DOSA
DENIS O'SULLIVAN & ASSOCIATES
CONSULTING ENGINEERS

27 September 2024
Our Ref. 6621 / SOG

Cork County Council
Planning Department
County Hall
Carrigrohane Road
Cork
T12 R2NC

Re: **LRD Application**
At: Castlepark, Castlelands(townland), St. Joseph's Road, Mallow, Co. Cork

Dear Sir,

We confirm that we have been retained by Reside (Castlepark) Ltd to respond to engineering queries resulting from the Stage 1/2 Audit undertaken by CST Group on the LRD Application at the above development. The items raised in the Road Safety Audit are listed below with the proposed responses:

3.2.1 Forward Visibility at Bend/Junctions

***Problem**: The design incorporates a number of sharp bends and tight junctions. Some of these bends and/or junctions have development plots, landscaping or car parking bays located to the inside of the bend. Buildings, high landscaping or high sided vehicles parked in the bays may restrict forward visibility for motorists.*

Response:

The sharp bends have been removed as per the revised Proposed Site Layout Drawing No.'s 6621-2010-RevC, 6621-2011-RevC & 6621-2012-RevC enclosed. Further details on the junctions have been indicated on the Proposed Traffic Calming Measures Drawing No.'s 6621-2013-RevA, 6621-2014-RevA & 6621-2015-RevA.

3.2.2 Uncontrolled Pedestrian Crossings

***Problem:** The proposed development indicates footpaths terminating at the junction radii. It is not clear how these footpaths will incorporate dropped kerbs or tactile paving. In some cases, the footpath does not align with the continuation on the opposite side of the road.*

Response:

The location of the dropped kerbs and tactile paving have been indicated on the Proposed Traffic Calming Measures Drawing No.'s 6621-2013-RevA, 6621-2014-RevA & 6621-2015-RevA.

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3.2.3 Cyclepath Carriageway Crossings

***Problem**: There are a number of locations where the proposed cycle path crosses carriageways and/or footpaths. There is no priority, intervisibility or details shown at these crossing points.*

Response:

The location of the crossing facilities have been indicated on the Proposed Traffic Calming Measures Drawing No.'s 6621-2013-RevA, 6621-2014-RevA & 6621-2015-RevA. These crossing have been designed in compliance with the Cycle Design Manual (CDM) prepared by the National Transport Authority (NTA).

3.2.4 Long and Straight Roads

***Problem:** Some of the roads within the development are long and straight. Long and straight roads have a poor history of undesirably high vehicle speeds. Certain roads in this phase incorporate a slight shift in alignment, but this is insufficient to require vehicles to slow if there are no opposing vehicles.*

Response:

Traffic Calming Measures have been incorporated as per the Proposed Traffic Calming Measures Drawing No.'s 6621-2013-RevA, 6621-2014-RevA & 6621-2015-RevA.

3.2.5 Crossroads Junctions

***Problem:** There are crossroads junctions proposed within the Phase 2 development.*

Response:

These junctions have been removed to incorporate a stagger at all junctions.

3.2.6 Shared Use Streets

***Problem:** Some of the streets appear to be designated as "shared use" where pedestrians, cyclists and motorists all use the same space. It is not clear how sight impaired pedestrians are meant to transfer from the shared space to the segregated footpath at the carriageway junction. There is concern the sight impaired user may errantly continue to walk out into the carriageway.*

Response:

Tactile crossing points have been indicated at the end of the footpath entering shared use spaces to facilitate the safe transfer of sight impaired users. Suitable route guidance will be incorporated to guide the pedestrian to the segregated footpath.

3.2.7 Shared Use Streets – Characteristics

***Problem:** Some of the streets appear to be designated as " shared use" where pedestrians, cyclists and motorists all use the same space, however the design of these spaces appear to be very similar to standard streets elsewhere in the development, including in some areas segregated footpaths.*

Response:

As outlined in the landscaping proposals, sufficient physical features has been provided within the space (bends, tree planting, street furniture, etc.) to ensure the motorist understands the shared use intent and that they are invited into a pedestrianised space.

3.2.8 Carriageway Alignment at tight Bends

Problem: *The carriageway contains very tight bends where large service vehicles are expected to navigate.*

Response:

An Auto-Track analysis vehicle swept path analysis on the proposed areas has been undertaken on site to ensure that large vehicles e.g., a refuse lorry, can maneuver through the tight bends. This analysis is indicated on the Proposed Auto-Track Analysis Drawing No.'s 6621-2017-RevA, 6621-2018-RevA & 6621-2019-RevA.

Response:

3.2.9 Turning Heads

Problem: *The turning heads appear small. It is not clear if this turning head can accommodate turning of service vehicles.*

Response:

An Auto-Track analysis on the proposed turning head has been undertaken on site to ensure that large vehicles e.g., a refuse lorry, can maneuver through this turning head. This analysis is indicated on the Proposed Auto-Track Analysis Drawing No.'s 6621-2017-RevA, 6621-2018-RevA & 6621-2019-RevA.

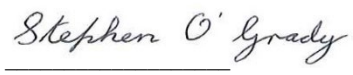
3.3.1 Dead End Near Maple Wood.

Problem: *The proposals include for an access road parallel with Maple Square without any vehicle turning facility. There does not appear to be a vehicle link through to Maple Wood. Service vehicles who enter this road may be required to reverse over a long distance.*

Response:

A suitable turning head has been provided at the end of this roadway as per the revised Proposed Site Layout Drawing No.'s 6621-2012-RevC.

Yours sincerely,



Stephen O' Grady B.Eng, CEng, MIEI

On behalf of Denis O'Sullivan & Associates