

The background is a vibrant yellow. It is decorated with several abstract geometric shapes in shades of blue, teal, and white. These include circles, semi-circles, and rounded rectangular shapes, some of which are layered or overlapping. The shapes are scattered across the page, with a concentration of larger shapes on the right side and bottom-left corner.

Appendix A6.4

Impact Assessments

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Appendix A6.4.1 Pedestrian Infrastructure Assessment

Table 1 Pedestrian Junction Assessment Criteria

Aspect	Indicator
Routing	Are pedestrian crossings (signalised or uncontrolled) available on all arms?
Directness	Where crossings are available, do they offer direct movements which do not require diversions or staggered crossings i.e., no or little delay required for pedestrians to cross in one direct movement?
Vehicular speeds	Are there measures in place to promote low vehicular speeds, such as minimally sized corner radii and narrow carriageway lane widths?
Accessibility	Where crossings exist, are there adequate tactile paving, dropped kerbs (or raised table treatment) and road markings for pedestrians (including able-bodied, wheelchair users, mobility impaired and pushchairs)?
Widths	Are there adequate footpath and crossing widths in accordance with national standards?

Table 2 Pedestrian Junction Assessment LoS

LoS	Indicators Met (of a total of 5)
A	5
B	4
C	3
D	2
E	1
F	0

Table 3 Description of Impact for Pedestrian Qualitative Assessment

Magnitude of Impact	Change in LoS Rating
High	4 to 5
Medium	2 to 3
Low	1
Negligible	0

Table 4 Determining the Significance of the Impact for Pedestrian Qualitative Assessment

		Sensitivity of Existing Environment			
		High	Medium	Low	Negligible
Description Impact	High	Profound	Very Significant	Moderate	Slight
	Medium	Very Significant	Significant	Moderate	Not Significant
	Low	Moderate	Moderate	Slight	Not Significant
	Negligible	Not Significant	Not Significant	Not Significant	Imperceptible

1.1 Section 1: N4 Junction 3 to M50 Junction 7 – N4 Lucan Road

Table 5 Section 1 Pedestrian Infrastructure Assessment

Location	Chainage	Criteria	Do Minimum		DoSomething		Impact	Sensitivity	Significance of Effect
			Comment	Criteria Met	Comment	Criteria Met			
N4 westbound on/off-slips /R136 Ballyowen Road	N368	Pedestrian Routing:	Signalised crossing across N4 westbound off slip only. No other formal crossing points.	x	Signalised crossing across N4 westbound off slip only	x	Low Positive	Medium	Positive Moderate
		Pedestrian Directness:	Two-stage crossing via pedestrian island.	x	Pedestrian island removed; direct crossing provided.	✓			
		Vehicular Speeds:	No particular constraint on vehicle speeds.	x	No particular constraint on vehicle speeds	x			
		Accessibility:	Adequate tactile paving, dropped kerbs and road markings in place at all crossing points.	✓	Fully compliant tactile paving, dropped kerbs, road markings at all crossing points at the junction.	✓			
		Footpath widths:	Existing footpaths are 1.8m in width. Existing crossing 2.4m in width.	✓	Footpath and crossing widths retained.	✓			
		Overall LoS	2 Indicators met:	D	3 Indicators met:	C			
N4 eastbound on/off-slips /R136 Ballyowen Road	B75	Pedestrian Routing:	No pedestrian facilities		No pedestrian facilities		Negligible	Medium	Not Significant
		Pedestrian Directness:							
		Vehicular Speeds:							
		Accessibility:							
		Footpath widths:							
		Overall LoS	0 Indicators met:	F	0 Indicators met:	F			
R136 Ballyowen Road / R835 Lucan Road	B254	Pedestrian Routing:	Signalised crossings present on Lucan Road east and Ballyowen Road. No crossing on Lucan Road west.	x	Signalised crossings present on Lucan Road east and Ballyowen Road. No crossing on Lucan Road west.	x	Medium Positive	Medium	Positive Significant
		Pedestrian Directness:	R136 Ballyowen Road signalised crossing requires four stages, R835 Lucan Road requires three stages.	x	R136 Ballyowen Road signalised crossing requires four stages, R835 Lucan Road requires three stages.	✓			
		Vehicular Speeds:	R136 Ballyowen Road left turn has a larger radius which does not encourage low vehicle speeds.	x	R136 Ballyowen Road left turn has a larger radius which does not encourage low vehicle speeds.	✓			
		Accessibility:	Adequate tactile paving, dropped kerbs and road markings in place at all crossing points.	✓	Adequate tactile paving, dropped kerbs and road markings in place at all crossing points.	✓			

Location	Chainage	Criteria	Do Minimum		DoSomething		Impact	Sensitivity	Significance of Effect
			Comment	Criteria Met	Comment	Criteria Met			
		Footpath widths:	Existing footpaths are in excess of 1.8m (typically 2.0m) and crossing widths are between 2.4m – 2.8m.	✓	Existing footpaths are in excess of 1.8m (typically 2.0m) and crossing widths are between 2.4m – 2.8m.	✓			
		Overall LoS	2 Indicators met:	D	2 Indicators met:	B			
R835 Lucan Road / Retail Park / Hermitage Golf Club roundabout	C288	Pedestrian Routing:	Dropped kerb crossing on golf club access and N4 eastbound on-slip. No crossing on Lucan Road arm.	✗	Dropped kerb crossing on golf club access and N4 eastbound on-slip. No crossing on Lucan Road arm.	✗	Negligible	Medium	Not Significant
		Pedestrian Directness:	Direct crossings (where present).	✓	Direct crossings (where present).	✓			
		Vehicular Speeds:	Small arm radii and relatively large deflections to manage vehicle speeds.	✓	Small arm radii and relatively large deflections to manage vehicle speeds.	✓			
		Accessibility:	Adequate tactile paving, dropped kerbs and road markings at existing crossing points.	✓	Adequate tactile paving, dropped kerbs and road markings at existing crossing points.	✓			
		Footpath widths:	Existing footpaths are typically 1.8m - 2.0m in width.	✓	Existing footpaths are typically 1.8m - 2.0m in width.	✓			
		Overall LoS	4 Indicators met:	B	4 Indicators met:	B			
N4 / Ballyowen Lane	A700	Pedestrian Routing:	Uncontrolled crossing on minor arm.	✗	Uncontrolled crossing on minor arm.	✗	Low Positive	Medium	Positive Moderate
		Pedestrian Directness:	Direct crossings (where present).	✓	Direct crossings (where present).	✓			
		Vehicular Speeds:	No particular constraint on vehicle speeds. Speed hump present on Ballyowen Lane, but located to the south of pedestrian crossing point.	✗	No particular constraint on vehicle speeds. Speed hump present on Ballyowen Lane, but located to the south of pedestrian crossing point.	✓			
		Accessibility:	Adequate tactile paving, dropped kerbs and road markings at existing crossing points.	✓	Adequate tactile paving, dropped kerbs and road markings at existing crossing points.	✓			
		Footpath widths:	Existing footpaths at least 1.8m in width.	✓	Existing footpaths at least 1.8m in width.	✓			
		Overall LoS	3 Indicators met:	C	3 Indicators met:	B			
N4 / St Loman's Hospital Access	A1175	Pedestrian Routing:	Uncontrolled crossing on minor arm.	✗	Uncontrolled crossing on minor arm.	✗	Low Positive	Low	Positive Slight
		Pedestrian Directness:	Direct crossings (where present).	✓	Direct crossings (where present).	✓			
		Vehicular Speeds:	No particular constraint on vehicle speeds.	✗	No particular constraint on vehicle speeds.	✓			
		Accessibility:	Adequate tactile paving, dropped kerbs and road markings at existing crossing points.	✓	Adequate tactile paving, dropped kerbs and road markings at existing crossing points.	✓			

Location	Chainage	Criteria	Do Minimum		DoSomething		Impact	Sensitivity	Significance of Effect
			Comment	Criteria Met	Comment	Criteria Met			
		Footpath widths:	Existing footpaths at least 1.8m in width.	✓	Existing footpaths at least 1.8m in width.	✓			
		Overall LoS	3 Indicators met:	C	3 Indicators met:	B			
N4 Lucan Road / Liffey Valley junction (eastbound on / off northern dumb-bell)	A305	Pedestrian Routing:	Signalised crossing across N4 eastbound off slip. Dropped kerb crossings across northern arm and N4 eastbound on-slip. No crossing point on southern arm.	✗	Signalised crossing across N4 eastbound off slip. Dropped kerb crossings across northern arm and N4 eastbound on-slip. No crossing point on southern arm.	✗	Medium Positive	Low	Positive Moderate
		Pedestrian Directness:	Direct crossings (where present).	✓	Direct crossings (where present).	✓			
		Vehicular Speeds:	Large roundabout with small entry arm deflections	✗	Large roundabout with small entry arm deflections	✗			
		Accessibility:	Adequate tactile paving, dropped kerbs, road markings on west and northern arms only. Non-compliant crossing point at N4 eastbound on-slip.	✗	Adequate tactile paving, dropped kerbs, road markings on west and northern arms only. Non-compliant crossing point at N4 eastbound on-slip.	✓			
		Footpath widths:	Existing footpath and crossing widths are between 1.5m – 1.8m. Crossing width 2.5m	✗	Existing footpath and crossing widths are between 1.5m – 1.8m. Crossing width 2.5m	✓			
		Overall LoS	1 Indicator met:	E	1 Indicator met:	C			
N4 Lucan Road / M50 Junction 7 Interchange	I650	Pedestrian Routing:	Pedestrian crossing over the north arm of the M50 via existing pedestrian footbridge.	✗	Pedestrian crossing over the north arm of the M50 via existing pedestrian footbridge.	✗	Negligible	Negligible	Imperceptible
		Pedestrian Directness:	As direct as possible.	✓	As direct as possible.	✓			
		Vehicular Speeds:	Grade separated crossing.	✓	Grade separated crossing.	✓			
		Accessibility:	Ramped access provided.	✓	Ramped access provided.	✓			
		Footpath widths:	3.0m wide shared surface.	✓	3.0m wide shared surface.	✓			
		Overall LoS	4 Indicators met:	B	4 Indicators met:	B			

1.2 Section 2: M50 Junction 7 to R148 Con Colbert Road – Palmerstown bypass and Chapelizod bypass

Table 6 Section 2 Pedestrian Infrastructure Assessment

Location	Chainage	Criteria	Do Minimum		Do Something		Overall Impact	Sensitivity	Significance
			Comment	Criteria Met	Comment	Criteria Met			
Old Lucan Road / Hollyville Lawn	J325	Pedestrian Routing:	Uncontrolled crossing on minor arm.	✘	Uncontrolled crossing on minor arm	✘	Medium Positive	Low	Positive Moderate
		Pedestrian Directness:	Direct crossing (where present).	✓	Direct crossing (where present)	✓			
		Vehicular Speeds:	No particular constraints on vehicle speeds	✘	Raised table provided on minor arm, and speed cushions on Old Lucan Road will constrain vehicle speeds	✓			
		Accessibility:	Dropped kerbs but no tactile paving.	✘	Fully compliant raised table and road markings at the junction.	✓			
		Footpath widths:	Footpath widths a minimum of 1.8m	✓	Footpath widths a minimum of 1.8m	✓			
		Overall LoS	2 Indicators met	D	4 Indicators met	B			
Old Lucan Road / Riverside Drive	J430	Pedestrian Routing:	Uncontrolled crossing on minor arm.	✘	Uncontrolled crossing on minor arm	✘	Medium Positive	Low	Positive Moderate
		Pedestrian Directness:	Direct crossing (where present).	✓	Direct crossing (where present)	✓			
		Vehicular Speeds:	No particular constraints on vehicle speeds.	✘	Raised table provided on minor arm, and speed cushions on Old Lucan Road will constrain vehicle speeds	✓			
		Accessibility:	Dropped kerbs but no tactile paving.	✘	Fully compliant raised table and road markings at the junction.	✓			
		Footpath widths:	Footpath widths a minimum of 1.8m.	✓	Footpath widths a minimum of 1.8m	✓			
		Overall LoS	2 Indicators met	D	4 Indicators met	B			
Old Lucan Road / Riversdale Avenue	J500	Pedestrian Routing:	Uncontrolled crossing on minor arm.	✘	Raised table will allow crossings on all arms.	✓	Medium Positive	Low	Positive Moderate
		Pedestrian Directness:	Direct crossing (where present).	✓	Direct crossing (where present)	✓			
		Vehicular Speeds:	No particular constraints on vehicle speeds.	✘	Raised table will constrain vehicle speeds	✓			
		Accessibility:	Dropped kerbs but no tactile paving.	✘	Fully compliant raised table and road markings at the junction.	✓			
		Footpath widths:	Footpath widths a minimum of 1.8m.	✓	Footpath widths a minimum of 1.8m	✓			
		Overall LoS	2 Indicators met	D	5 Indicators met	A			
Old Lucan Road / Rose View	J710	Pedestrian Routing:	Uncontrolled crossing on minor arm.	✘	Uncontrolled crossing on minor arm	✘	Medium Positive	Low	Positive Moderate
		Pedestrian Directness:	Direct crossing (where present).	✓	Direct crossing (where present)	✓			

Location	Chainage	Criteria	Do Minimum		Do Something		Overall Impact	Sensitivity	Significance
			Comment	Criteria Met	Comment	Criteria Met			
		Vehicular Speeds:	No particular constraints on vehicle speeds.	✘	Raised table provided on minor arm, and speed cushions on Old Lucan Road will constrain vehicle speeds	✓			
		Accessibility:	Dropped kerbs but no tactile paving.	✘	Fully compliant raised table and road markings at the junction.	✓			
		Footpath widths:	Footpath widths a minimum of 1.8m.	✓	Footpath widths a minimum of 1.8m	✓			
		Overall LoS	2 Indicators met	D	4 Indicators met	B			
Old Lucan Road / Waterstown Avenue	J770	Pedestrian Routing:	Uncontrolled crossing on minor arm.	✘	Raised table will allow crossings on all arms.	✓	Medium Positive	Low	Positive Moderate
		Pedestrian Directness:	Direct crossing (where present).	✓	Direct crossing (where present)	✓			
		Vehicular Speeds:	No particular constraints on vehicle speeds.	✘	Raised table will constrain vehicle speeds	✓			
		Accessibility:	Dropped kerbs but no tactile paving.	✘	Fully compliant raised table and road markings at the junction.	✓			
		Footpath widths:	Footpath widths a minimum of 1.8m.	✓	Footpath widths a minimum of 1.8m	✓			
		Overall LoS	2 Indicators met	D	5 Indicators met	A			
Lucan Road / Kennelsfort Road Lower	J886	Pedestrian Routing:	Dropped kerbs present on both Lucan Road arms and the Kennelsfort Road arm.	✓	Raised table will allow crossings on all arms.	✓	Medium Positive	Low	Positive Moderate
		Pedestrian Directness:	Direct crossings present.	✓	Direct crossings available on all arms.	✓			
		Vehicular Speeds:	No particular constraints on vehicle speeds.	✘	Raised table on major arm will further decrease vehicular speeds.	✓			
		Accessibility:	No tactile paving on Lucan Road west.	✘	Fully compliant raised table and road markings at the junction.	✓			
		Footpath widths:	Existing footpath and widths are significantly in excess of 1.8m wide. Dropped kerb crossing widths approximately 1.2m wide.	✓	Existing footpath widths at least retained.	✓			
		Overall LoS	3 Indicators met	C	5 Indicators met	A			
R148 Palmerston Bypass / Kennelsfort Road Upper / Lower	A3660	Pedestrian Routing:	Signalised crossing on Kennelsfort Road Lower arm. Pedestrian footbridge across R148 east arm. Remote signalised crossing 60m from the junction on Kennelsfort Road Upper arm. No crossing point on R18 west.	✘	Signalised crossing on Kennelsfort Road Lower arm removed and replaced with remote Toucan Crossing. Footbridge on R148 east arm retained. New Toucan Crossing across R148 east arm to provide at-grade crossing point. Ped crossing on Kennelsfort Road Upper retained.	✘	Medium Positive	High	Positive Very Significant

Location	Chainage	Criteria	Do Minimum		Do Something		Overall Impact	Sensitivity	Significance
			Comment	Criteria Met	Comment	Criteria Met			
		Pedestrian Directness:	Only signalised crossing on Kennelsfort Road Lower considered to be direct.	✘	Toucan Crossing on R148 east provides direct crossing route.	✓			
		Vehicular Speeds:	Large corner radii into and out of both Kennelsfort Road Upper and Lower will not act as a constraint on vehicle speeds.	✘	Tighter corner radii and removal of left-turn slip to and from KRU decrease vehicular speeds. Lane widths on R148 reduced compared to existing.	✓			
		Accessibility:	Adequate tactile paving, dropped kerbs, road markings on arms where crossings are present.	✓	Fully compliant tactile paving, dropped kerbs, road markings at all crossing points.	✓			
		Footpath widths:	Existing footpath widths are minimum of 1.8m wide. Crossing width on Kennelsfort Road Lower 2.0m wide, narrower than standard.	✘	Proposed footpath widths of 2.0m wide	✓			
		Overall LoS	1 indicators met	E	4 Indicators met	B			
Old Lucan Road / Mill Lane	K150	Pedestrian Routing:	Uncontrolled crossing on minor arm.	✘	Uncontrolled crossing on minor arm	✘	Medium Positive	Low	Positive Moderate
		Pedestrian Directness:	Direct crossing (where present).	✓	Direct crossing (where present)	✓			
		Vehicular Speeds:	No particular constraints on vehicle speeds.	✘	Raised table provided on minor arm, and speed cushions on Old Lucan Road will constrain vehicle speeds	✓			
		Accessibility:	Dropped kerbs but no tactile paving.	✘	Fully compliant raised table and road markings at the junction.	✓			
		Footpath widths:	Footpath widths a minimum of 1.8m	✓	Footpath widths a minimum of 1.8m	✓			
		Overall LoS	2 Indicators met	D	4 Indicators met	B			
R148 Palmerstown Bypass / Lucan Road / The Oval	A4000	Pedestrian Routing:	Signalised crossing on R148 east, no crossing point on R148 west. Uncontrolled crossings on Lucan Road and The Oval.	✘	Signalised crossing relocated from R148 east to west. New signalised crossings added across The Oval and Lucan Road. No crossing on R148 east. Dropped kerb crossing to north on Lucan Road upgraded to raised table.	✘	Medium Positive	High	Positive Very Significant
		Pedestrian Directness:	Direct crossings on all arms where crossings are present. Crossing on R148 as direct as possible.	✓	Direct crossings on all arms where crossings are present. Crossing on R148 as direct as possible.	✓			
		Vehicular Speeds:	No particular restraint on vehicle speeds. Corner radii at The Oval are large.	✘	Corner radii reduced on The Oval and Lucan Road approaches.	✓			
		Accessibility:	Tactile paving only present at R148 east crossing points.	✘	Fully compliant tactile paving, dropped kerbs, road markings at all crossing points.	✓			
		Footpath widths:	Adequate on R148 arms and on The Oval. Narrow footpath of around 1m on east side of Lucan Road. Crossing widths on Chapelizod Bypass 3.5m wide.	✘	Adequate footpath widths of at least 2m on all arms. Crossing widths on Chapelizod Bypass and The Oval 4.0m. Crossing width of Lucan Road 2.4m.	✓			
		Overall LoS	1 Indicator met:	E	4 Indicators met	B			

Negligible impacts to the quality in walking infrastructure are noted at the following Section 2 junctions:

- R148 Chapelizod Bypass / R112 Kylemore Road Priority junction (Chainage 4950)
- R148 Chapelizod Bypass / Con Colbert Road Signalised Junction (Chainage A7750)

1.3 Section 3: R148 Con Colbert Road to City Centre (Frank Sherwin Bridge) – Con Colbert Road and St John’s Road West

Table 7 Section 3 Pedestrian Infrastructure Assessment

Location	Chainage	Criteria	Do Minimum		Do Something		Overall Impact	Sensitivity	Significance
			Comment	Criteria Met	Comment	Criteria Met			
R148 Con Colbert Road / Memorial Road	A7850	Pedestrian Routing:	Signalised crossings on Chapelizod Bypass west and Memorial Road. No crossing point on Chapelizod Bypass east.	✘	Signalised crossing with refuge island relocated to Chapelizod Bypass east. Signalised crossing maintained on Memorial Road. No crossing point on Chapelizod Bypass west.	✘	Low Positive	Low	Positive Slight
		Pedestrian Directness:	Two-stage crossing on Chapelizod Bypass west, as direct as possible.	✓	Two-stage crossing on Chapelizod Bypass east, as direct as possible.	✓			
		Vehicular Speeds:	Typically 3m lane widths for general traffic, and small corner radii for traffic emerging from Memorial Road.	✓	Lane widths similar to Do Minimum. Corner radii into and out of Memorial Road reduced, which will further reduce vehicle speeds.	✓			
		Accessibility:	Adequate tactile paving, dropped kerbs and road markings at existing crossing points.	✓	Fully compliant tactile paving, dropped kerbs, road markings at all crossing points.	✓			
		Footpath widths:	Adequate widths of at least 1.8m. Crossing widths on Chapelizod Bypass (south) and Memorial Road are 2.0m, less than the standard 2.4m.	✘	Adequate widths of at least 2.0m.	✓			
		Overall LoS	3 Indicators met	C	4 Indicators met	B			
R148 Chapelizod Bypass Con Colbert Road / R111 South Circular Road / St R148 John’s Road West	A8650	Pedestrian Routing:	Signalised crossings on all arms.	✓	Signalised crossings on all arms.	✓	Medium Positive	High	Positive Very Significant
		Pedestrian Directness:	Two-stage crossings via refuge island on South Circular south arm. Four stage crossing required for pedestrians travelling from Circular Road south to St John’s Road West northern kerb. Three stage crossings on other arms.	✘	Left-turn slips from Chapelizod Bypass to South Circular north and St John’s Road West to South Circular south removed, allowing one-stage signalised crossings. Pedestrians travelling from Circular Road south to St John’s Road West northern kerb provided with a more direct route.	✓			
		Vehicular Speeds:	All roads signal controlled. Left-turning slip roads from Chapelizod Bypass to South Circular north and St John’s Road West to South Circular south could encourage higher vehicle speeds for these movements.	✘	Left-turn slips from Chapelizod Bypass to South Circular north and St John’s Road West to South Circular south removed.	✓			
		Accessibility:	Adequate tactile paving, dropped kerbs and road markings at existing crossing points.	✓	Fully compliant tactile paving, dropped kerbs, road markings at all crossing points.	✓			
		Footpath widths:	Adequate widths of at least 1.8m. Some crossing widths, such as on South Circular south arm (east kerb) less than 2.4m.	✘	Adequate widths of at least 2.0m	✓			
		Overall LoS	2 indicators met	D	5 indicators met	A			
R148 St John’s Road West / Heuston South Quarter	A9100	Pedestrian Routing:	Signalised crossings on St John’s Road West (east) and HSQ access. No crossing points on SJRW (west).	✘	Signalised crossings retained on two arms.	✘	Medium Positive	High	Positive Very Significant
		Pedestrian Directness:	Three-stage crossing of SJR West (east) required, two stage crossing of HSQ access.	✘	Traffic island at HSQ access removed. Left turn lane removed making shorter crossing across SJR east and HSQ access.	✓			
		Vehicular Speeds:	Generous corner radii at HSQ access, and left-turning slip into HSQ from SJR West (east).	✘	Corner radii at HSQ access tightened, and left-turn slip removed. Combined effect of reducing traffic speeds into and out of HSQ.	✓			
		Accessibility:	Dropped kerbs, tactile paving and suitable road markings are present.	✓	Fully compliant tactile paving, dropped kerbs, road markings at all crossing points.	✓			

Location	Chainage	Criteria	Do Minimum		Do Something		Overall Impact	Sensitivity	Significance
			Comment	Criteria Met	Comment	Criteria Met			
		Footpath widths:	Adequate widths of at least 1.8m. Crossing widths of at least 2.4m wide.	✓	Adequate footpath widths of at least 2.0m. Compliant crossing widths of at least 2.4m.	✓			
		Overall LoS	2 Indicators met:	D	4 Indicators met	B			
R148 St John's Road West / Military Road	A9300	Pedestrian Routing:	Signalised crossings on St John's Road West (east) and Military Road.	✗	Signalised crossing added on St John's Road West western arm and retained on the east arm and Military Road arm.	✓	Medium Positive	Medium	Positive Significant
		Pedestrian Directness:	Two-stage crossing of SJR West (east) required, but as direct as possible.	✓	Two-stage crossing of SJR West (east) required, but as direct as possible.	✓			
		Vehicular Speeds:	No particular constraints on vehicle speeds.	✗	Baseline geometry unchanged.	✗			
		Accessibility:	Dropped kerbs, tactile paving and suitable road markings are present.	✓	Fully compliant tactile paving, dropped kerbs, road markings at all crossing points.	✓			
		Footpath widths:	Adequate widths of at least 1.8m. Crossing widths on SJR of at least 2.4m wide. Crossing width on Military Road narrows to 1.6m wide.	✗	Adequate widths of at least 2.0m Crossing width on Military Road widened to standard 2.4m.	✓			
		Overall LoS	2 Indicators met:	D	4 Indicators met	B			

Appendix A6.4.2 Cycling Infrastructure Assessment

Table 8: Cycling Assessment LoS

LoS	Segregation	No. of adjacent cyclists/width		Junction treatment
A+	High degree of separation. Minimal delay	2+1	2.5m	Cyclists get green signal priority at signalised junctions / has priority across uncontrolled junctions
A	Well separated at mid-link with some conflict at intersections	1+1	2.0m	Toucan crossings at signalised junctions for cyclists along CBC / Protected junctions not already classified as A+ for junction treatment
B	On-road cycle lanes or carriageway designated as 'quiet cycle routes'	1+1	1.75m	Cyclists share green time with general traffic and cycle lanes continue through the junction, for junctions not already classified as A or A+ for junction treatment
C	Bicycle share traffic or bus lanes	1+0	1.25m	Cyclists share green time with general traffic with cycle facilities (advanced stacking locations / cycle lanes) available up to the junction but do not continue through
D	No specific bicycle facilities	1+0	0.75m	No specific bicycle facilities

Table 9: Description of Impact for Cycling Qualitative Assessment

Magnitude of Impact	Change in LoS Rating
High	3 to 4
Medium	2
Low	1
Negligible	0

Table 10: Significance of Effect Matrix

		Sensitivity of Existing Environment			
		High	Medium	Low	Negligible
Description Impact	High	Profound	Very Significant	Moderate	Slight
	Medium	Very Significant	Significant	Moderate	Not Significant
	Low	Moderate	Moderate	Slight	Not Significant
	Negligible	Not Significant	Not Significant	Not Significant	Imperceptible

1.4 Section 1: N4 Junction 3 to M50 Junction 7 – N4 Lucan Road

Table 11 Section 1 Cycling Infrastructure Assessment

Location	Chainage	Pedestrian Impact	Do Minimum		Do Something		Overall Impact	Sensitivity of Environment	Significance of Effect
R136 Ballyowen Road: Hermitage Road to N4 overbridge	B0 - B250	Segregation	Combination of on-road cycle lanes and bus lanes.	C	Off-road bidirectional cycle track. High degree of separation. Minimal delay	A+	High Positive	Medium	Positive Significant
		Number of Adjacent Cyclists / Width	Each one-way cycle lane has capacity one cyclist only (1.25m, 1+0)	D	Each cycle lane has capacity for cycling two abreast and / or overtaking (2.5m, 2+1)	A+			
		Junction Treatment	Cyclists share green time with general traffic with cycle facilities. Cycle lanes available up to the junctions but do not continue through.	C	Toucan crossings at signalised junctions for cyclists	A			
		Overall		C		A+			
Lucan Road: R136 Ballyowen Road to N4 Lucan Road.	C0 - D300	Segregation	Short section of eastbound shared bus / cycle lane, but overall no cycle facilities.	D	Two-way cycle track then quiet street.	B	Medium Positive	Medium	Positive Significant
		Number of Adjacent Cyclists / Width	Each cycle facility has capacity for cycling two abreast and / or overtaking (2.5m, 2+1)	A+	3.25m, two-way cycle track. Each cycle facility has capacity for cycling two abreast and / or overtaking (2.5m, 2+1)	A+			
		Junction Treatment	Cyclists share green time with general traffic with cycle facilities at R136 Ballyowen Road / Lucan Road junction. No facilities at Hermitage Golf Club roundabout.	C	Cyclists bypass roundabout, but must give way to traffic on quiet street.	A			
		Overall		C		A			
N4 Lucan Road: Lucan Bypass to Fonthill Road North.	A550 - F0	Segregation	Westbound shared pedestrian / cycle facility to Hermitage Golf Club overbridge, then on-road cycle lane on N4 and up the R136 westbound offslip. Eastbound shared pedestrian / cycle facility	B	Two-way cycle track.	A	Medium Positive	Low	Positive Moderate
		Number of Adjacent Cyclists / Width	Ranges from B to C	B	3.25m, two-way cycle track. Each cycle facility has capacity for cycling two abreast and / or overtaking (2.5m, 2+1)	A+			
		Junction Treatment	Cyclists share green time with general traffic with cycle facilities. Cycle lanes available up to the Hospital junction but do not continue through.	B	Cycle track bypasses existing junctions.	A+			
		Overall		B		A+			
Old Lucan Road / N4 Lucan Road: Fonthill Road North to M50 Junction 7.	F0 - I500	Segregation	3.25m-wide two-way cycle track between Liffey Valley over-bridge and M50 J7 bridge, but otherwise shared bus / cycle lanes in both directions (C) , otherwise use of Old Lucan Road as quieter alternative.	C	Continuous, 3.25m-wide two-way cycle track, linking into Liffey Valley overbridge and M50 overbridge.	A	Medium Positive	Low	Positive Moderate
		Number of Adjacent Cyclists / Width	Ranges from A* to C	C	3.25m, two-way cycle track. Each cycle facility has capacity for cycling two abreast and / or overtaking (2.5m, 2+1)	A+			
		Junction Treatment		D	Toucan crossing provided at N4 Lucan Road / Liffey Valley junction (eastbound on / off northern dumb-bell)	A			
		Overall		C		A			
Hermitage Road: R136 Ballyowen Road to Ballyowen Lane		Segregation	Bicycles share traffic or bus lanes	C	Quiet Way	B	Low Positive	Low	Positive Slight
		Number of Adjacent Cyclists / Width	Each cycle lane has capacity for cycling two abreast and / or overtaking (>= 2.5m, 2+1)	A+	Each cycle lane has capacity for cycling two abreast and / or overtaking (>= 2.5m, 2+1)	A+			
		Junction Treatment		-		-			
		Overall		C		B			

1.5 Section 2: M50 Junction 7 to R148 Con Colbert Road – Palmerstown bypass and Chapelizod bypass

Table 12 Section 2 Cycling Infrastructure Assessment

Location	Chainage	Pedestrian Impact	Do Minimum		Do Something		Overall Impact	Sensitivity of Environment	Significance of Effect
Old Lucan Road / N4: M50 Junction 7 to The Oval.	I500 – K275	Segregation	Shared bus / cycle lanes	C	Two-way cycle track.	A	Medium Positive	Low	Positive Moderate
		Number of Adjacent Cyclists / Width	Each cycle facility has capacity for cycling two abreast and / or overtaking (2.5m, 2+1)	A*	3.0m, two-way cycle track. Each cycle facility has capacity for cycling two abreast and / or overtaking (2.5m, 2+1)	A+			
		Junction Treatment	No specific bicycle facilities	D	Cyclists have priority at side roads. Toucan Crossings across N4 at Kennelsfort Road	A			
		Overall		C		A			
R148 Palmerston Bypass / The Oval to Con Colbert Road.	K275 – A7600	Segregation	Shared bus / cycle lanes	C	Shared bus / cycle lanes	C	Negligible	High	Not Significant
		Number of Adjacent Cyclists / Width	3m-wide shared bus / cycle lane with capacity for cycling two abreast and / or overtaking (2.5m, 2+1)	A*	3m-wide shared bus / cycle lane with capacity for cycling two abreast and / or overtaking (2.5m, 2+1)	A*			
		Junction Treatment	Cyclists share green with traffic at R148 Chapelizod Bypass / Lucan Road / The Oval junction (in bus lanes). Otherwise, no specific facilities.	D	Cyclists share green with traffic at R148 Chapelizod Bypass / Lucan Road / The Oval junction (in bus lanes). Otherwise, no specific facilities.	D			
		Overall		C		C			

1.6 Section 3 R148 Con Colbert Road to City Centre (Frank Sherwin Bridge) – Con Colbert Road and St John’s Road West

Table 13 Section 3 Cycling Infrastructure Assessment

Location	Chainage	Pedestrian Impact	Do Minimum		Do Something		Overall Impact	Sensitivity of Environment	Significance of Effect
R148 Con Colbert Road: R148 Chapelizod Bypass to R111 South Circular Road.	Chainage A7600 – A8450	Segregation	Shared bus / cycle lanes in both directions	C	Continuous 1.75m-wide cycle tracks alongside the eastbound and westbound carriageways which continue through the Con Colbert Road / South Circular Road junction.	A	Low Positive	Low	Slight
		Number of Adjacent Cyclists / Width	Each cycle facility has capacity for cycling two abreast and / or overtaking (2.5m, 2+1)	A*	Each cycle facility has capacity for cycling two abreast and / or overtaking (1.75 - 2.0m, 1+1)	B			
		Junction Treatment	No specific cycle facilities	D	Cyclists share green time with general traffic and cycle lanes continue through the junction.	B			
		Overall		C		B			
R148 St John’s Road West: R111 South Circular to Frank Sherwin Bridge.	Chainage A8450 – A9618	Segregation	Eastbound, on-road cycle lane through the St John’s Road / R111 junction, then section of shared bus / cycle lane. East of Military Road this becomes an on-road cycle lane again. Westbound on-road cycle lane from Heuston Station to Heuston South Quarter Access, then shared bus / cycle lane which terminates 110m west of the St John’s Road / R111 junction.	B/C	Continuous 2.0m-wide cycle tracks alongside the eastbound and westbound carriageways which continue through the Con Colbert Road / South Circular Road junction.	A	Low Positive	High	Moderate
		Number of Adjacent Cyclists / Width	Shared bus / cycle lanes (A*), Assessed on 1.5m cycle lanes - Each one-way cycle facility has capacity for cycling one cyclist only (1.25 - 1.75m, 1+0)	C	Each cycle facility has capacity for cycling two abreast and / or overtaking (1.75 - 2.0m, 1+1)	B			
		Junction Treatment	Range of provision, from no facilities (D) at the R148 Con Colbert Road / R111 South Circular / St R148 John’s Road West junction, to continuous lanes through the R148 St John’s Road (SJR) West / Military Road (B)	C	Cyclists share green time with general traffic and cycle lanes continue through the junction.	B			
		Overall		C		B			

Appendix A6.4.3 Average Bus Journey Times

Table 14 2028 AM and PM Peak Hour Journey Times

PT Line	Direction	Peak Period	Do Minimum	Do Something	Abs Diff	% Diff
4023	C1: Adamstown_ Outside Train Station to Sandymount_ Saint John's Church	AM Peak Hour	25.1	18.0	-7.1	-28%
		PM Peak Hour	20.4	17.4	-3.0	-15%
4024	C1: Sandymount_ Saint John's Church to Adamstown_ Outside Train Station	AM Peak Hour	18.3	17.5	-0.7	-4%
		PM Peak Hour	20.8	18.9	-1.9	-9%
4025	C2: Adamstown_ Outside Train Station to Sandymount_ Saint John's Church	AM Peak Hour	25.2	18.0	-7.2	-29%
		PM Peak Hour	20.3	17.3	-3.0	-15%
4026	C2: Sandymount_ Saint John's Church to Adamstown_ Outside Train Station	AM Peak Hour	18.4	17.5	-0.9	-5%
		PM Peak Hour	20.8	19.0	-1.9	-9%
4027	C3: Grand Canal Dock_ Ringsend Bus Depot to Straffan Rd	AM Peak Hour	19.3	17.8	-1.5	-8%
		PM Peak Hour	21.7	19.6	-2.1	-10%
4028	C3: Straffan Rd to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	22.3	16.0	-6.3	-28%
		PM Peak Hour	18.2	16.0	-2.2	-12%
4029	C4: Celbridge_ Maynooth Road (Crodaun Forest Park) to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	22.0	16.0	-6.0	-27%
		PM Peak Hour	18.3	16.4	-1.9	-11%
4030	C4: Grand Canal Dock_ Ringsend Bus Depot to Celbridge_ Maynooth Road (Crodaun Forest Park)	AM Peak Hour	19.8	18.0	-1.8	-9%
		PM Peak Hour	21.9	19.6	-2.3	-10%
4079	80: Ballinteer_ Kingston Estate to Liffey Valley	AM Peak Hour	4.1	5.1	1.1	26%
		PM Peak Hour	5.0	5.6	0.6	12%
4080	80: Liffey Valley SB to Ballinteer_ Kingston Estate	AM Peak Hour	1.3	1.0	-0.3	-25%
		PM Peak Hour	1.3	1.0	-0.3	-26%

PT Line	Direction	Peak Period	Do Minimum	Do Something	Abs Diff	% Diff
4162	P29: Adamstown_ Outside Train Station to Merrion Square South	AM Peak Hour	20.5	16.1	-4.4	-22%
		PM Peak Hour	-	-	-	-
4163	P29: Merrion Square South to Adamstown_ Outside Train Station	AM Peak Hour	-	-	-	-
		PM Peak Hour	19.6	17.2	-2.4	-12%
4164	X30: Adamstown_ Outside Train Station to Belfield_ University College Dublin	AM Peak Hour	22.1	16.5	-5.6	-25%
		PM Peak Hour	-	-	-	-
4165	X30: Belfield_ University College Dublin to Adamstown_ Outside Train Station	AM Peak Hour	-	-	-	-
		PM Peak Hour	22.2	20.0	-2.2	-10%
4166	X31: Leixlip_ River Forest Estate to Merrion Square South	AM Peak Hour	21.9	15.9	-6.0	-28%
		PM Peak Hour	-	-	-	-
4167	X31: Merrion Square North to Leixlip_ River Forest Estate	AM Peak Hour	-	-	-	-
		PM Peak Hour	22.1	19.6	-2.5	-11%
4168	X32: Leixlip Road to Merrion Square South	AM Peak Hour	22.1	15.7	-6.4	-29%
		PM Peak Hour	-	-	-	-
4169	X32: Merrion Square North to Leixlip Road	AM Peak Hour	-	-	-	-
		PM Peak Hour	22.2	19.5	-2.8	-12%
4170	X25: Maynooth_ Straffan Road (Kingsbury Estate) to Merrion Square South	AM Peak Hour	20.4	16.1	-4.4	-21%
		PM Peak Hour	-	-	-	-
4171	X25: Merrion Square North to Maynooth_ Kingsbury Estate	AM Peak Hour	-	-	-	-
		PM Peak Hour	19.3	16.9	-2.4	-13%
4172	X26: Maynooth_ Straffan Road (Kingsbury Estate) to Belfield_ University College Dublin	AM Peak Hour	20.5	16.0	-4.5	-22%
		PM Peak Hour	-	-	-	-
4173	X26: Belfield_ University College Dublin to Straffan Rd	AM Peak Hour	-	-	-	-
		PM Peak Hour	20.1	16.9	-3.2	-16%

PT Line	Direction	Peak Period	Do Minimum	Do Something	Abs Diff	% Diff
4174	X27: Celbridge_ Maynooth Road (Crodaun Forest Park) to Belfield_ University College Dublin	AM Peak Hour	20.3	16.1	-4.2	-21%
		PM Peak Hour	-	-	-	-
4175	X27: Belfield_ University College Dublin to Celbridge_ Maynooth Road (Crodaun Forest Park)	AM Peak Hour	-	-	-	-
		PM Peak Hour	19.3	17.0	-2.3	-12%
4176	X28: Celbridge_ Maynooth Road (Crodaun Forest Park) to Belfield_ University College Dublin	AM Peak Hour	20.6	16.1	-4.5	-22%
		PM Peak Hour	-	-	-	-
4177	X28: Belfield_ University College Dublin to Celbridge_ Maynooth Road (Crodaun Forest Park)	AM Peak Hour	-	-	-	-
		PM Peak Hour	19.6	17.6	-2.1	-11%
4186	X55: Nangor_ Dunawley Avenue to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	4.8	4.3	-0.5	-10%
		PM Peak Hour	-	-	-	-
4187	X56: Greenoge_ Greenoge to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	4.9	4.4	-0.5	-11%
		PM Peak Hour	-	-	-	-
4188	X56: Grand Canal Dock_ Ringsend Bus Depot to Greenoge_ Greenoge	AM Peak Hour	-	-	-	-
		PM Peak Hour	4.9	4.4	-0.5	-11%
4215	X58: Rathcoole_ Rathlawns (Green Lane) to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	5.1	4.3	-0.7	-15%
		PM Peak Hour	-	-	-	-
4216	X58: Grand Canal Dock_ Ringsend Bus Depot to Community School	AM Peak Hour	-	-	-	-
		PM Peak Hour	4.6	4.4	-0.2	-5%
4227	58: Community School to Tolka Quay_ Irish Ferries Terminal	AM Peak Hour	0.4	0.3	-0.1	-22%
		PM Peak Hour	0.3	0.3	0.0	3%

PT Line	Direction	Peak Period	Do Minimum	Do Something	Abs Diff	% Diff
4228	60: Irish Rail Building North Wall Quay to Red Cow Luas	AM Peak Hour	1.4	3.2	1.8	132%
		PM Peak Hour	1.4	1.7	0.3	23%
4231	60: Monastery Road to Irish Rail Building North Wall Quay	AM Peak Hour	4.1	3.8	-0.2	-6%
		PM Peak Hour	4.4	4.3	-0.1	-3%
4232	W4: Mulhuddart_ Blanchardstown to Tallaght_ The Square Shopping Centre	AM Peak Hour	3.6	4.3	0.7	18%
		PM Peak Hour	5.4	5.2	-0.3	-5%
4249	W4: Tallaght_ The Square Shopping Centre to Blanchardstown_ Shopping Centre	AM Peak Hour	5.2	6.3	1.1	22%
		PM Peak Hour	5.1	6.6	1.5	29%
4250	52: Easton Road (Outbound at Beechpark) to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	13.5	7.3	-6.2	-46%
		PM Peak Hour	6.7	6.1	-0.6	-8%
4259	52: Grand Canal Dock_ Ringsend Bus Depot to Easton Road (Outbound at Beechpark)	AM Peak Hour	20.1	16.1	-3.9	-20%
		PM Peak Hour	17.9	15.8	-2.1	-12%
4260	X55: Grand Canal Dock_ Ringsend Bus Depot to Nangor_ Dunawley Avenue	AM Peak Hour	17.3	15.9	-1.3	-8%
		PM Peak Hour	19.0	17.1	-1.9	-10%
4265	Dublin Bus: 747: Dublin Airport to Heuston Station_ Victoria Quay	AM Peak Hour	2.5	3.3	0.8	32%
		PM Peak Hour	2.1	3.1	1.0	50%
4266	L54: Monastery Road to Leixlip_ River Forest Estate	AM Peak Hour	2.8	1.2	-1.6	-58%
		PM Peak Hour	1.9	0.9	-0.9	-50%
4275	X55: Grand Canal Dock_ Ringsend Bus Depot to Nangor_ Dunawley Avenue	AM Peak Hour	-	-	-	-
		PM Peak Hour	4.5	4.2	-0.3	-7%
4276	Dublin Bus: 747: Dublin Airport to Heuston Station_ Victoria Quay	AM Peak Hour	1.4	2.6	1.2	91%
		PM Peak Hour	1.7	1.6	-0.1	-4%
4277	Dublin Bus: 747: Heuston Station_ Victoria Quay to Dublin Airport	AM Peak Hour	1.6	1.4	-0.2	-10%
		PM Peak Hour	1.6	1.7	0.1	7%

Table 15 2043 AM and PM Peak Hour Journey Times

PT Line	Direction	Peak Period	Do Minimum	Do Something	Abs Diff	% Diff
4023	C1: Adamstown_ Outside Train Station to Sandymount_ Saint John's Church	AM Peak Hour	25.4	18.2	-7.1	-28%
		PM Peak Hour	20.6	17.4	-3.1	-15%
4024	C1: Sandymount_ Saint John's Church to Adamstown_ Outside Train Station	AM Peak Hour	18.4	17.4	-1.0	-6%
		PM Peak Hour	20.9	18.6	-2.4	-11%
4025	C2: Adamstown_ Outside Train Station to Sandymount_ Saint John's Church	AM Peak Hour	25.3	18.3	-7.0	-28%
		PM Peak Hour	20.3	17.3	-3.0	-15%
4026	C2: Sandymount_ Saint John's Church to Adamstown_ Outside Train Station	AM Peak Hour	18.2	17.4	-0.8	-5%
		PM Peak Hour	20.6	18.5	-2.1	-10%
4027	C3: Grand Canal Dock_ Ringsend Bus Depot to Straffan Rd	AM Peak Hour	19.4	17.8	-1.6	-8%
		PM Peak Hour	21.4	19.0	-2.4	-11%
4028	C3: Straffan Rd to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	22.5	16.4	-6.1	-27%
		PM Peak Hour	18.2	16.1	-2.1	-12%
4029	C4: Celbridge_ Maynooth Road (Crodaun Forest Park) to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	22.1	16.2	-5.9	-27%
		PM Peak Hour	18.5	16.3	-2.2	-12%
4030	C4: Grand Canal Dock_ Ringsend Bus Depot to Celbridge_ Maynooth Road (Crodaun Forest Park)	AM Peak Hour	19.8	17.9	-1.8	-9%
		PM Peak Hour	22.1	19.3	-2.8	-13%
4079	80: Ballinteer_ Kingston Estate to Liffey Valley	AM Peak Hour	4.2	5.4	1.3	30%
		PM Peak Hour	5.4	5.6	0.2	4%
4080	80: Liffey Valley SB to Ballinteer_ Kingston Estate	AM Peak Hour	1.3	1.0	-0.3	-24%
		PM Peak Hour	1.3	1.0	-0.4	-26%
4162	P29: Adamstown_ Outside Train Station to Merrion Square South	AM Peak Hour	20.4	16.1	-4.4	-21%
		PM Peak Hour	-	-	-	-
4163	P29: Merrion Square South to Adamstown_ Outside Train Station	AM Peak Hour	-	-	-	-
		PM Peak Hour	19.7	16.6	-3.1	-16%
4164	X30: Adamstown_ Outside Train Station to Belfield_ University College Dublin	AM Peak Hour	22.2	16.8	-5.5	-25%
		PM Peak Hour	-	-	-	-
4165	X30: Belfield_ University College Dublin to Adamstown_ Outside Train Station	AM Peak Hour	-	-	-	-
		PM Peak Hour	22.4	19.4	-3.0	-13%
4166	X31: Leixlip_ River Forest Estate to Merrion Square South	AM Peak Hour	22.0	16.2	-5.7	-26%
		PM Peak Hour	-	-	-	-
4167	X31: Merrion Square North to Leixlip_ River Forest Estate	AM Peak Hour	-	-	-	-
		PM Peak Hour	22.0	18.9	-3.2	-14%
4168	X32: Leixlip Road to Merrion Square South	AM Peak Hour	22.3	16.0	-6.4	-28%
		PM Peak Hour	-	-	-	-
4169	X32: Merrion Square North to Leixlip Road	AM Peak Hour	-	-	-	-

PT Line	Direction	Peak Period	Do Minimum	Do Something	Abs Diff	% Diff
		PM Peak Hour	22.9	19.7	-3.2	-14%
4170	X25: Maynooth_ Straffan Road (Kingsbury Estate) to Merrion Square South	AM Peak Hour	20.7	16.1	-4.6	-22%
		PM Peak Hour	-	-	-	-
4171	X25: Merrion Square North to Maynooth_ Kingsbury Estate	AM Peak Hour	-	-	-	-
		PM Peak Hour	19.4	16.7	-2.7	-14%
4172	X26: Maynooth_ Straffan Road (Kingsbury Estate) to Belfield_ University College Dublin	AM Peak Hour	20.3	16.1	-4.2	-21%
		PM Peak Hour	-	-	-	-
4173	X26: Belfield_ University College Dublin to Straffan Rd	AM Peak Hour	-	-	-	-
		PM Peak Hour	19.7	16.4	-3.4	-17%
4174	X27: Celbridge_ Maynooth Road (Crodaun Forest Park) to Belfield_ University College Dublin	AM Peak Hour	20.5	16.1	-4.4	-22%
		PM Peak Hour	-	-	-	-
4175	X27: Belfield_ University College Dublin to Celbridge_ Maynooth Road (Crodaun Forest Park)	AM Peak Hour	-	-	-	-
		PM Peak Hour	19.2	16.6	-2.6	-14%
4176	X28: Celbridge_ Maynooth Road (Crodaun Forest Park) to Belfield_ University College Dublin	AM Peak Hour	20.4	16.2	-4.2	-21%
		PM Peak Hour	-	-	-	-
4177	X28: Belfield_ University College Dublin to Celbridge_ Maynooth Road (Crodaun Forest Park)	AM Peak Hour	-	-	-	-
		PM Peak Hour	20.0	16.7	-3.2	-16%
4186	X55: Nangor_ Dunawley Avenue to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	4.9	4.4	-0.5	-9%
		PM Peak Hour	-	-	-	-
4187	X56: Greenoge_ Greenoge to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	4.7	4.5	-0.3	-6%
		PM Peak Hour	-	-	-	-
4188	X56: Grand Canal Dock_ Ringsend Bus Depot to Greenoge_ Greenoge	AM Peak Hour	-	-	-	-
		PM Peak Hour	4.6	4.3	-0.3	-7%
4215	X58: Rathcoole_ Rathlawns (Green Lane) to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	5.0	4.5	-0.6	-11%
		PM Peak Hour	-	-	-	-
4216	X58: Grand Canal Dock_ Ringsend Bus Depot to Community School	AM Peak Hour	-	-	-	-
		PM Peak Hour	4.5	4.6	0.1	3%
4227	58: Community School to Tolka Quay_ Irish Ferries Terminal	AM Peak Hour	0.3	0.3	0.0	0%
		PM Peak Hour	0.4	0.3	-0.1	-20%
4228	60: Irish Rail Building North Wall Quay to Red Cow Luas	AM Peak Hour	1.4	2.9	1.5	107%
		PM Peak Hour	1.2	2.1	1.0	81%
4231	60: Monastery Road to Irish Rail Building North Wall Quay	AM Peak Hour	3.4	4.1	0.6	19%
		PM Peak Hour	4.4	4.3	-0.1	-2%
4232	W4: Mulhuddart_ Blanchardstown to Tallaght_ The Square Shopping Centre	AM Peak Hour	3.4	4.6	1.2	35%
		PM Peak Hour	5.4	4.7	-0.8	-14%
4249		AM Peak Hour	5.2	6.1	0.9	17%

PT Line	Direction	Peak Period	Do Minimum	Do Something	Abs Diff	% Diff
	W4: Tallaght_ The Square Shopping Centre to Blanchardstown_ Shopping Centre	PM Peak Hour	5.1	6.3	1.2	23%
4250	52: Easton Road (Outbound at Beechpark) to Grand Canal Dock_ Ringsend Bus Depot	AM Peak Hour	13.4	7.3	-6.1	-46%
		PM Peak Hour	6.7	6.1	-0.5	-8%
4259	52: Grand Canal Dock_ Ringsend Bus Depot to Easton Road (Outbound at Beechpark)	AM Peak Hour	20.3	15.8	-4.5	-22%
		PM Peak Hour	18.1	15.6	-2.6	-14%
4260	X55: Grand Canal Dock_ Ringsend Bus Depot to Nangor_ Dunawley Avenue	AM Peak Hour	17.0	16.2	-0.8	-5%
		PM Peak Hour	19.3	16.5	-2.9	-15%
4265	Dublin Bus: 747: Dublin Airport to Heuston Station_ Victoria Quay	AM Peak Hour	2.5	3.5	1.0	39%
		PM Peak Hour	2.2	3.0	0.8	37%
4266	L54: Monastery Road to Leixlip_ River Forest Estate	AM Peak Hour	3.3	1.1	-2.1	-65%
		PM Peak Hour	2.1	1.0	-1.1	-52%
4275	X55: Grand Canal Dock_ Ringsend Bus Depot to Nangor_ Dunawley Avenue	AM Peak Hour	-	-	-	-
		PM Peak Hour	4.4	4.2	-0.2	-5%
4276	Dublin Bus: 747: Dublin Airport to Heuston Station_ Victoria Quay	AM Peak Hour	1.3	2.7	1.4	108%
		PM Peak Hour	1.6	1.8	0.2	12%
4277	Dublin Bus: 747: Heuston Station_ Victoria Quay to Dublin Airport	AM Peak Hour	1.6	1.4	-0.2	-10%
		PM Peak Hour	1.4	1.5	0.1	6%

Appendix A6.4.4: General Traffic Assessment

Table 16: 2028 AM Peak Hour Junction Analysis

Location							Max Volume over Capacity Ratio (%)		Ranges		Description of Impact	Significance of Effects
Orientation	Map ID	Road Name	NavTeq Functional Class	Road Sensitivity	Junction ID	Junction Name	Do Minimum VoC	DoSomething VoC	Do Minimum VoC	Do Something VoC		
East of M50	A5	Davitt Road	4	Medium	8159	Davitt Road / Davitt Road / Benbulbin Road	62	65	≤85%	≤85%	Negligible	Not Significant
		Davitt Road	4	Medium	8173	Davitt Road / Davitt Road / Kilworth Road	57	68	≤85%	≤85%	Negligible	Not Significant
		Davitt Road	4	Medium	7173	Dolphin Road / Slievenamon Road / Dolphin Road / Davitt Road	55	63	≤85%	≤85%	Negligible	Not Significant
		Emmet Road	4	Medium	14216	Myra Close / Emmet Road / Emmet Road	48	50	≤85%	≤85%	Negligible	Not Significant
		Emmet Road	4	Medium	14141	Emmet Road / Bulfin Road	50	52	≤85%	≤85%	Negligible	Not Significant
		Naas Road	3	Low	8392	Naas Road / Davitt Road	97	99	85% - 100%	85% - 100%	Negligible	Not Significant

Table 17: 2043 AM Junction Analysis

Location							Max Volume over Capacity Ratio (%)		Ranges		Description of Impact	Significance of Effects
Orientation	Map ID	Road Name	NavTeq Functional Class	Road Sensitivity	Junction ID	Junction Name	Do Minimum VoC	DoSomething VoC	Do Minimum VoC	Do Something VoC		
East of M50	A5	Davitt Road	4	Medium	8159	Davitt Road / Davitt Road / Benbulbin Road	65	67	≤85%	≤85%	Negligible	Not Significant
		Davitt Road	4	Medium	8173	Davitt Road / Davitt Road / Kilworth Road	57	67	≤85%	≤85%	Negligible	Not Significant
		Davitt Road	4	Medium	7173	Dolphin Road / Slievenamon Road / Dolphin Road / Davitt Road	60	64	≤85%	≤85%	Negligible	Not Significant
		Emmet Road	4	Medium	14216	Myra Close / Emmet Road / Emmet Road	50	52	≤85%	≤85%	Negligible	Not Significant
		Emmet Road	4	Medium	14141	Emmet Road / Bulfin Road	52	55	≤85%	≤85%	Negligible	Not Significant
		Naas Road	3	Low	8392	Naas Road / Davitt Road	97	99	85% - 100%	85% - 100%	Negligible	Not Significant

Table 18: 2028 PM Junction Analysis

Location							Max Volume over Capacity Ratio (%)		Ranges		Description of Impact	Significance of Effects
Orientation	Map ID	Road Name	NavTeq Functional Class	Road Sensitivity	Junction ID	Junction Name	Do Minimum VoC	DoSomething VoC	Do Minimum VoC	Do Something VoC		
West of M50	P1	R109 Main Street	5	High	25408	Leixlip Road / Main Street	48	54	≤85%	≤85%	Negligible	Not Significant
		R109 Main Street	5	High	25406	R109 / Lower Main Street / Lower Main Street	29	36	≤85%	≤85%	Negligible	Not Significant
		R109 Main Street	5	High	25453	Chapel Hill / Lower Main Street / R109	71	76	≤85%	≤85%	Negligible	Not Significant
	P2	R113 Fonthill Road North (North Of St Lomans Road)	2	Negligible	25147	R113 SB on slip to Fonthill Road North SB	61	69	≤85%	≤85%	Negligible	Imperceptible
		Fonthill Road North Rdbt	3	Low	25139	Fonthill Road North / St Loman's Road	68	77	≤85%	≤85%	Negligible	Not Significant
		R113 Fonthill Road North (South Of St Lomans Road)	3	Low	25129	R113 Fonthill Road North / Saint Loman's Road	106	107	>100%	>100%	Negligible	Not Significant
	P3	Coldcut Road	4	Medium	25100	Coldcut Road / Fonthill Road	84	86	≤85%	85% - 100%	Low	Moderate
		Neilstown Road	4	Medium	25385	Neilstown Road / Coldcut Road / Coldcut Road	50	46	≤85%	≤85%	Negligible	Not Significant
		Coldcut Road	4	Medium	25383	Coldcut Road / Neilstown Road	47	53	≤85%	≤85%	Negligible	Not Significant
		Neilstown Road	4	Medium	25381	St Marks Avenue / Neilstown Road / Neilstown Road	31	39	≤85%	≤85%	Negligible	Not Significant
		Neilstown Road	4	Medium	25380	Neilstown Road / Collinstown Road / Neilstown Road	56	70	≤85%	≤85%	Negligible	Not Significant
		Neilstown Road	4	Medium	25229	Neilstown Road / St Mark's Avenue	49	63	≤85%	≤85%	Negligible	Not Significant
		Neilstown Road	4	Medium	25376	Lucan Newlands Road / Neilstown Road	48	62	≤85%	≤85%	Negligible	Not Significant
	Lucan Newlands Road	3	Low	25375	Lucan Newlands Road / R113 Fonthill Road North / R113	100	97	85% - 100%	85% - 100%	Negligible	Not Significant	
Lucan Newlands Road	3	Low	25226	Lucan Newlands Road / Rowlagh Park	15	21	≤85%	≤85%	Negligible	Not Significant		
East of M50	P4	Chapelizod Road	3	Low	12250	Main Street / Chapelizod Road /	97	96	85% - 100%	85% - 100%	Negligible	Not Significant

Location							Max Volume over Capacity Ratio (%)		Ranges		Description of Impact	Significance of Effects
Orientation	Map ID	Road Name	NavTeq Functional Class	Road Sensitivity	Junction ID	Junction Name	Do Minimum VoC	DoSomething VoC	Do Minimum VoC	Do Something VoC		
		Chapelizod Road	3	Low	14158	Chapelizod Hill Road / St Laurence Road / Lucan Road	108	187	>100%	>100%	Negligible	Not Significant
		Sarsfield Road	2	Negligible	14146	Sarsfield Road / Ballyfermot Road	51	33	≤85%	≤85%	Negligible	Imperceptible
		Davitt Road	4	Medium	8392	Naas Road / Davitt Road	99	99	85% - 100%	85% - 100%	Negligible	Not Significant
		Davitt Road	4	Medium	8173	Davitt Road / Davitt Road / Kilworth Road	44	53	≤85%	≤85%	Negligible	Not Significant
		R112 Slip To Wb R148	3	Low	14160	R112 WB R148 on-slip / Kylemore Road	46	55	≤85%	≤85%	Negligible	Not Significant
	P5	Emmet Road	4	Medium	14139	Grattan Crescent / Tyrconnell Road / Emmet Road	95	99	85% - 100%	85% - 100%	Negligible	Not Significant
		Emmet Road	4	Medium	14126	Emmet Road / St Vincent Street West / Emmet Road	69	73	≤85%	≤85%	Negligible	Not Significant
		Emmet Road	4	Medium	14141	Emmet Road / Bulfin Road	52	58	≤85%	≤85%	Negligible	Not Significant
		South Circular Road	1	Negligible	7187	Emmet Road / Old Kilmainham / South Circular Road / South Circular Road	67	75	≤85%	≤85%	Negligible	Imperceptible
		South Circular Road	1	Negligible	7163	South Circular Road / Inchicore Road / Kilmainham Lane	62	91	≤85%	85% - 100%	Low	Not Significant

Table 19: 2043 PM Junction Analysis

Location							Max Volume over Capacity Ratio (%)		Ranges		Description of Impact	Significance of Effects
Orientation	Map ID	Road Name	NavTeq Functional Class	Road Sensitivity	Junction ID	Junction Name	Do Minimum VoC	DoSomething VoC	Do Minimum VoC	Do Something VoC		
West of M50	P1	R109 Main Street	5	High	25408	Leixlip Road / Main Street	47	56	≤85%	≤85%	Negligible	Not Significant
		R109 Main Street	5	High	25406	R109 / Lower Main Street / Lower Main Street	29	37	≤85%	≤85%	Negligible	Not Significant
		R109 Main Street	5	High	25453	Chapel Hill / Lower Main Street / R109	75	81	≤85%	≤85%	Negligible	Not Significant
	P2	R113 Fonthill Road North (North Of St Lomans Road)	2	Negligible	25147	R113 SB on slip to Fonthill Road North SB	56	63	≤85%	≤85%	Negligible	Imperceptible
		Fonthill Road North Rdbt	3	Low	25139	Fonthill Road North / St Loman's Road	63	73	≤85%	≤85%	Negligible	Not Significant
		R113 Fonthill Road North (South Of St Lomans Road)	3	Low	25129	R113 Fonthill Road North / Saint Loman's Road	106	106	>100%	>100%	Negligible	Not Significant
	P3	Coldcut Road	4	Medium	25100	Coldcut Road / Fonthill Road	85	86	≤85%	85% - 100%	Low	Moderate
		Neilstown Road	4	Medium	25385	Neilstown Road / Coldcut Road / Coldcut Road	54	51	≤85%	≤85%	Negligible	Not Significant
		Coldcut Road	4	Medium	25383	Coldcut Road / Neilstown Road	41	47	≤85%	≤85%	Negligible	Not Significant
		Neilstown Road	4	Medium	25381	St Marks Avenue / Neilstown Road / Neilstown Road	31	34	≤85%	≤85%	Negligible	Not Significant
		Neilstown Road	4	Medium	25380	Neilstown Road / Collinstown Road / Neilstown Road	53	63	≤85%	≤85%	Negligible	Not Significant
		Neilstown Road	4	Medium	25229	Neilstown Road / St Mark's Avenue	45	57	≤85%	≤85%	Negligible	Not Significant
		Neilstown Road	4	Medium	25376	Lucan Newlands Road / Neilstown Road	45	57	≤85%	≤85%	Negligible	Not Significant
		Lucan Newlands Road	3	Low	25375	Lucan Newlands Road / R113 Fonthill Road North / R113	101	101	>100%	>100%	Negligible	Not Significant
	Lucan Newlands Road	3	Low	25226	Lucan Newlands Road / Rowlagh Park	14	17	≤85%	≤85%	Negligible	Not Significant	
East of M50	P4	Chapelizod Road	3	Low	12250	Main Street / Chapelizod Road /	95	93	85% - 100%	85% - 100%	Negligible	Not Significant
		Chapelizod Road	3	Low	14158	Chapelizod Hill Road / St Laurence Road / Lucan Road	101	101	>100%	>100%	Negligible	Not Significant
		Sarsfield Road	2	Negligible	14146	Sarsfield Road / Ballyfermot Road	50	32	≤85%	≤85%	Negligible	Imperceptible
		Davitt Road	4	Medium	8392	Naas Road / Davitt Road	99	99	85% - 100%	85% - 100%	Negligible	Not Significant
		Davitt Road	4	Medium	8173	Davitt Road / Davitt Road / Kilworth Road	40	47	≤85%	≤85%	Negligible	Not Significant
		R112 Slip To Wb R148	3	Low	14160	R112 WB R148 on-slip / Kylemore Road	45	51	≤85%	≤85%	Negligible	Not Significant
	P5	Emmet Road	4	Medium	14139	Grattan Crescent / Tyrconnell Road / Emmet Road	95	98	85% - 100%	85% - 100%	Negligible	Not Significant
		Emmet Road	4	Medium	14126	Emmet Road / St Vincent Street West / Emmet Road	68	73	≤85%	≤85%	Negligible	Not Significant
		Emmet Road	4	Medium	14141	Emmet Road / Bulfin Road	50	59	≤85%	≤85%	Negligible	Not Significant
		South Circular Road	1	Negligible	7187	Emmet Road / Old Kilmainham / South Circular Road / South Circular Road	65	72	≤85%	≤85%	Negligible	Imperceptible
South Circular Road	1	Negligible	7163	South Circular Road / Inchicore Road / Kilmainham Lane	57	82	≤85%	≤85%	Negligible	Imperceptible		