

Spatial Layout Attraction Modelling **Scenarios**



CONNECTIONS MODELLED

1. Direct pedestrian link across the tracks as an extension of Hillary Court.
2. Extension of Hillary Court across Everest Avenue towards the bowling club.
3. Creation of a vehicle as well as pedestrian link between Holland's Crescent and Rata Street.
4. Extension of Everest Avenue to the intersection of Holland's Crescent and Horlor Street.
5. Connection across tracks between Hillary Court and Walters Street.

SCENARIOS MODELLED

Vehicle model

2 + 3
2 + 3 + 4

Pedestrian model

2 + 3
2 + 3 + 4
1 + 2
2 + 5
5 + 6
2 + 5 + 6
2 + 4 + 5 + 6
2 + 5 + 6 + 7
1 + 2 + 4
2 + 4 + 5

Figure 46. - Urban structure options to be tested using Space Syntax techniques. (Image Source: Space Syntax)

Options for Naenae town centre were developed and tested to arrive at pragmatic propositions which work structurally and are in line with clearly expressed community expectations for the centre. These options relate to the available land for development, urban structure, land uses, building types and the quality of the public realm.

06.01 POSSIBLE IMPROVED URBAN STRUCTURE AND TOWN CENTRE SITE EXPANSION

The urban design evaluation and the spatial layout attraction analysis, point to potential improvements which could be made to the urban structure. These would make the town centre and surrounding areas more walkable and accessible. The options to be tested using Space Syntax techniques and Ped-shed measurements are indicated in Figure 46.

Naenae town centre is surrounded by large road reserves and open spaces, some of which are isolated and not useable. These could be reduced and used more efficiently for other uses, while areas such as parks could be improved and possibly expanded. Council has a pivotal role to play in assessing these spaces and providing for outcomes which would induce better performance in and around the town centre and meet community aspirations. The areas to be tested through design and community consultation are shown in Figure 47. Road reserves are proposed to be narrowed to align with surrounding roads and new connections are made possible by the reallocation of land for new links.

These potential changes are as follows:

Options for Urban Structure Changes (Refer to Figure 47.)

1. A potential level crossing to the railway station.
2. A potential extension to Hillary Court either as a pedestrian zone, a shared zone, or a slow-moving street.
3. The reinstatement of the removed street which linked Holland's Crescent to Treadwell Street prior to the construction of the Naenae pool.
4. A potential more direct link from Everest Avenue to Holland's Crescent. This would be through private land which may be difficult to procure.

To View the Space Syntax Report, Please go to:

<https://haveyoursay.huttcity.govt.nz/60543/widgets/314978/documents/187974/download>

To hear an explanation of the Space Syntax Analysis, please go to:

<https://haveyoursay.huttcity.govt.nz/naenaespatialplan/widgets/314981/videos/23599>

5. A new elevated bridge linking from the Naenae town centre to the railway station and Oxford Terrace.
6. The potential to extend Sladden Street as a narrow shared zone from Treadwell Street to Vogel Street.
7. A new pedestrian pathway from Everest Avenue to the new Rata Street extension

Options for Land use Changes (Refer to Figure 47.)

8. Narrowing of the Treadwell Street road reserve and using the current parking lot for other uses.
9. An expansion to the pedestrian plaza in Hillary Court replacing parking.
10. Widening of the Everest Avenue road reserve to create a “parking street” with additional parking capacity and street trees.
11. Development of other uses on the footprint of the existing pool and associated parking lot.
12. A consolidated site for a future pool.
13. Vogel Street and Cambridge Terrace road reserves narrowed to increase the development potential of the town centre. This could only occur if a new link from the town centre to the railway station were created, either as a level crossing or an over-bridge.

06.02 EVALUATION OF URBAN STRUCTURE CHANGES

The potential changes to urban structure have been evaluated using the Space Syntax methodology and Ped-shed measurements.

Figures 48. and 49. evaluate the vehicle movement implications of new connections and streets in the vehicle network.

Figures 50. to 59. evaluate the pedestrian movement implications of new connections and streets in the pedestrian network.

Figures 60. to 63. show the Ped-shed improvements these new links create.



Figure 47. - Urban structure and land use options to be tested. Areas coloured grey are existing buildings. Areas coloured yellow are potential development sites. Areas coloured lime green are potential recreation areas, while deep green represents improved parks.

06.03 SCENARIOS TO TEST IMPROVED VEHICLE MOVEMENT

Spatial Layout Attraction Vehicle 10km Scenario 2 + 3

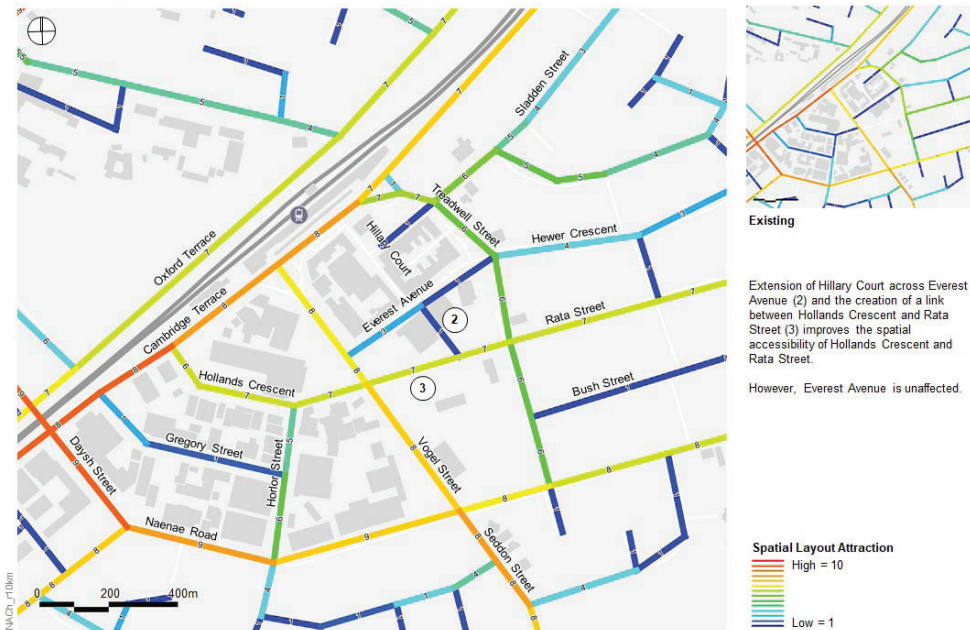


Figure 48. - Scenarios 2 and 3 testing an extension to Hillary Court and the reinstatement of the street from Vogel Street to Treadwell Street.
(Image Source: Space Syntax)

Spatial Layout Attraction Vehicle 10km Scenario 2 + 3 + 4

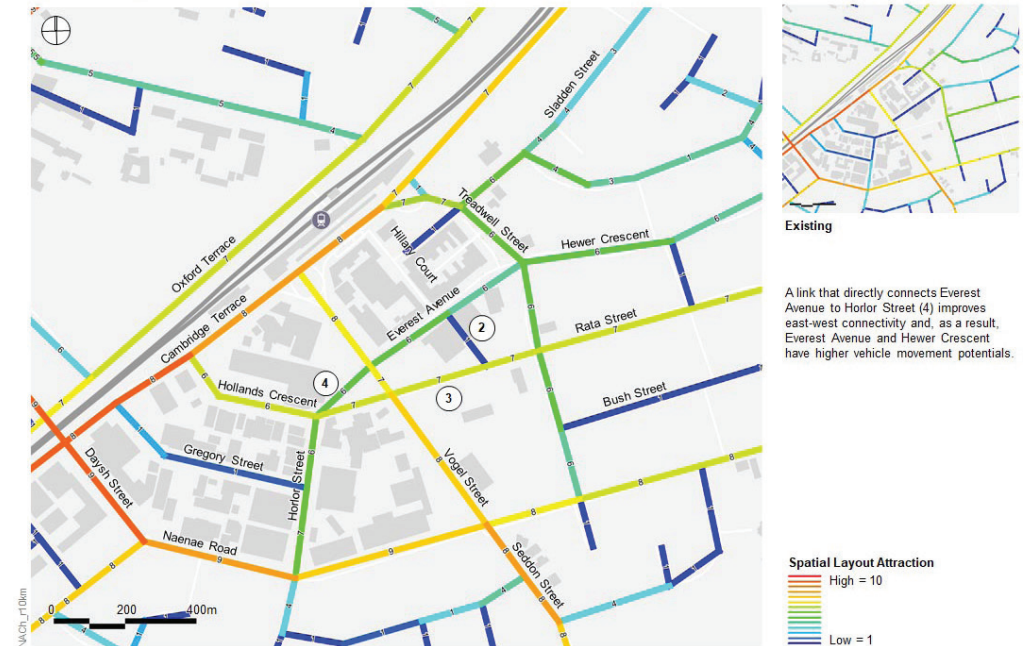


Figure 49. - Scenarios 2, 3 and 4 testing and additional link from Everest Ave to Hollands Crescent.
(Image Source: Space Syntax)

06.04 SCENARIOS TO TEST IMPROVED PEDESTRIAN MOVEMENT

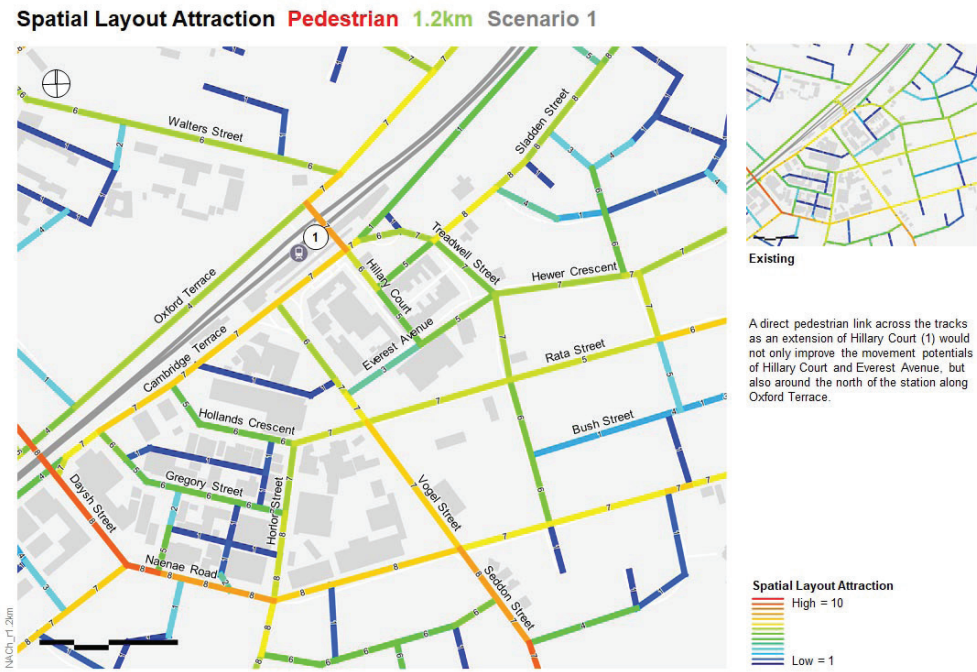


Figure 50. - Scenario 1 testing a direct at-grade link from Hillary Court to Oxford Terrace. (Image Source: Space Syntax)

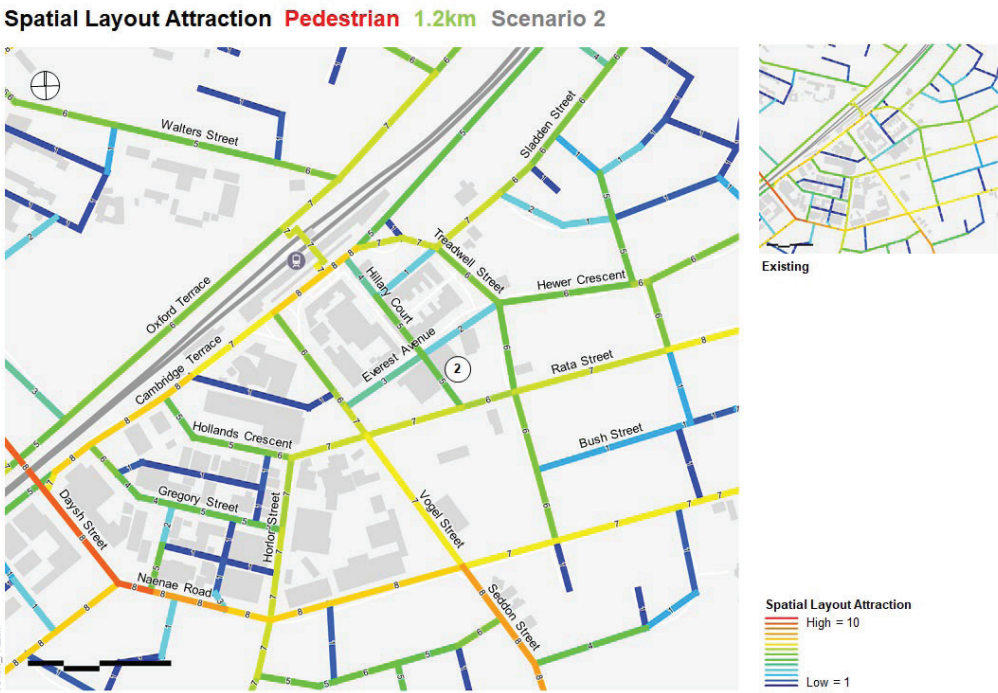


Figure 51. - Scenario 2 testing a southerly extension to Hillary Court. (Image Source: Space Syntax)

Spatial Layout Attraction Pedestrian 1.2km Scenario 1 + 2

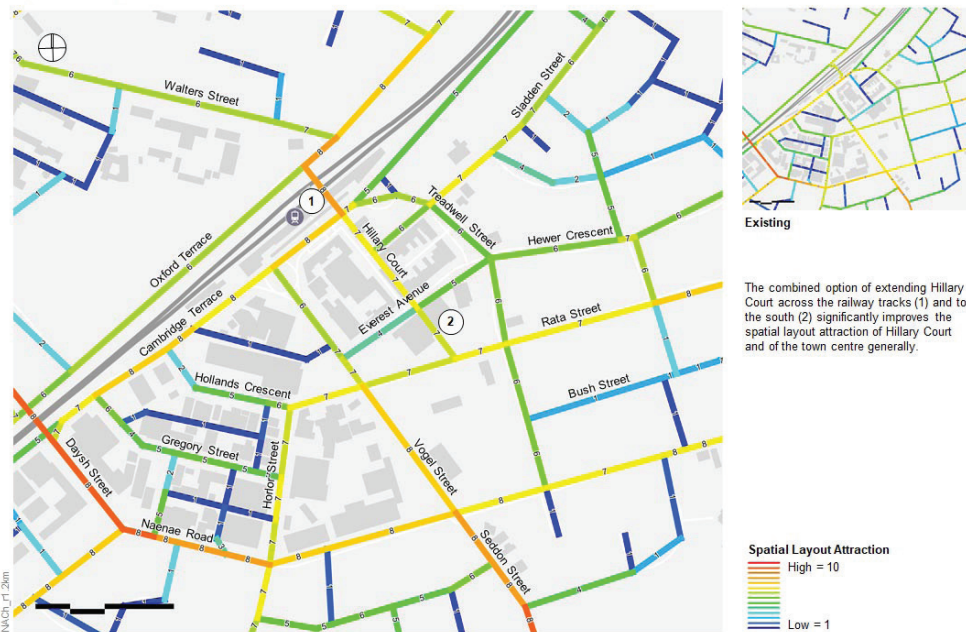


Figure 52. - Scenarios 1 and 2 testing an extension to Hillary Court and a direct at-grade link from Hillary Court to Oxford Terrace.
(Image Source: Space Syntax)

Spatial Layout Attraction Pedestrian 1.2km Scenario 5

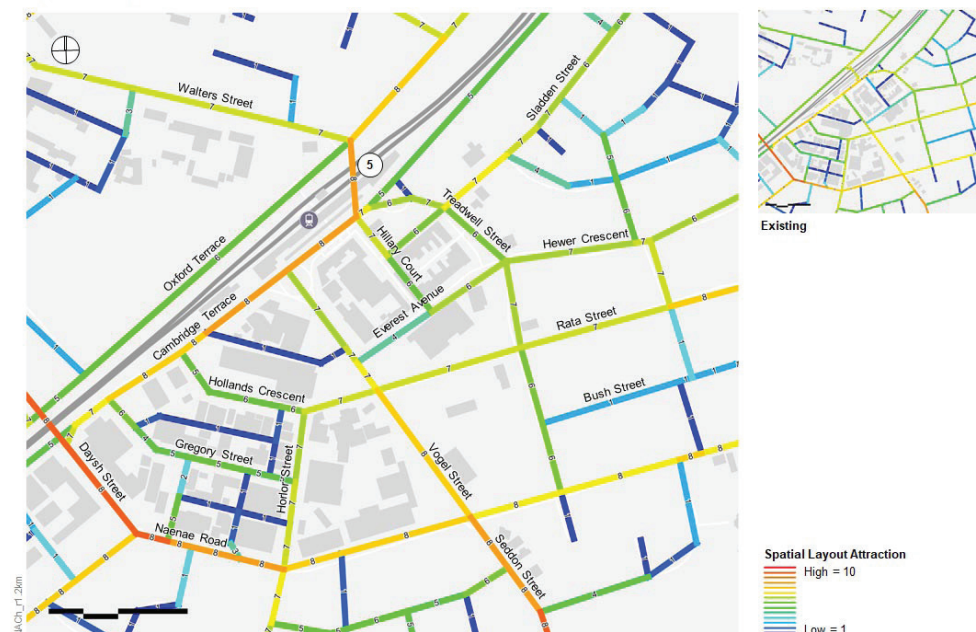


Figure 53. - Scenario 5 testing a link from Walters Street to Hillary Court.
(Image Source: Space Syntax)

Spatial Layout Attraction Pedestrian 1.2km Scenario 2 + 5

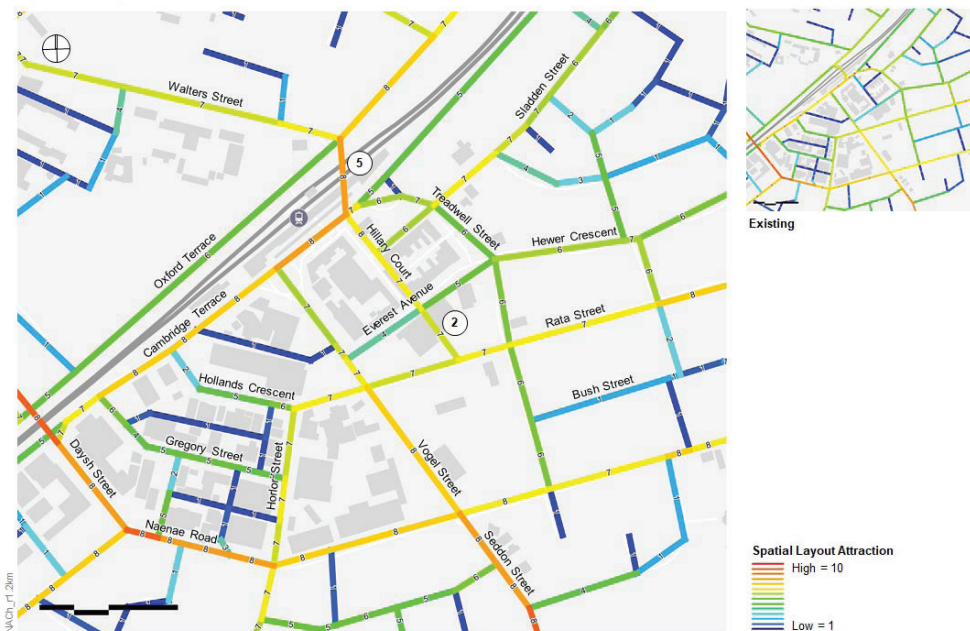


Figure 54. - Scenarios 2 and 5 testing the link from Walters Street to Hillary Court as well as the southerly extension of Hillary Court.
(Image Source: Space Syntax)

Spatial Layout Attraction Pedestrian 1.2km Scenario 5 + 6

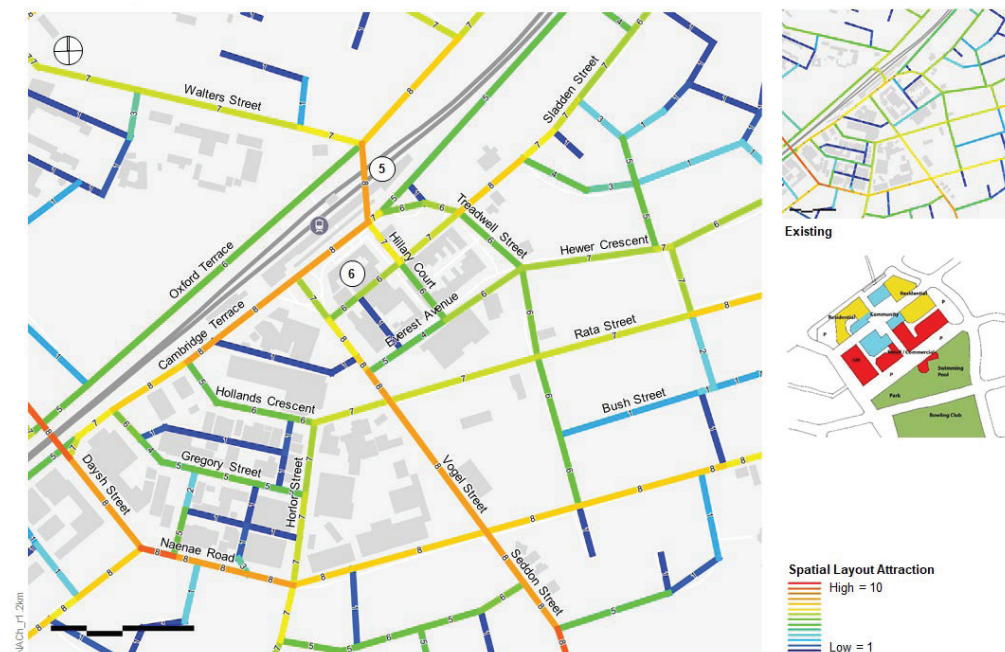


Figure 55. - Scenarios 5 and 6 testing an extension of Sladden Street to Vogel Street in conjunction with a link from Walters Street to Hillary Court. This excludes the Hillary Court extension to the south.
(Image Source: Space Syntax)

Spatial Layout Attraction Pedestrian 1.2km Scenario 2 + 5 + 6

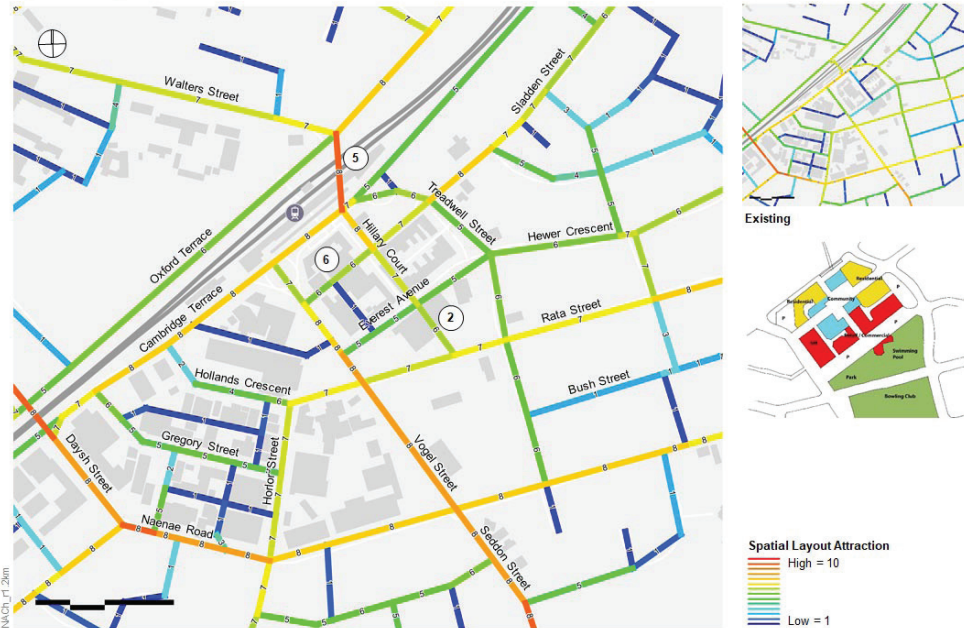


Figure 56. - Scenarios 2, 5 and 6 testing an extension to Hillary Court, a link to Walters Street, and the extension of Sladden Street to Vogel Street.
(Image Source: Space Syntax)

Spatial Layout Attraction Pedestrian 1.2km Scenario 2 + 5 + 6 + 7

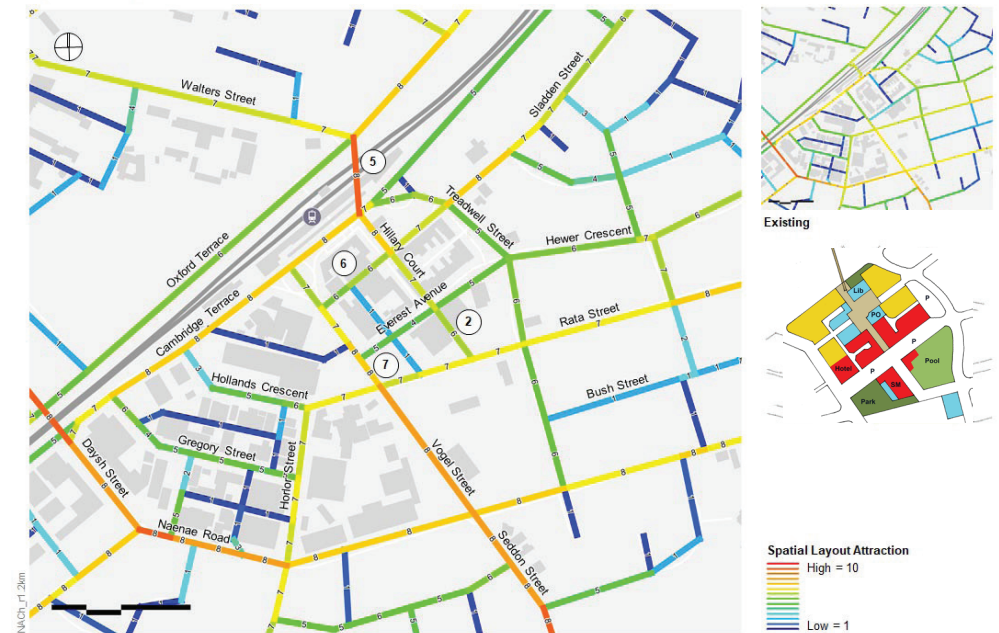


Figure 57. - Scenarios 2, 5, 6 and 7 testing the southerly extension of Hillary Court, a link to Walters Street, an extension of Sladden Street to Vogel Street and a pedestrian path linking from Everest Avenue to the Rata Street extension.
(Image Source: Space Syntax)

Spatial Layout Attraction Pedestrian 1.2km Proposed 1 + 2 + 4

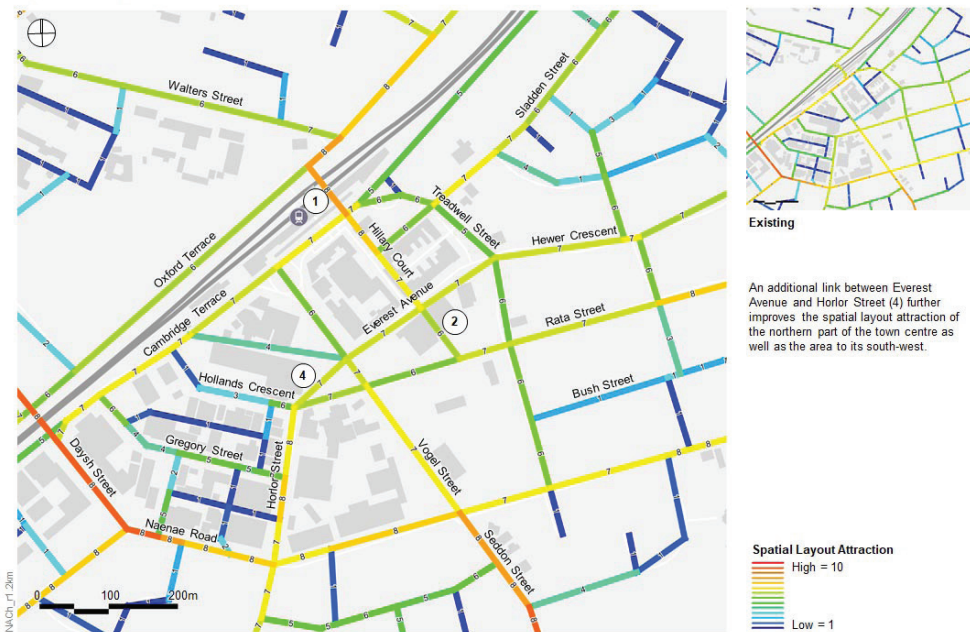


Figure 58. - Scenario 1 testing a direct at-grade link from Hillary Court to Oxford Terrace.
(Image Source: Space Syntax)

Spatial Layout Attraction Pedestrian 1.2km Proposed 2 + 4 + 5

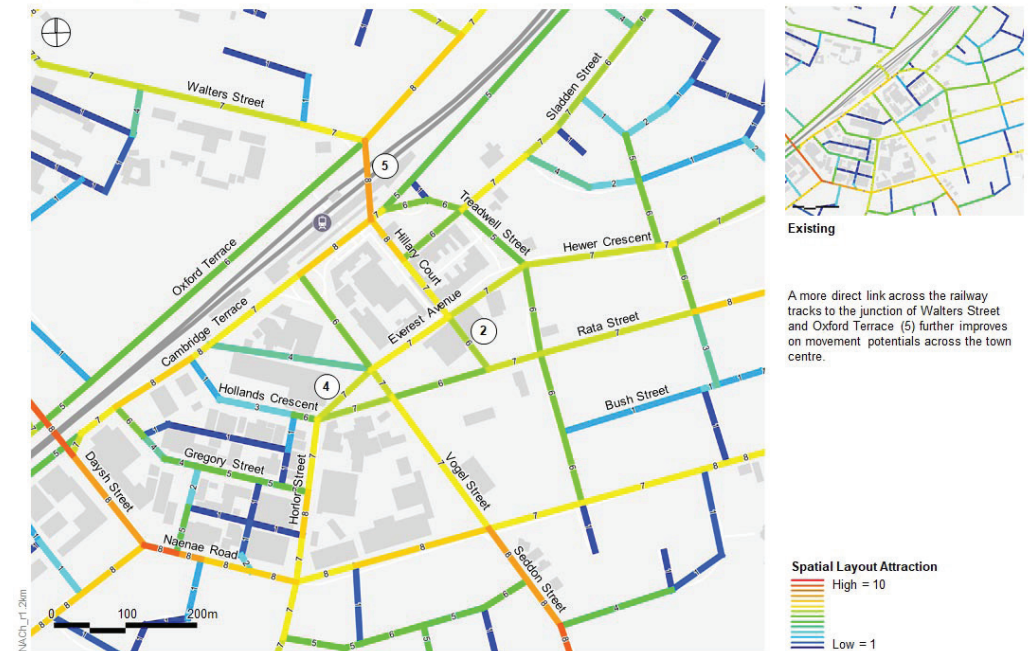


Figure 59. - Scenario 2 testing a southerly extension to Hillary Court.
(Image Source: Space Syntax)

06.05 MEASURING WALKABLE CATCHMENT IMPROVEMENTS

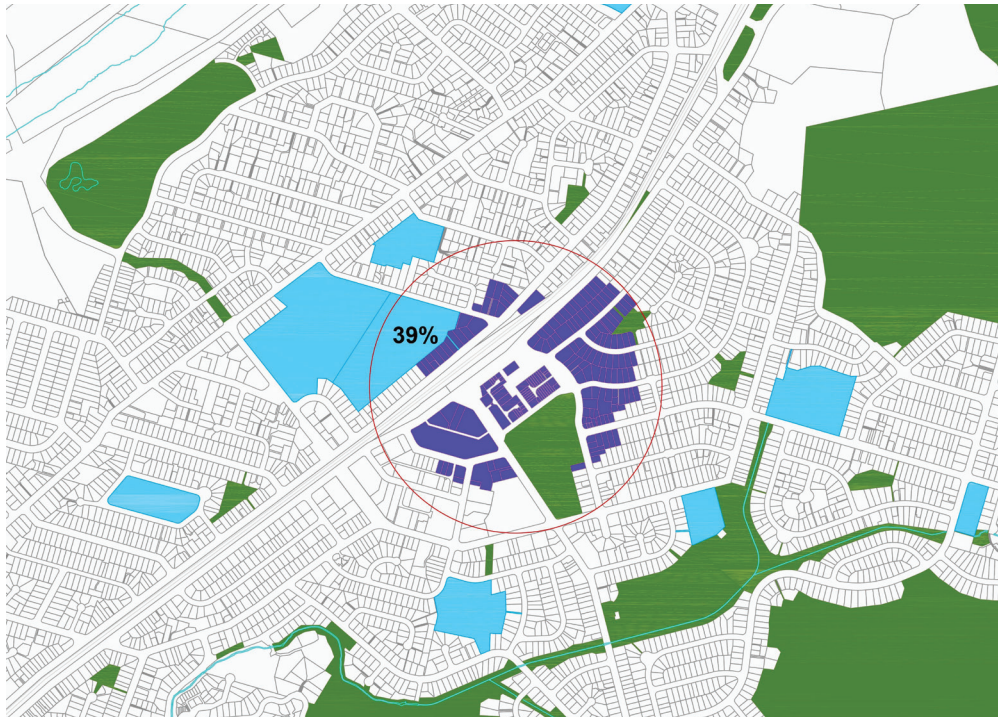


Figure 60. - Ped-shed measured today. This ped-shed measures 400 metres walkability from Hillary Court. Refer to Section 03.04 for an explanation of a Ped-shed.

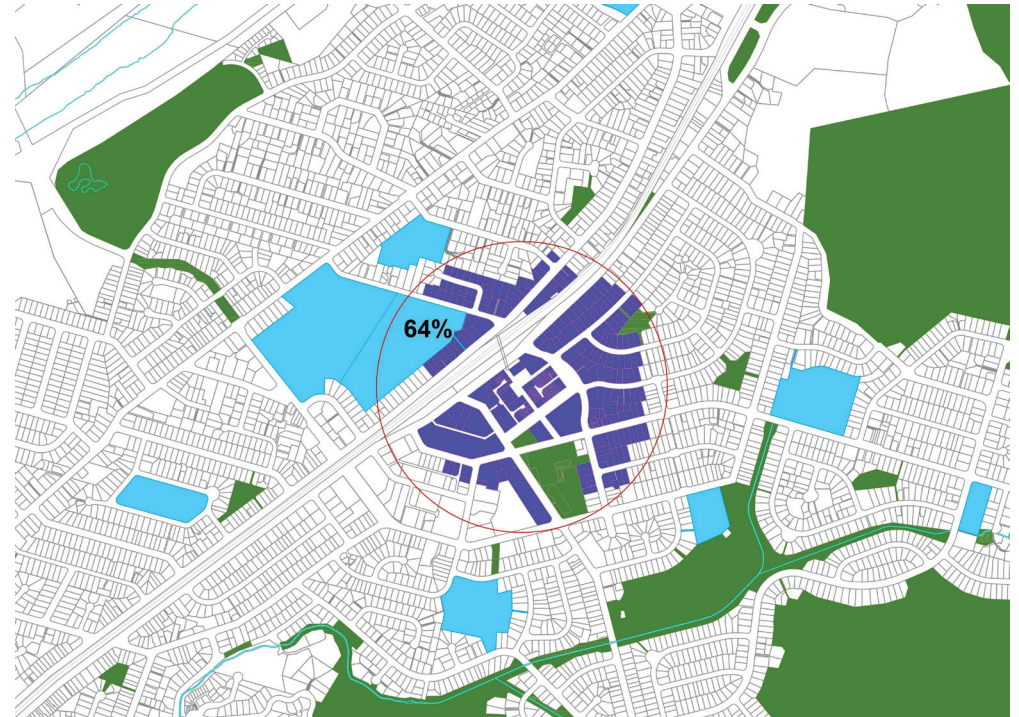


Figure 61. - Ped-shed measured after options to improve the pedestrian and vehicle movement network are added. Note the improvements to the north and east. This ped-shed excludes the Sladden Street extension which would further improve the ped-shed especially to the existing light industrial area to the south.

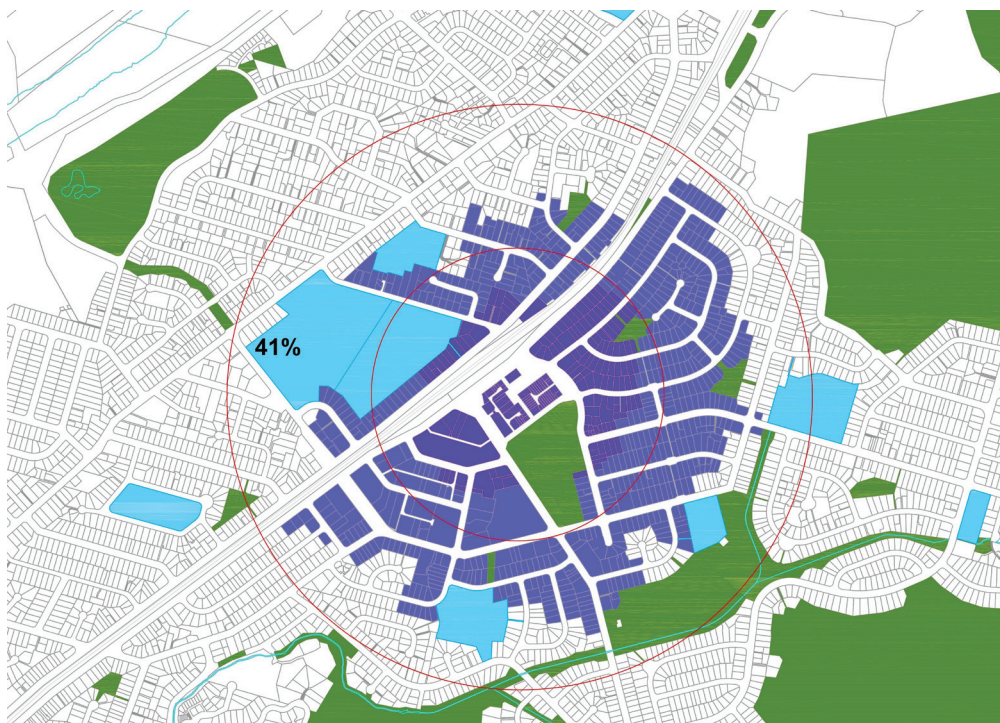


Figure 62. - Ped-shed measured today. This ped-shed measures walkability 800 metres from the bus stops and Naenae railway station. Refer to Section 03.04 for an explanation of a Ped-shed.

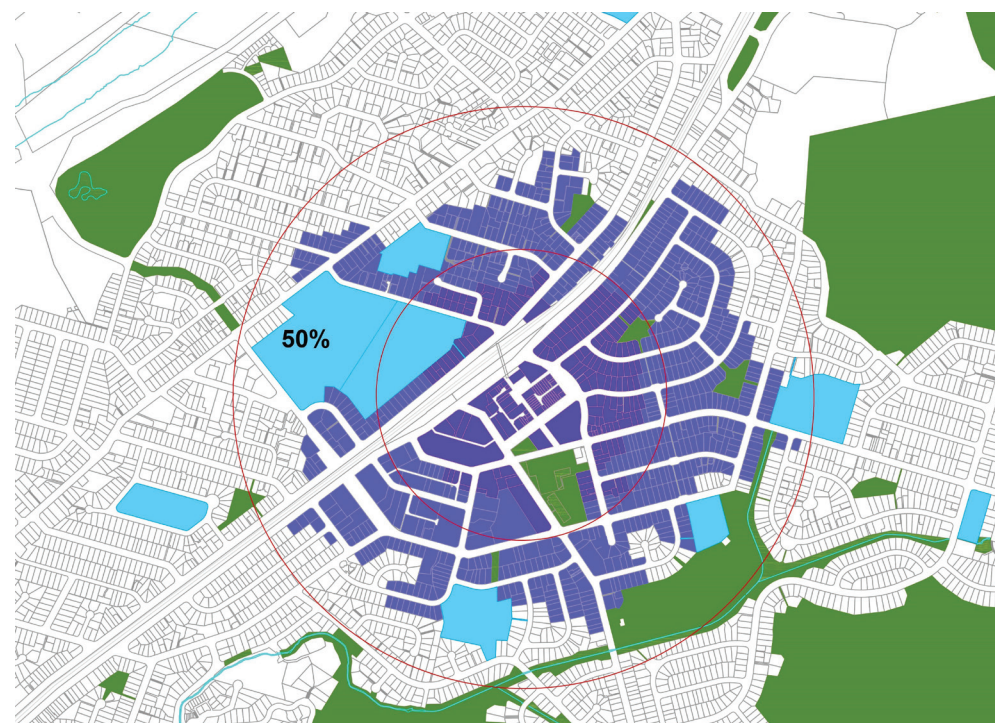


Figure 63. - Ped-shed measured after options to improve the pedestrian and vehicle movement network are added. Note the improvements to the north and east.