



# INTERNATIONAL PRECEDENTS

# Sylvia Park, South Eastern Arterial Auckland, New Zealand



Image © Data source: DigitalGlobe

The 'SEART Park' is designed around the underside of 'South Eastern Arterial' motorway overpass SEART.

The project is an example of an urban design intervention which aims to invigorate a formerly underutilised space.





Figure I 1 Sylvania Park



Figure I 2 Sylvania Park



Figure I 3 Sylvania Park carparking



Figure I 4 Sylvania Park seating area



Figure I 5 Sylvania Park



# Bras Basah Station

## Singapore

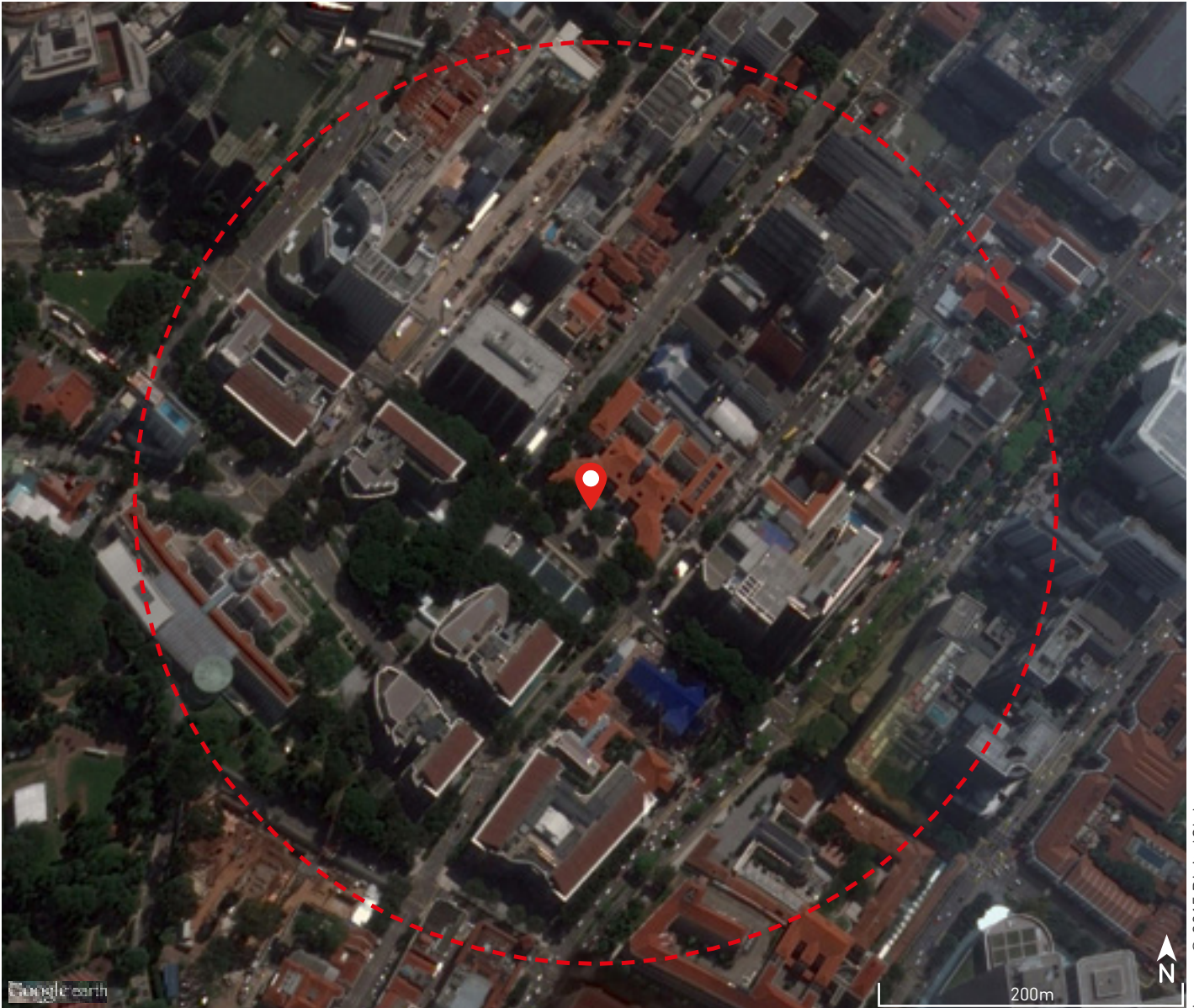


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Bras Basah is an underground station on the Circle Line in Singapore. At street level a large public space includes a water feature. Below street level, the station features an escalator atrium which has the water feature as a ceiling.

The project is an example of transport related public open space.





Figure I 6 Public open space and water feature



Figure I 7 View from above



Figure I 8 Station architecture



Figure I 9 Street entrance

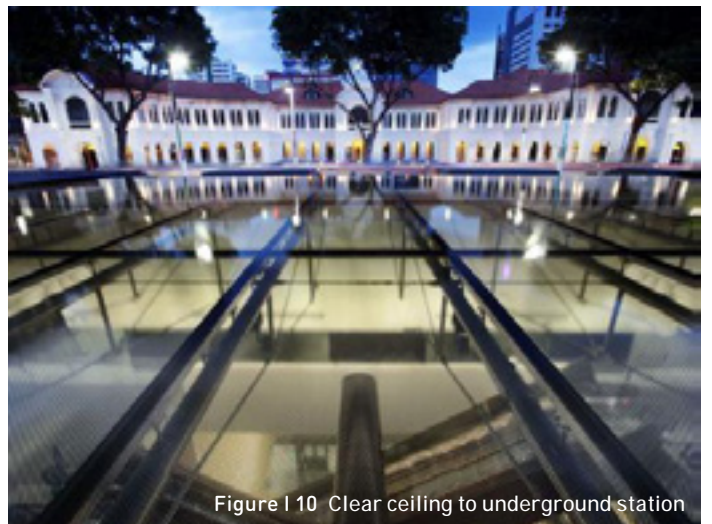


Figure I 10 Clear ceiling to underground station



# The Underline

## Miami, USA

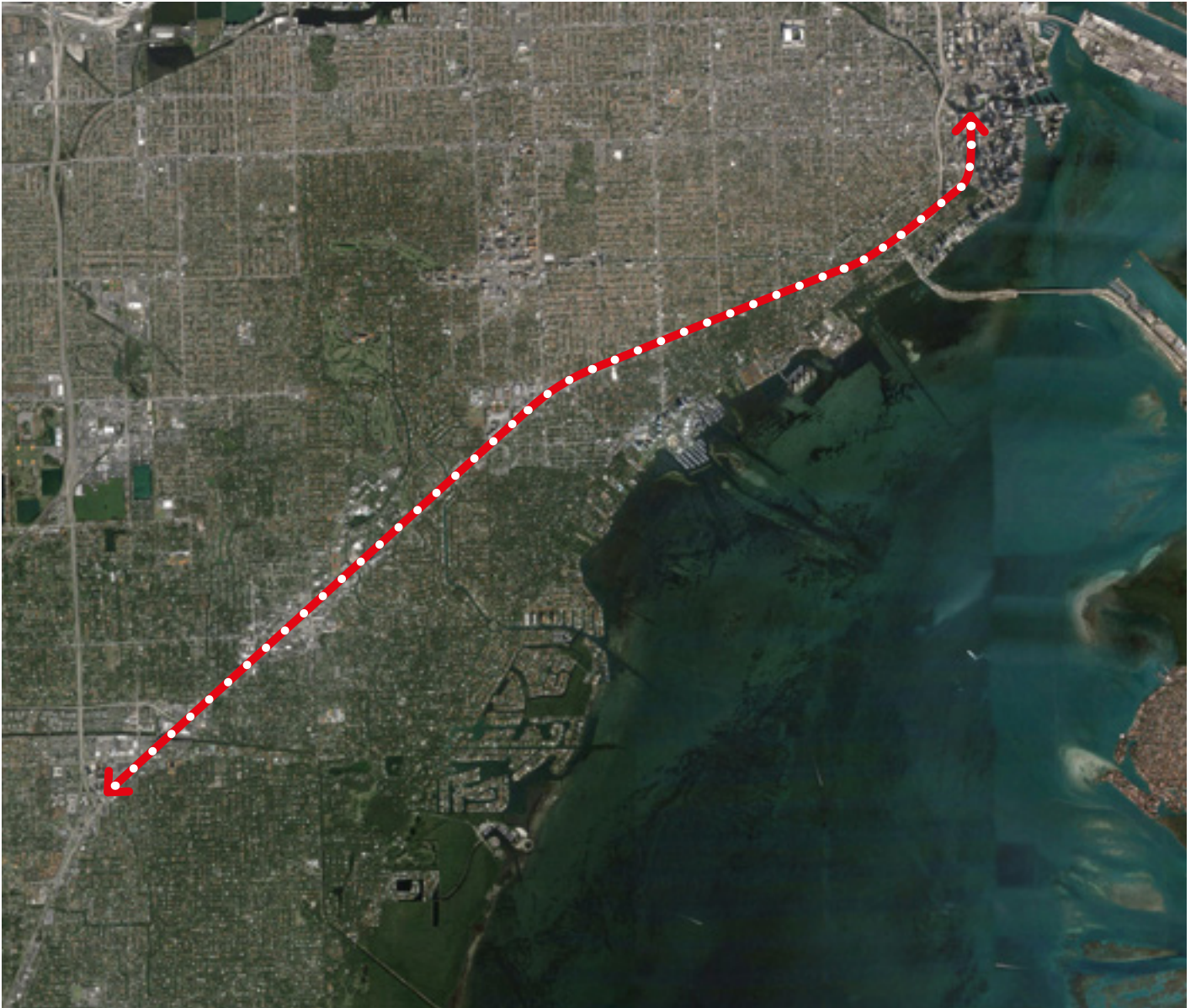


Image © Data source: SIO, NOAA, US Navy, NGA, GEBCO.

The Underline initiative aims to transform the underutilised 16 kilometre stretch under Miami's MetroRail into a linear park and urban trail. The vision is to create a world-class trail and living art destination that connects communities, provides an easily accessible place to exercise, creates over a hundred acres of open space with restored natural habitats and attracts development along the US1.

The project is at the Master Plan stage and is planned to be completed by 2026, depending on funding.





Figure I 11 Existing path



Figure I 12 Proposed path



Figure I 13 Existing path



Figure I 14 Proposed path



Figure I 15 Existing path



Figure I 16 Proposed path



# Buffalo Bayou Sabine Promenade

## Houston, USA

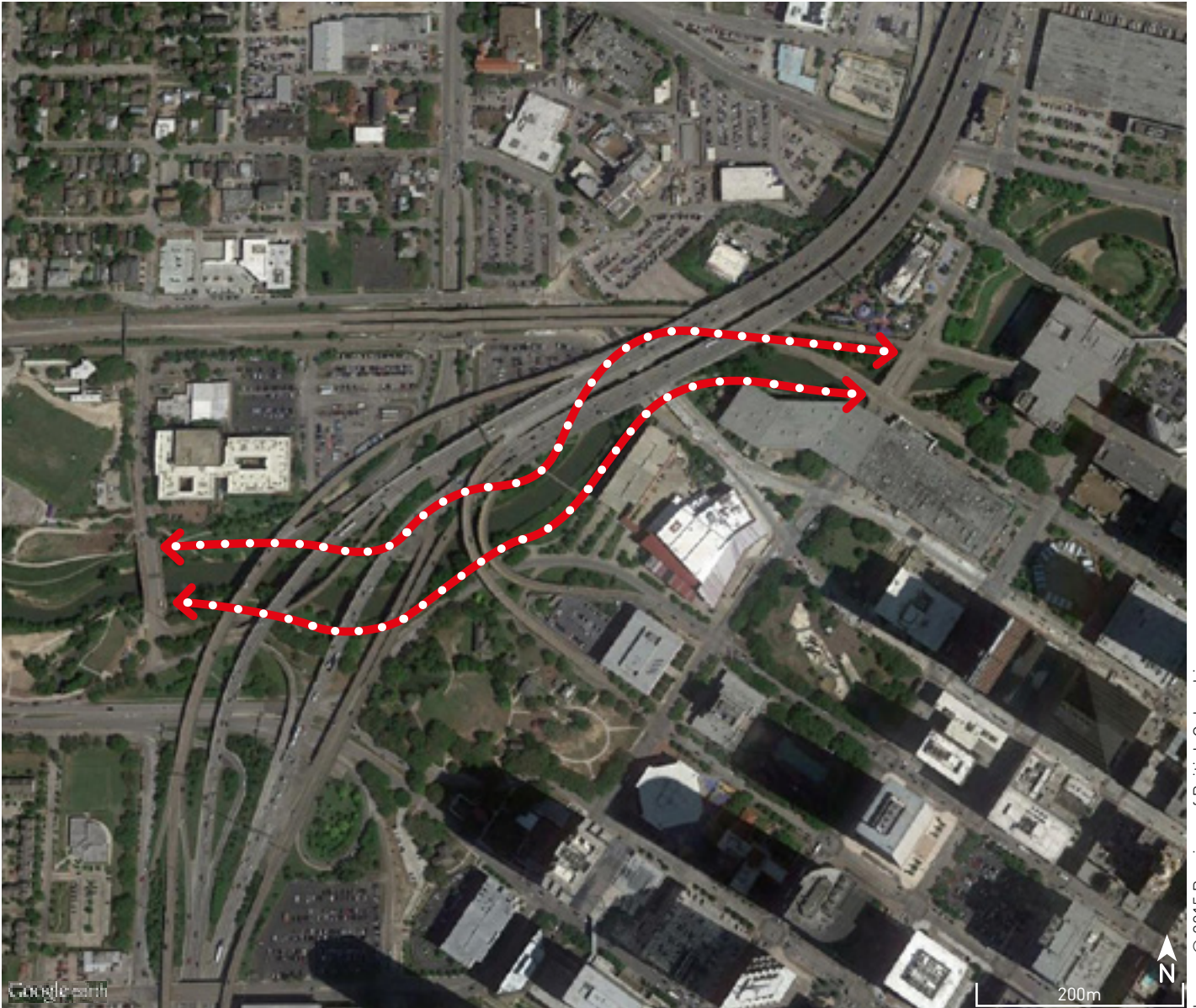


Image © 2015 Province of British Columbia

The Buffalo Bayou Promenade connects Houston's city core to the river park, under and through an area laden with roads and bridges. The Promenade project added 23 acres of parkland in close proximity to Houston's downtown area.

A wide variety of design solutions were employed to create the pedestrian friendly environment. A large focus was placed on pedestrian safety, particularly for night time.





Figure I 17 Lighting design



Figure I 18 Sabine Promenade hike and bike trails



Figure I 19 Sabine Promenade hike and bike trails



Figure I 20 Sabine Promenade hike and bike trails

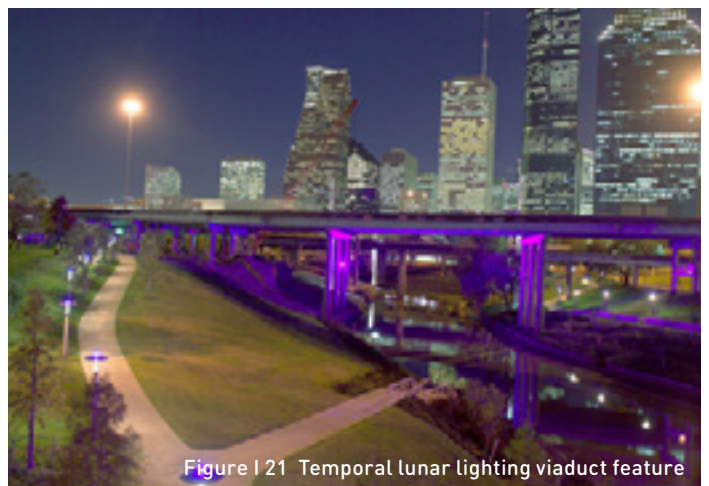
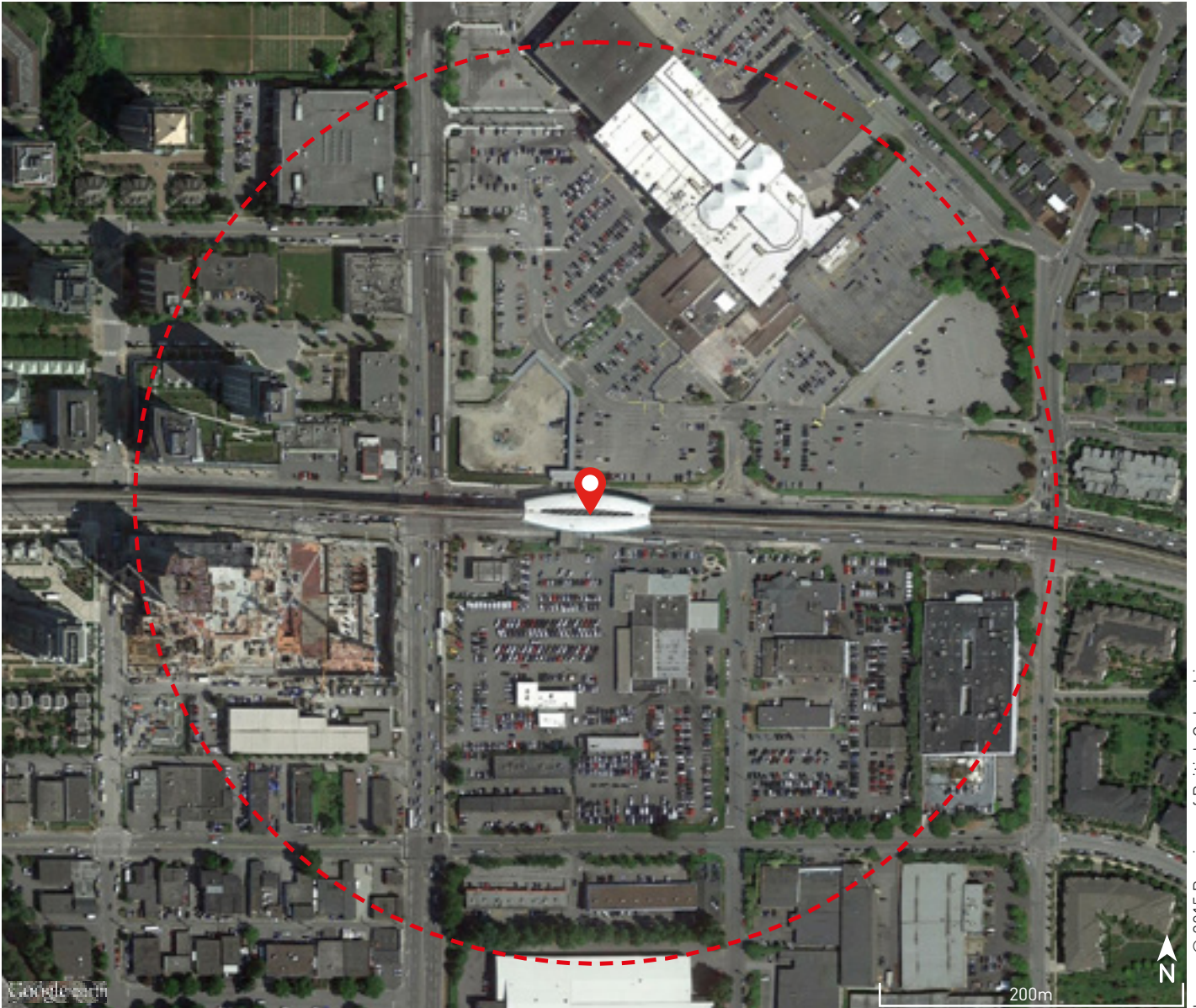


Figure I 21 Temporal lunar lighting viaduct feature



# Brentwood SkyTrain

## Vancouver, Canada



The Brentwood Town Centre station is part of Metro Vancouver's SkyTrain rapid transit system. It is located directly above the highway and also serves as a pedestrian overpass. The station platforms are high above the roadway and the mezzanine and concourse are below the platform level. It is designed to provide a curved appearance and is built using a combination of wood and steel. The use of glass for the outer wall makes the station glow at night.





Figure I 22 Brentwood SkyTrain station architecture



Figure I 23 Brentwood SkyTrain view from street



Figure I 24 Brentwood SkyTrain architecture



Figure I 25 Brentwood SkyTrain Station entrance

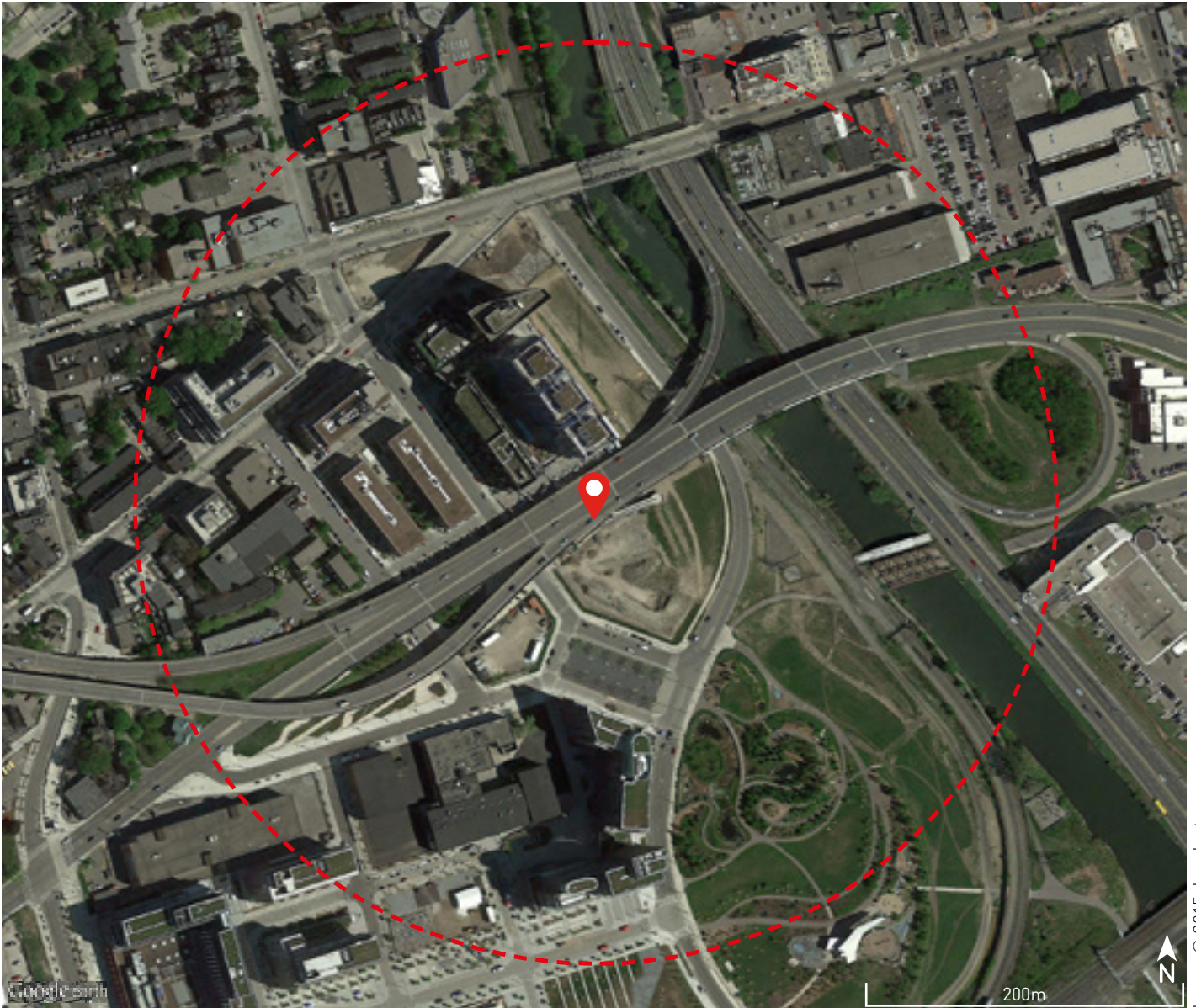


Figure I 26 Brentwood SkyTrain Platform



# Underpass Park

Toronto, Canada



Underpass Park which was created in 2012 is one of the many initiatives by Waterfront Toronto aimed at revitalising public open space. The formerly underused space now features a playground, basketball courts and skate park.





Figure I 27 Basketball court



Figure I 28 Event space



Figure I 29 Viaduct art



Figure I 30 Viaduct art

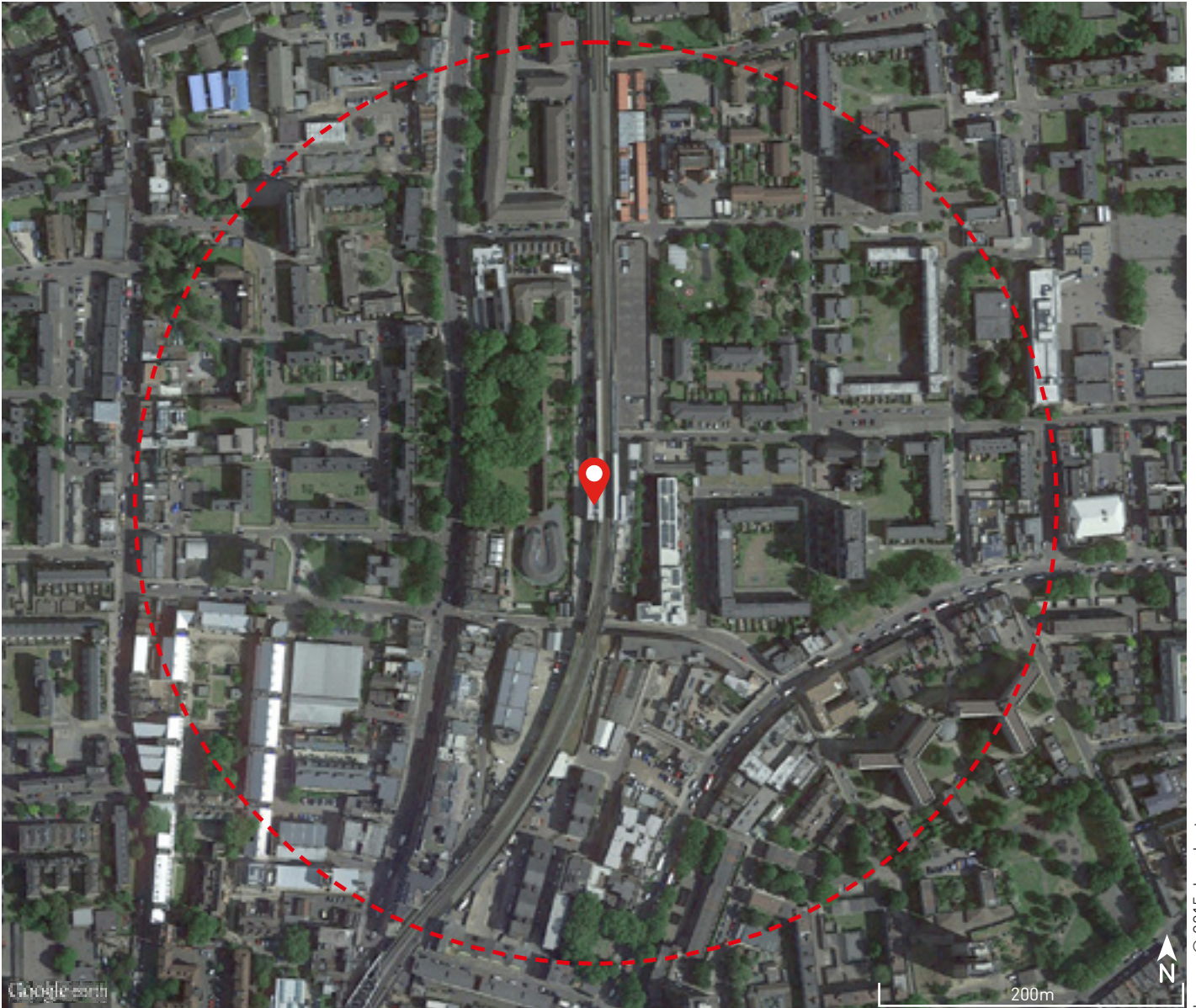


Figure I 31 Play spaces



# Hoxton Station

London, UK



Hoxton Station was commissioned as part of the East London Line extension. Parts of the extension reused existing Victorian infrastructure and Hoxton station was inserted within the existing viaduct.

The project is an example of an re-purposed under viaduct space.





Figure I 32 Station entrance



Figure I 33 Station entrance



Figure I 34 Staircase



Figure I 35 Ticket gates



Figure I 36 Street frontage

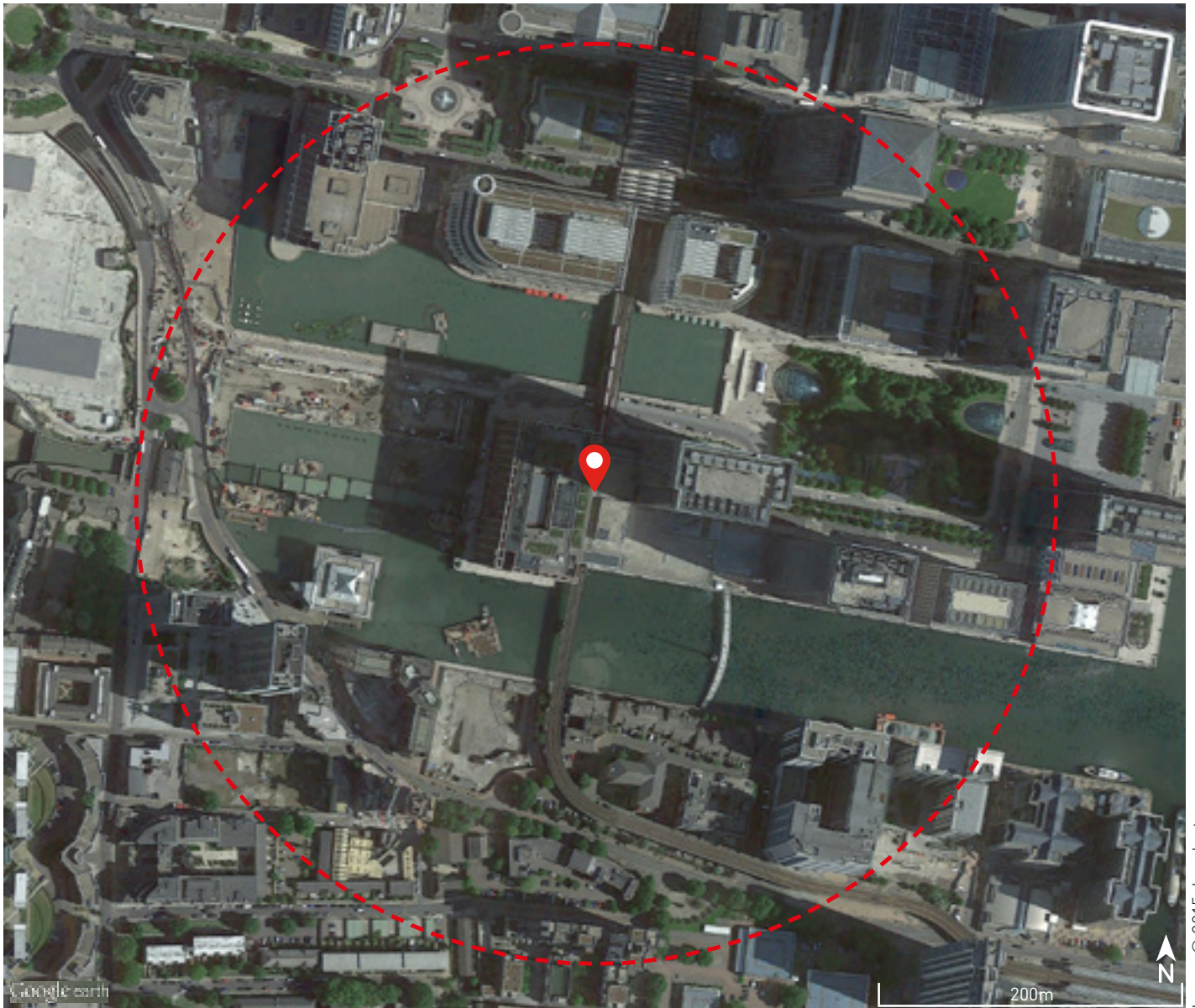


Figure I 37 Restaurant under stain viaduct



# DLR Heron Quays Station

London, UK



The new station, completed in 2002, was designed to be integrated within the Lehman Brothers building. The rail structure is wholly enclosed by the building above but is completely self supporting.

The station has space beneath the viaduct to encourage free flow for pedestrians and to emphasise the independence of the rail structure.





Figure I 38 Elevated rail



Figure I 39 Station integrated into building



Figure I 40 Space under the feature viaduct



Figure I 41 Station architecture



Figure I 42 Platform

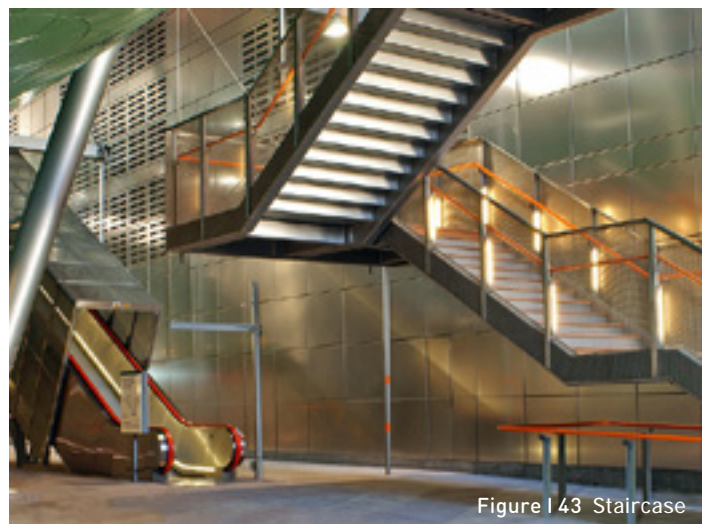


Figure I 43 Staircase



# Folly for a flyover

London, UK



Folly for a Flyover was designed to transform a disused motorway undercroft in Hackney Wick into an arts venue and new public space.

This is an example of an urban design activation project.





Figure I 44 Activated space under motorway



Figure I 45 Folly for a Flyover



Figure I 46 Temporary cinema



Figure I 47 Temporary cinema



Figure I 48 View from the street

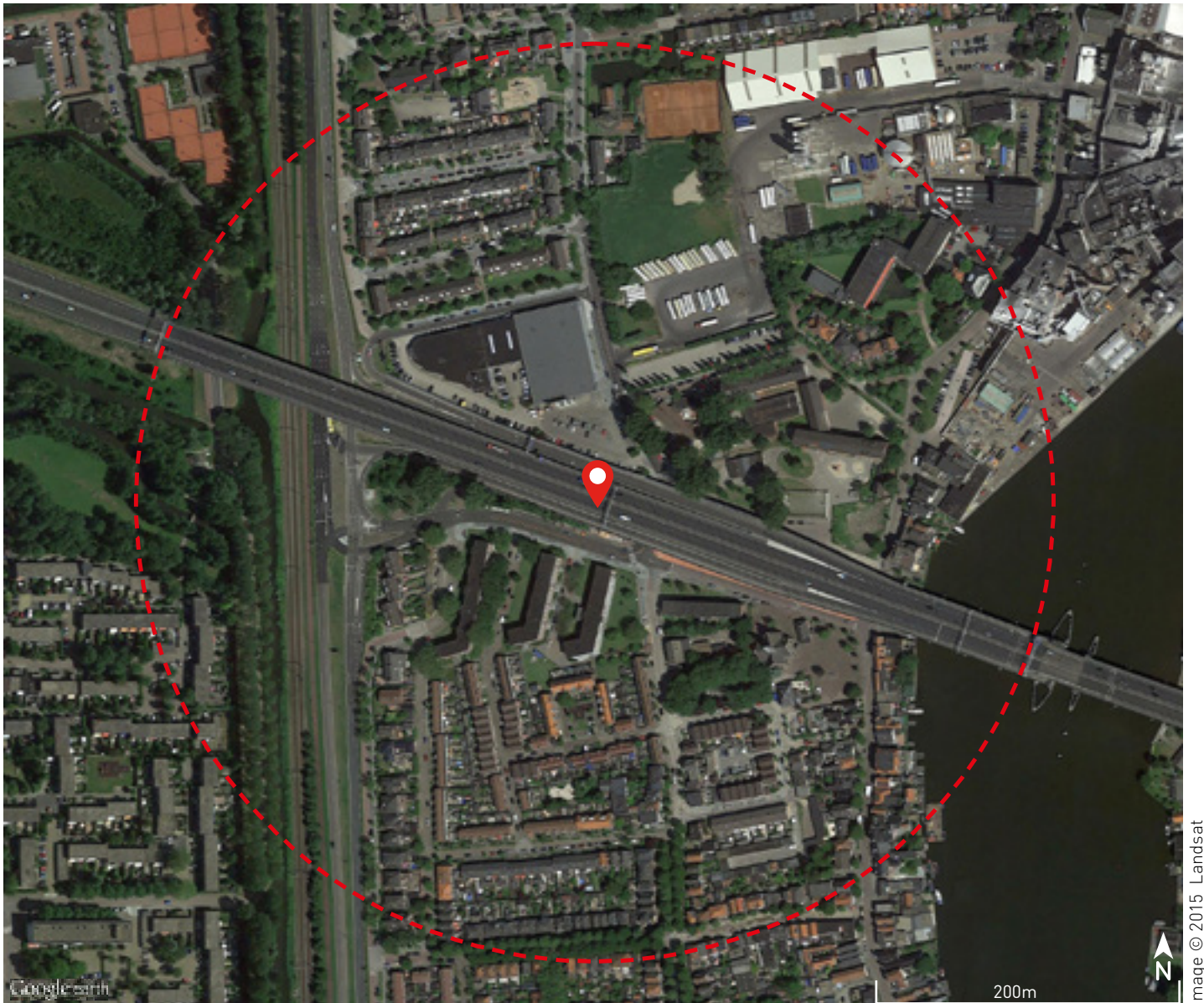


Figure I 49 Cafe outside building trapped between motorway



# A8erna

## Koog aan de Zaan, Netherlands



The A8 motorway bridge was built in the 1970's. It passes through Koog aan de Zaan and divides the local area. The A8erna project makes use of the space underneath the underpass with various different activities including a skate park, a plaza and a supermarket. The project reanimated the area below the underpass and established new connections.

The project is an example of activating a formerly forgotten space.





Figure I 50 Skate area



Figure I 51 The Panorama Deck



Figure I 52 The Panorama Deck and jetty



Figure I 53 Building underneath viaduct and feature piers



Figure I 54 Community space

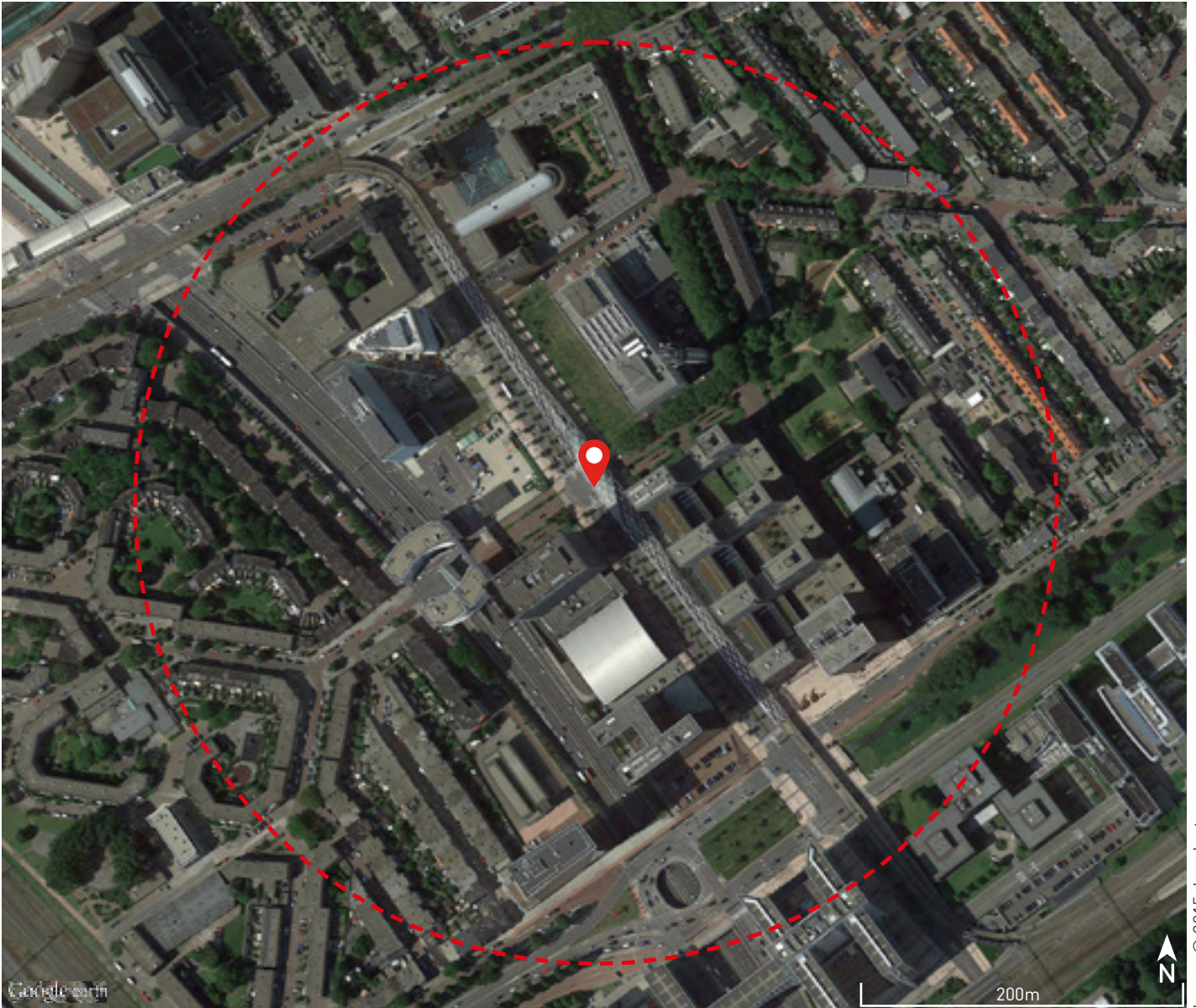


Figure I 55 Basketball area



# Randstad Rail Station Beatrixlaan

## Den Haag, Netherlands



Located in The Hague, the Randstadrail is a light rail network through an urban setting. It is elevated on a 400m long viaduct over existing tram and railway tracks, with an elevated new station and platform.

The viaduct is wrapped in an open tubular space-frame structure which follows the curve of the train line.

There are relatively few columns at street level due to the 50m spans. The structure is permeable, allowing light and rain down into the landscape and the street below.





Figure I 56 Randstad Rail Station



Figure I 57 Randstad Rail



Figure I 58 Randstad Rail



# Urban viaduct

## Girona, Spain



The viaduct, built in 1973, has utilised landscape elements to present a softer, more welcoming appearance to the surrounding urban context.

Image © Data source: Institut Cartogràfic de Catalunya





Figure I 59 Vegetated viaduct



Figure I 60 Vegetated viaduct



Figure I 61 Vegetated viaduct



Figure I 62 Vegetated viaduct



# Basarab Overpass Light Rail

## Bucharest, Romania



The Basarab Overpass road opened in 2011 to connect Nicolae Titulescu Blvd. and Grozavesti Road, part of Bucharest's inner city ring. The number 1 tram now runs along the elevated structure and follows the city's inner traffic circle.

The modern light rail stations are elevated on one of Europe's largest suspension bridges.





Figure I 63 Basarab elevated Station



Figure I 64 Basarab overpass



Figure I 65 Basarab light rail bridge



Figure I 66 Rail corridor



Figure I 67 Basarab overpass



# Refurbishment Viaduct Arches

## Zurich, Switzerland

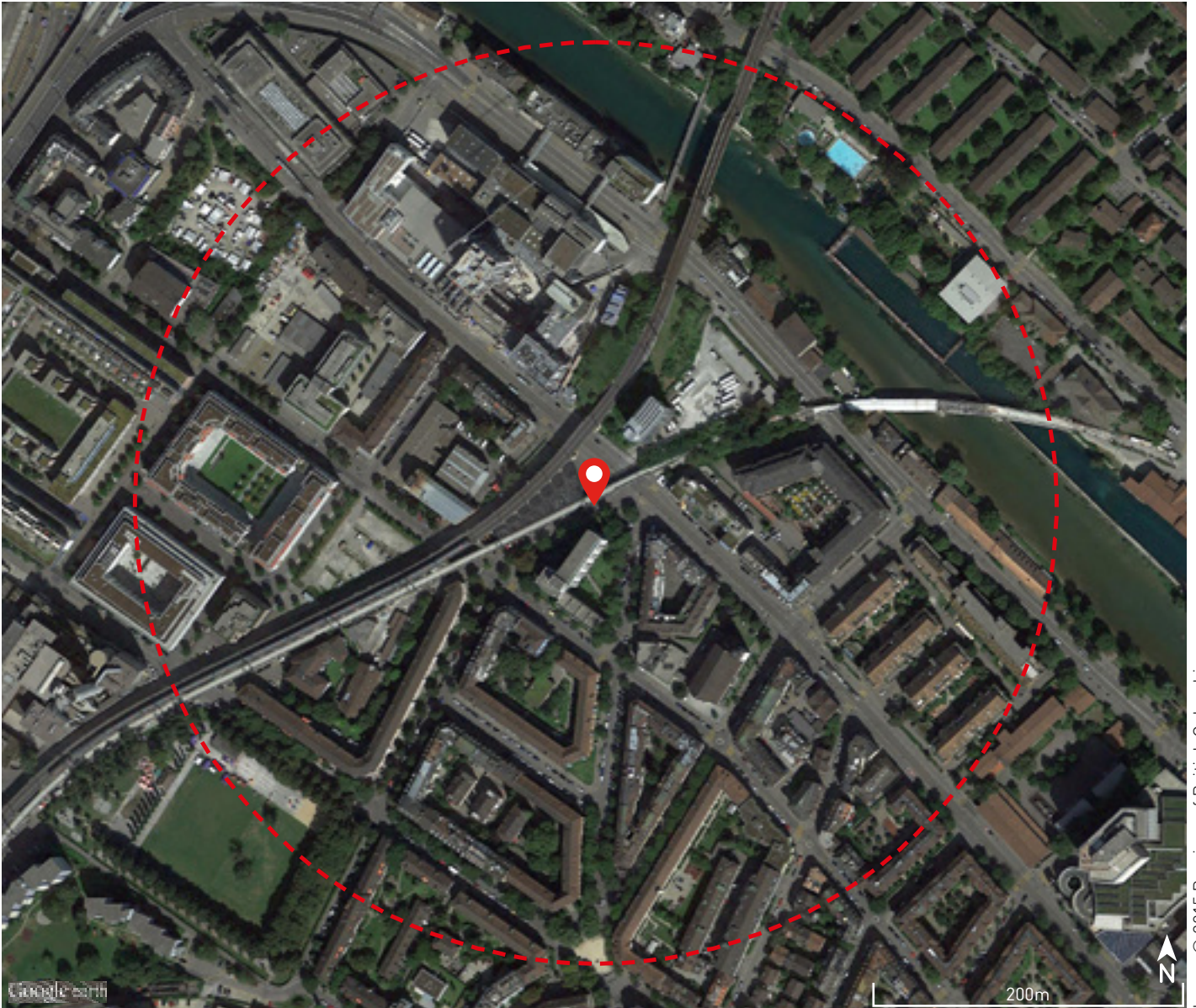


Image © 2015 Province of British Columbia

This project transformed the spaces under a historic 19th century rail structure into a cultural and commercial attraction. The viaduct which was originally built to support the city's early rail lines separated the parts of the inner city and Zurich city centre. Temporary and permanent buildings were installed in the viaduct structure to provide activity and amenity.





Figure I 68 Rail bridge and pedestrian bridge



Figure I 69 Rail viaduct



Figure I 70 Active frontages



Figure I 71 Active frontages



Figure I 72 Viaduct shops



