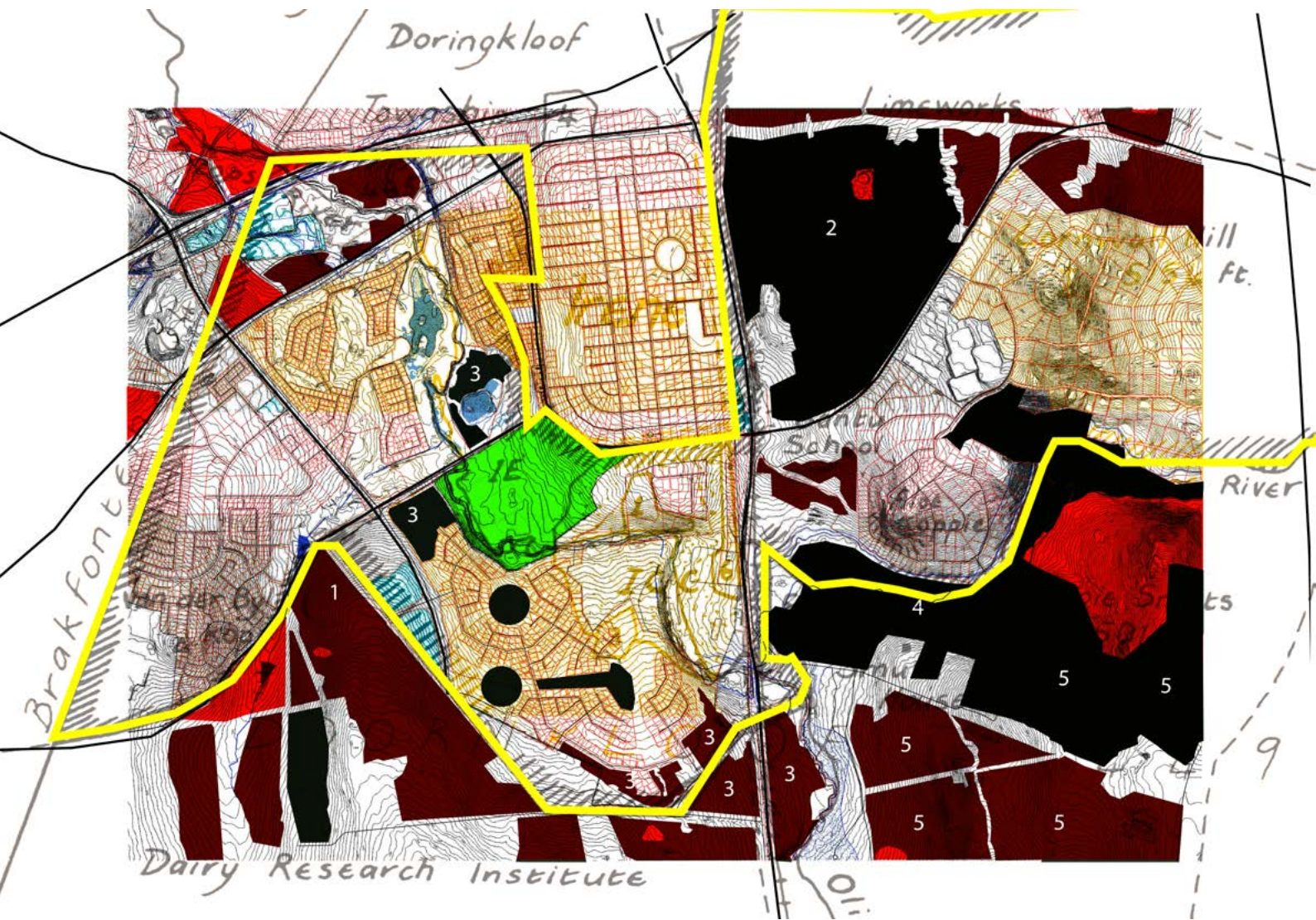


APPENDIX 1

IRENE

URBAN FRAMEWORK







1830

BOER VOORTEKKER DANIEL ELARDUS ERASMUS LEAVES CAPE TOWN ON THE GROOT TREK.

1844

DANIEL ERASMUS REGISTERS THE TITLE DEADS FOR THE FARM DOORNKLOOF.

1855

THE VILLAGE ON THE NEIGHBOURING FARM ELANDSPOORT IS NAMED PRETORIA.

1889

A.H. NELLMAPIUS BUYS TWO THIRDS OF THE ERASMUS FARM, NAMED THE FARM AFTER HIS DAUGHTER.

1889

NELLMAPIUS COMMISSION WILLEM DE ZWAAN TO DESIGN HIS HOUSE AND STABLE.

1893

THE FIRST TRAIN ARRIVES AT THE NEWLY BUILT IRENE TRAIN STATION.

1896

J.A. VAN DER BYL BECOMES THE NEW OWNER OF IRENE FARM.



1898

HACK'S & CO LTD. THE FIRST TRADING STORE OPENS NEAR THE TRAIN STATION.

1899

THE SECOND BOER WAR BREAKS OUT.

1902

THE IRENE TOWNSHIP IS ESTABLISHED BY J.A. VAN DER BYL.

1903

IRENE FARM BECOMES HOME TO THE GOVERNMENT TREE NURSERY.

1908

J.C. SMUTS BUYS THE LAST THIRD OF THE FARM DOORNKLOOF STILL BELONGING TO THE ERASMUS FAMILY.



1911

THE ESTABLISHMENT OF THE IRENE COUNTRY CLUB.

1937

THE MARIE VAN RIEBEECK NATURE RESERVE IS PROCLAIMED. TODAY KNOWN AS THE RIETVLEI NATURE RESERVE.

1954

THE ESTABLISHMENT OF THE NATIONAL DAIRY RESEARCH INSTITUTE ON THE IRENE FARM.

1974

IRENE ESTATE'S LIME WORKS HAD TO BE CLOSED DOWN.

1998

CORNWALL HILL RESIDENTIAL ESTATE IS ESTABLISHED.

2003

THE FIRST RESTAURANT IS BUILT IN THE ORIGINAL BARN ON THE IRENE FARM, THE BARN.

2006

THE SOUTHDOWNS COUNTRY ESTATE IS ESTABLISHED.

IRENE TIME LINE

(After Swanepoel, M. 2012:15,16,18,20)



IRENE 1937
(Helme, N. 1976)



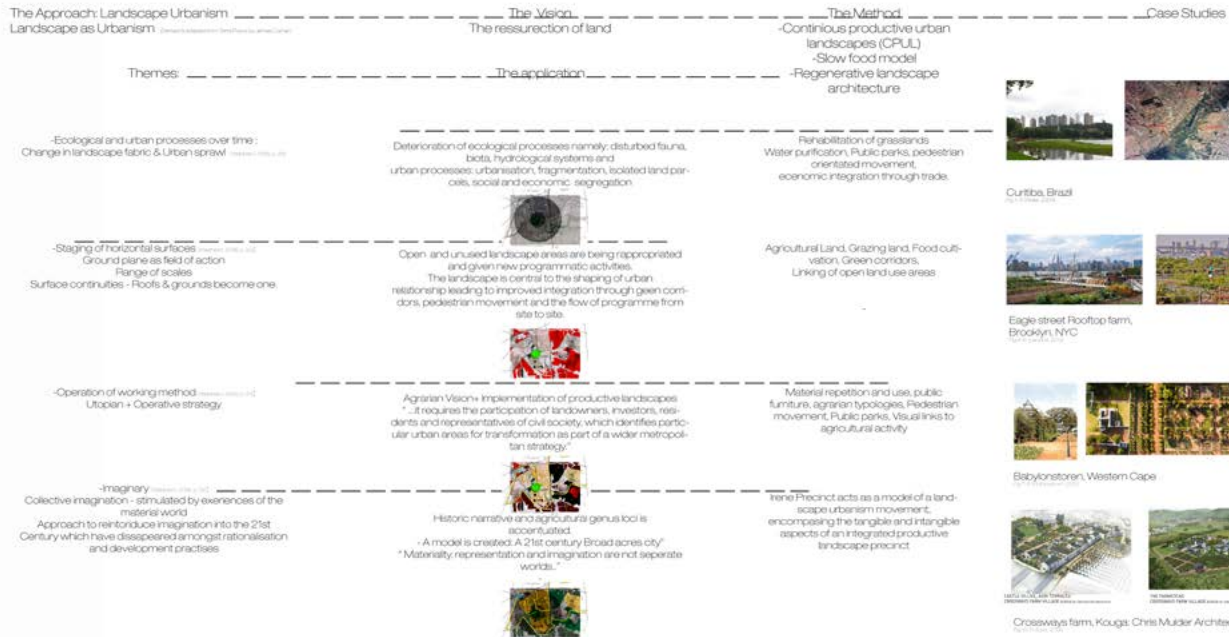
IRENE 1971
(Helme, N. 1976)



IRENE 2013

(City of Tswane, Pretoria Aerial photos. 2013)

Landscape Urbanism ... "urban infrastructure sows the seeds of future possibility, staging the ground for both uncertainty and promise" - James Corner (2004: 21)



LANDSCAPE URBANISM



FOOD CULTIVATION



PUBLIC PARK



RAPPROPRIATION OF OPEN
LANDSCAPE AREAS



REHABILITATION & PRESERVATION OF
BAKENVELD LANDSCAPE



HENNOPS RIVER: IMPLEMENTATION
OF WATER PURIFICATION SYSTEM

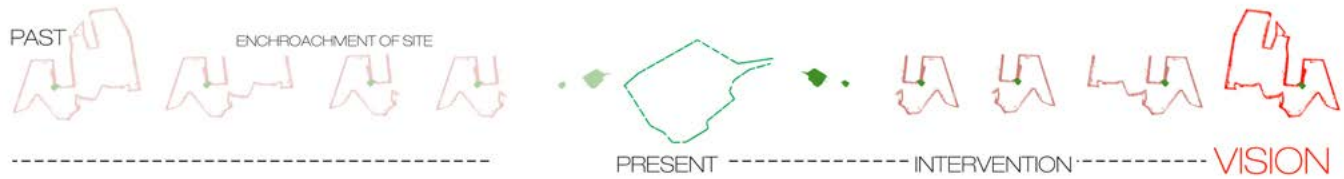


CELEBRATION OF HERITAGE & HISTORIC BUILDS
TOURIST ROUTE



IMAGINARY LANDSCAPE





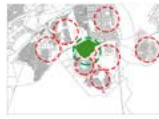
CIRCULATION



vehicular circulation



land parcel and gated communities
notifies how gated communities **impair vehicular flow**



the vehicular circulation of Irene precinct are envisioned to **stay the same**.
The gated communities are preventing integration



precinct integration through pedestrian circulation in between public parks and land

SURFACES



no development opportunity



Intervention opportunity
Reappropriation of open landscape areas



Pollution control strategy: for Hennops River & its tributaries:
rehabilitate surfaces (erosion control)
implement designated washing areas, grease traps,
faecal collection
Litter catchment areas



-improvement of Hennops river water quality
-reappropriation of land - agriculture rehabilitation
-ecological upgrading
-changes in materiality of public surfaces and furniture

ECOLOGY



rehabilitate open grassland



rehabilitate highveld grassland



PROGRAM



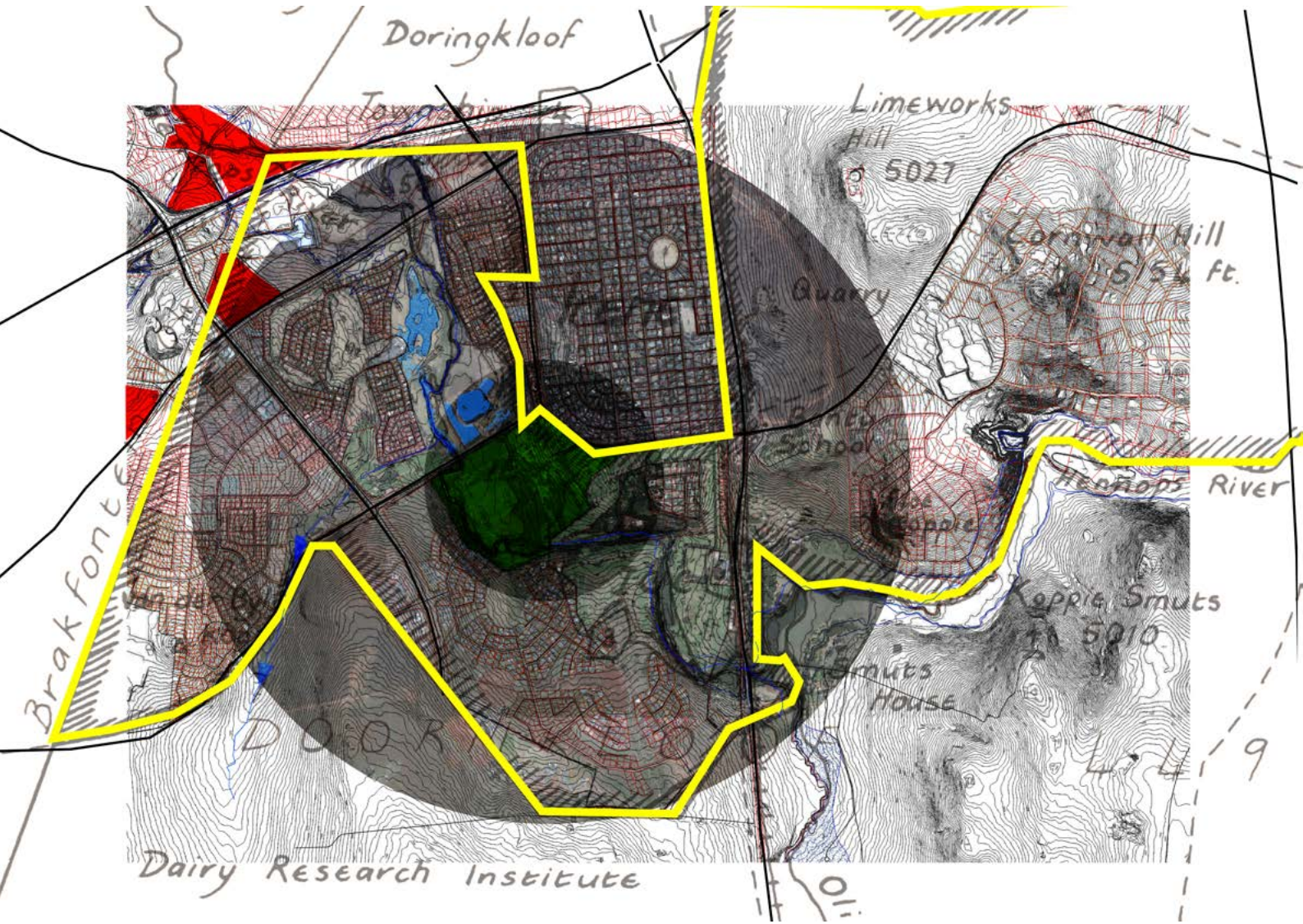
current public & semi public programme



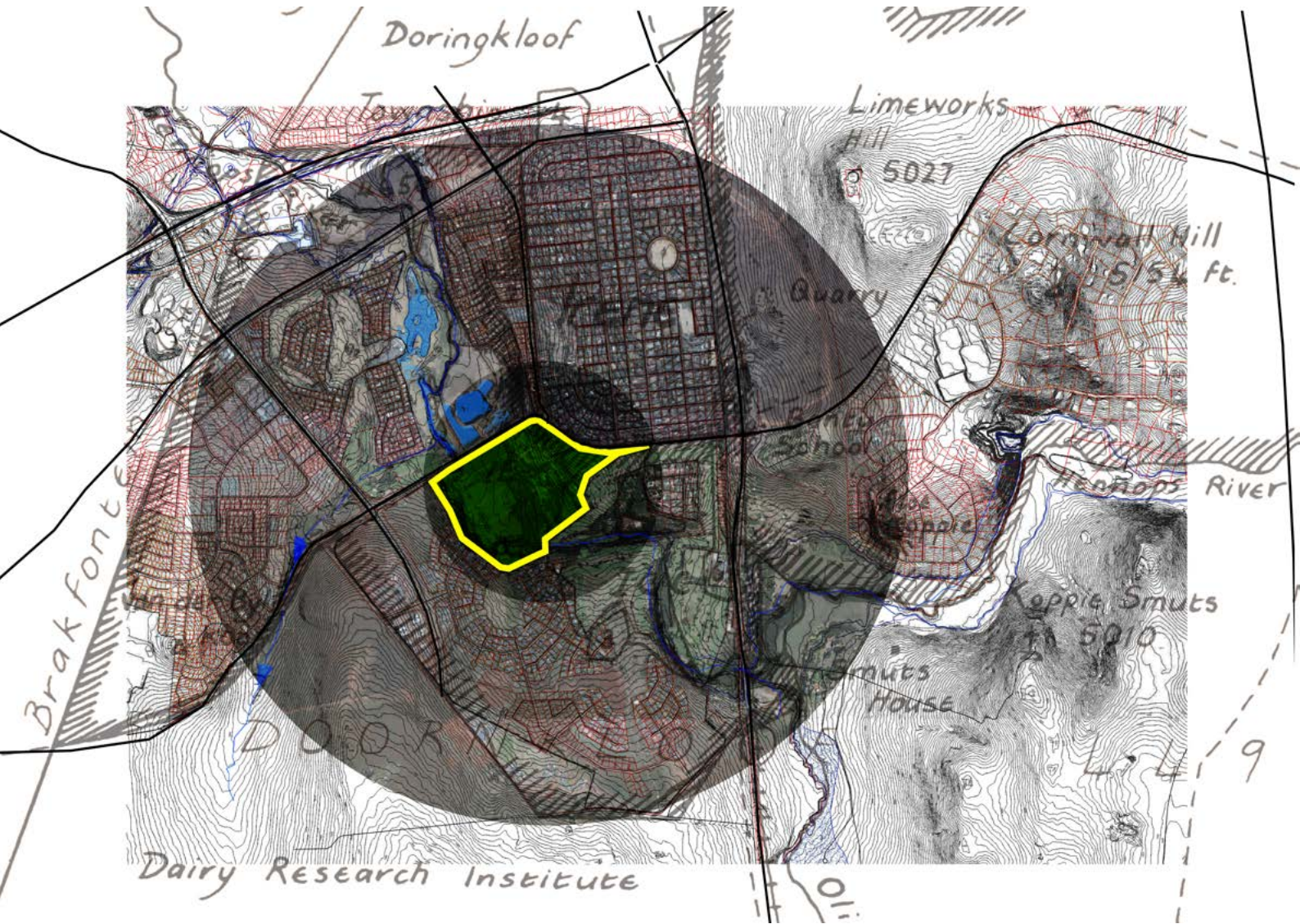
unused open space



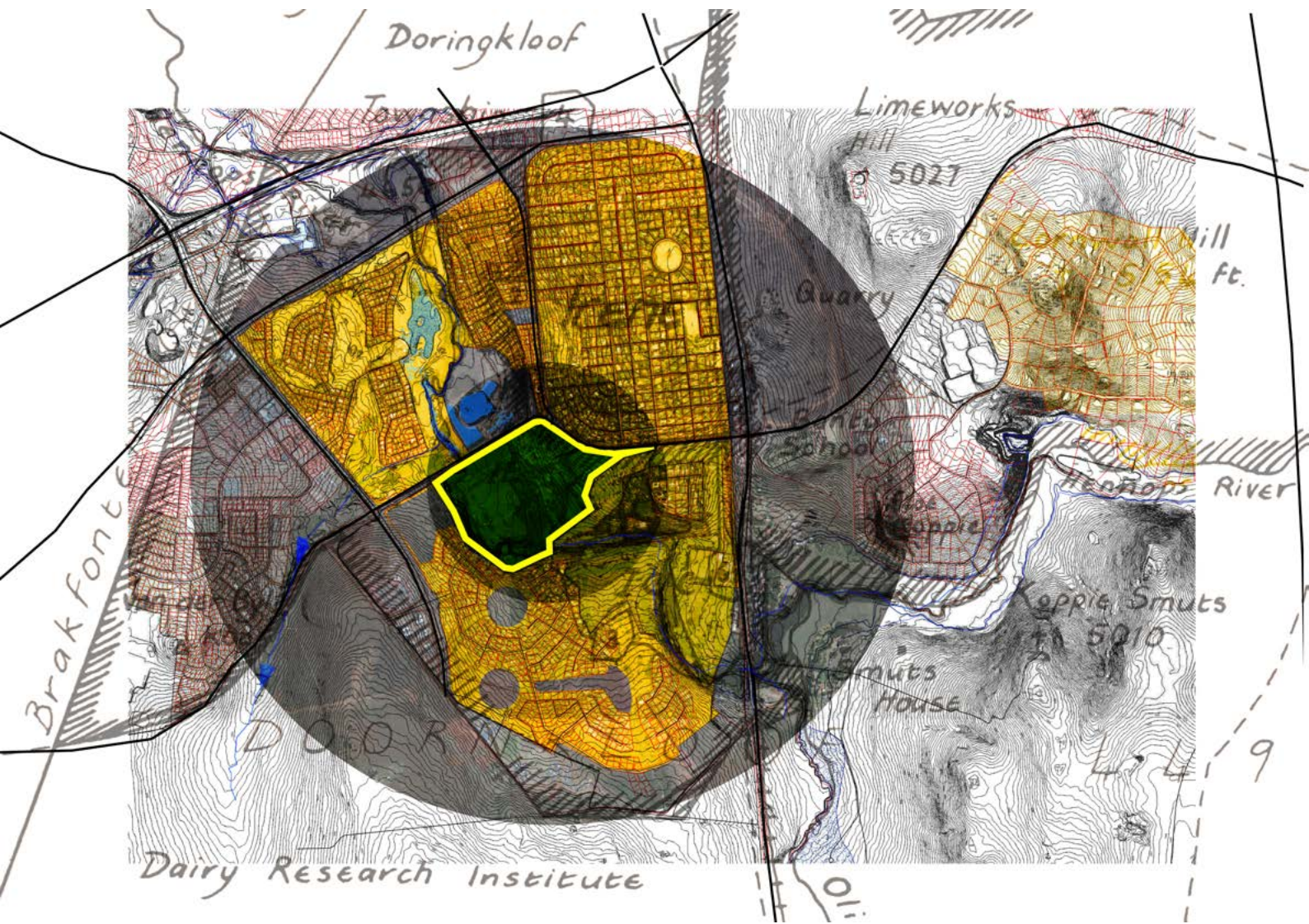
IRENE VISION



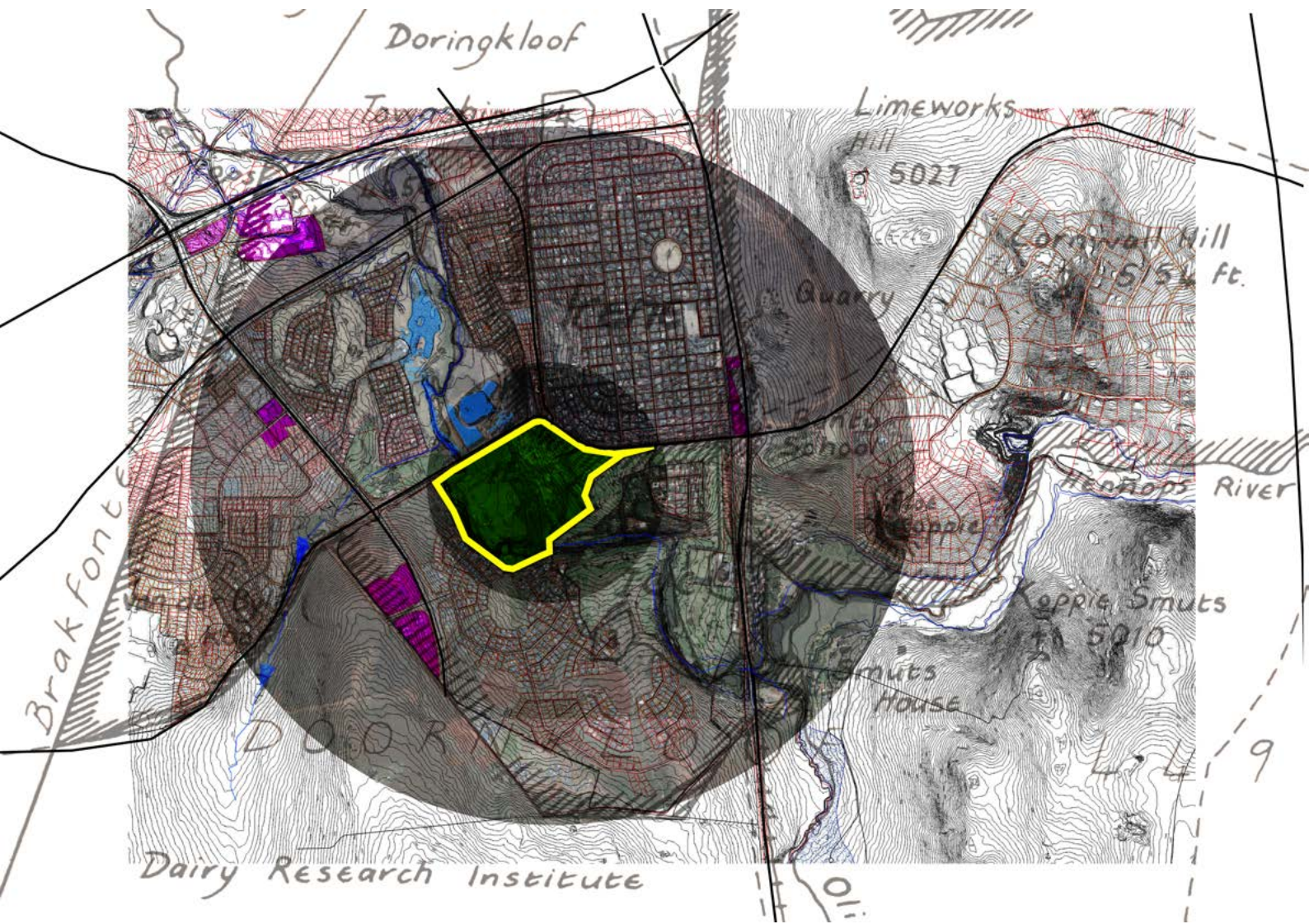
ORIGINAL FARM BOUNDARY



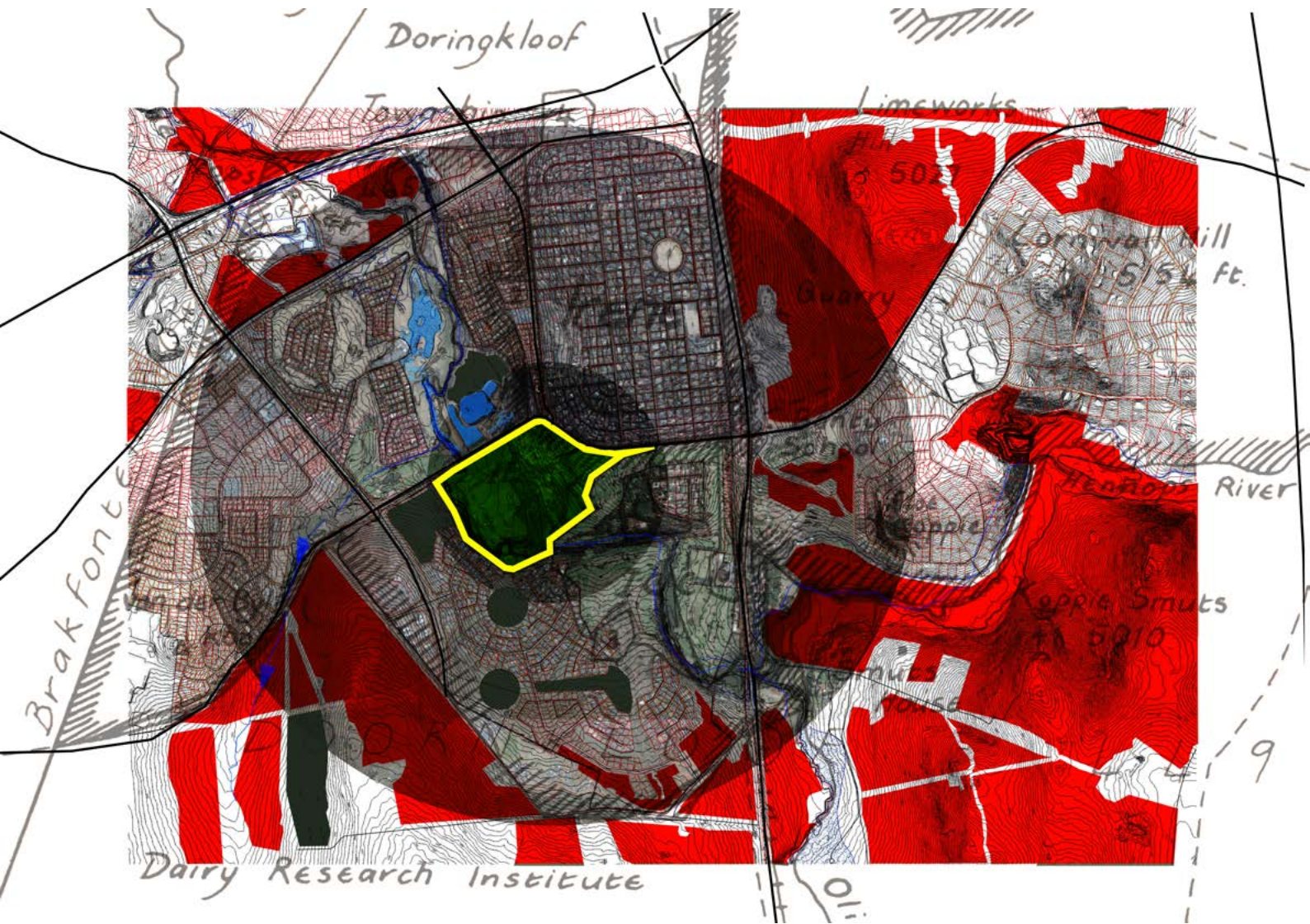
CURRENT IRENE FARM BOUNDARY



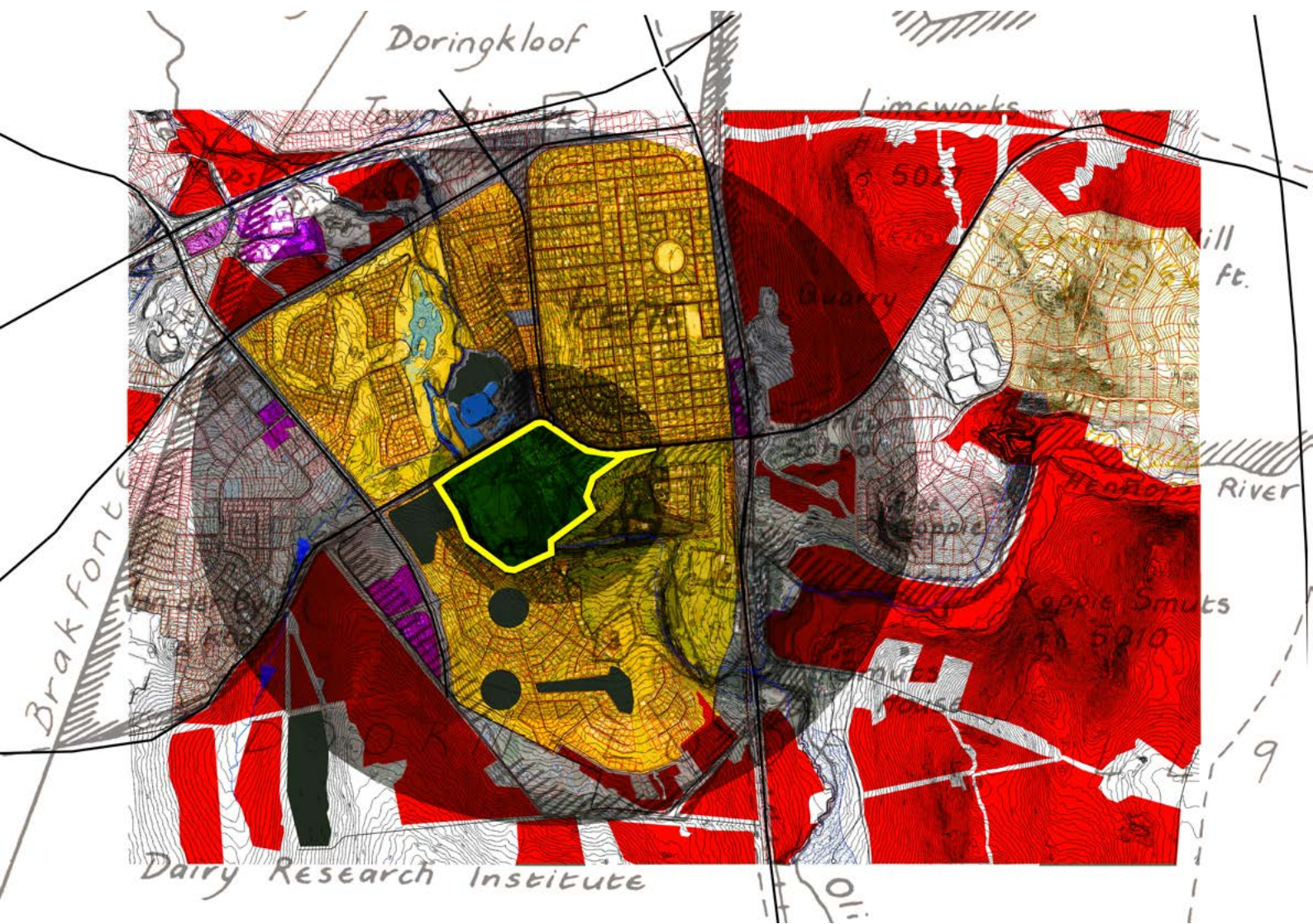
GATED COMMUNITIES



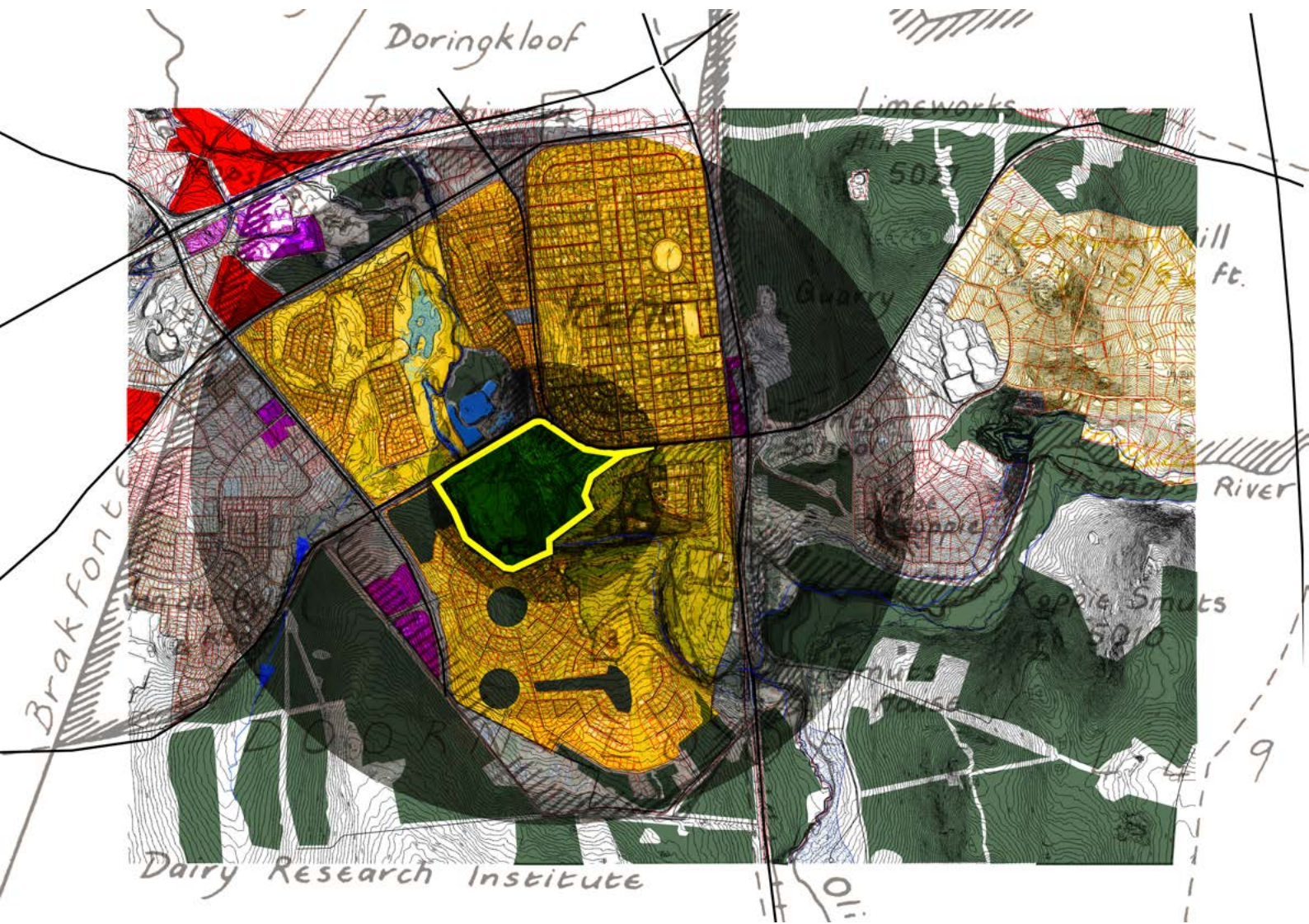
COMMERCIAL ACTIVITIES



HORIZONTAL SURFACES



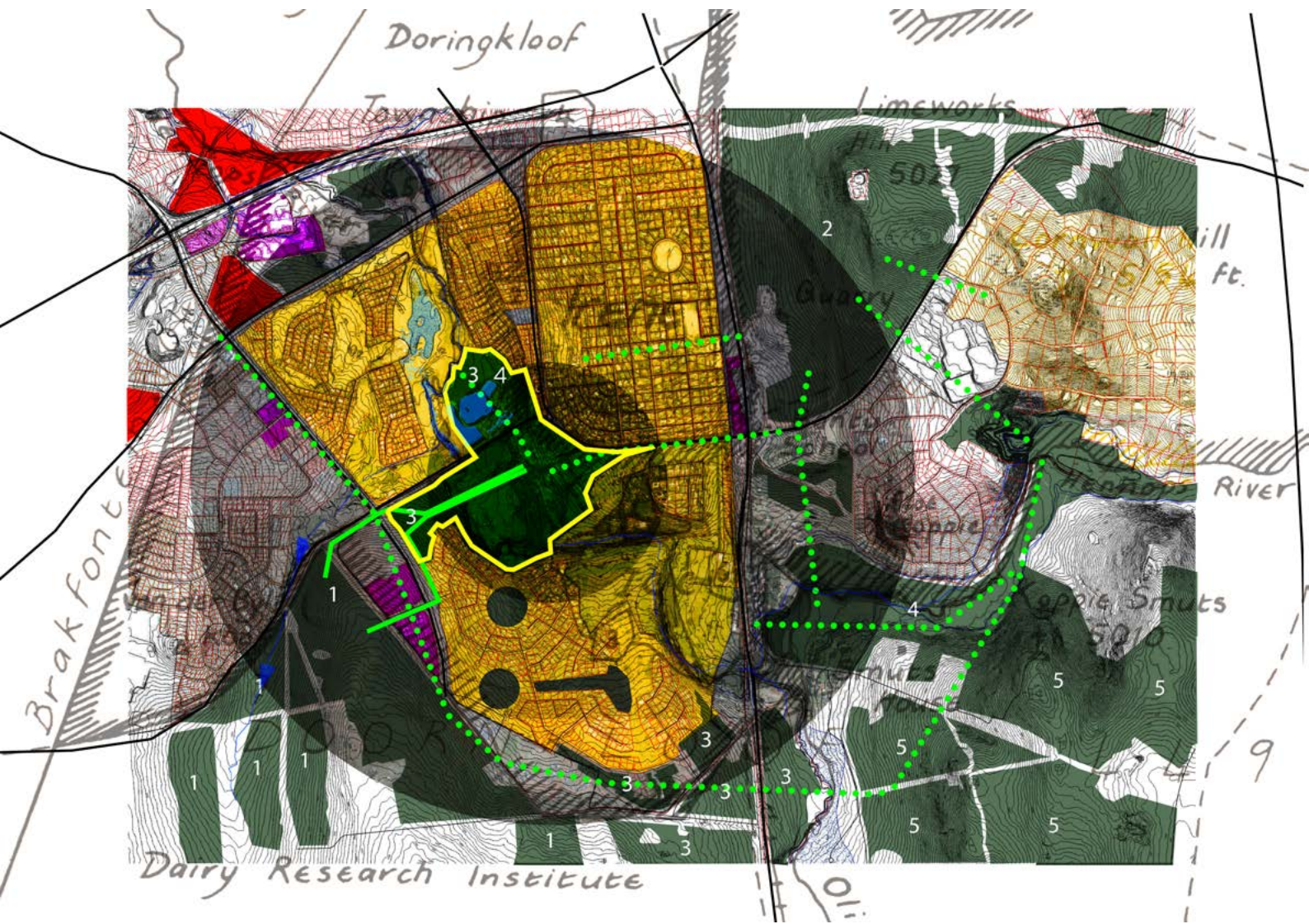
UNUSED OPEN SITES



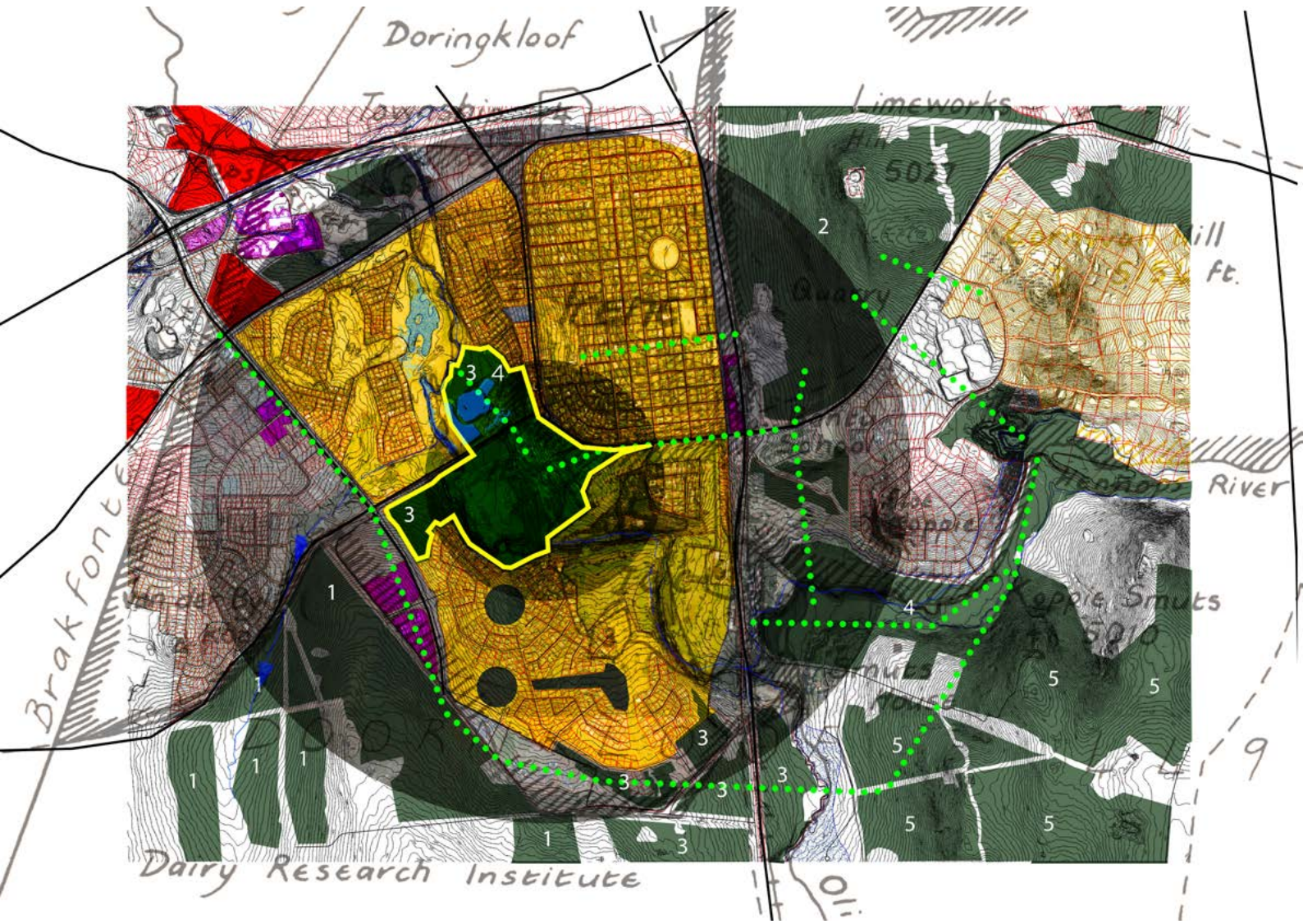
PROGRAMME OPEN SITES



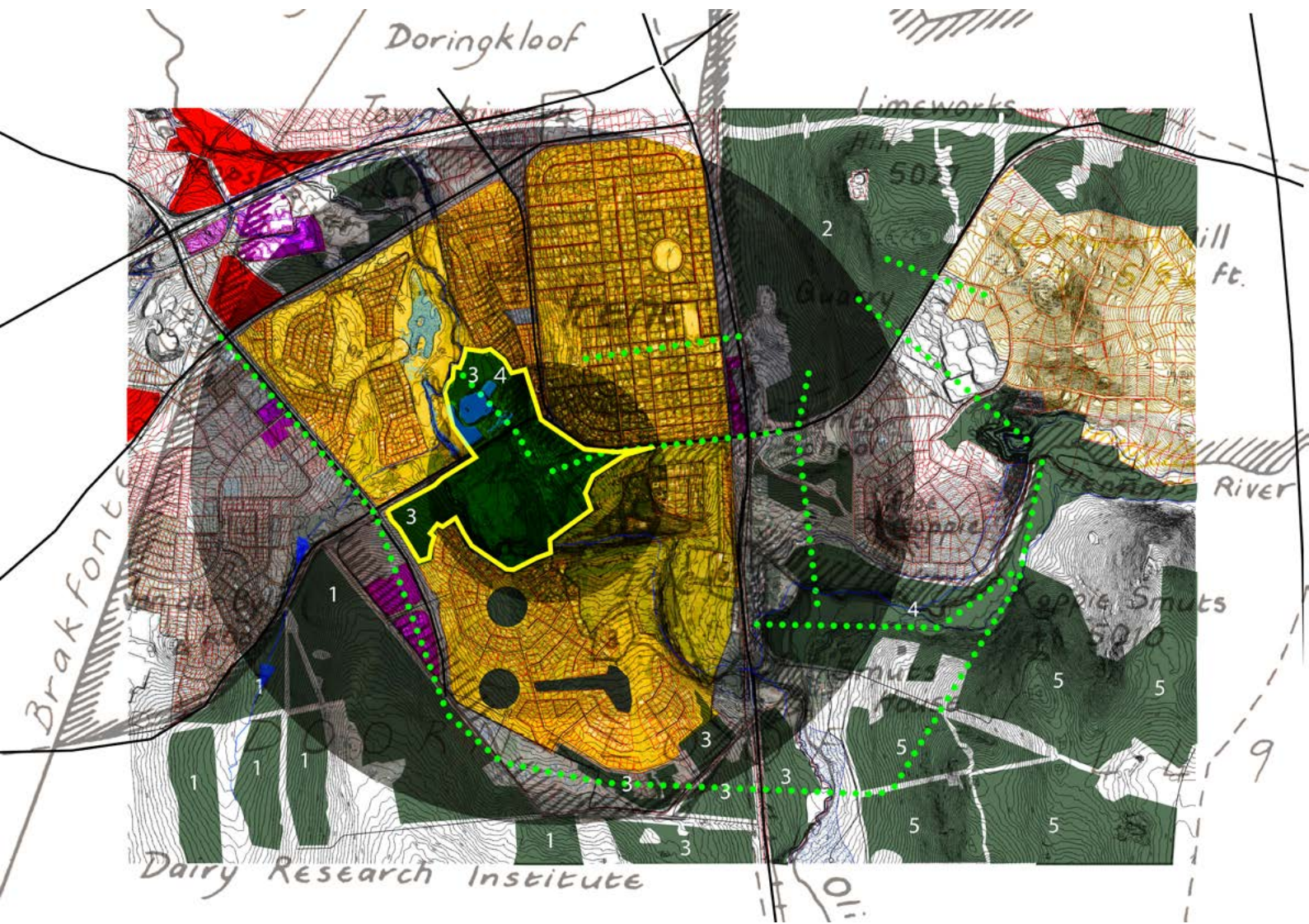
NEW SITE BOUNDARY



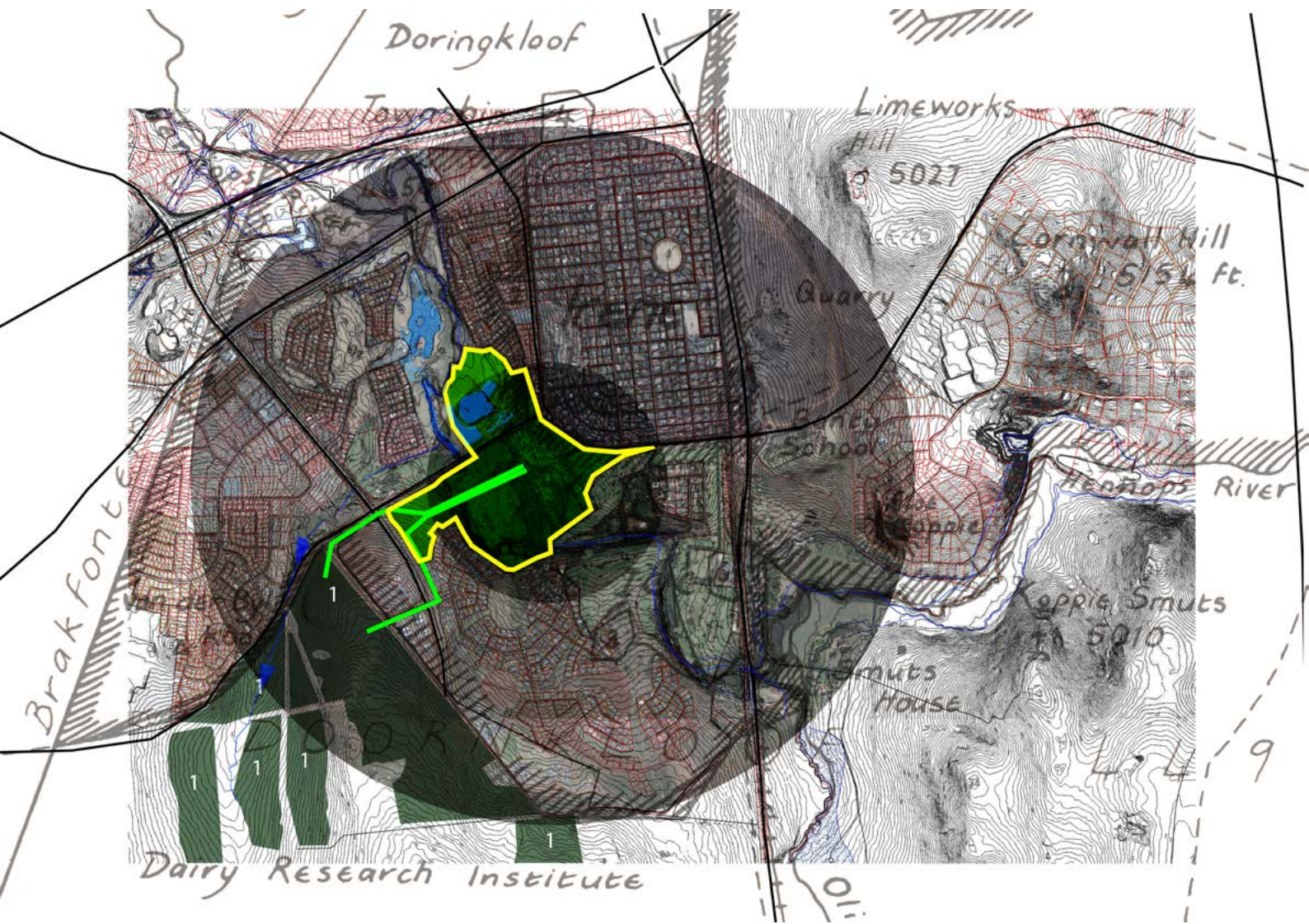
NEW PROGRAMMES



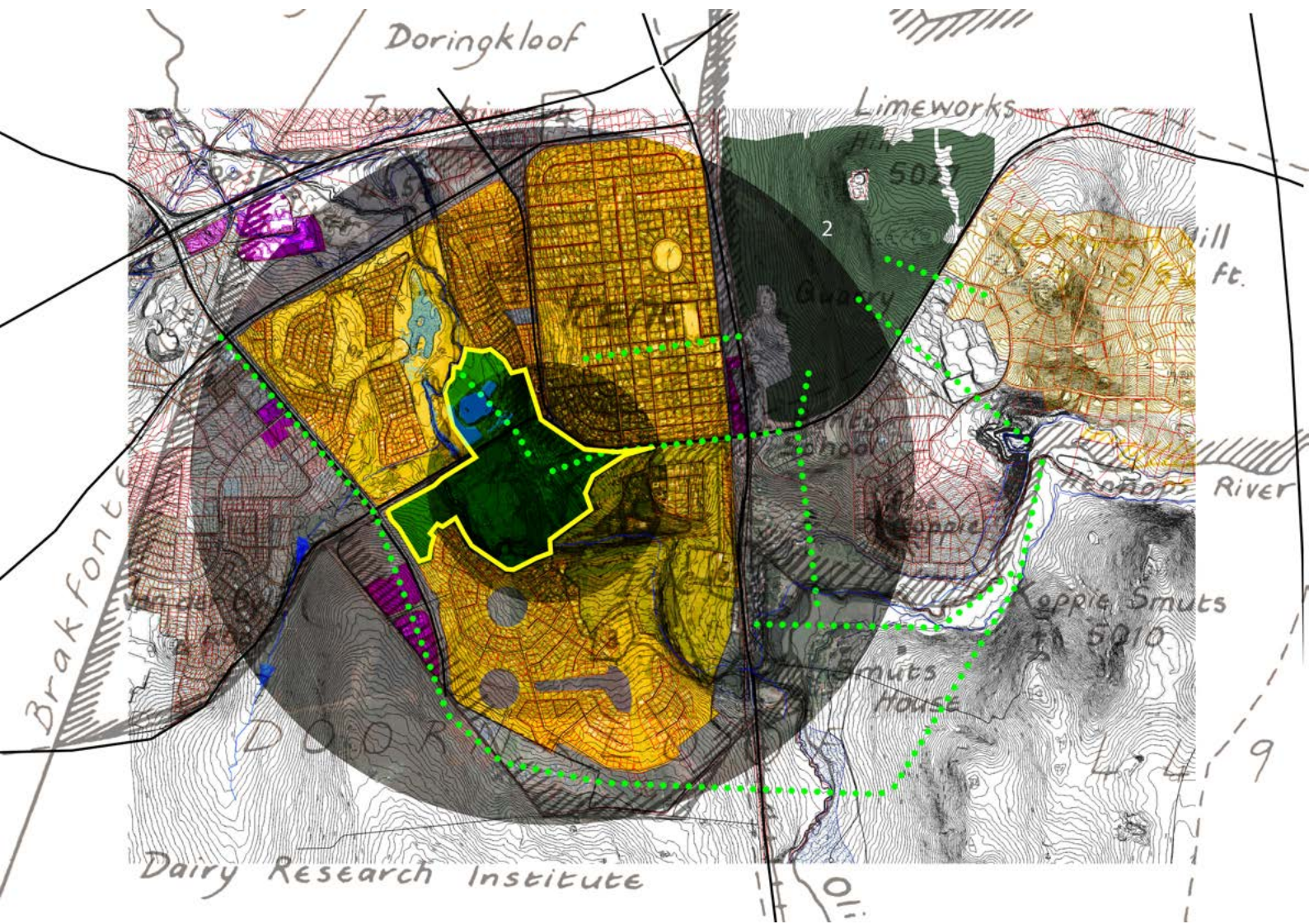
NEW COW ROUTES



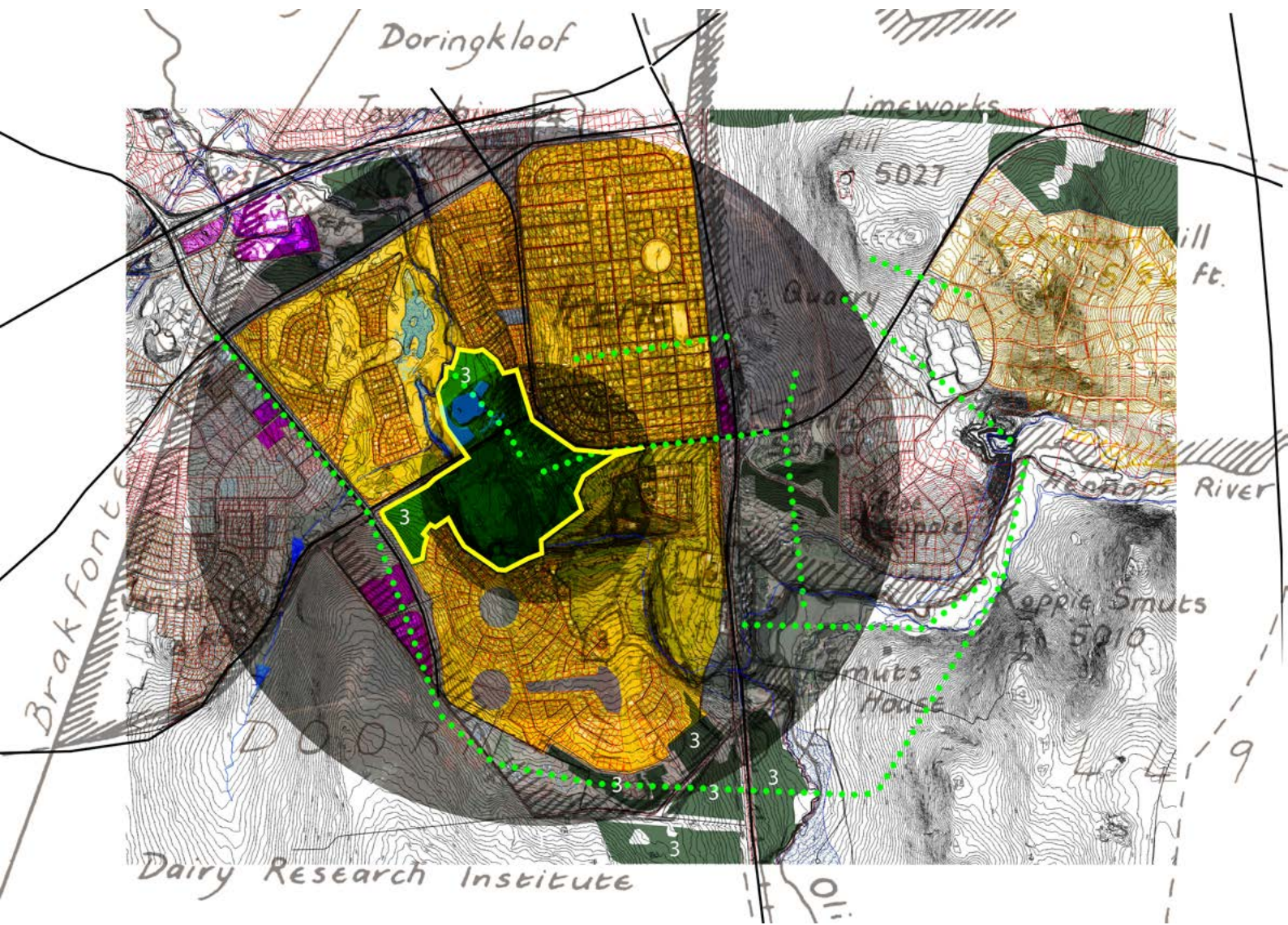
NEW PEDESTRIAN ROUTES



NEW GRAZING



RECREATIONAL PARKS



FOOD CULTIVATION



Precedent: Crossways farm, Kouga
Category: Food cultivation, urban agriculture, community upliftment, slow food



Precedent: Eagle Street Rooftop farm, Brooklyn NYC
Category: Food cultivation, urban agriculture, community upliftment, slow food



APPROACH

Landscape
Urbanism -

Economical & urban
processes over time

Staging of horizontal
surfaces

Operation of working
method

Imaginary

INTENT

Expansion of productive landscape

Didactic Role

Community involvement

Reintroduction of historic landscape

Accentuation of agricultural genus loci

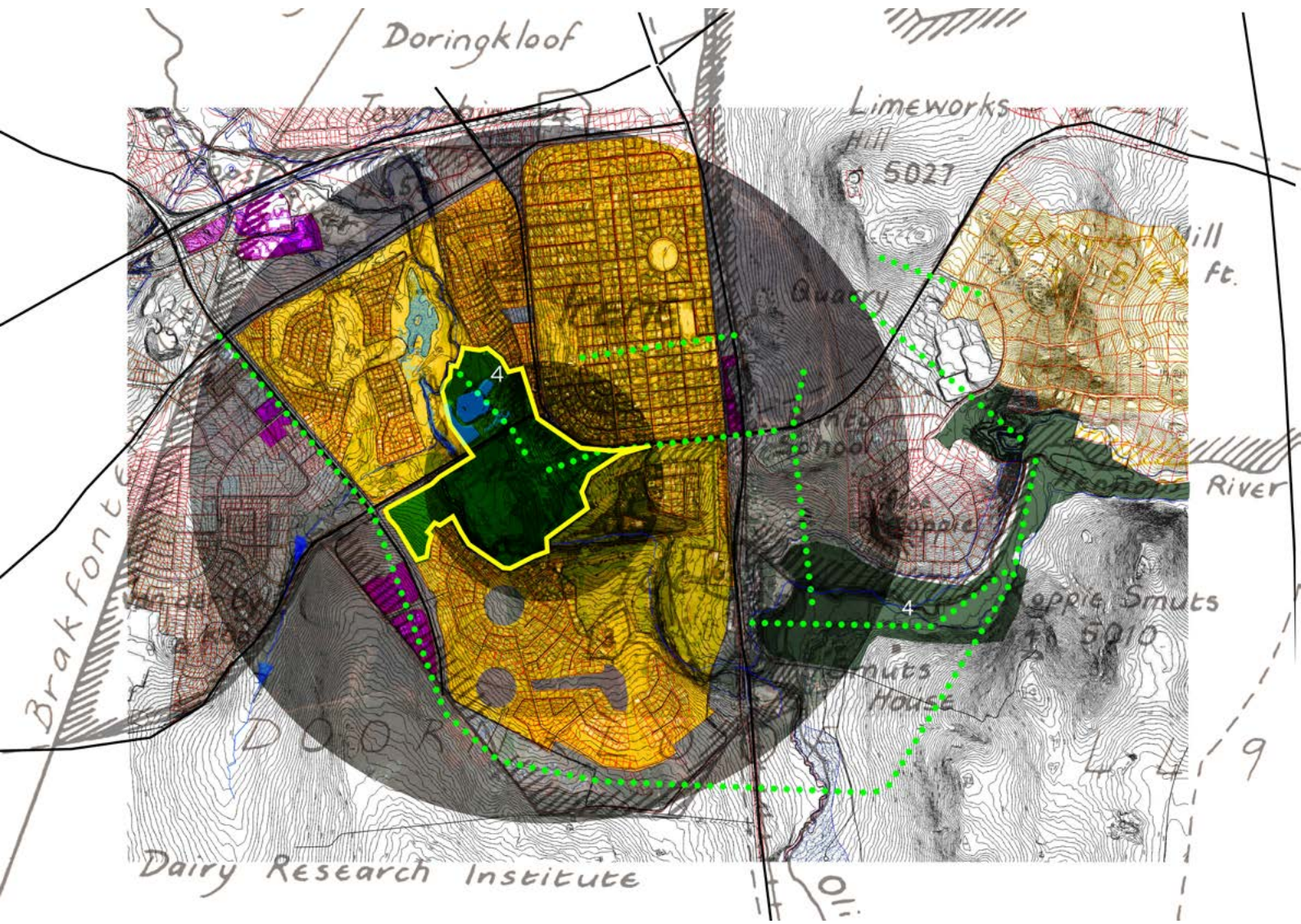
PROGRAMME

- Food cultivation
- Community involvement
- Economic upliftment
- Market spaces
- Restaurants

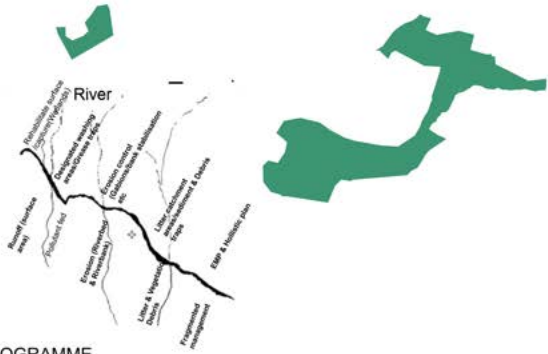
Precedent: Babylonstoren, Western Cape



Food cultivation & additional grazing



FLOOD PLAINS+WETLANDS



APPROACH

Landscape
Urbanism -
Economic & urban
processes over time

INTENT

Water quality improvement
Flood control
Storm water management

The parks adjacent to the Hennops River would multipurposely act as floodplains and public parks.

A system would be put in place that can be adaptable to change over time. The type of landscape can be altered and reprogrammed with the development of the surrounds if necessary as long as it can act as a floodplain.

PROGRAMME

- Floodplain
- Public Park
- Storm water management
- Litter catchment basins
- Subsurface wetlands
- Erosion Control through surface rehabilitation
- embankment upgrade through Gabions

Public parks as floodplains & Water quality improvement (Hennops River & Tributaries)

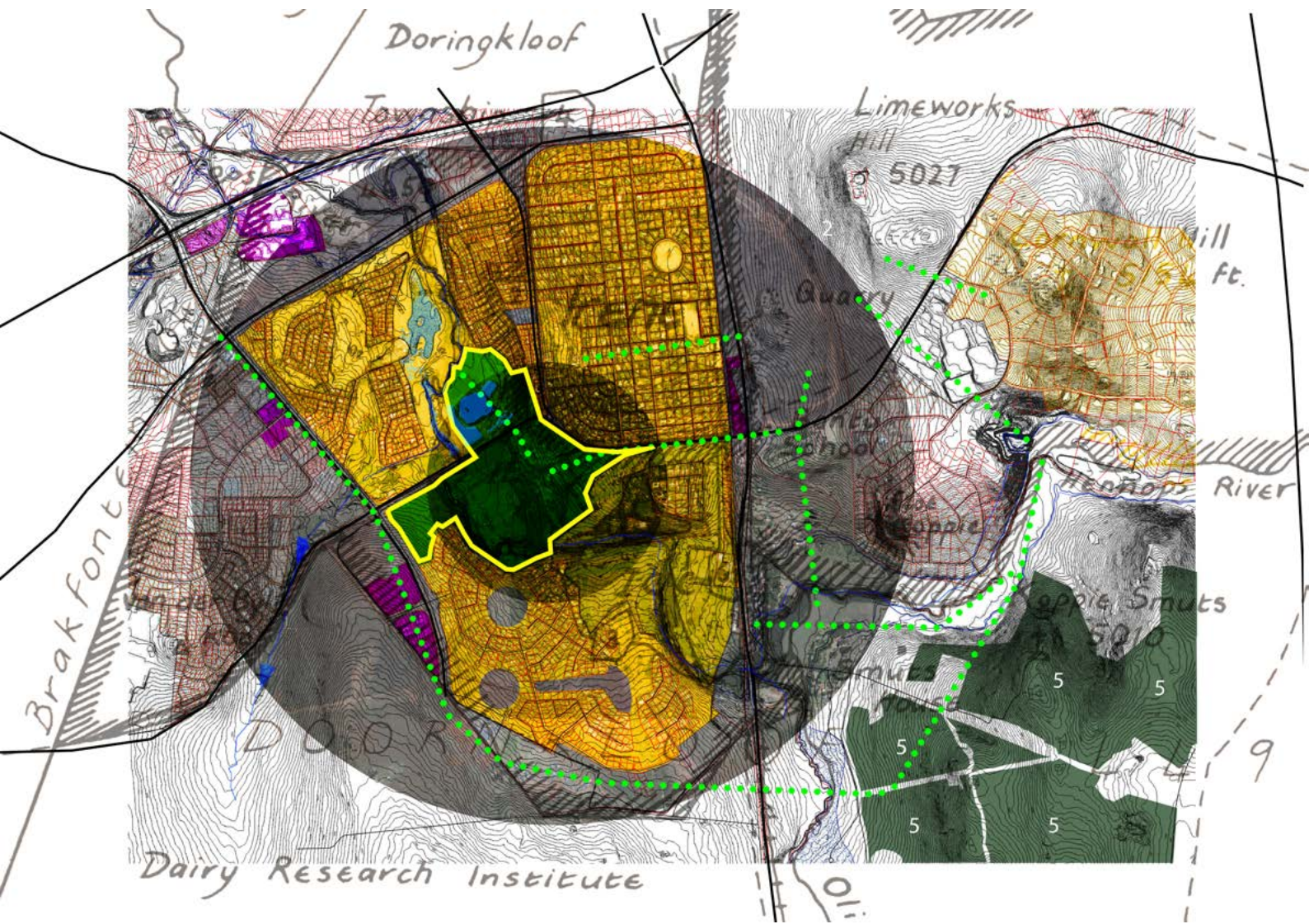


Regulation of the use of flood plain areas through legislation and other non-structural measures:

- Prevention and relief measures for low frequency floods;
- Improvement in the urban drainage water quality.

There should be a strong interaction between urban master plans, urban drainage and flood control master plans and other city plans related to water supply and sanitation and solid waste management. Land use is closely related to urban drainage. Therefore, urban drainage master plans should be essential components of urban master plans.

Precedent: Curitiba - Brazil
Category: Storm water management



REHABILITATION PARKS

ECOSYSTEMS VISION_Hennops River

A study was done by a Researcher at UJ. Data was collected over a 2 year period (January 2002- December 2003) to determine the average water quality of the Hennops river over the past 2 years.

The information was compared to two other studies which were done by Hoffmann (1994) and Sheperd et al (2000) respectively.

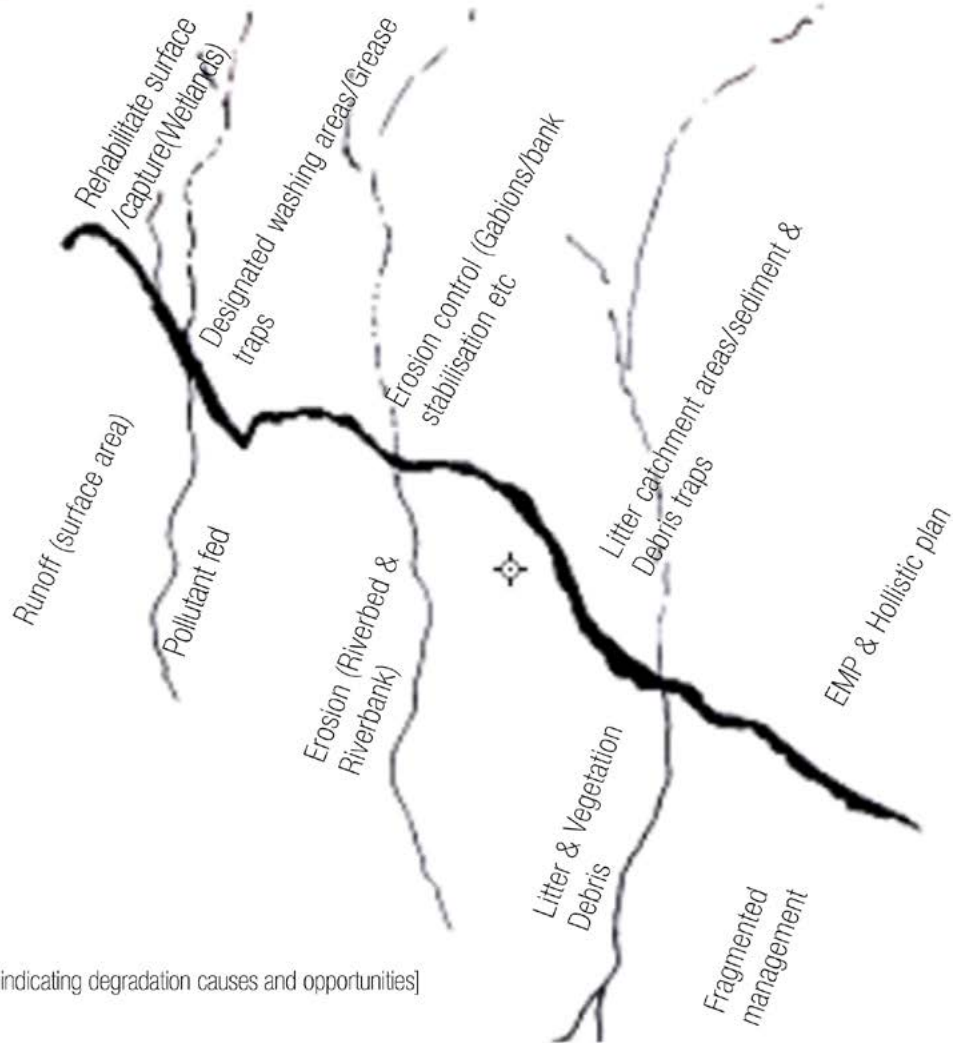
This was done to ascertain how the Hennops River and its tributaries deteriorated

The present status can be compared to its previous conditions.

The conclusion drawn from the information available is to determine what type of pollution it is and also how the pollutant enters the water. **This will establish how the architect and if the architect can implement anything to try prevent the further decay of the Hennops River as well as gradually rehabilitate it.**

DESIGN PROPOSAL_Hennops River

The conclusion and aim of the gathering of this information is to try ascertain how the polluted state of the Hennops River can be countered by way of a landscape and/or architectural intervention.



[Image: diagram of the Hennops River indicating degradation causes and opportunities]

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