2013 ICA CONFERENCE

Creating Safer Communities - More Than Design

3 - 4 July 2013

Calgary, Alberta, Canada

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CSIR Built Environment, South Africa

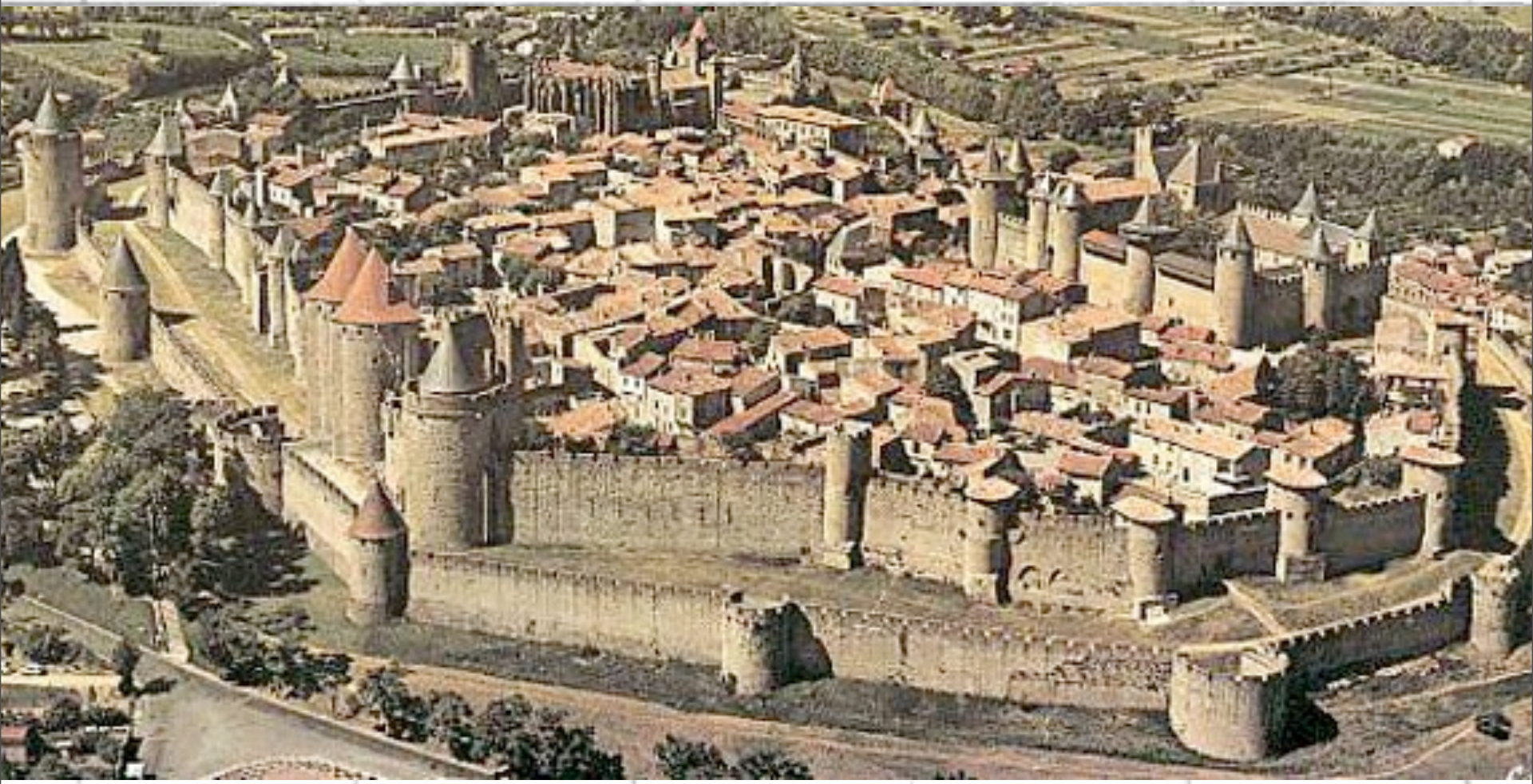
CSIR

our future through science

CPTED without boundaries

A critical examination of walls as security measures

CPTED > SECURITY > WALLS?



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Berlin wall

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PINK
FLOYD
THE
WALL

FEAR BUILDS WALLS

perceptions

FEAR

WALLS

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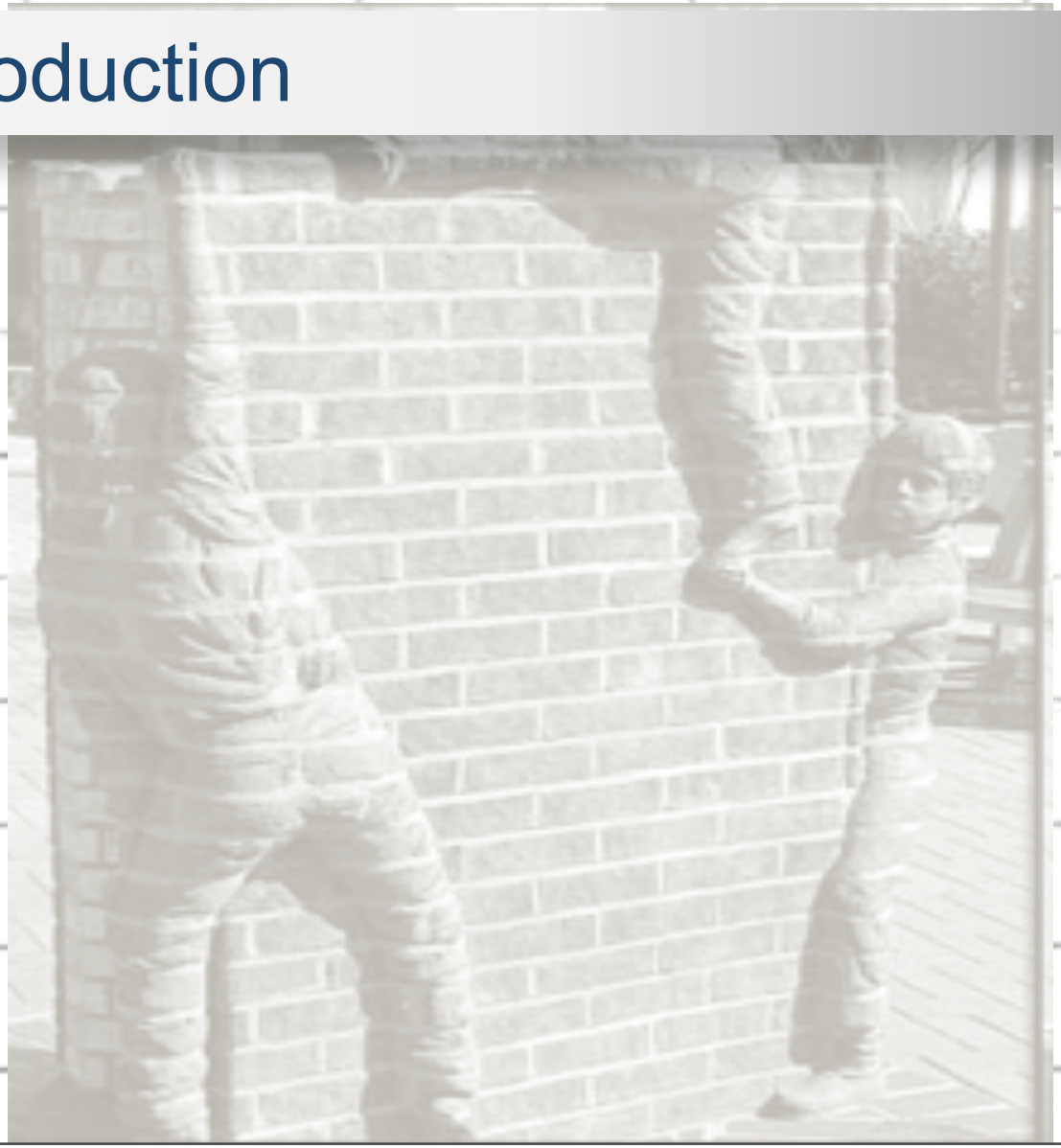
PRESENTATION STRUCTURE

PRESENTATION STRUCTURE

1. Introduction



PRESENTATION STRUCTURE

1. Introduction
2. Responses to crime

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3. Project – removing a security wall

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4. Conclusion

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4. Conclusion
5.

INTRODUCTION

The South African context

- Background to South Africa
- Social-political situation
- Crime situation

Background

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Canada
Population
35 million
8 x size of SA
South Africa
Population
50 million

The socio-political situation

Political legacy

History of forced segregation

History of forced segregation

Extreme levels of poverty

Inequality and income disparity

Unemployment: 40 – 50%

Lack of respect for law and order; moral decay

The crime situation

The crime situation

- Crime levels very high relative to many other countries
- More than 15 600 murders per year - 31 per 100 000
- Since 1994 the murder rate has decreased by almost 54%, (from 70 per 100 000)
- USA – 4.2 per 100 000 (13 000)
- Highest murder rate 2012 - Honduras (92 per 100 000)

Extreme violence

High levels of fear

Fear… sometimes it is justified

The physical environment can contribute to, or reduce, the fear of crime

Implications

- High levels of crime, violence and fear, combined with…
- Inequalities – extreme differences in context
- Affect the nature of strategies and initiatives aimed at reducing crime

RESPONSES TO CRIME

Responses are context specific

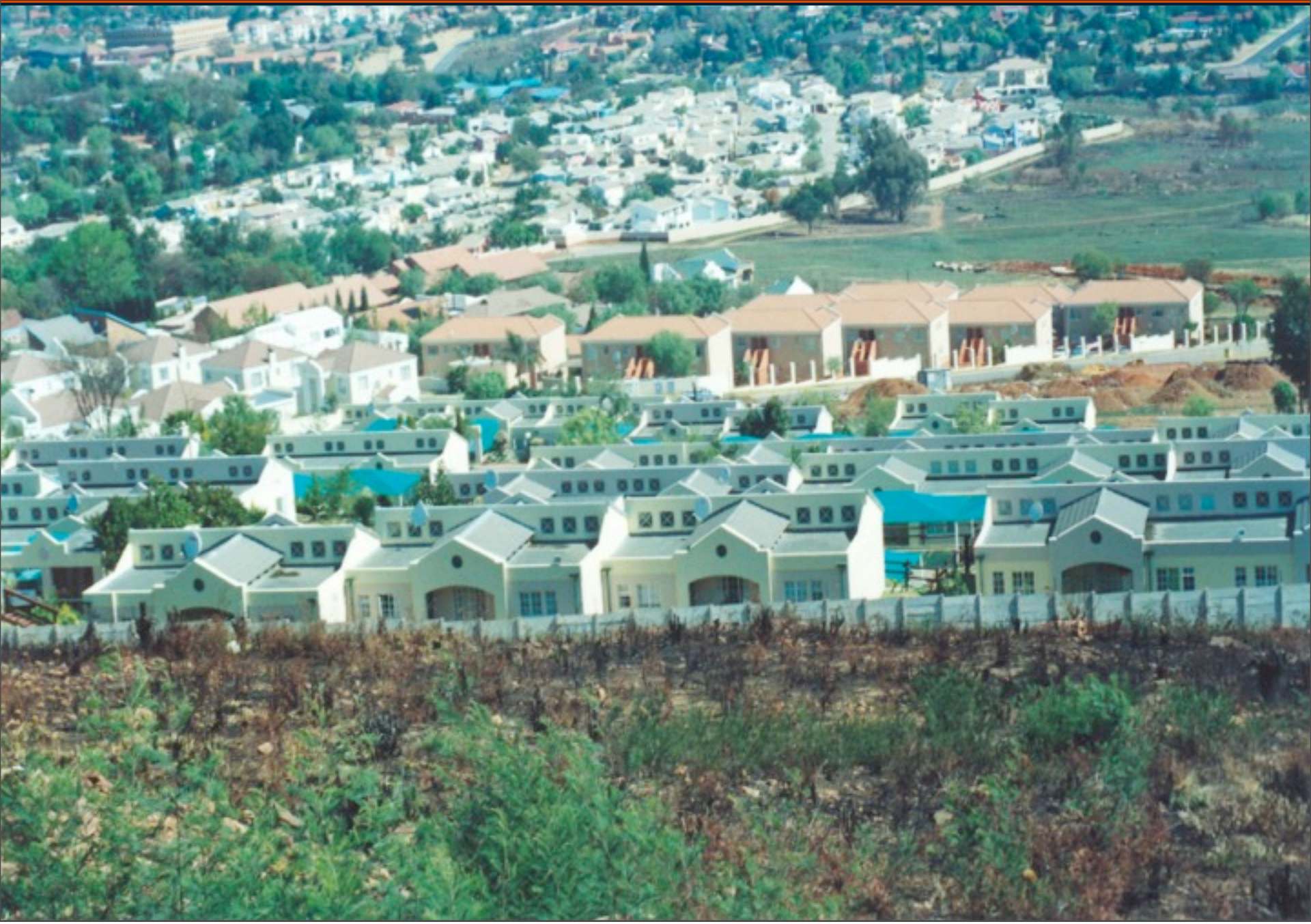
- Affluent communities – often rely on private resources and funding
- Poorer communities – do not have access to resources other than those provided by the government

Typical responses to crime and the fear of crime – affluent areas

Typical responses to crime and the fear of crime – affluent areas

Walls are built around private houses…

…neighborhoods, townhouse complexes, security estates etc.



Combined with electric fencing, CCTV systems…

Combined with electric fencing, CCTV systems…

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Typical responses to crime and the fear of crime – poor areas

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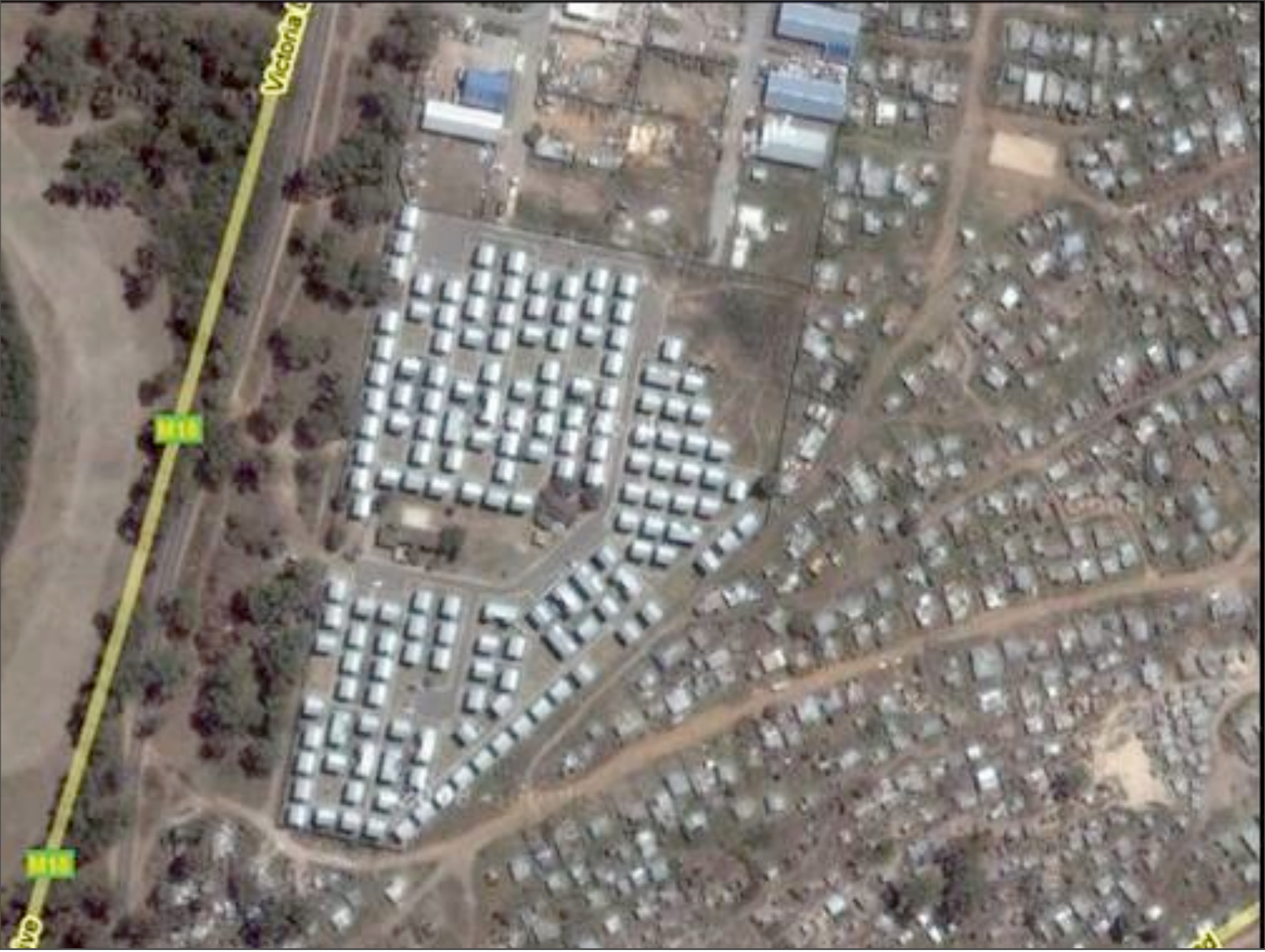

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In South Africa, walls are contentious

- Emotive responses - for and against
- Need for security vs exclusion
- One of the more visible manifestations of people's fear of crime, esp. in affluent areas
- To many people, including the poor, solid walls have come to represent the "must-have" protection system, a barrier without which they feel vulnerable and exposed to crime

PROJECT – REMOVING A SECURITY WALL

Removing the perimeter wall at the Goethe-Insitut, Johannesburg

Project description

- A German cultural organization based in an affluent part of Johannesburg (Parktown)
- Required guidance to replace the perimeter wall with alternative security measures without compromising the safety of employees and members of the public
- Employees / users of the facility needed to be “involved” in the decision to remove the wall
- Removing a wall goes against natural instinct

Project objectives

- To make the Institute more accessible to visitors and strengthen its image as a welcoming, inclusive cultural organization
- To demonstrate the Institute's commitment to the breaking down of cultural barriers and the creation of integrated communities
- To symbolically commemorate the falling of the Berlin wall 20 years ago (1989), as well as 15 years of democracy in South Africa (1994)

Project activities

- Information sharing and public discussions regarding safety & security and walls to inform, share concerns and address fears
- Rudimentary risk assessment, CPTED analysis
- Involve architecture students in generating ideas and proposing alternatives to the wall
- Develop and execute the intervention

Jan Smuts Ave, Johannesburg, South Africa
Image © 2010 DigitalGlobe
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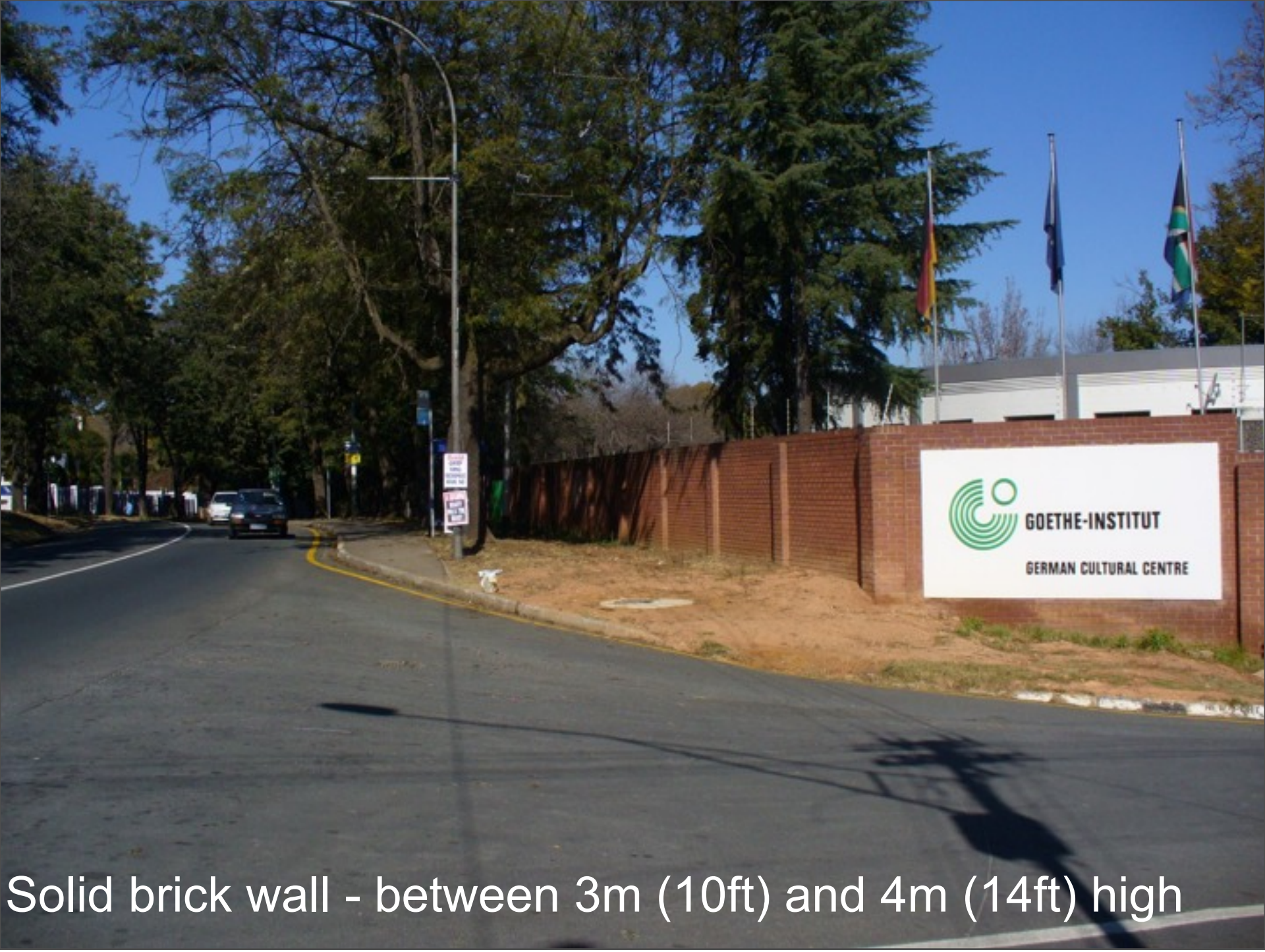

Solid brick wall - between 3m (10ft) and 4m (14ft) high

GOETHE-INSTITUT
GERMAN CULTURAL CENTRE

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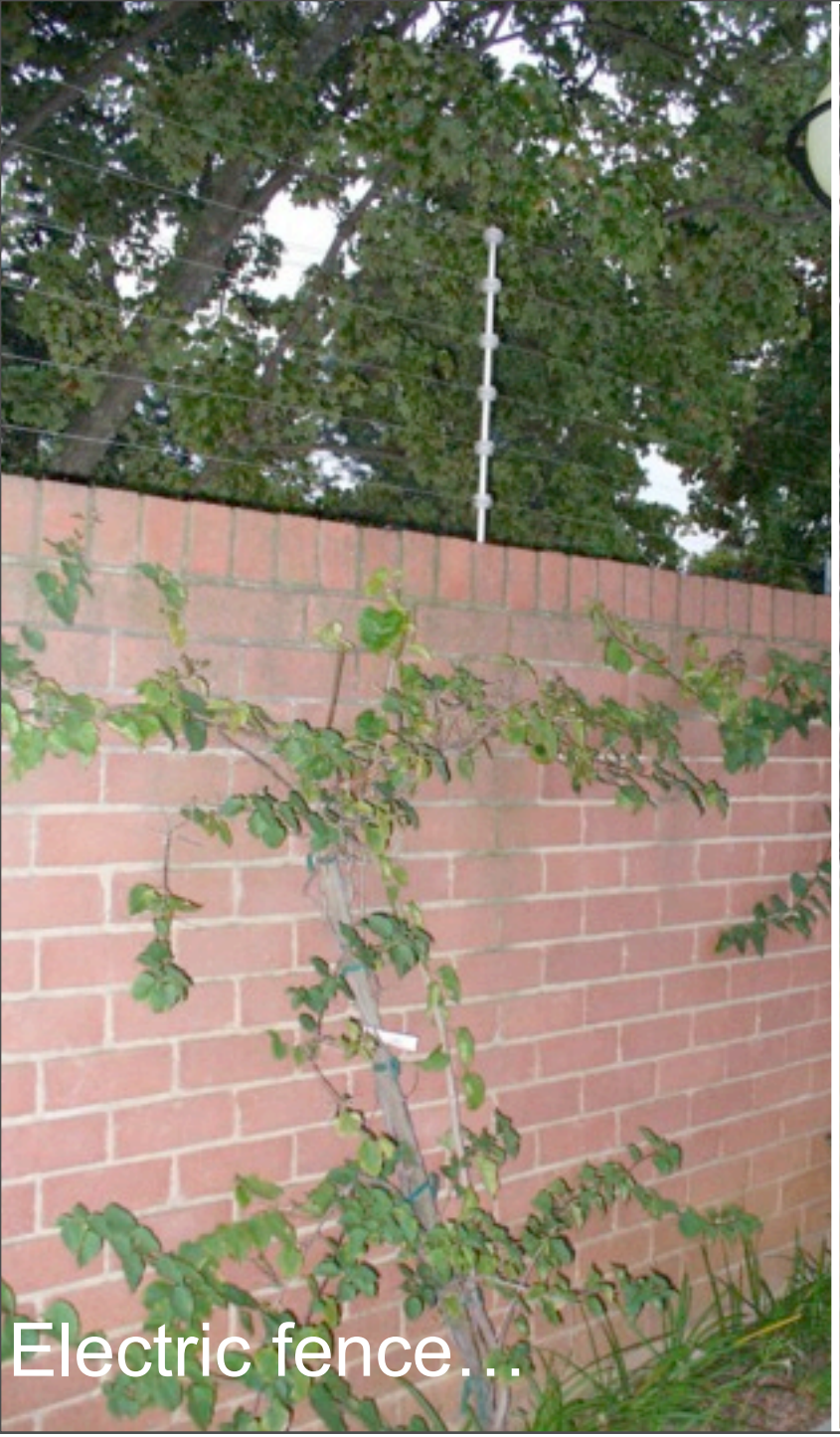
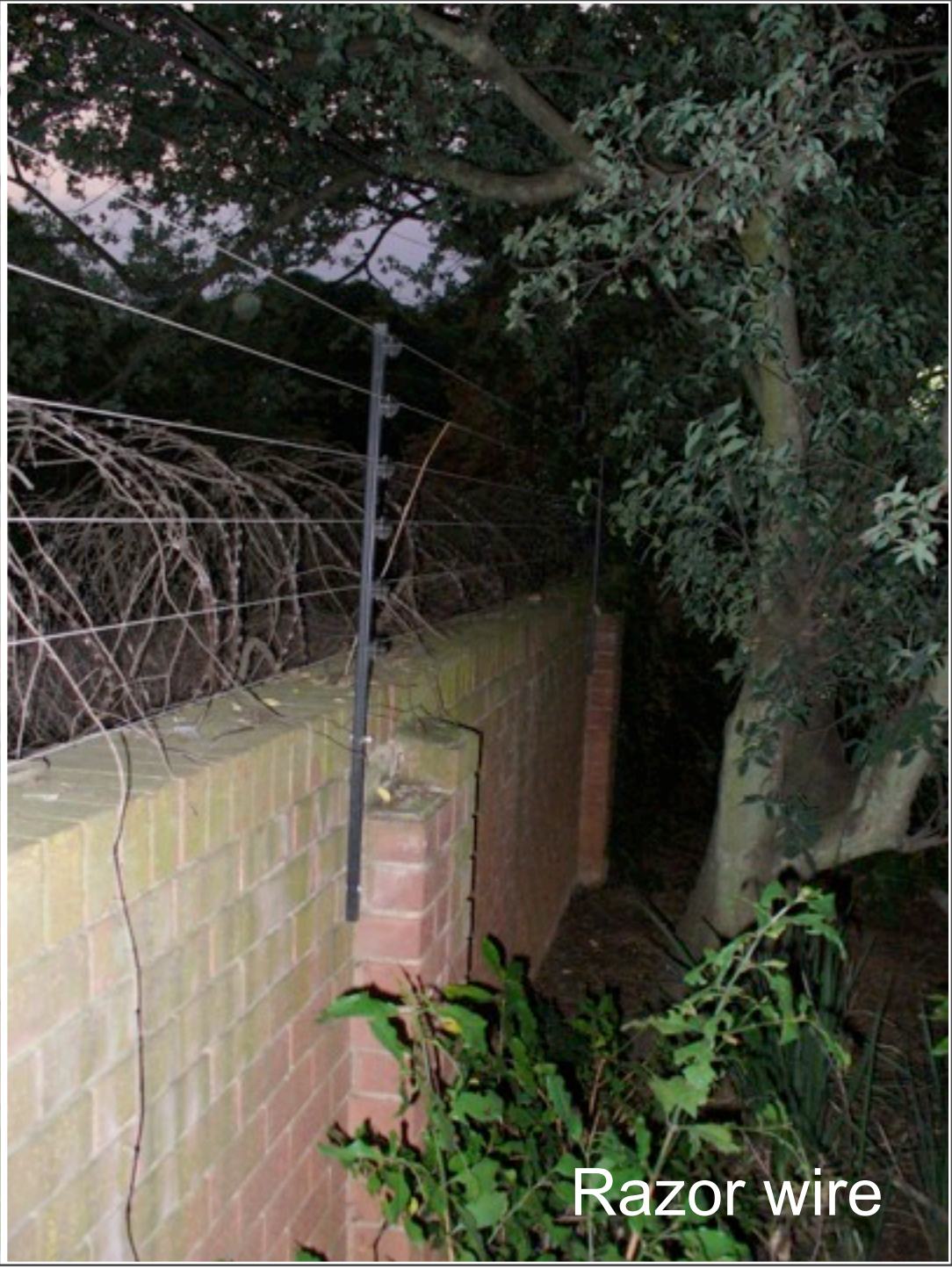
Guard house with 24 hour guard

Steel electric gate


Electric fence…

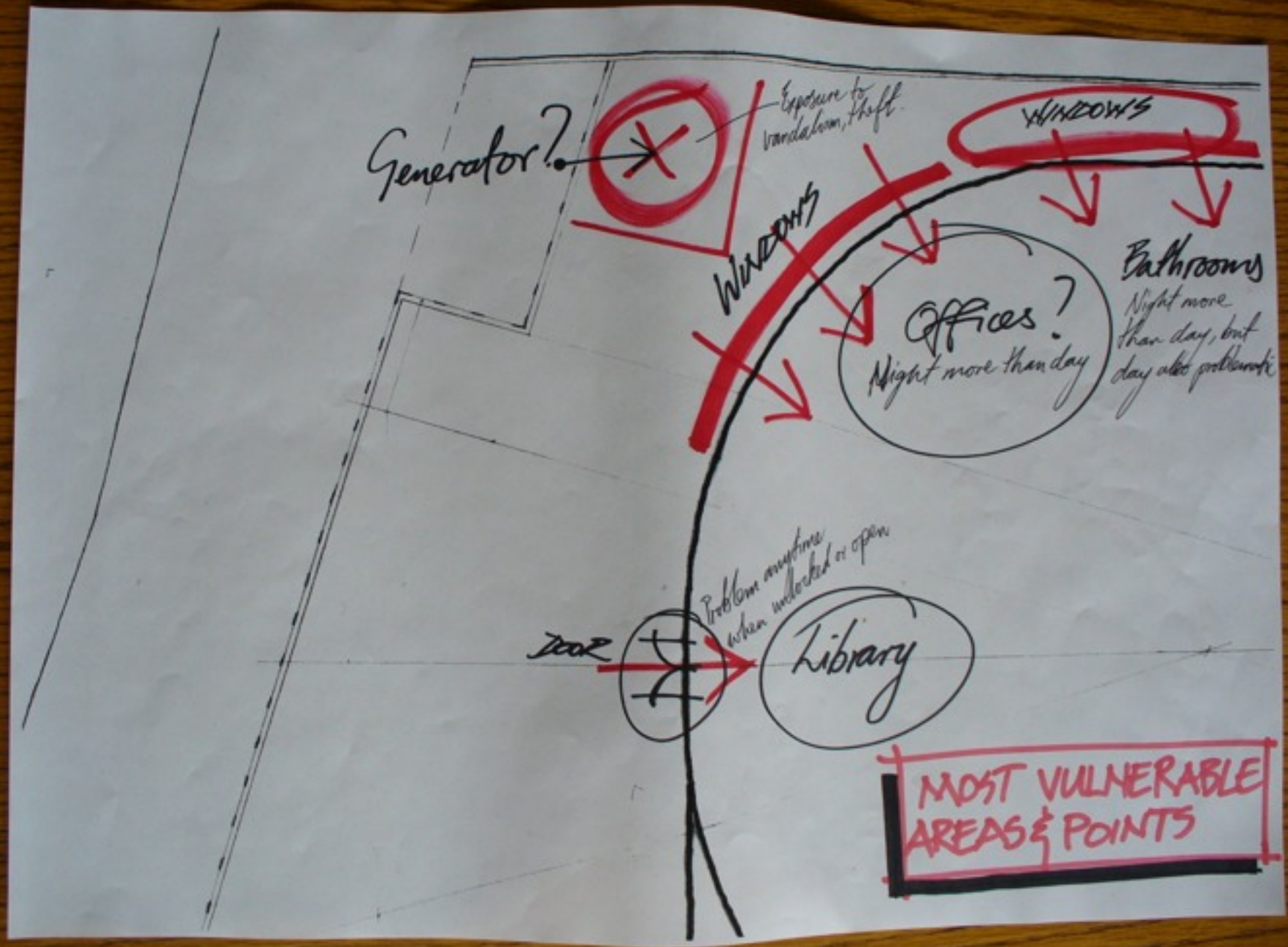

Razor wire

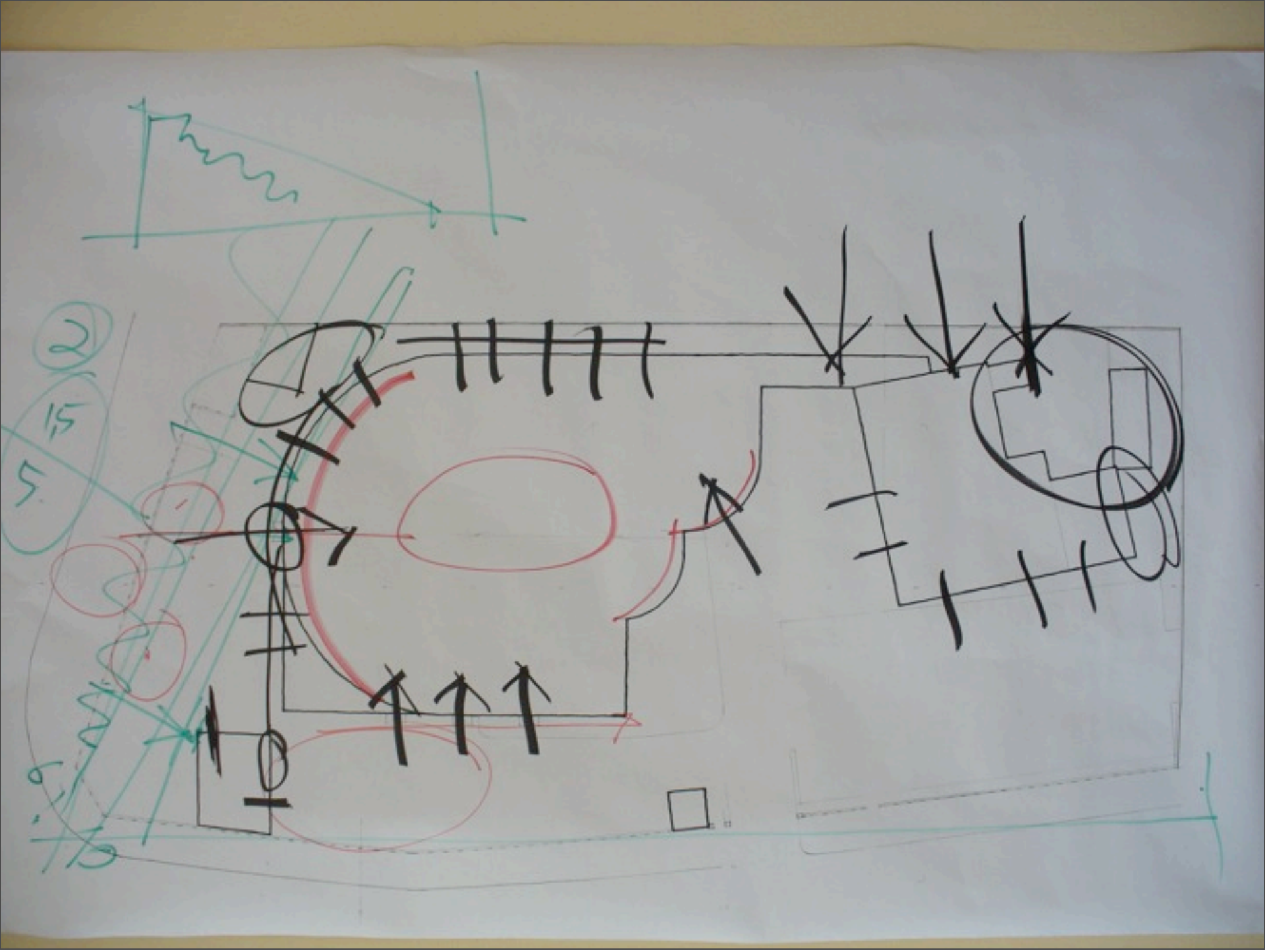
79
Westwold Way
Spikes

Rudimentary risk assessment

- Assets
- Threats
- Vulnerabilities / levels of opportunity
- Likelihood of location being targeted
- Consequences

- Physical assessment


Generator?
Exposure to vandalism, theft
WINDOWS
WINDOWS
Offices?
Night more than day
Bathrooms
Night more than day, but day also problematic
Problem anytime when unlocked or open
DOOR
Library
MOST VULNERABLE AREAS & POINTS



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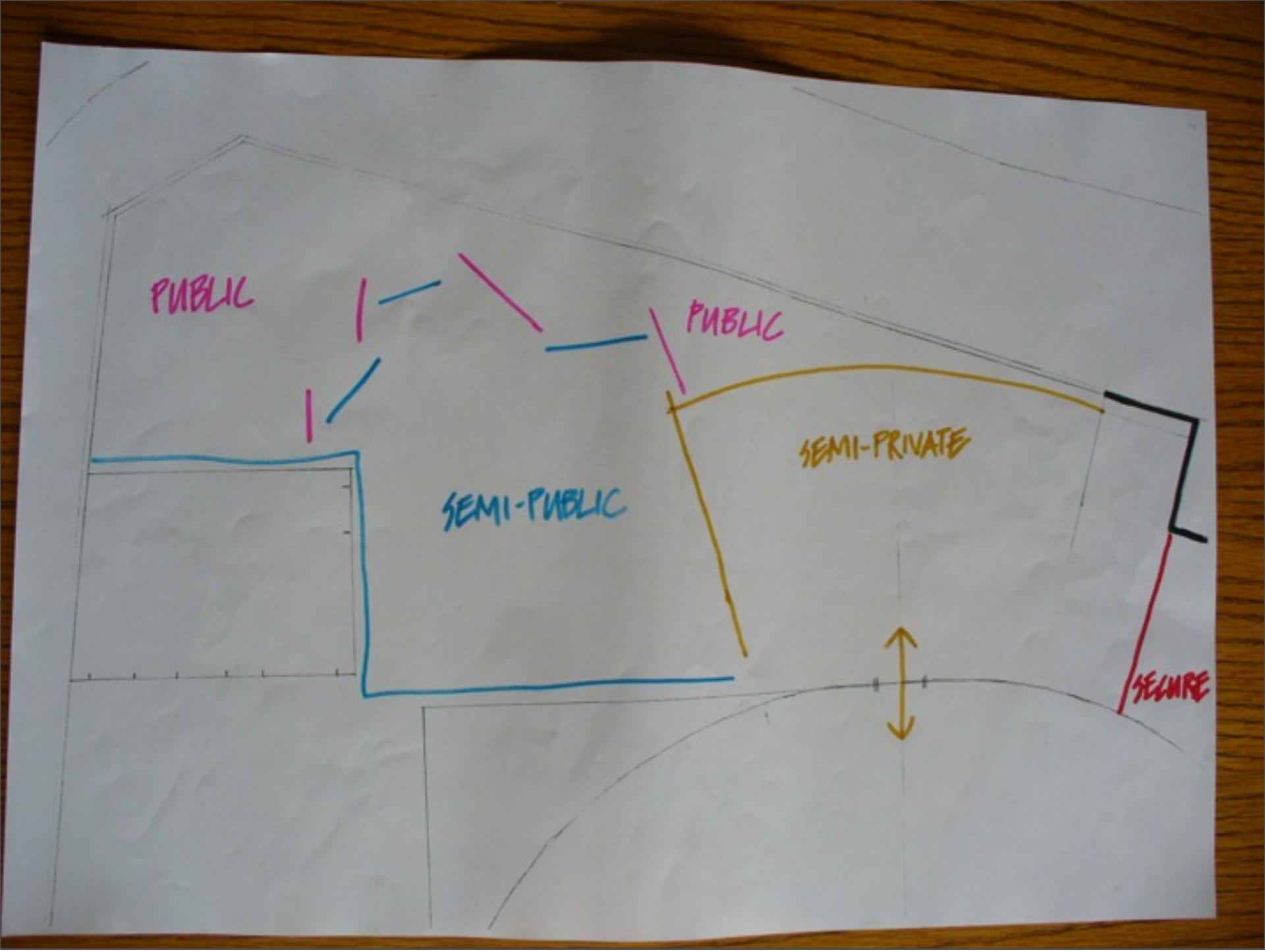
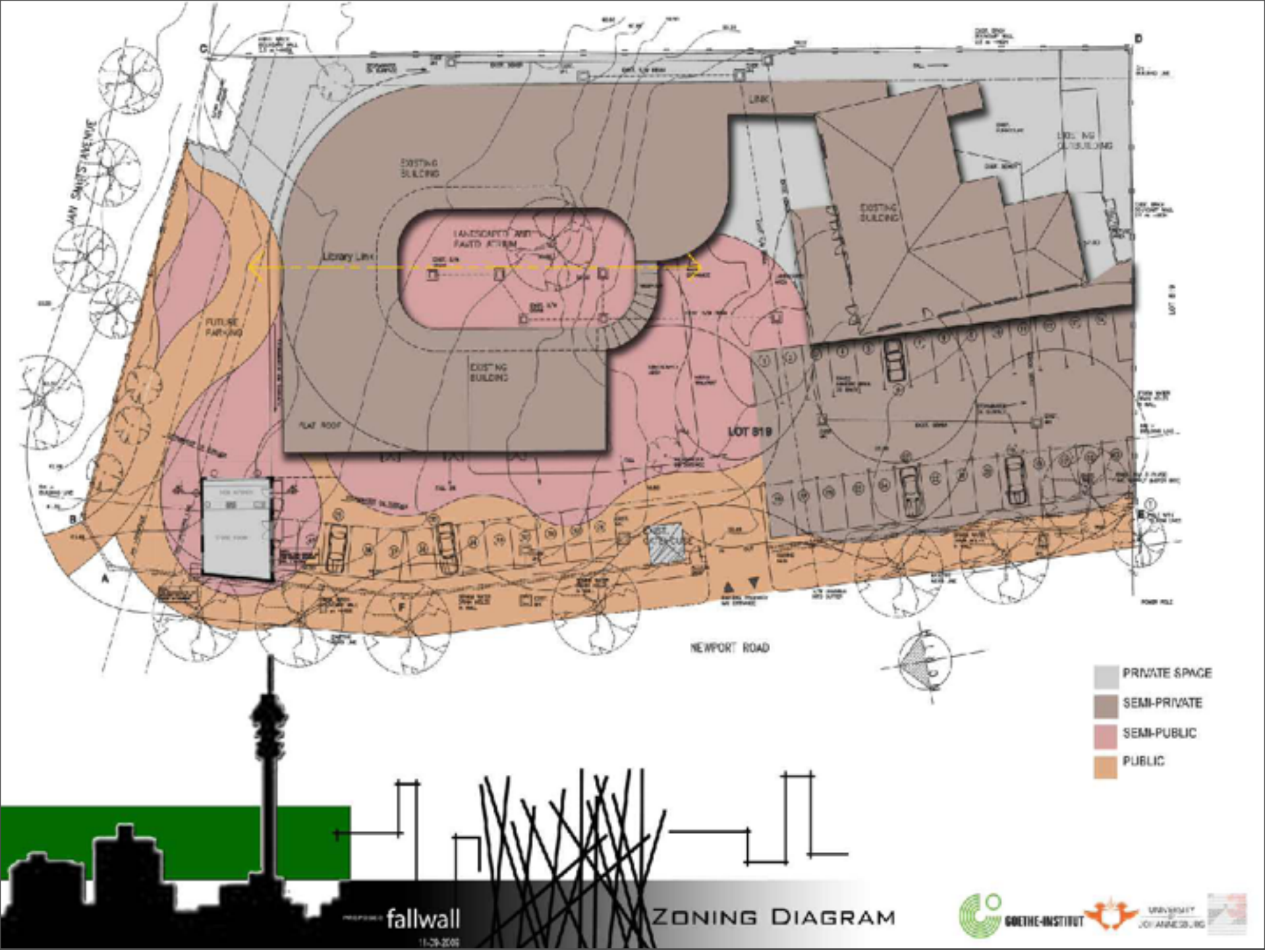
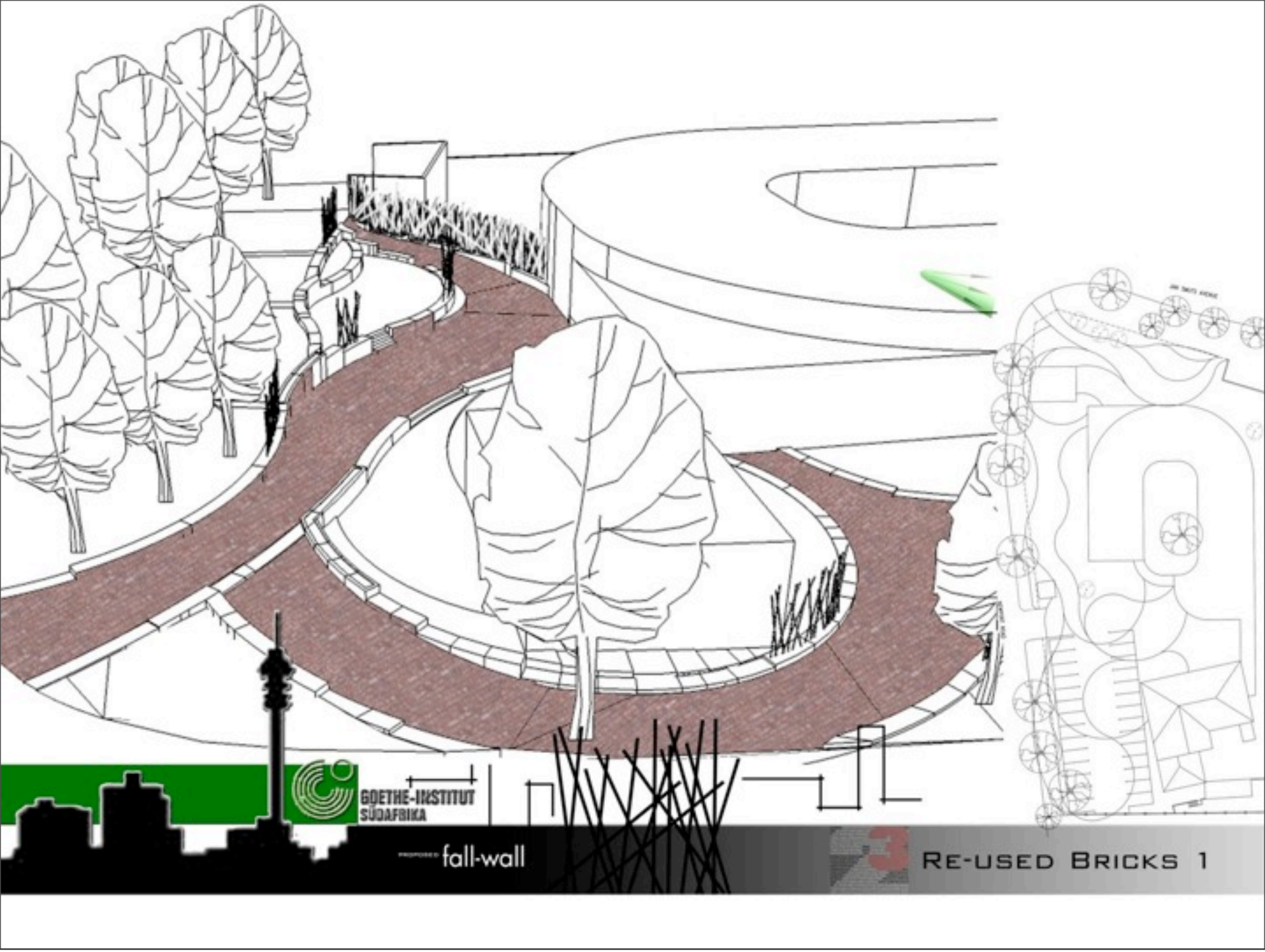

PUBLIC
PUBLIC
SEMI-PRIVATE
SEMI-PUBLIC
SECURE


JAN SMUTS AVENUE
NEWPORT ROAD
EXISTING BUILDING
LANDSCAPED AND PAVED ATRIUM
Library Link
FUTURE PARKING
FLAT ROOF
LOT 919
LINK
PRIVATE SPACE
SEMI-PRIVATE
SEMI-PUBLIC
PUBLIC
fallwall
ZONING DIAGRAM
GOETHE-INSTITUT


GOETHE-INSTITUT
SÜDAFRIKA
proposed fall-wall
Re-used Bricks 1

GERMAN
CULTURAL CEN

JTJ584 GP

GOETHE-INSTITUT
GERMAN CULTURAL CENTRE

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GOETHE-INSTITUT
GERMAN CULTURAL CENTRE

GOETHE-INSTITUT
SOUTH AFRICA
CULTURAL PROGRAMMES
GERMAN LANGUAGE COURSES
GERMAN

CULTURAL PROGRAMMES
GOETHE-

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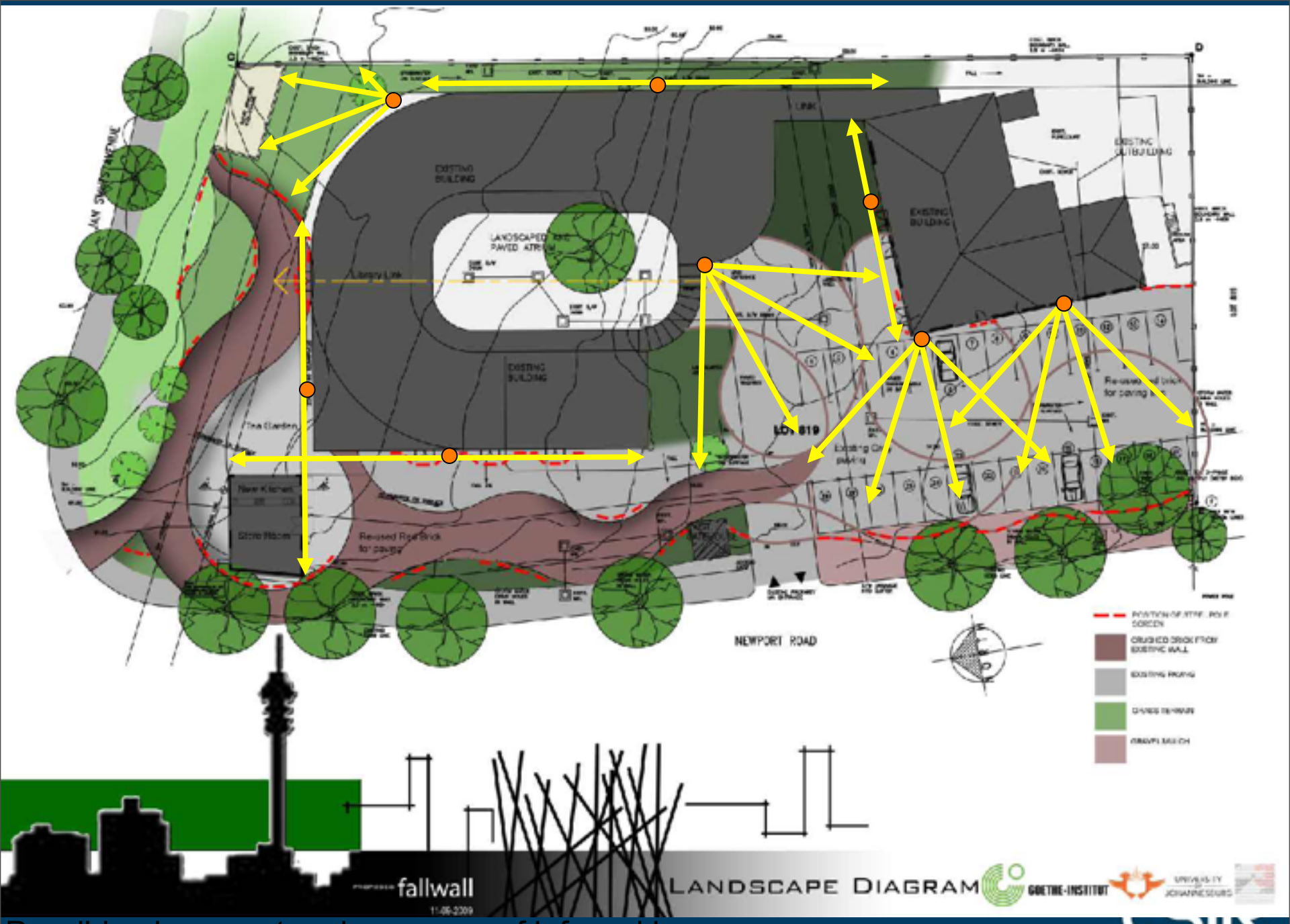
Design and technology interventions

- Employ a multi-pronged approach
  - Passive mechanisms (CPTED)
  - Electronic mechanisms (motion detection alarm system, CCTV, locks)
  - Burglar proofing at windows, security gates at doors
  - Security guard
- Techniques / strategies / tools
  - Defined private and public zones
  - Surface treatment (paving, grass)
  - Landscaping (plants)
  - Lighting



Possible placement and coverage of infrared beams

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CENTWEG

CONCLUSION

CPTED without boundaries

- Exclusionary CPTED
  - Building barriers
  - Architecture of fear

CPTED without boundaries

- Exclusionary CPTED
  - Building barriers
  - Architecture of fear
- Inclusionary CPTED
  - Building bridges
  - Integrating communities

Use more agreeable, less divisive ways of defining territory

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Apply CPTED principles to build communities rather than barriers

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