

A dramatic landscape painting showing a wide river valley. In the foreground on the left, a large, gnarled tree with dense green foliage stands on a rocky outcrop. The river flows through the center of the valley, winding around a small island. The valley floor is covered in green fields and scattered trees. In the background, rolling hills and mountains are visible under a sky filled with heavy, dark clouds. A bright rainbow arches across the sky, its colors reflecting on the water. The overall mood is one of natural beauty and tranquility.

*E*nvisioning
SUSTAINABLE
NORTHAMPTON

UNIVERSITY OF NOTRE DAME SCHOOL OF ARCHITECTURE



OUTLINE

Introduction & background

Observation of existing conditions

History of development in Northampton

The threat of sprawl

Sustainable Northampton

OUR DESIGN PROPOSALS

I. Reinforcing the historic centers:

Downtown, Leeds, Baystate, Florence

II. New development: Village Hill

III. Retrofitting sprawl: King Street

Conclusion

PROJECT BACKGROUND

University of Notre Dame School of Architecture

Northampton Design Forum

Design Northampton Week



DESIGN NORTHAMPTON WEEK



WHAT WE HEARD FROM YOU



CONCERNS OF THE COMMUNITY

- Land conservation
- Environmental protection
- Affordable housing
- Survival of local business, agriculture
- Lengthy approval process for development
- Taxes & public revenue
- Education, arts, culture
- Fear of growth/density
- Traffic & parking
- Public transit
- Design for pedestrians, cyclists

THE NOTRE DAME STUDIO



THE NOTRE DAME STUDIO



THE NOTRE DAME STUDIO



THE NOTRE DAME STUDIO



EVOLUTION *of a* CITY

A brief history of development in Northampton

FIGURE-GROUND DIAGRAMS



FIGURE-GROUND DIAGRAMS



HISTORICAL GROWTH: 1800
POPULATION: 2,000



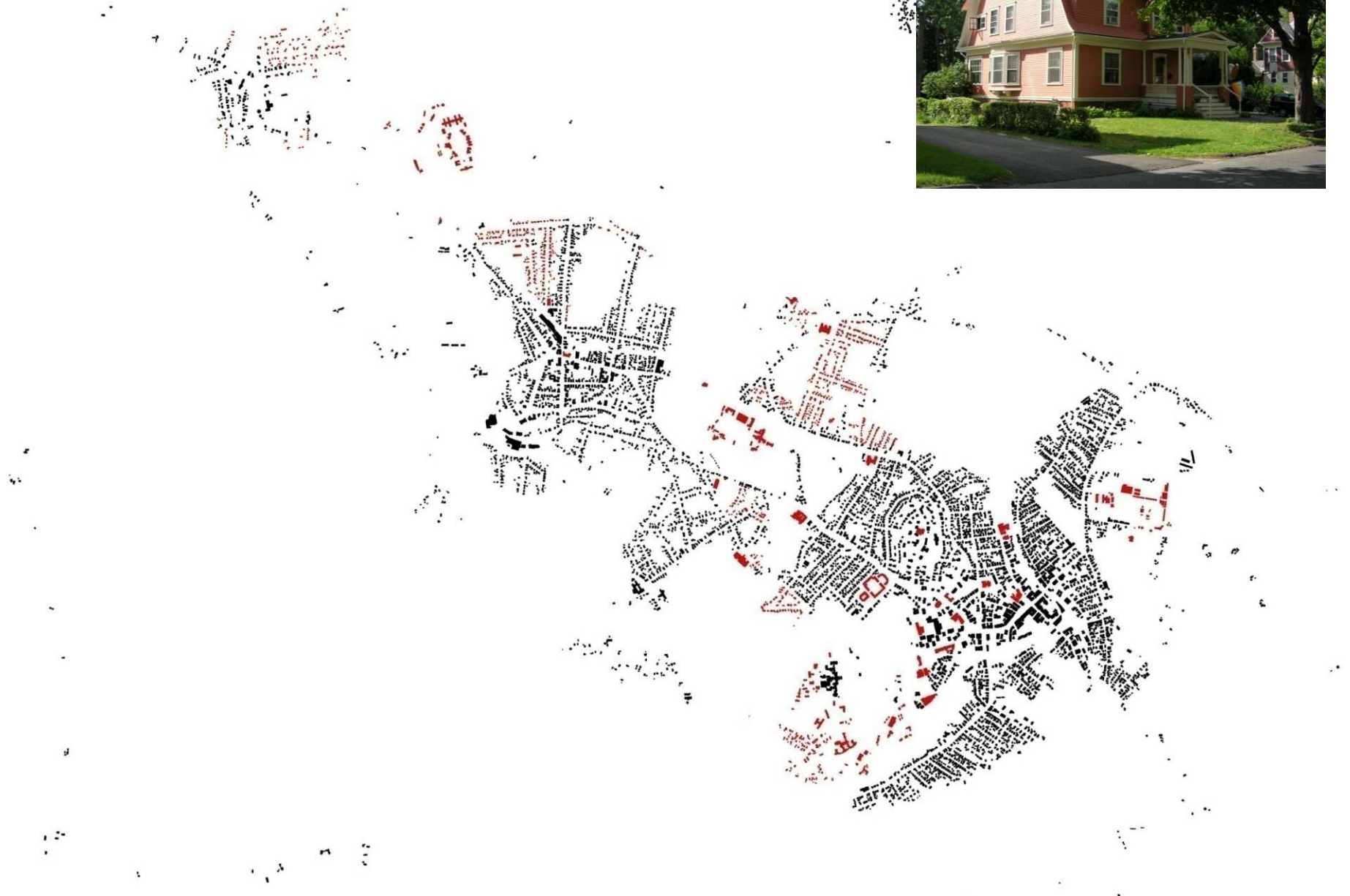
HISTORICAL GROWTH: 1850
POPULATION: 6,000



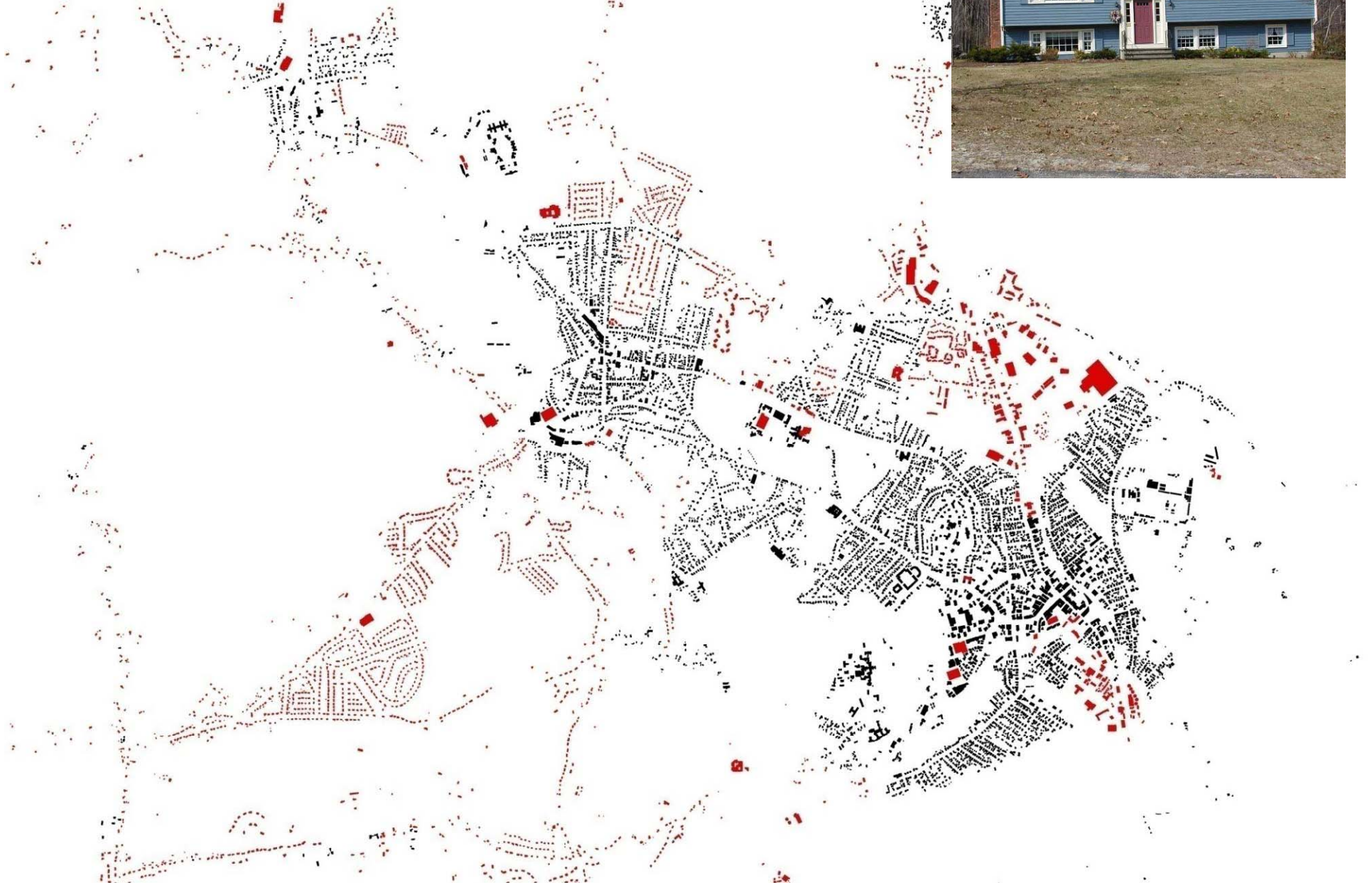
HISTORICAL GROWTH: 1900
POPULATION: 18,500



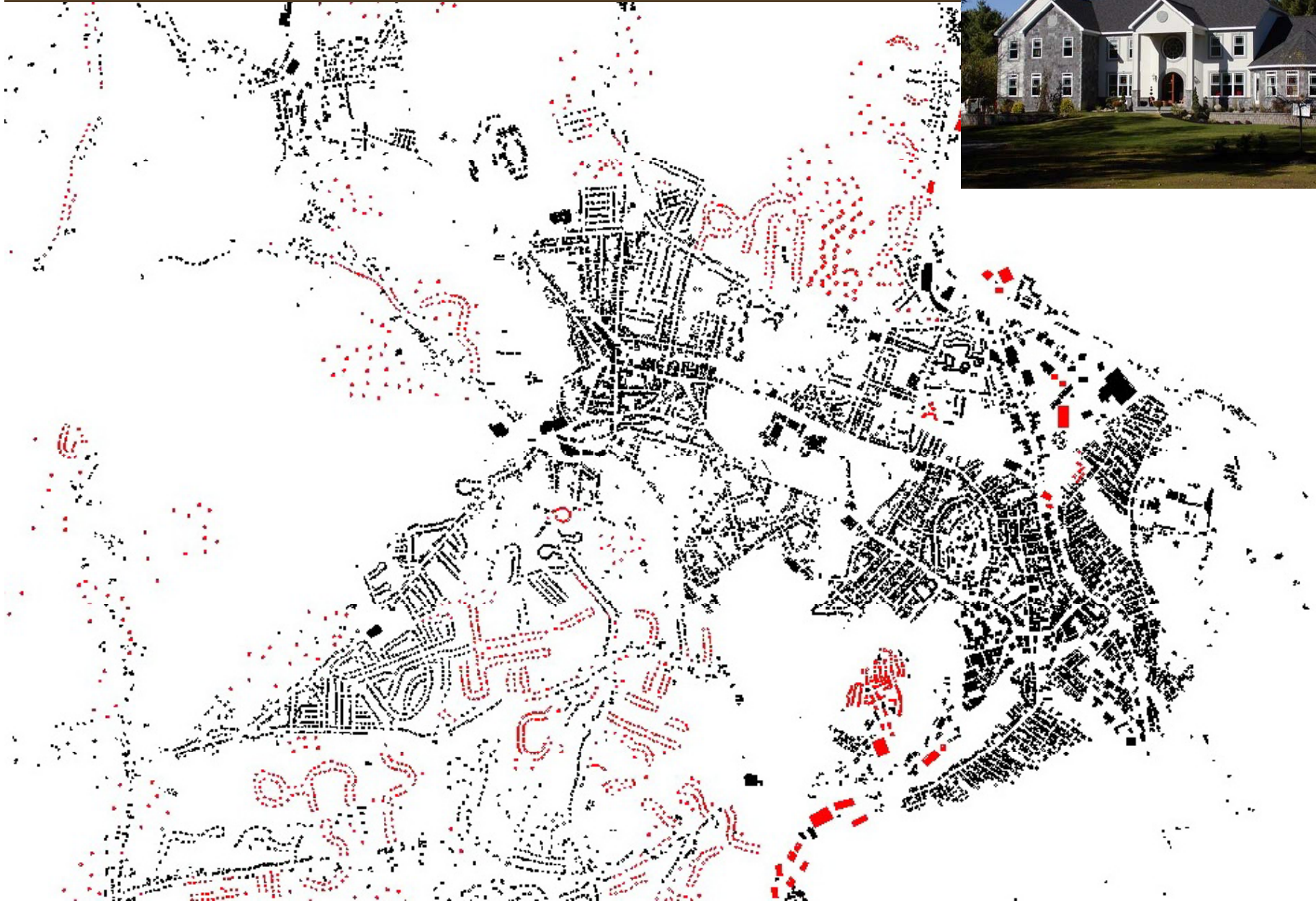
HISTORICAL GROWTH: 1950
POPULATION: 26,000



HISTORICAL GROWTH: 2000
POPULATION: 28,000



POSSIBLE FUTURE GROWTH
POPULATION: 32,000-36,000



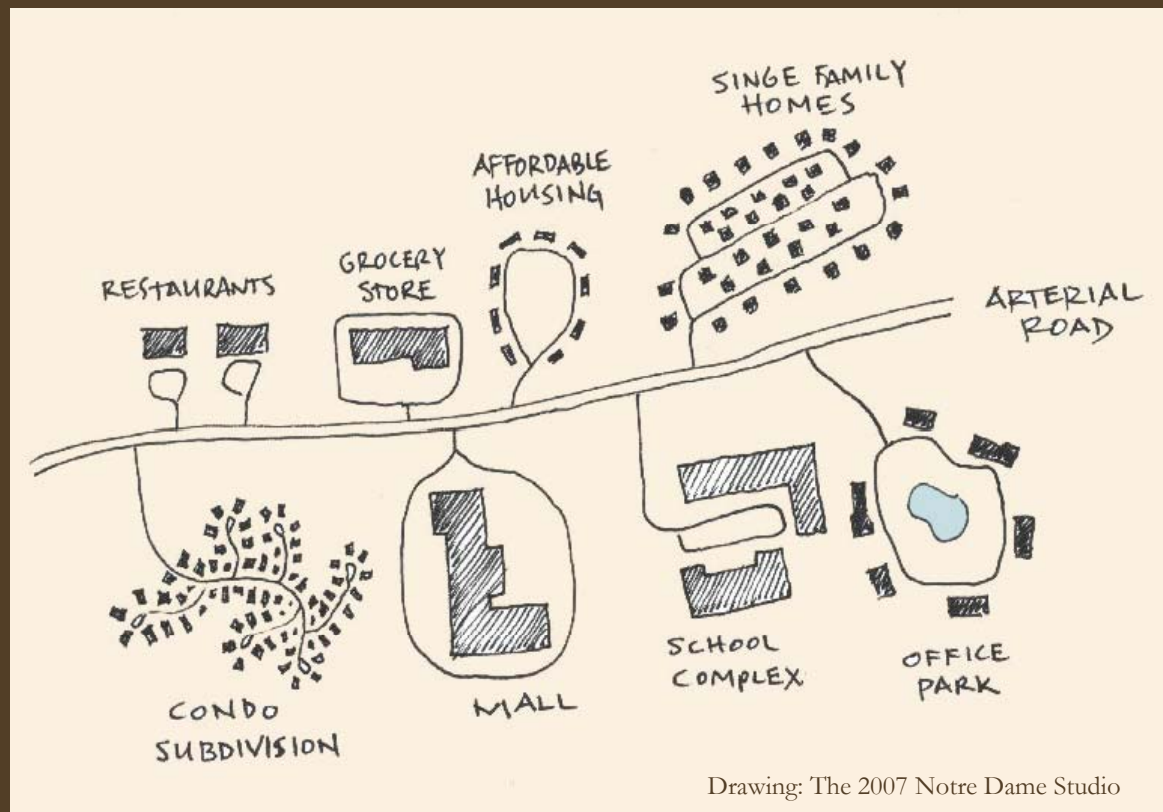
WHAT'S WRONG WITH SPRAWL?



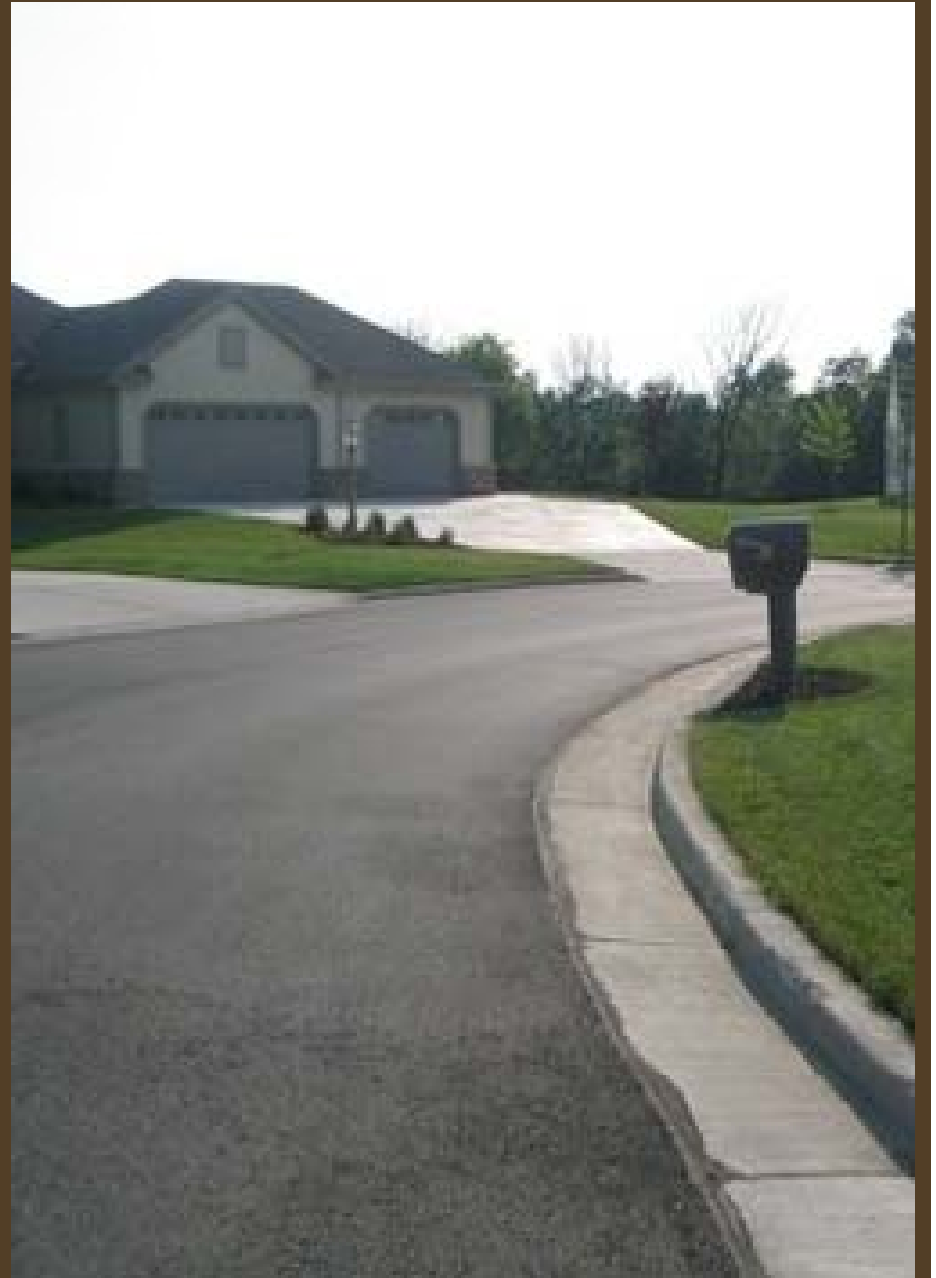
WHAT'S WRONG WITH SPRAWL?

- Completely dependent on cars - not walkable.
- Diminished sense of community, due to loss of public realm
- Affordable housing is isolated from the rest of the community
- Requires massive public infrastructure; more difficult to serve by police, fire, etc.
- Loss of natural land and damage to the natural environment

NOT SUSTAINABLE.



WHAT'S WRONG WITH SPRAWL?

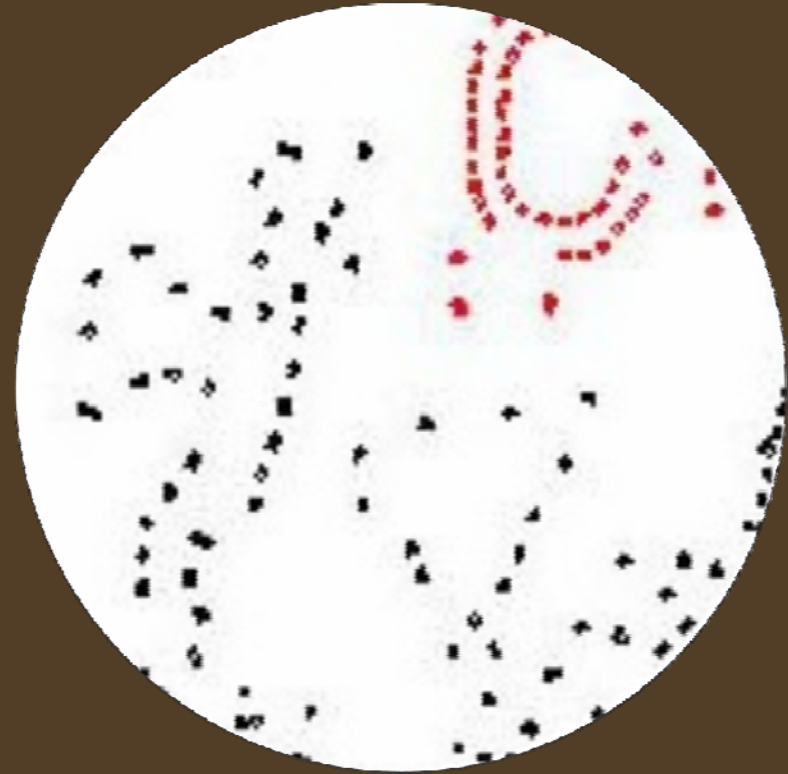


WHAT'S WRONG WITH SPRAWL?

The City

vs.

Sprawl



Quarter-Mile radius circle: 5-minute walk from center to edge

THE CITY vs. SPRAWL:
Traditional Mixed-use Center



THE CITY vs. SPRAWL

Sprawl Commercial



NORTHAMPTON'S BUILT ENVIRONMENT: Traditional Residential



THE CITY vs. SPRAWL
Sprawl Residential



THE CITY vs. SPRAWL
Traditional Street Facade



NORTHAMPTON'S BUILT ENVIRONMENT: Sprawl Street Facade

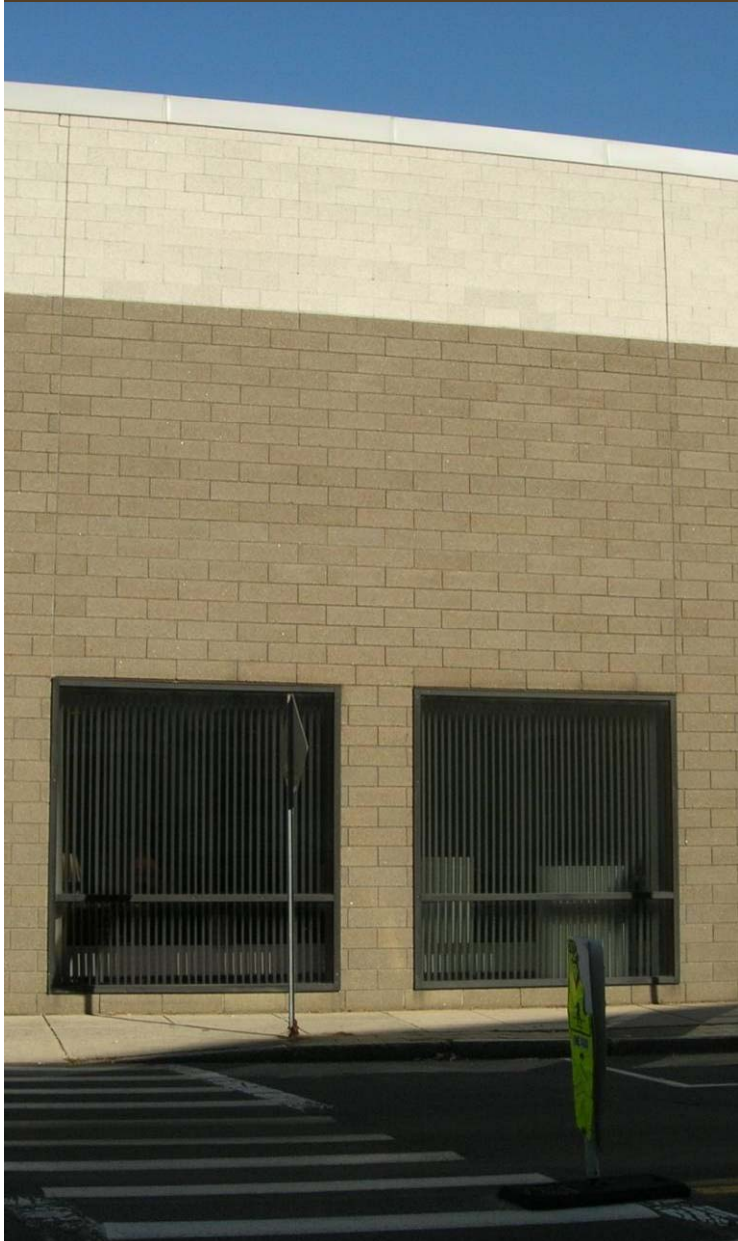


THE CITY vs. SPRAWL

Traditional Civic Architecture



THE CITY vs. SPRAWL
Recent Civic Architecture



HOW DO WE FIX THIS?

A strategy for sustainability

SUSTAINABLE NORTHAMPTON

“SUSTAINABLE DEVELOPMENT
is development that meets the needs of the
present without compromising the ability of
future generations to meet their own needs.”

- *The Bruntland Commission on Environment and
Development, United Nations 1983*



SUSTAINABLE NORTHAMPTON



PRINCIPLES

- Support a diverse and integrated community
- Improve energy efficiency
- Support a wide variety of housing types
- Support artists and the arts
- Maintain a mix of urban and rural areas
- Foster the history, character and function of each neighborhood
- Encourage a diverse and vibrant economy
- Make the city more walkable, bikeable, transit-oriented

SUSTAINABLE NORTHAMPTON

STRATEGIES

- Encourage mixed use, high density, walkable development near existing centers, including Downtown Northampton, Hospital Hill, Florence, Baystate & Leeds
- Provide affordable housing for a mix of incomes
- Convert public and private parking lots to private mixed use development with parking structures
- Calm traffic through use of roundabouts, street trees, sidewalks, on-street parking, and by building close to the street
- Consider changes to zoning code, especially the adoption of form-based code



TRADITIONAL URBANISM

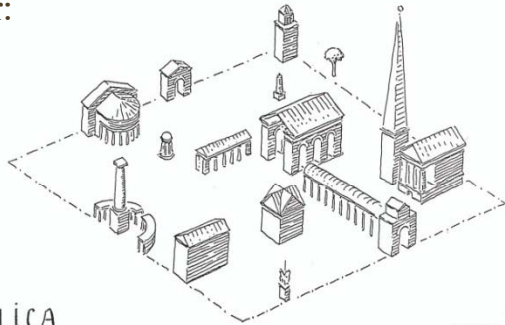
“Traditional urbanism and architecture provide the only comprehensive approach to the challenges of environmental sustainability. Only their enduring lessons address the full spectrum of issues involved: from regional land use and resource management, to the development of healthy communities and lifestyles, to durable, energy-efficient, non-toxic built environments. In addition, both beauty and the character of the citizenry must be understood as integral components of a sustainable culture. A place must be loved if it is to be sustained; and love entails happy and willing sacrifice.”

- G.K. David, University of Notre Dame



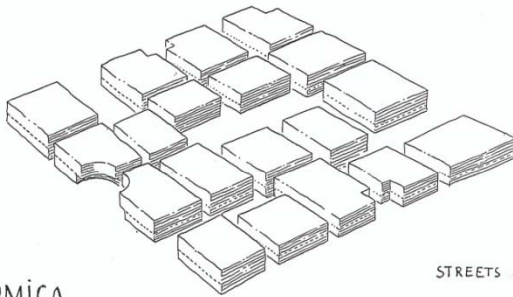
TRADITIONAL URBANISM

Leon Krier:



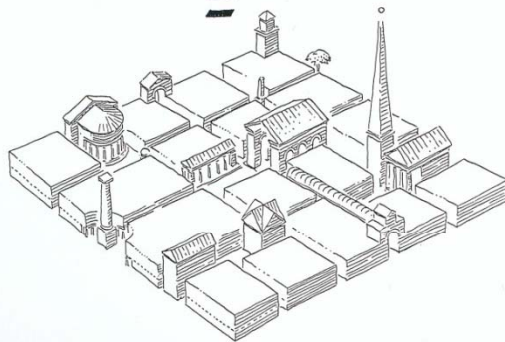
RES PUBLICA

MONUMENTS
WITHOUT
STREETS or SQUARES



RES ECONOMICA

STREETS and SQUARES
WITHOUT
MONUMENTS



CIVITAS

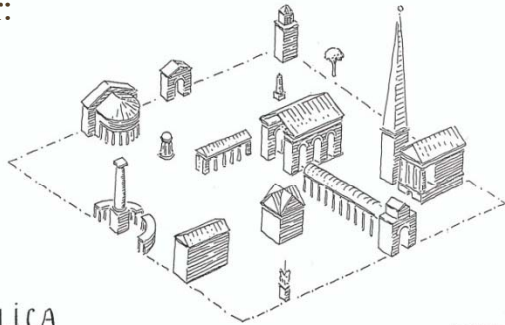
THE
TRUE
CITY

LK 83



TRADITIONAL URBANISM

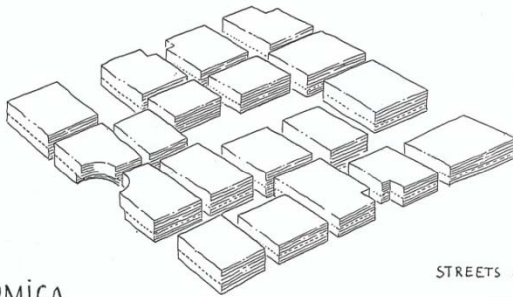
Leon Krier:



RES PUBLICA

MONUMENTS
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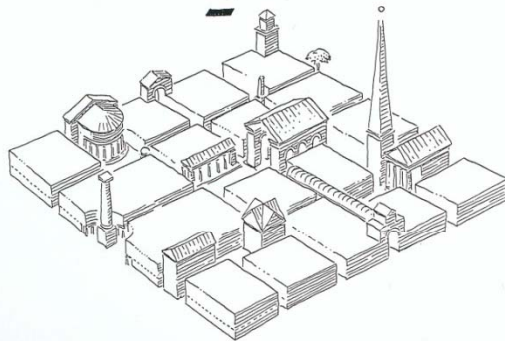
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RES ECONOMICA

STREETS and SQUARES
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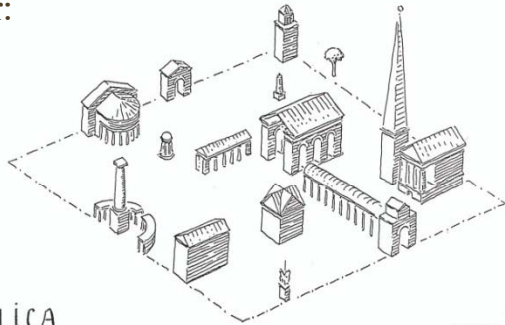
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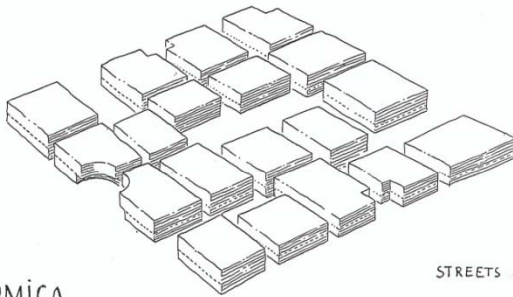
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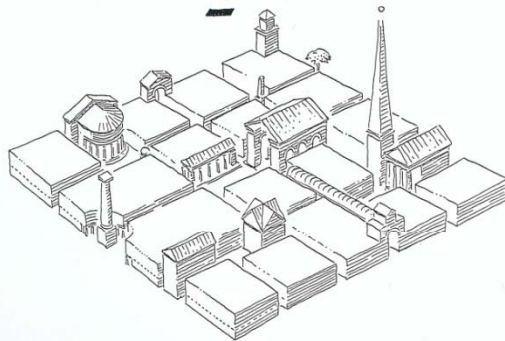
RES PUBLICA

MONUMENTS
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STREETS or SQUARES



RES ECONOMICA

STREETS and SQUARES
WITHOUT
MONUMENTS



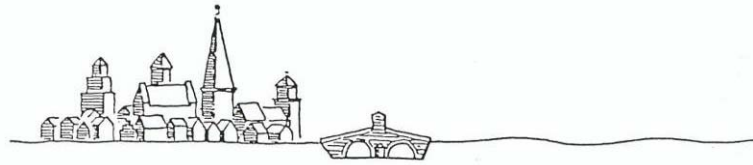
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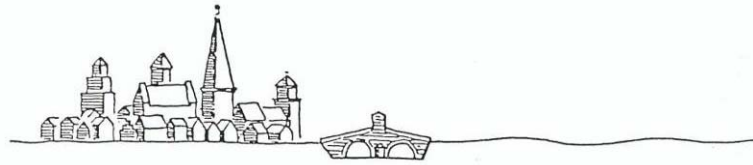


ARCHITECTURE • CHOICE OR FATE

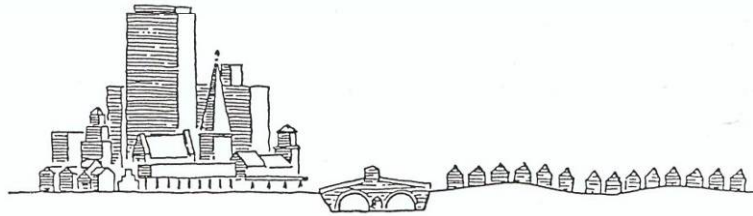


Mature CITY

ARCHITECTURE • CHOICE OR FATE

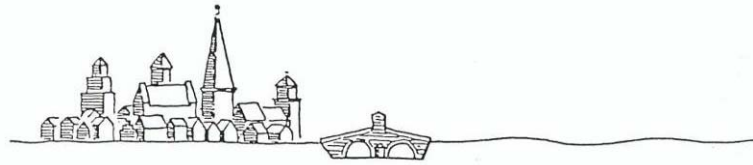


Mature CITY

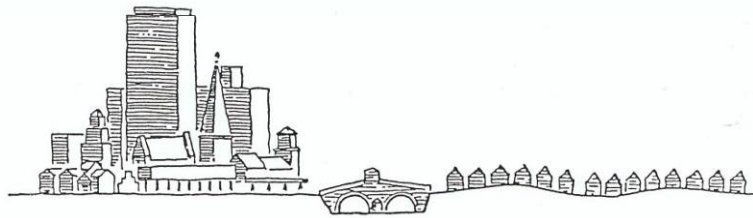


VERTICAL & HORIZONTAL "OVEREXPANSION"

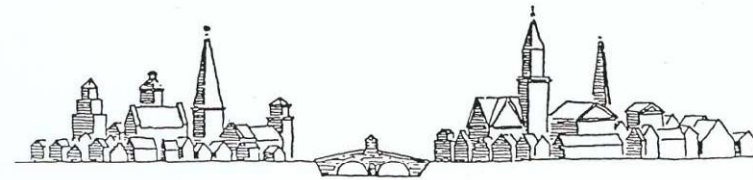
ARCHITECTURE • CHOICE OR FATE



Mature CITY



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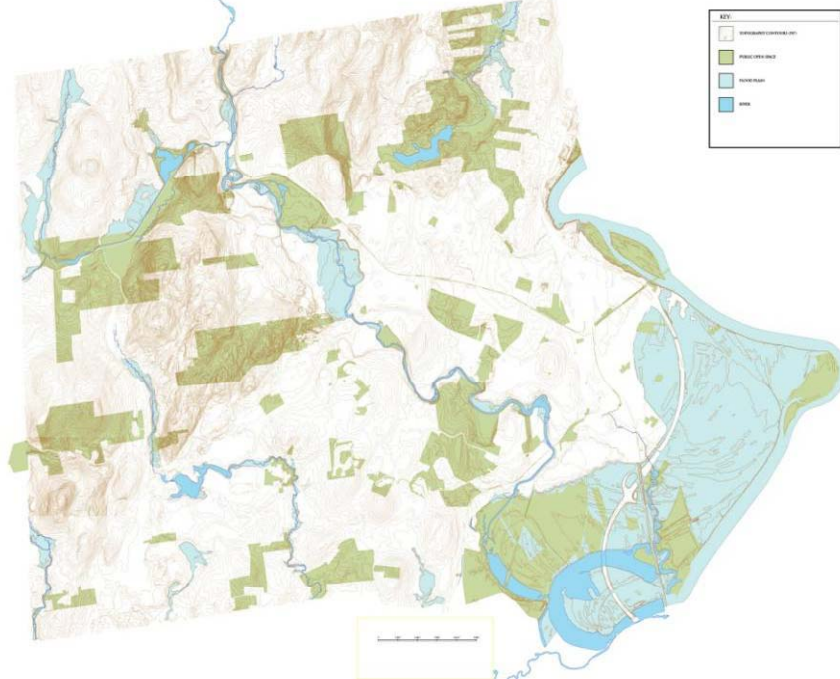


Organic EXPANSION through 'DUPLICATION'

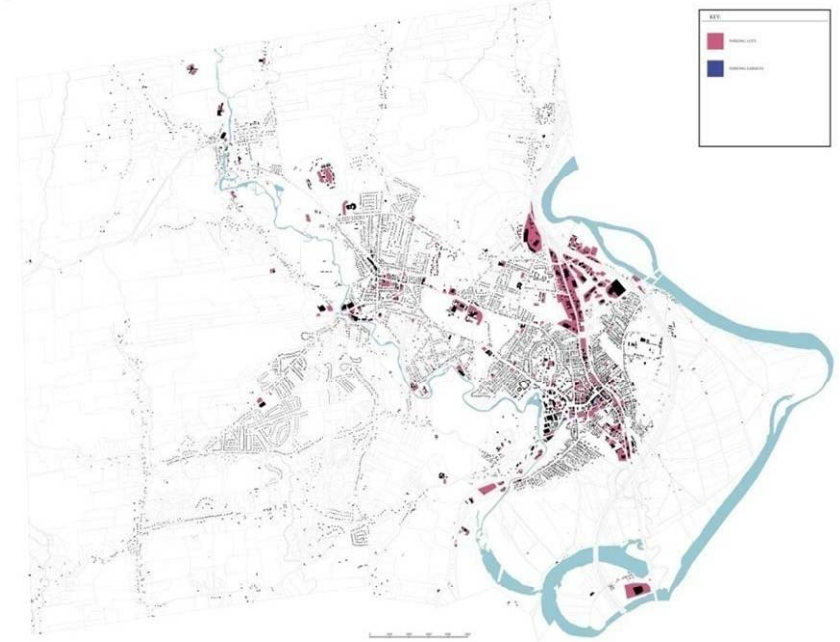
NORTHAMPTON TODAY



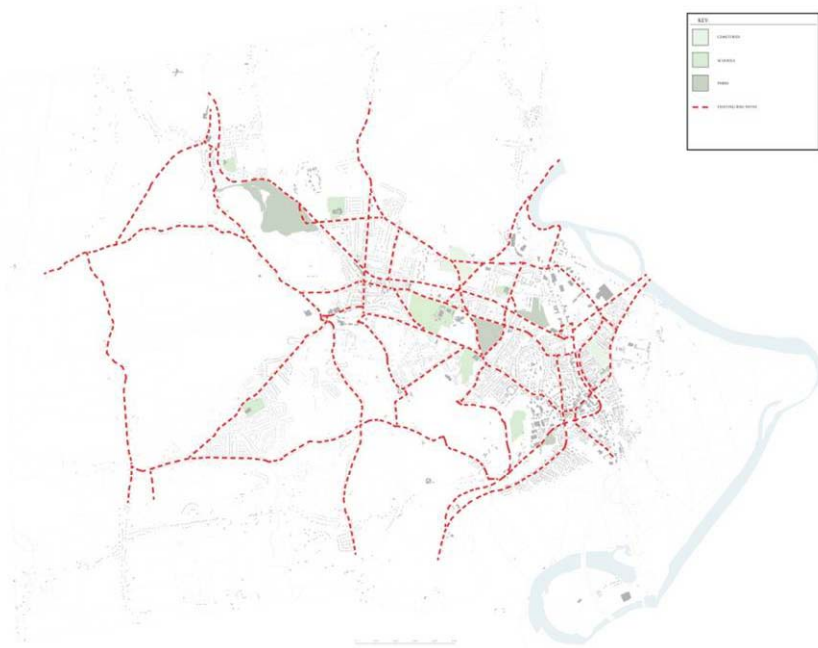
NORTHAMPTON NATURAL CONSTRAINTS DIAGRAM



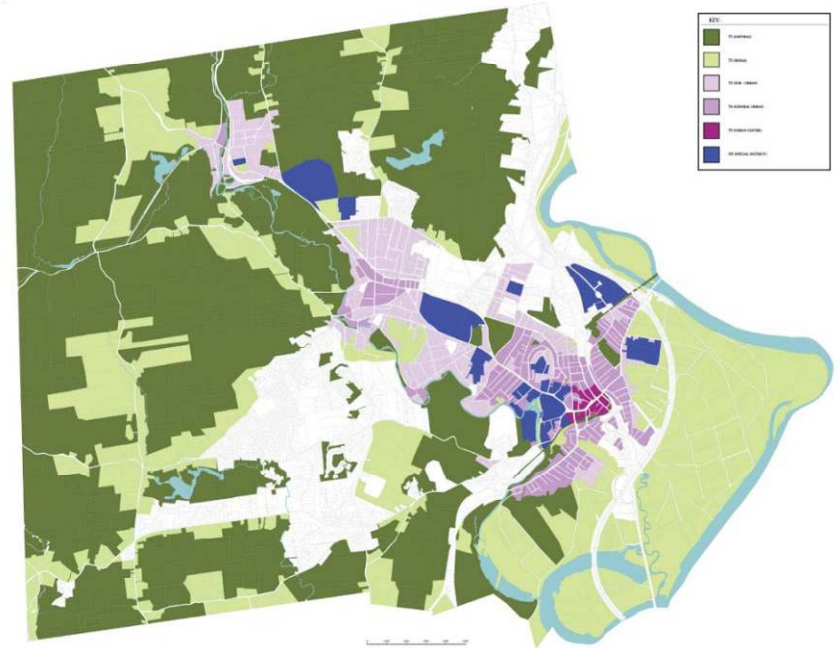
NORTHAMPTON EXISTING PARKING LOTS & GARAGES DIAGRAM



NORTHAMPTON OPEN SPACE & BICYCLE PATH DIAGRAM



NORTHAMPTON EXISTING URBAN TRANSECT DIAGRAM



NORTHAMPTON IN CONTEXT



STRATEGY



KEY:

	SENDING - NO GROWTH (SMARTCODE SECTORS O1, O2 & G1)
	RECEIVING - CONCENTRATED GROWTH (SMARTCODE SECTORS G2 & G3)
	INFILL GROWTH (SMARTCODE SECTOR G4)

STRATEGY



WHAT DOES SUSTAINABILITY LOOK LIKE?

Our design proposals

DOWNTOWN

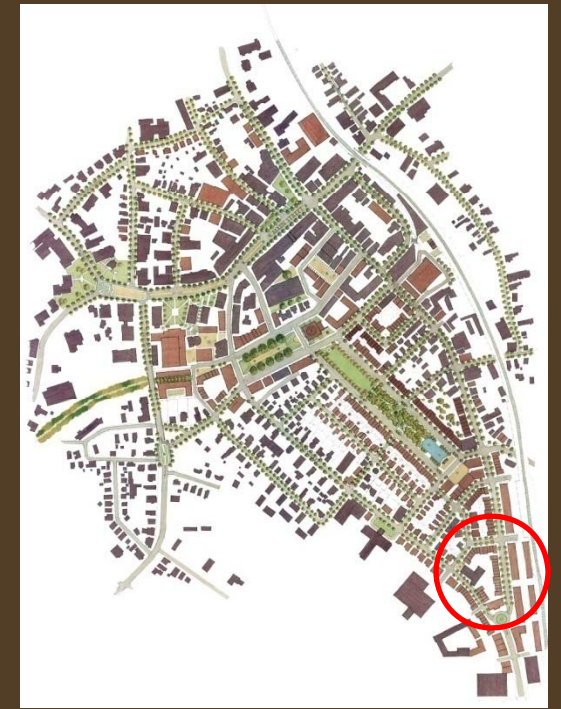


DOWNTOWN



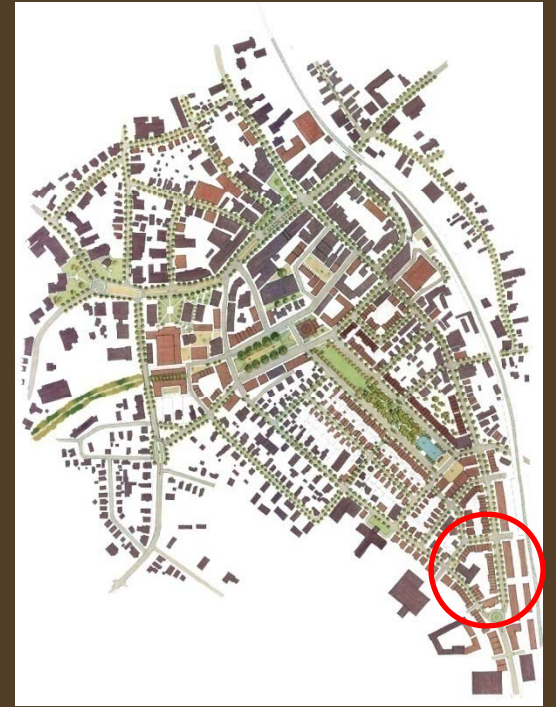
DOWNTOWN

A new southern gateway



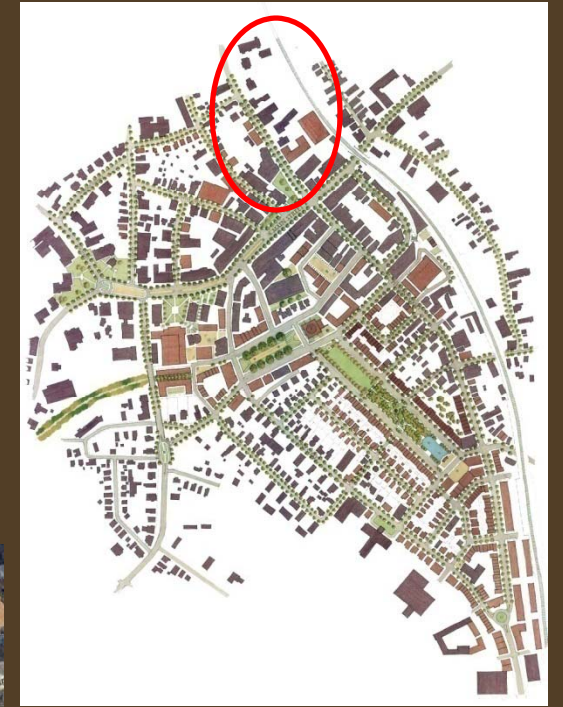
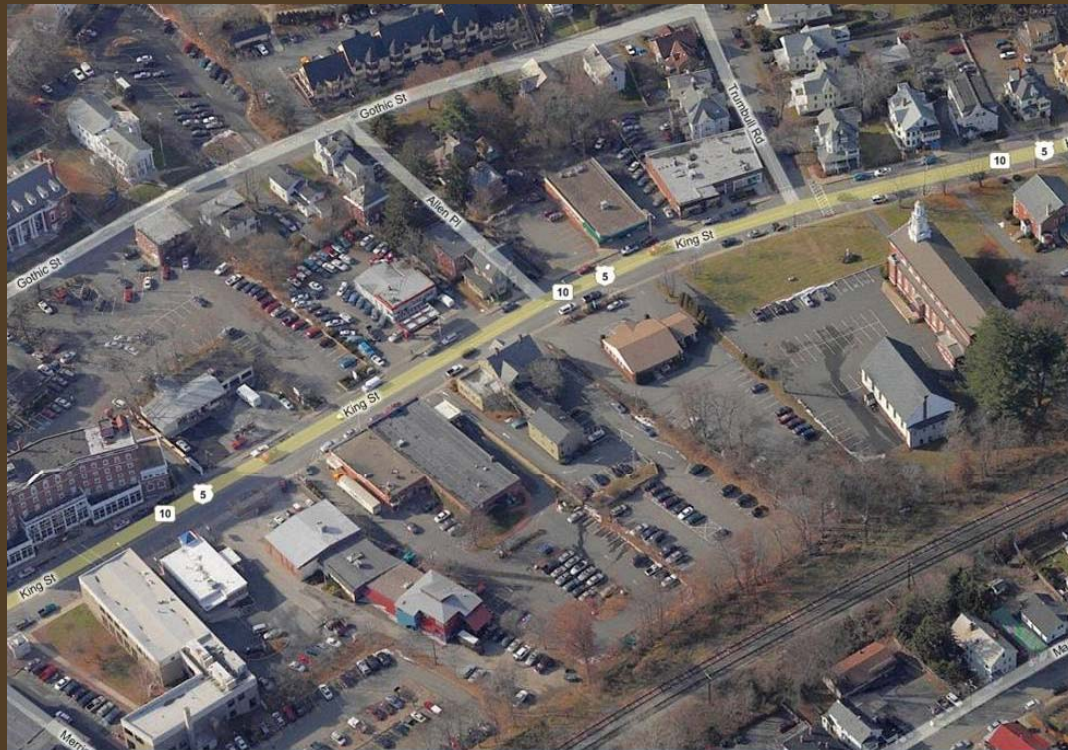
DOWNTOWN

A new southern gateway



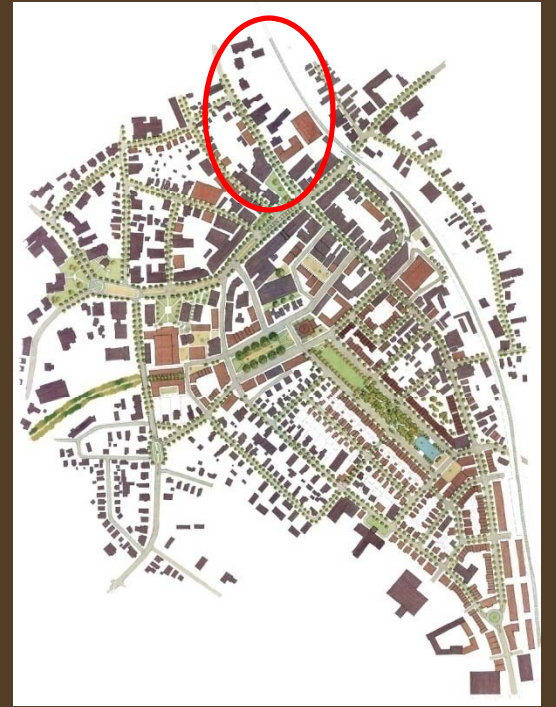
DOWNTOWN

Mending lower King Street



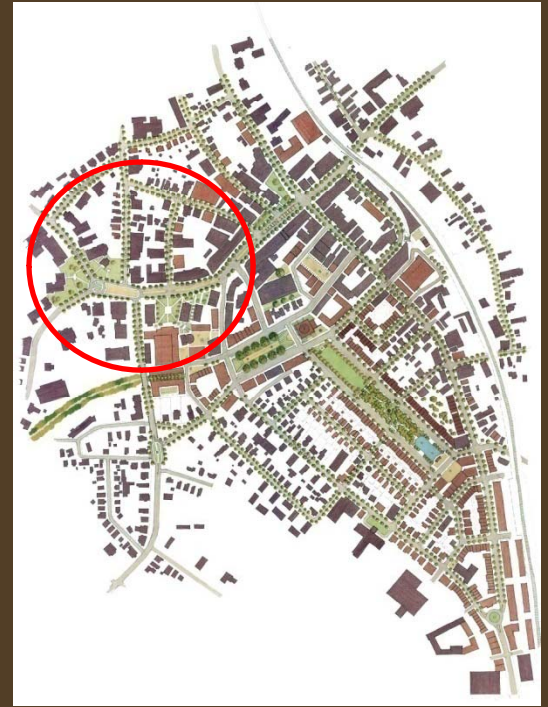
DOWNTOWN

Mending lower King Street



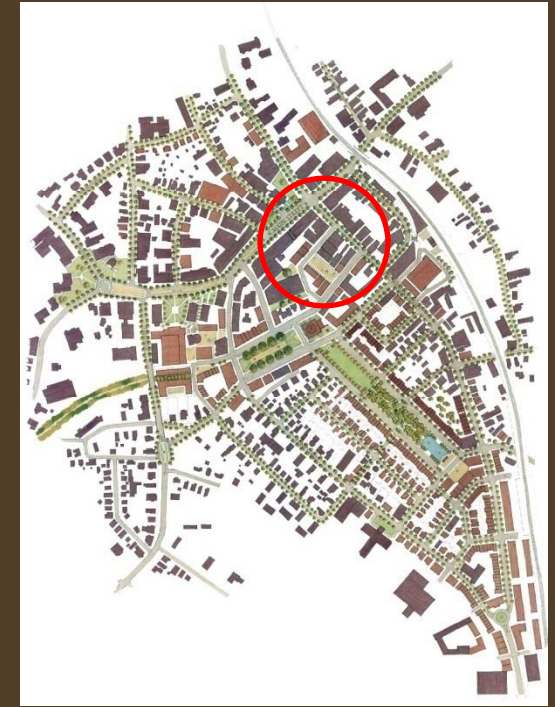
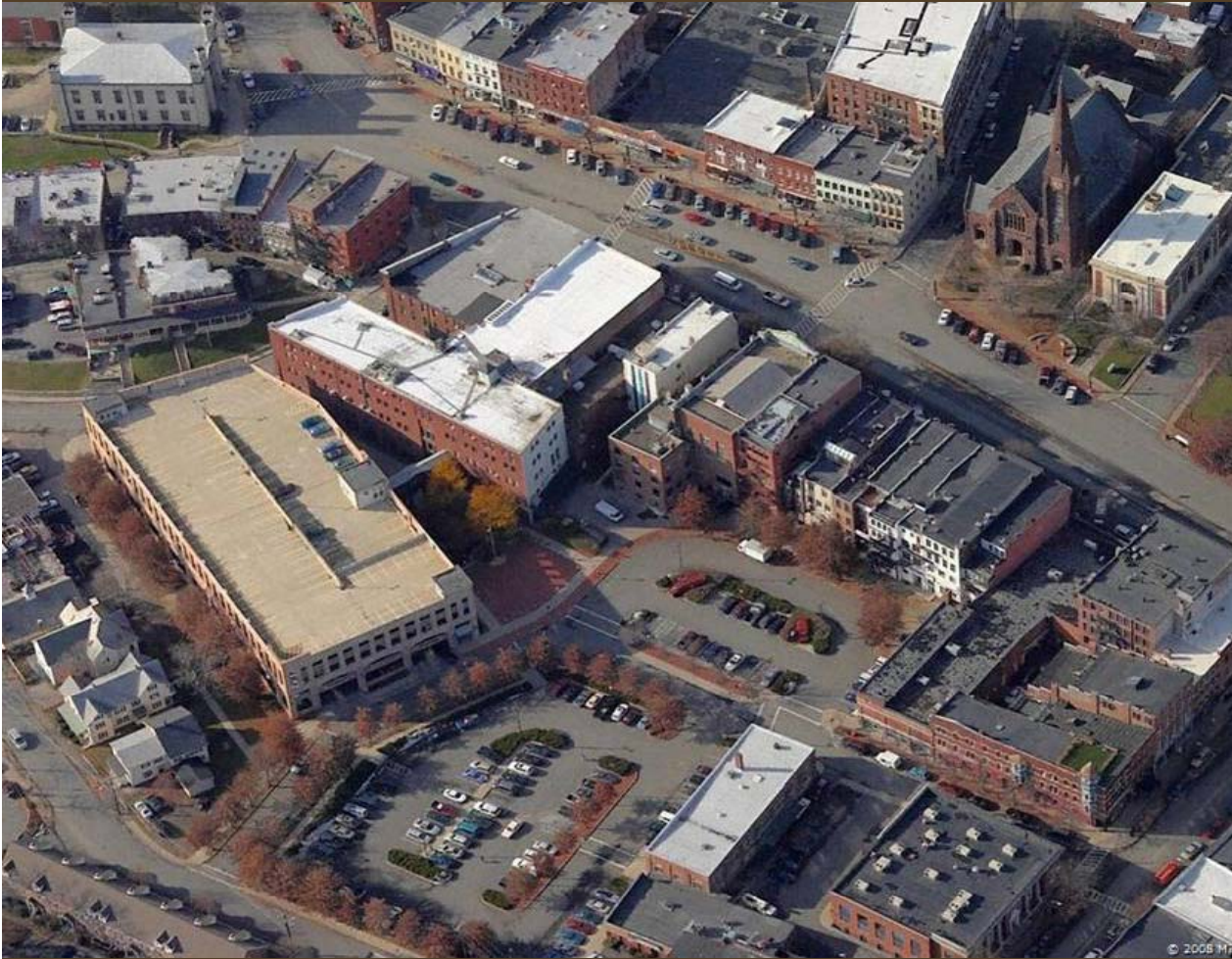
DOWNTOWN

Main Street



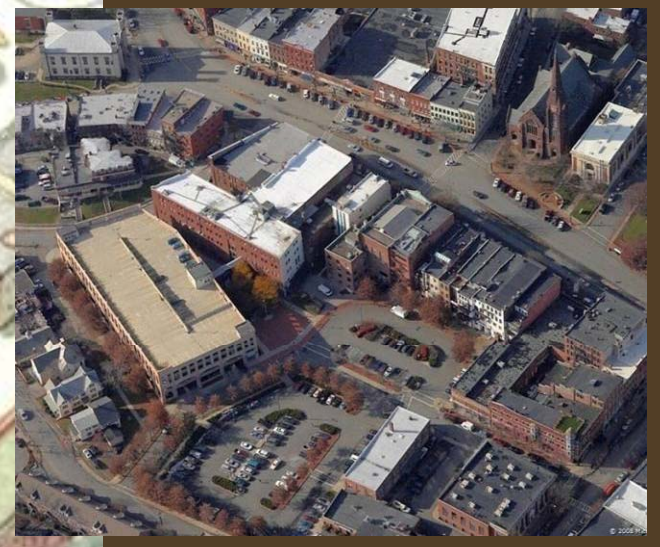
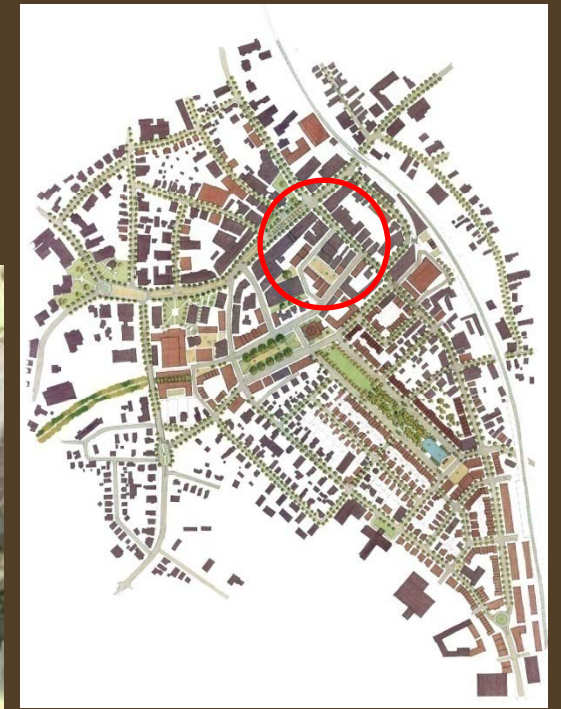
DOWNTOWN

From parking lot to market square



DOWNTOWN

From parking lot to market square

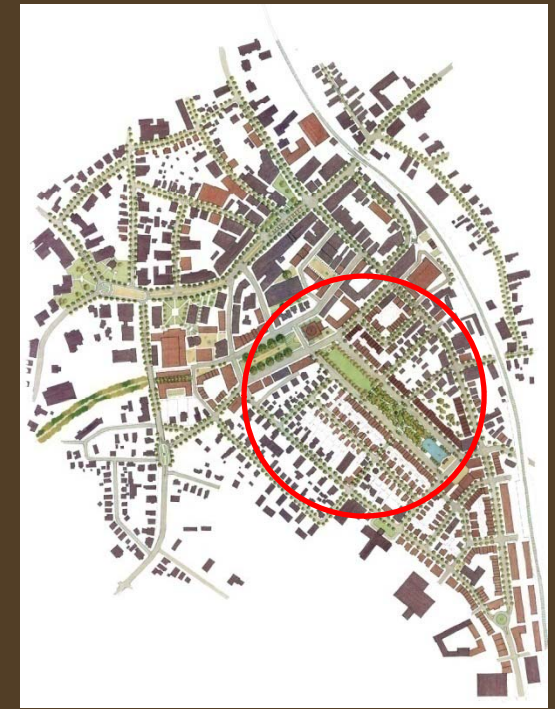
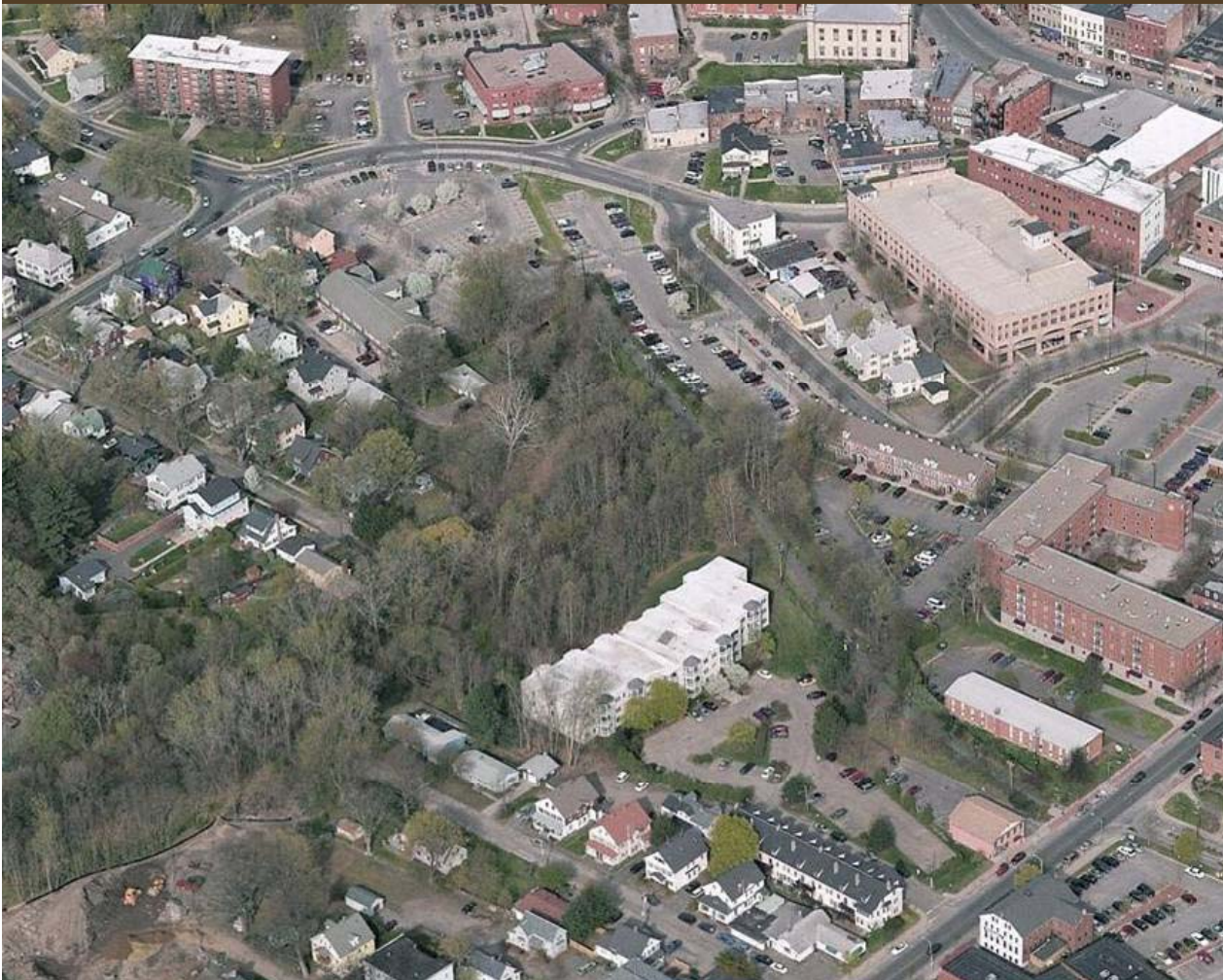






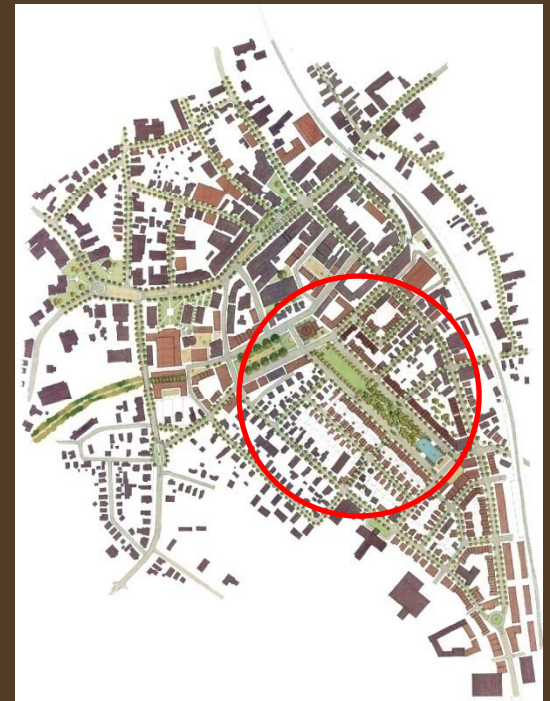
DOWNTOWN

The old Mill River becomes
Northampton's *Emerald Necklace*



DOWNTOWN

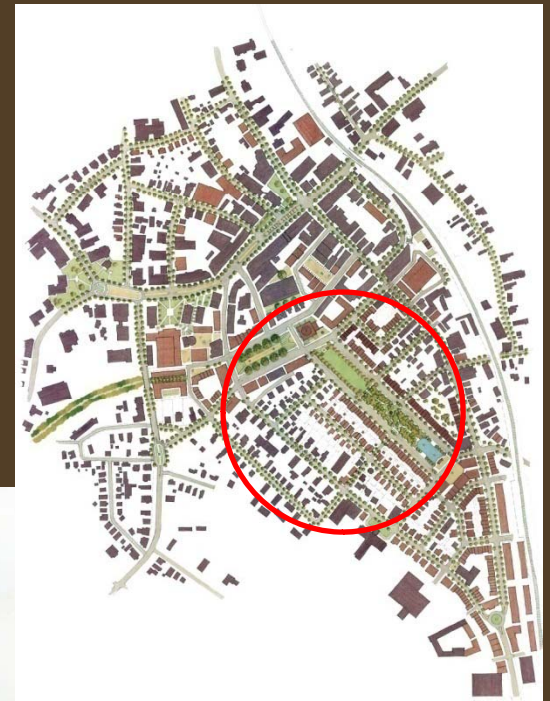
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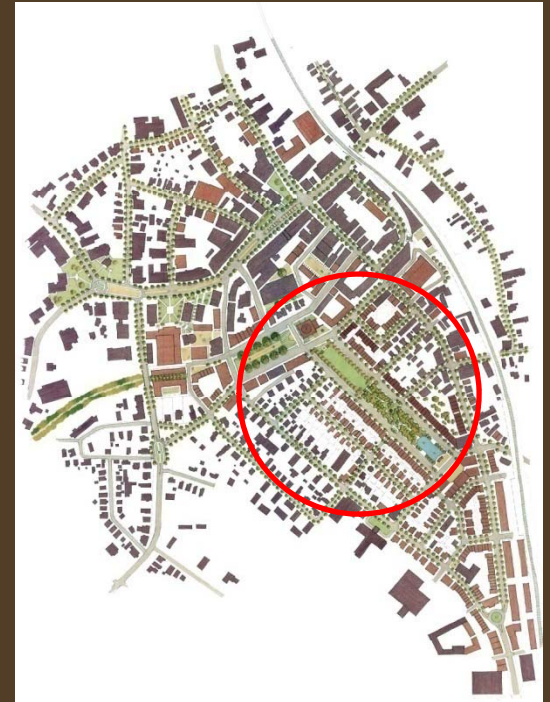
DOWNTOWN

A town green



DOWNTOWN

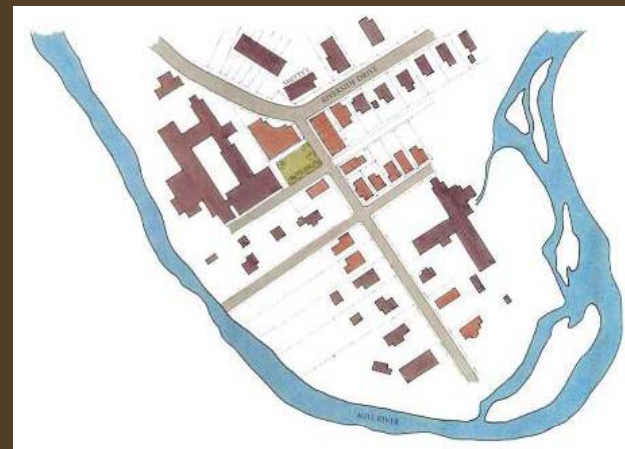
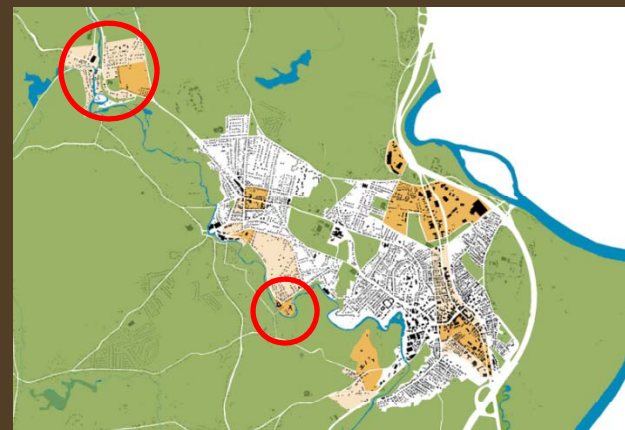
Public Transit



OTHER HISTORIC CENTERS

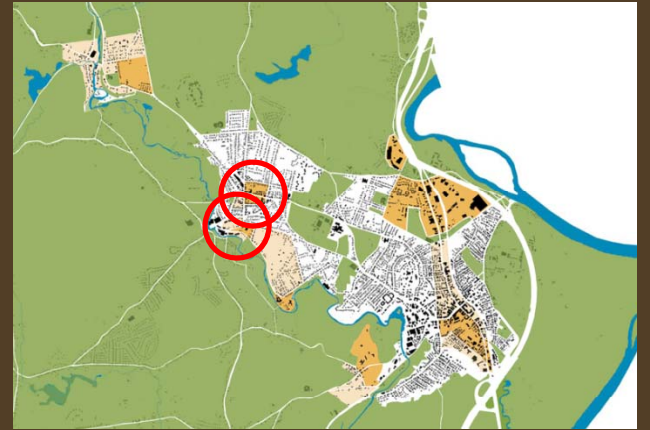
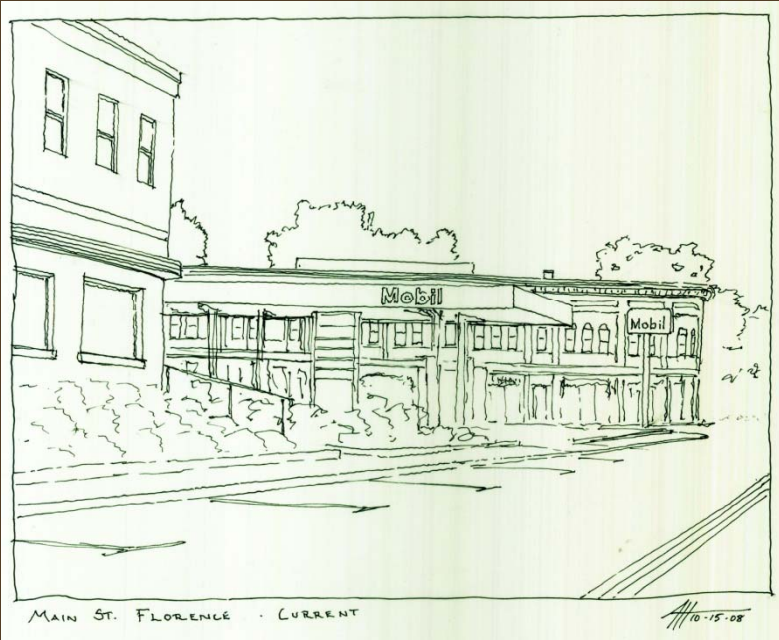


Leeds



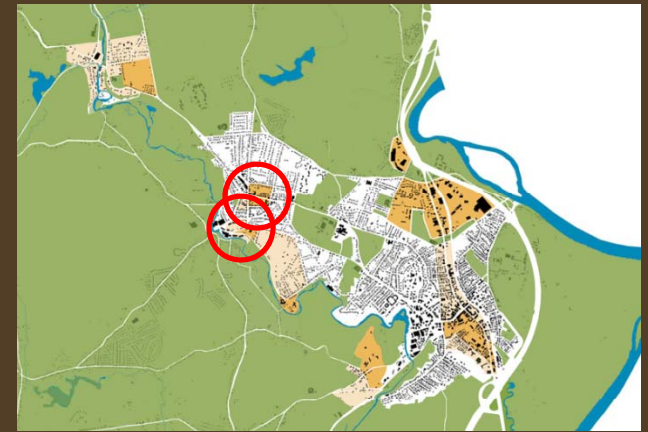
Baystate

OTHER HISTORIC CENTERS

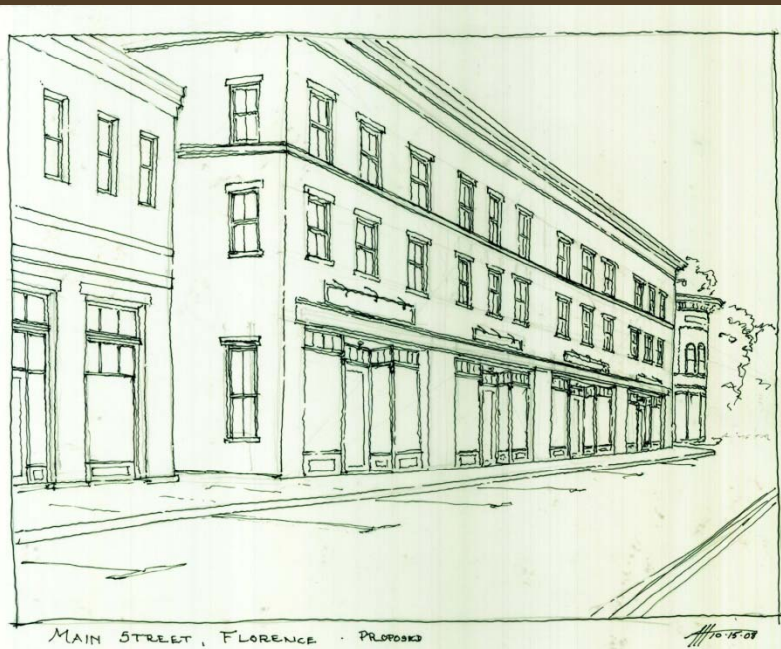


Florence

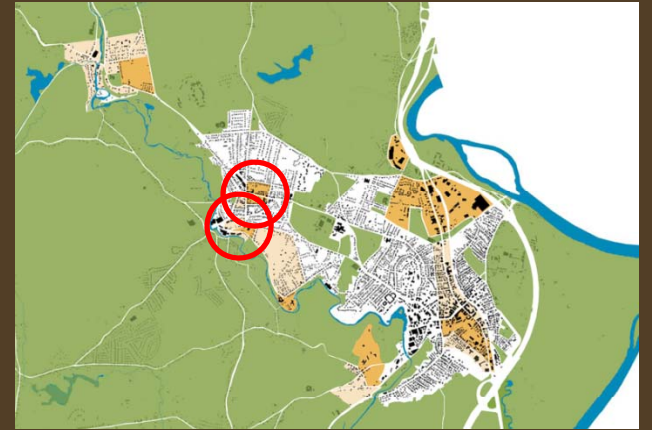
OTHER HISTORIC CENTERS



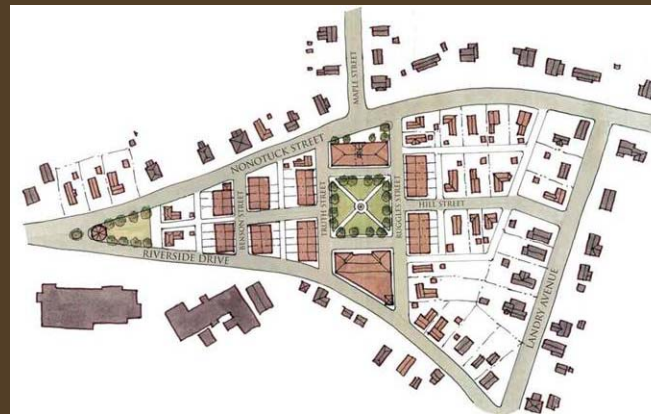
Florence



OTHER HISTORIC CENTERS



Florence



VILLAGE ON HOSPITAL HILL

Current MassDevelopment plan:



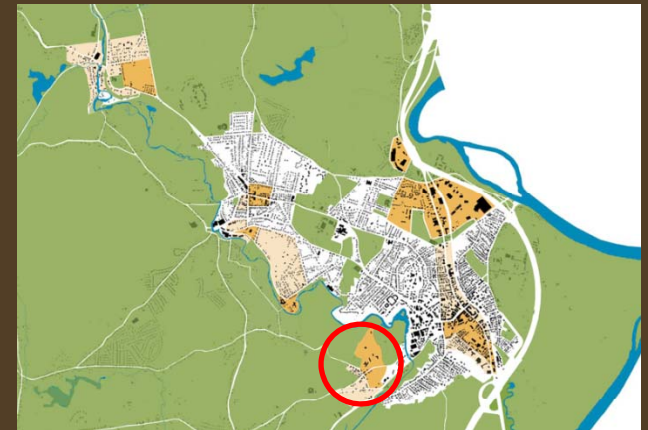
VILLAGE ON HOSPITAL HILL

Our short-term plan:



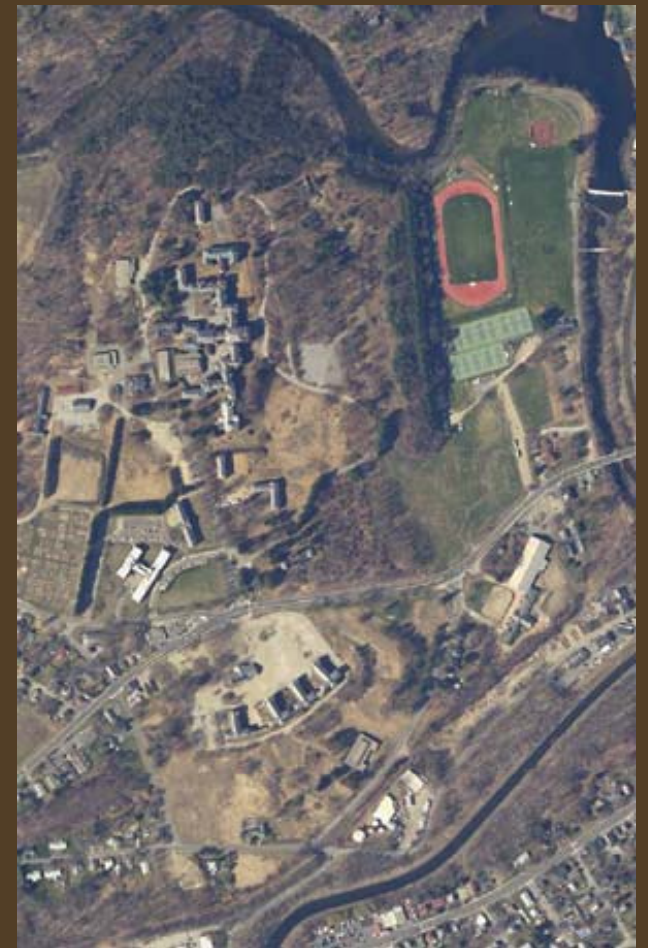
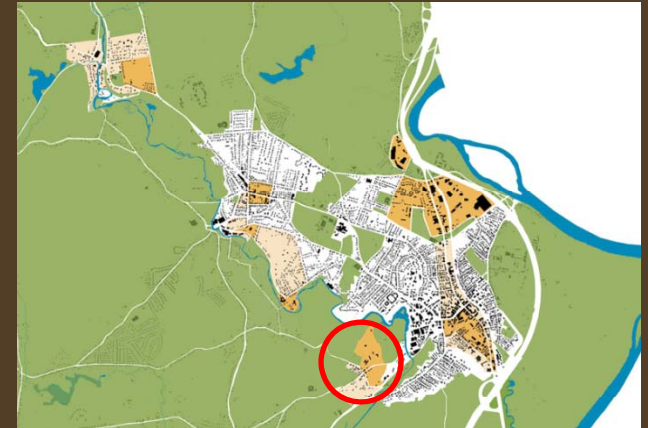
VILLAGE ON HOSPITAL HILL

Our long-term plan:



VILLAGE ON HOSPITAL HILL

Density and Land Conservation



VILLAGE ON HOSPITAL HILL

Making Village Hill a true Village



VILLAGE ON HOSPITAL HILL

Making Village Hill a true Village



VILLAGE ON HOSPITAL HILL

Kollmorgen



VILLAGE ON HOSPITAL HILL

A memorial crescent: open space as part of the civic realm



VILLAGE ON HOSPITAL HILL

The meadow:
Land conservation
and public open space



VILLAGE ON HOSPITAL HILL

The meadow:
Land conservation
and public open space





KING STREET

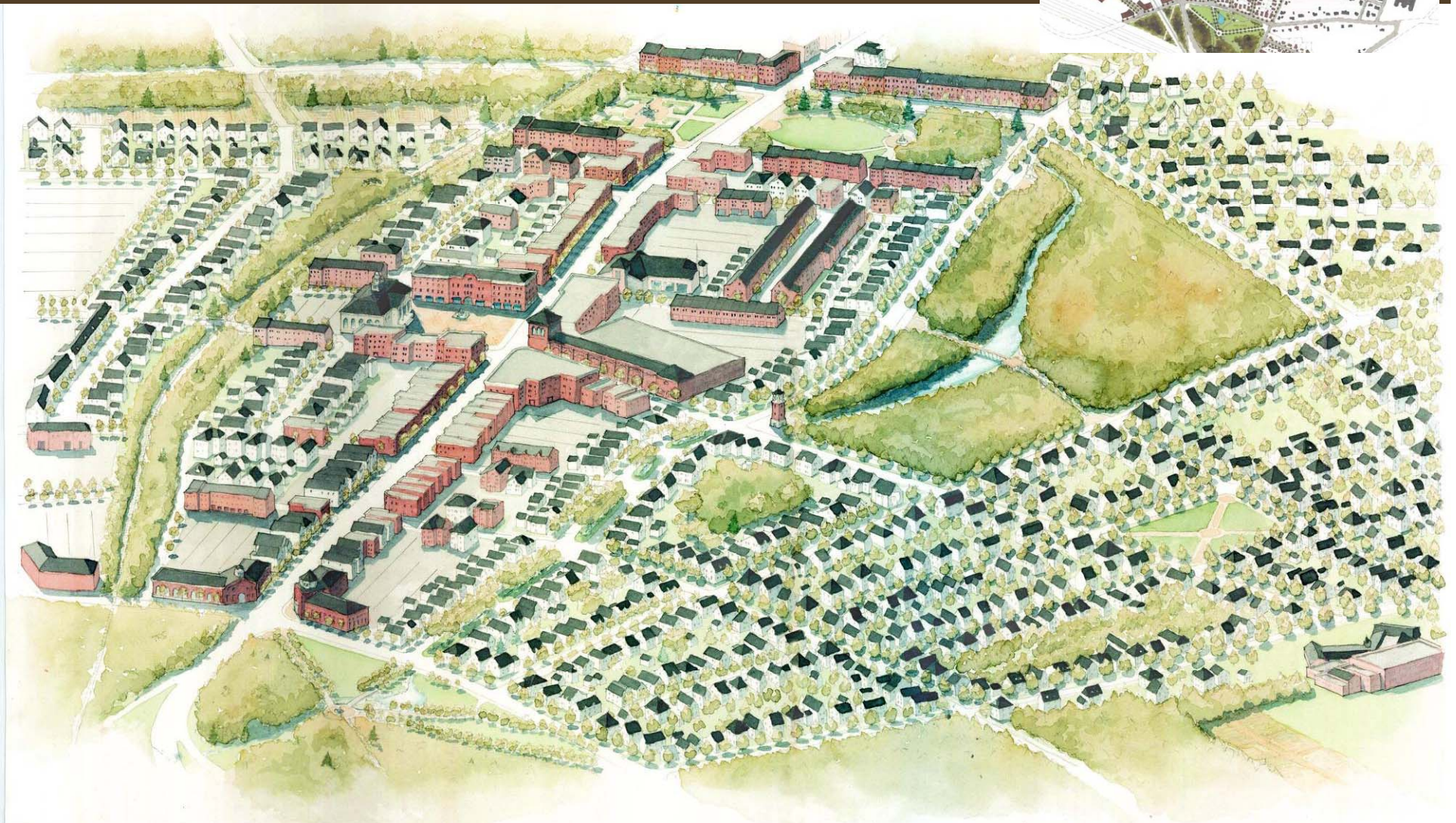


KING STREET



KING STREET

King Street: the next Main Street



KING STREET

Affordable Housing:
An alternative to Hampshire Heights



KING STREET

Wilderness within walking distance



KING STREET

A public garden



KING STREET

Urban Agriculture



KING STREET

Civic plaza; civic supermarket



KING STREET

King Street today



KING STREET

A vision King Street



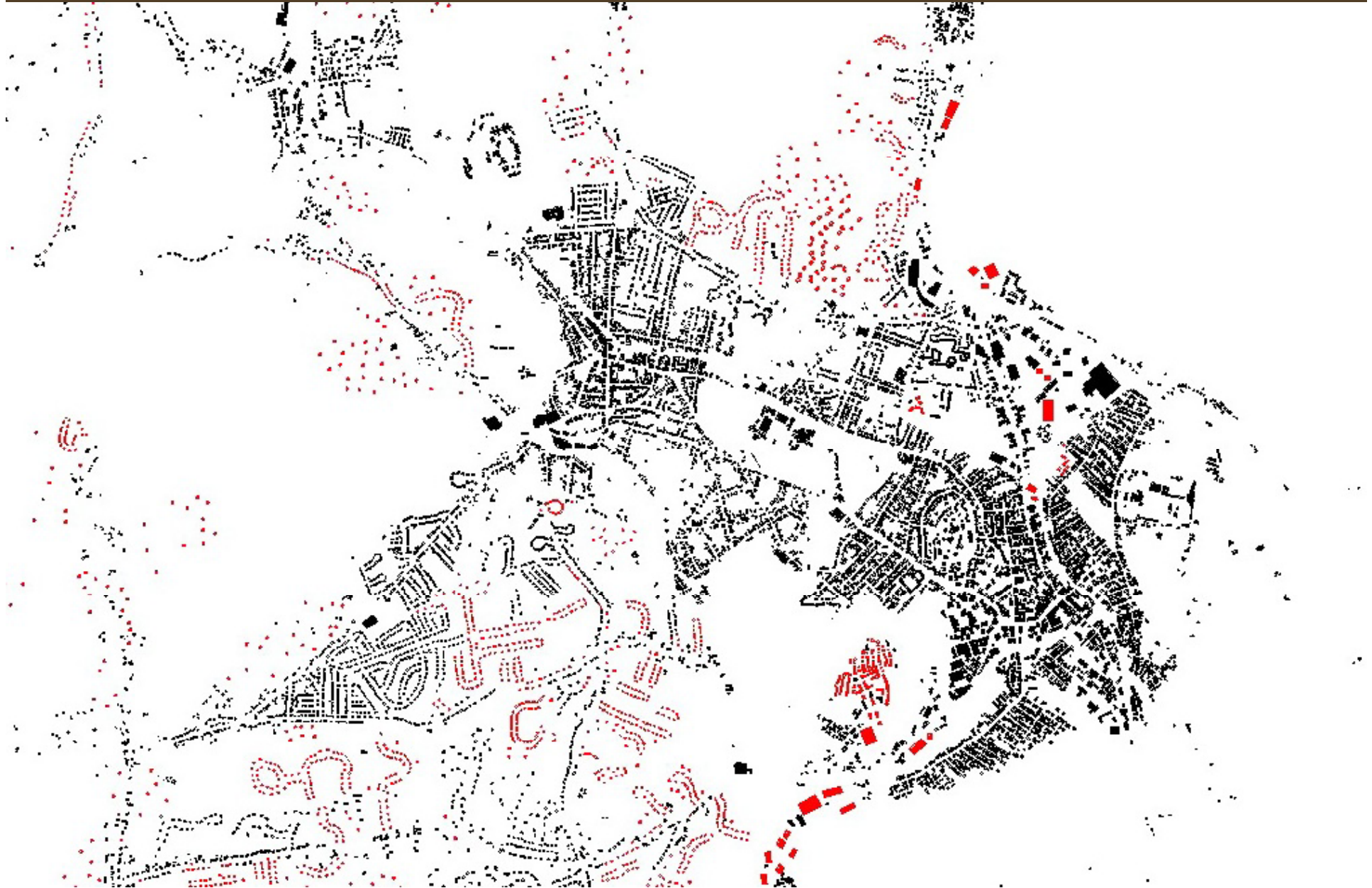
KING STREET

Civic plaza; civic supermarket

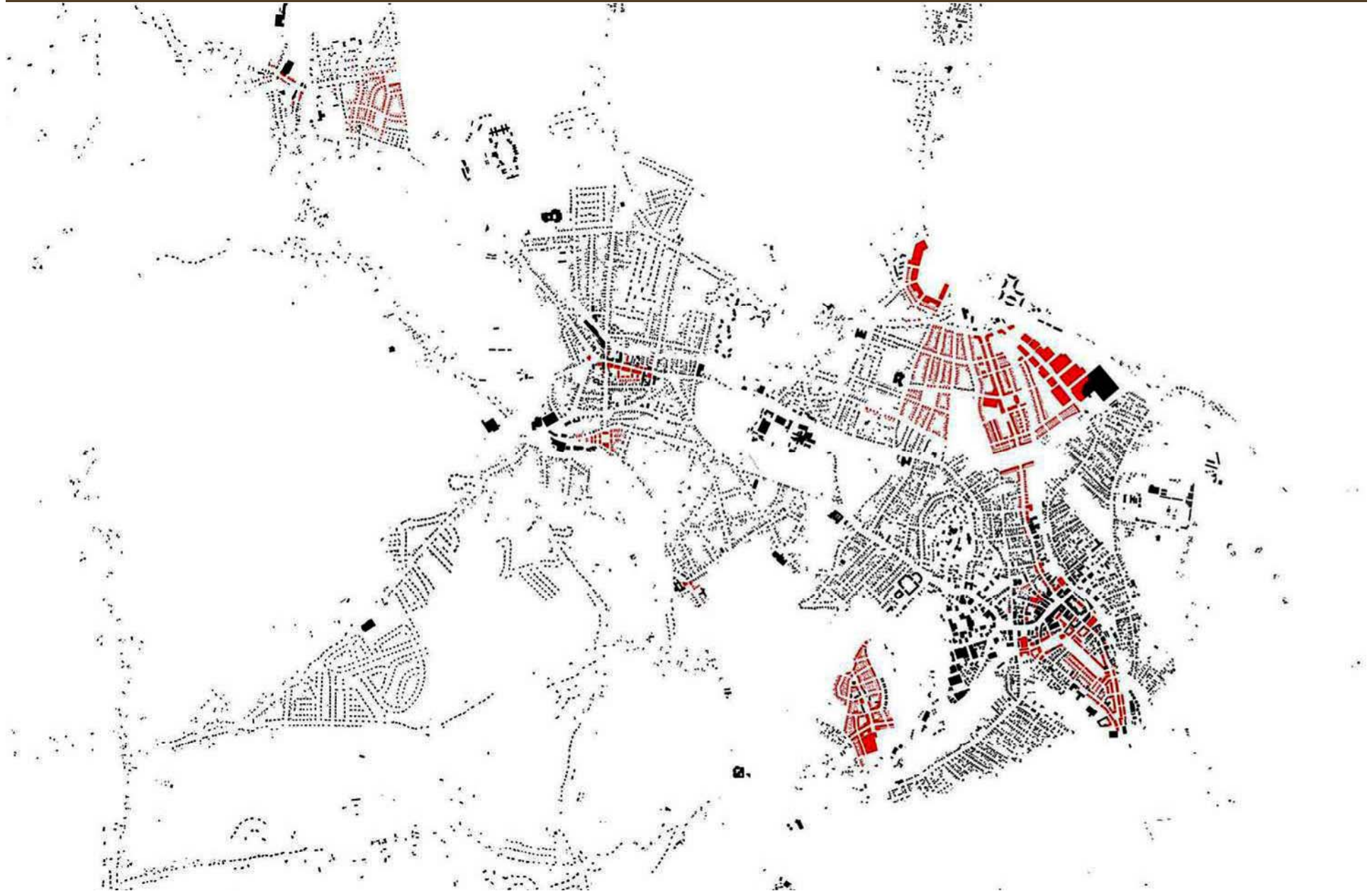




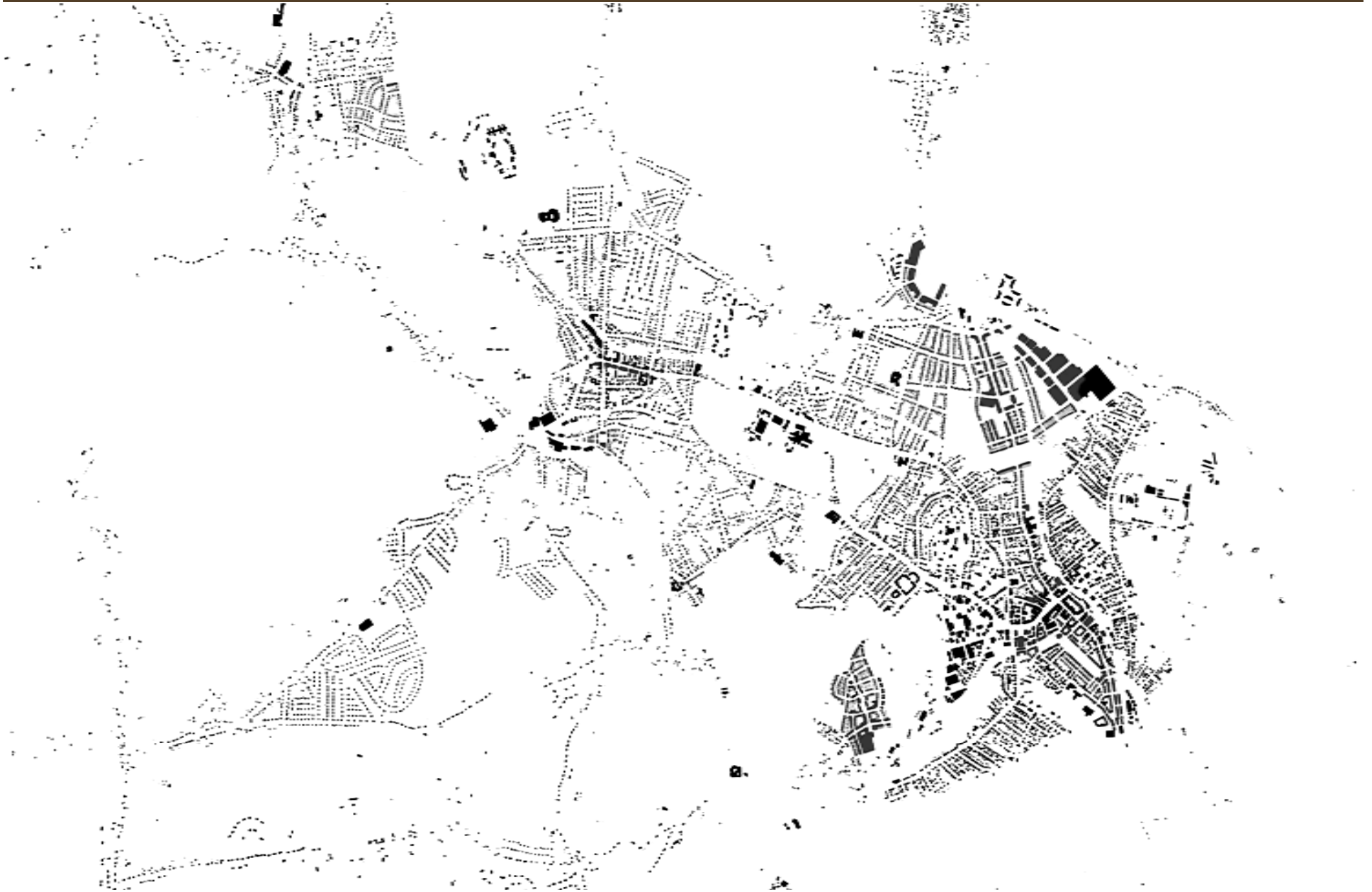
POSSIBLE FUTURE GROWTH
POPULATION: 32,000-36,000



GROWTH ACCOMODATED
POPULATION: 32,000-42,000



GROWTH ACCOMODATED
POPULATION: 32,000-42,000



GROWTH ACCOMODATED
POPULATION: 32,000-42,000



GROWTH ACCOMODATED
POPULATION: 32,000-42,000





IMPLEMENTING *ESN*

- LEED-ND standards should be required for all new developments.
- City should adopt a form-based zoning code.
- Consideration of public space should be integral to planning process for new development, which could be overseen by a Town Architect.
- City should actively pursue desirable development, especially on city-owned land, rather than only reacting to negative development.
- City should seek coordination and cooperation among local banks, local institutions, local developers and local builders who understand the intent of *Envisioning Sustainable Northampton*.
- The city can take advantage of the time afforded by the current economic climate, to plan for future development.

THE VISION

