

planning

"It was divine nature which gave us the country and man's skill that built the cities"

Marcus Terentius Varro (MTV) a Roman Scholar

Process

How to compress and accelerate a time consuming process? How to create a community that used to take years of development and evolution, in a short period of time. How to make it a whole with identifiable parts?

This thesis faces 2 competing realities and performs a balancing act in an effort to address both. The first reality is that this thesis is critical of the notion that one designer, or a group of designers, can be responsible for master planning a city or a large community where they attempt to replicate an evolutionary process that takes decades and centuries to develop. The second reality acknowledges the first reality to be necessary despite its misgivings, a necessary evil. The proposals offered in this thesis establish and set-up an environment and conditions that are conducive for evolutionary, spontaneous and natural growth of an urban center where the resulting process set in motion is what this thesis calls Urbanmorphology. It draws on simple and established evolutionary concepts that occur in nature and argues that comparable evolutionary conditions are likely to occur if a set of minimum criteria are met. These criteria are demonstrated in this thesis as a set of principles governing the planning, urban design and the architectural design of the site.

The site chosen is Cameron Station, a closed military base in West Alexandria. It is to be used as a model for re-integrating closed military bases into the city, as a model for suburban developments and to influence future developments around it.

The objective is to reverse the process of suburban and exurban sprawl and to bring good urban qualities to the suburbs.

The proposal is to produce a public oriented and diverse community with a range of uses, densities and scale but always geared for the pedestrian user. To create a permeable rather than gated community designed to serve the community as well as outside visitors, thus making it part of a bigger urban network.

The solutions

Evolution is the process of movement from randomness to order, sometimes in increased complexity and other times in decreased complexity. Suburban sprawl, while deliberate, produces results that are random and chaotic. While complex and spontaneous, it lacks order and a clear system of growth. West Alexandria, a suburb of Washington and an extension of historic Alexandria lacks order and legibility. Therefore, a system of organization and orientation is introduced. The result is a pattern within which paths, buildings, nodes and edges are located. The solutions proposed are interpretations of design principles outlined in the following paragraph. They are site specific and reflect the site constraints. Many of these solutions such as the open spaces, edges, aesthetic places, and placement of important buildings are meant to be portable. They are not intended to be read as a complete or absolute plan but an illustrative work of urbanistic technique and principles. Thus the scheme is a master plan with a set of design principles in which one finds latitude for a variety of expressions and architectural developments. In this sense, these solutions attempt to supply generic Urban Strategy which promote and stimulate the public life of the city.

THE DESIGN PRINCIPLES

To make seams rather than divides

1. **Connectivity** – must be created and maintained from street to street, district to district, district to metropolitan. Connectivity is essential to natural evolution. The first thing that an organism or an entity does to evolve is make connections to its environment and to other entities in its environment. Connectivity allows for evolution.
2. **Streets** – shall be the primary mode of circulation for both pedestrian and vehicular traffic.
3. **Off street surface parking** – shall be located in and accessed from the back of the buildings.
4. **No dead ends** – are allowed. All streets must be connected
5. **Open spaces** – shall be extensions of the streets
6. **Public and institutional buildings** – must occupy axial or re-orientational sites.
7. **Streets active edges** – must be maintained and shall be associated with pedestrian activities.
8. **Transition space** – from public to private shall be well designed and highly developed.
9. **Residential dwelling** – shall have dual exposure to public and private quarters.
10. **Street scale & configuration** – shall be a function of street/buildings relationship, also the speed, use, size, furnishing, details, material, building program...

Planning

In the process of developing an urban design proposal for Cameron Station it became very apparent that Issues on the planning level needed to be addressed, and big proposals as well as assumptions have to be made in order to meet the goals of the thesis. The following are the proposed Planning actions:

- Transform Alexandria into a twin center (dumbbell configuration), one in the west (Cameron Station) and one in the east (Old Town) connected by two arteries, Duke Street and Eisenhower Ave.
- Change the nature of Duke Street, slow speed corridor similar to Washington Street in Old Town, Alexandria.
- Maintain the higher speed nature of Eisenhower Avenue to remain a corridor similar to Route-1 in Old Town Alexandria.
- Increase the cross connections to the Beltway and Duke Street.
- Permanence - In order to become the nucleus of a new urban center, Cameron Station has to overcome the problem of transient developments, transient services, commerce and residence. The first thing that a nucleus has to be is a provider of permanence. It has to have a strong and stable infrastructure with social anchors
- Light rail or dedicated bus lane service that links the new urban center to Metro
- Beautification of Backlick Run
- Access (connection) to Van Dorn metro station

Once the planning strategy was established, a number of relevant planning and urban design precedents were analyzed or visited:

Historic – unbuilt

Tony Garnier's Industrial City
Le Corbusier's Radiant City
Frank Lloyd Wright's Broad Acre City

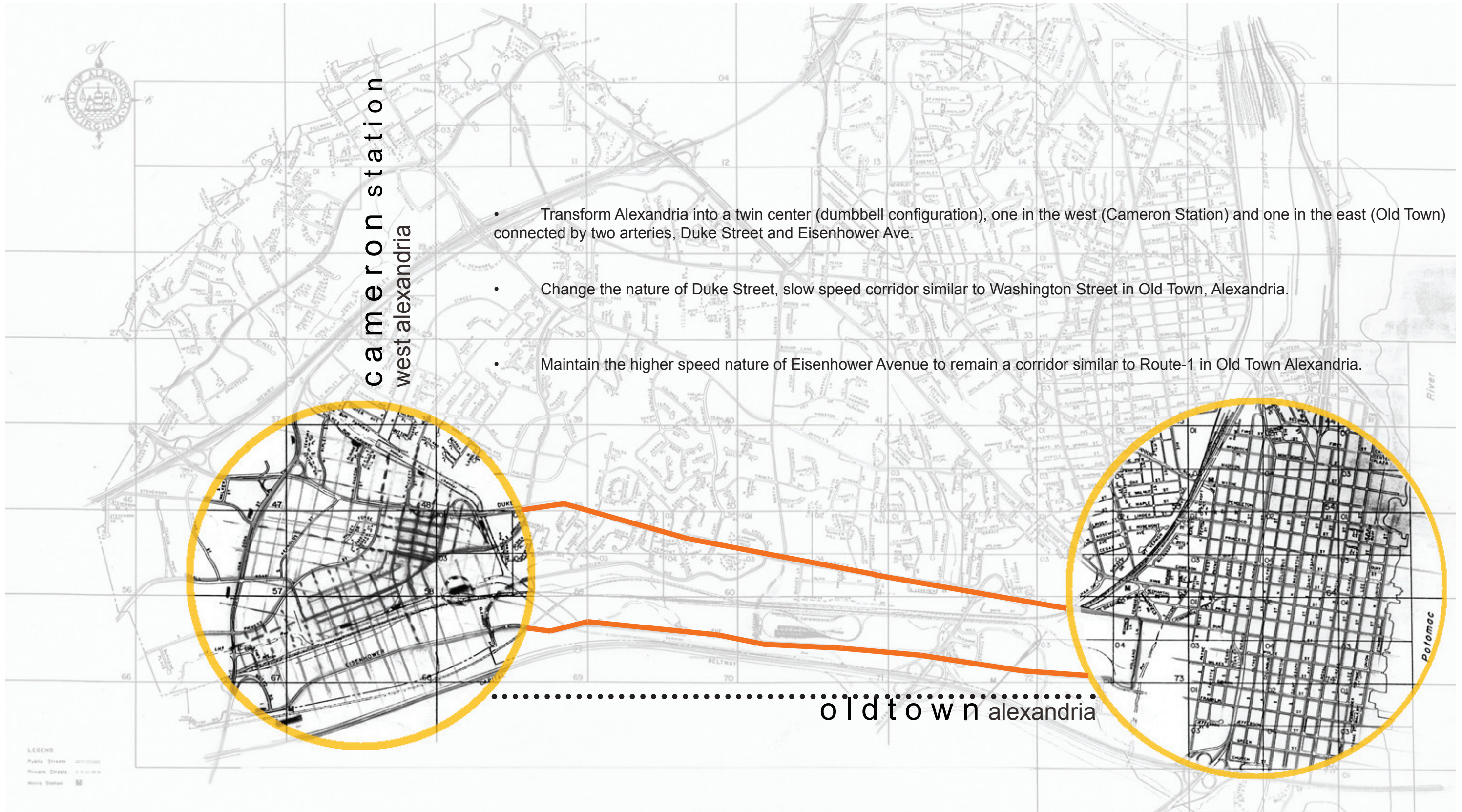
Contemporary

Park De la Villete – Paris, France
La Defence – Paris France
Villa Olympica – Barcelona, Spain

Local

Kentland, Gaithersburg, MD
Reston Town center, New and old, Fairfax County, VA
Park Fairfax, Arlington, VA
Stone Gate, Alexandria, VA

However, the multi-prong solutions exhibited by the "Pedestrian's Pocket Book" by Peter Calthorpe was adopted as an investigative technique in the process of developing a planning and urban design approach in this thesis. A quick study where solutions from the Pedestrian Pocket Book were literally juxtaposed on the thesis site in order to relearn the lessons of their exercise and at the end determine what doesn't work in their solutions, at least in our case.



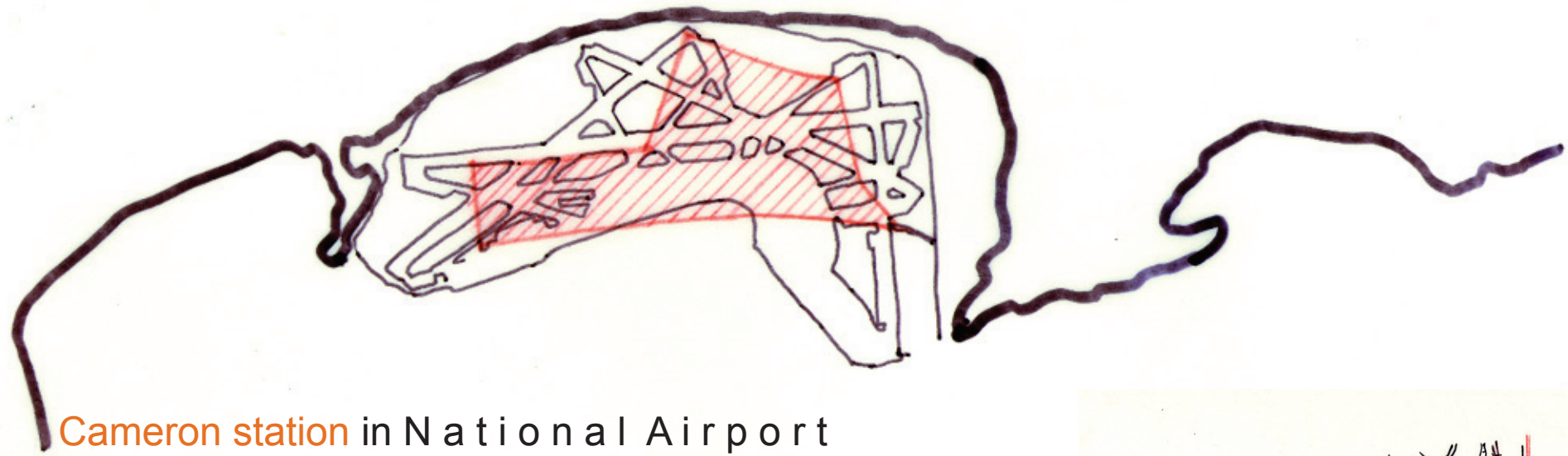
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Alexandria parks-runs network

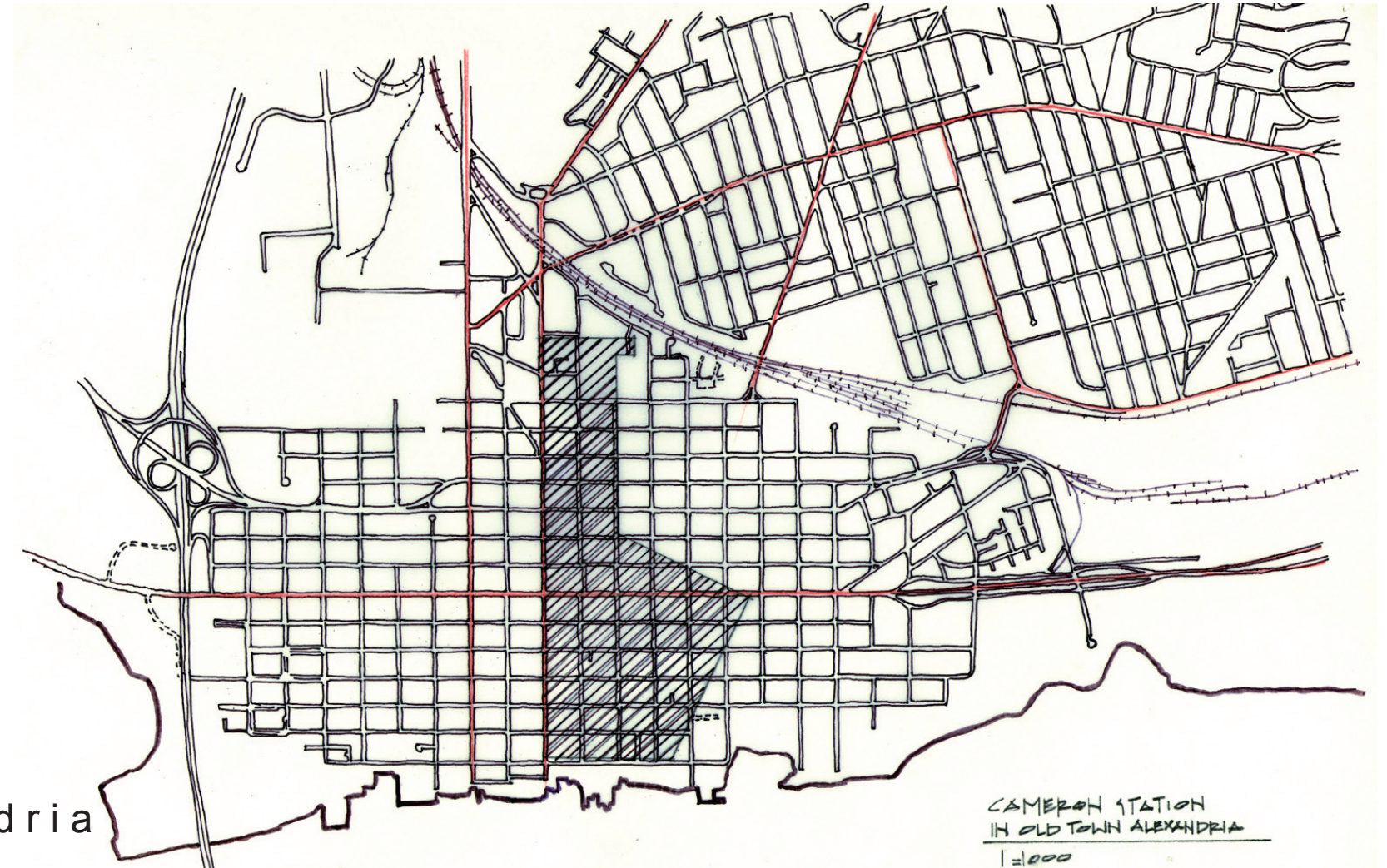


- Beautification of Backlick Run



Cameron station in National Airport

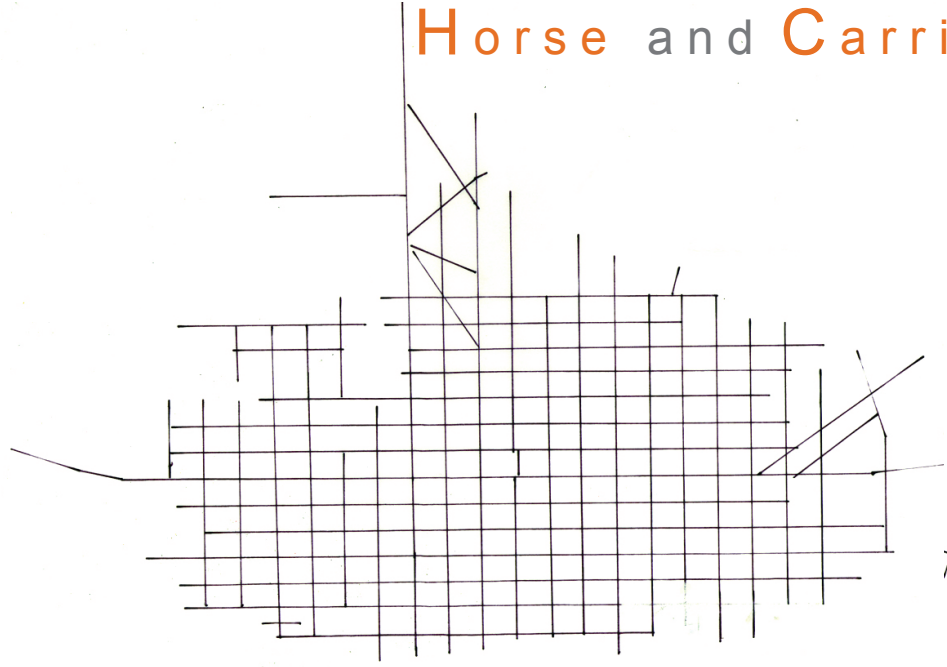
scale analysis



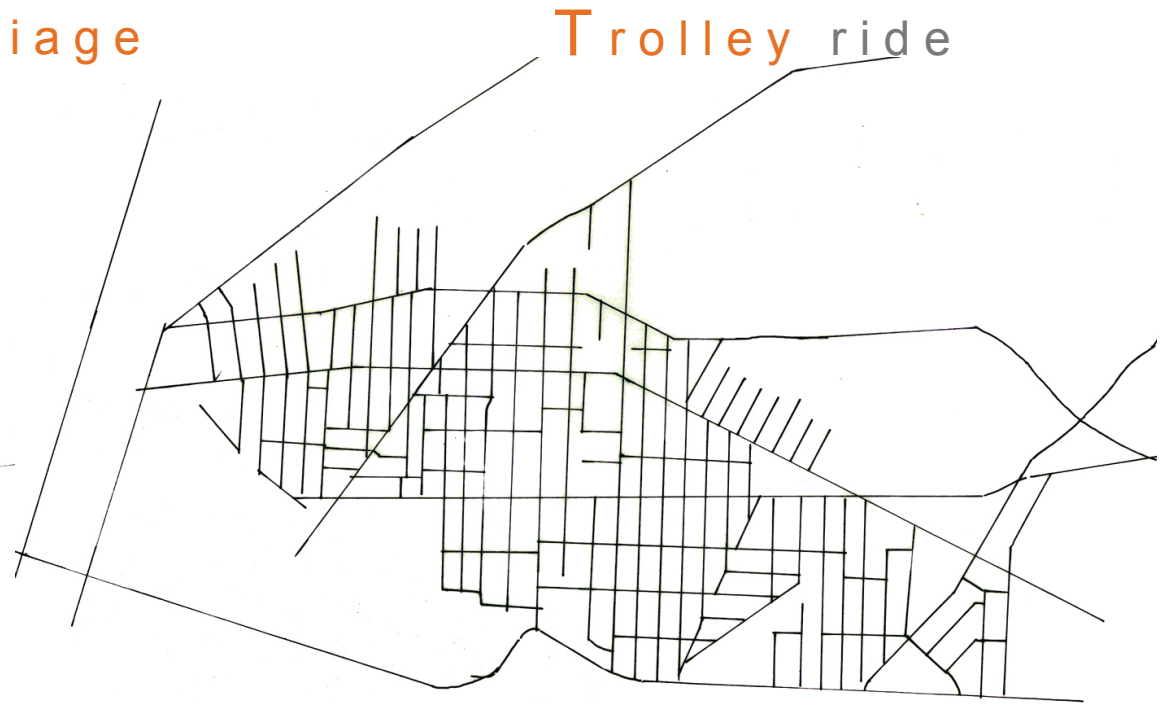
Cameron station in Oldtown Alexandria

CAMERON STATION
IN OLD TOWN ALEXANDRIA
1:1000

Horse and Carriage



Trolley ride



Cars and Turns



history of alexandria

in between **Highways**



IN BETWEEN HIGHWAYS
1:1000

AROUND A HIGHWAY
1:1000



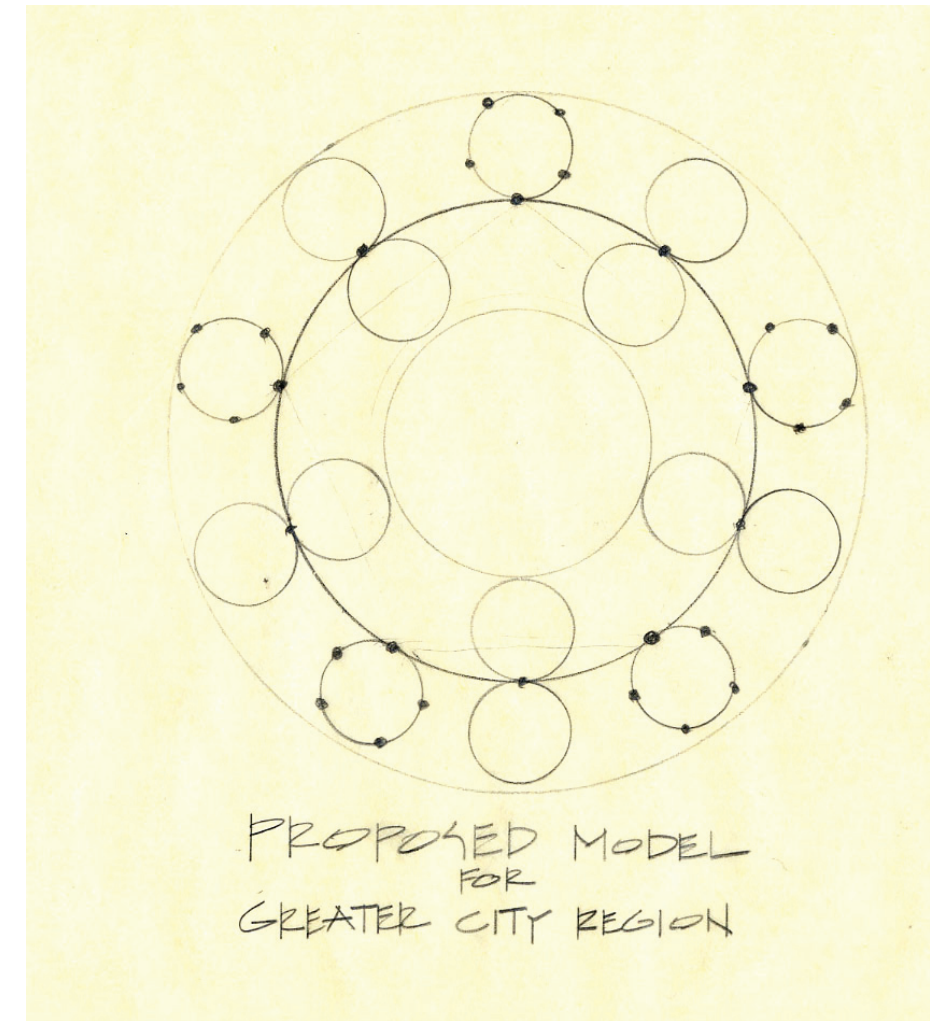
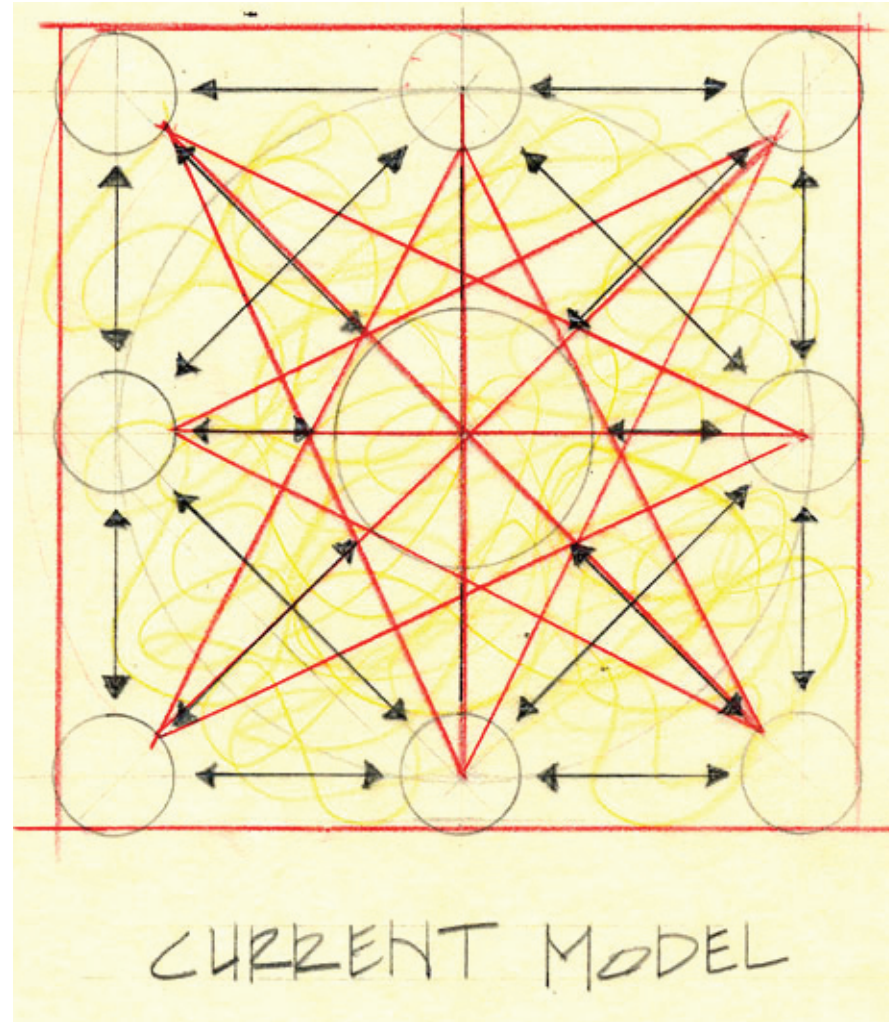
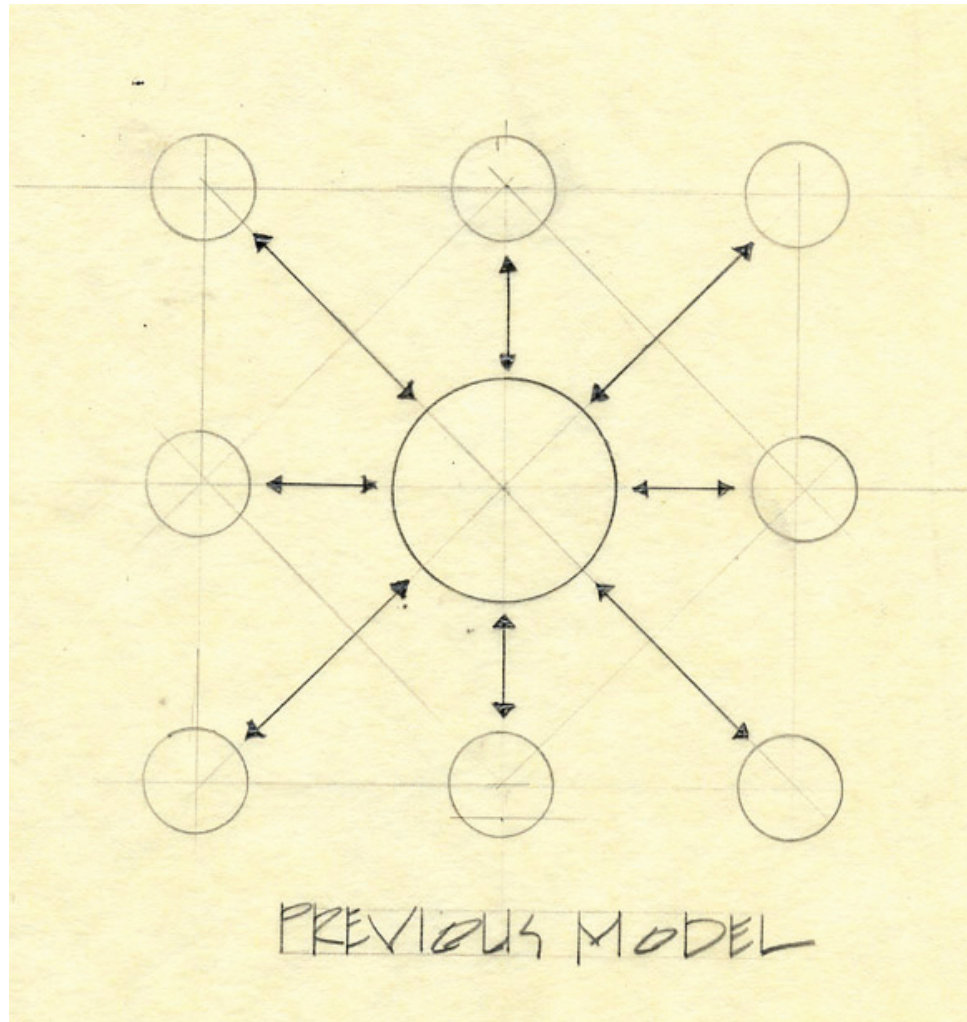
around a **Highway**

ride around the **Site**

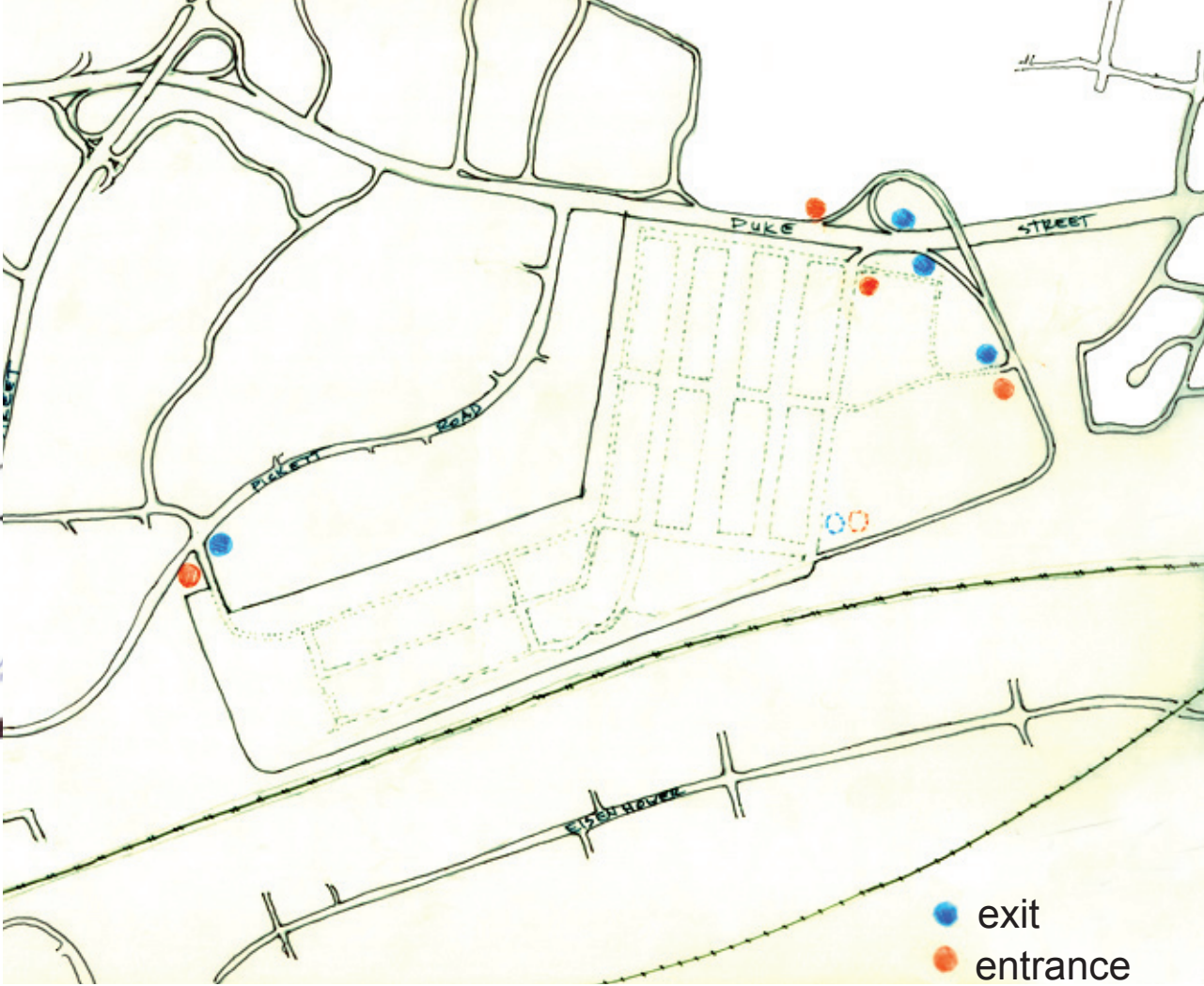
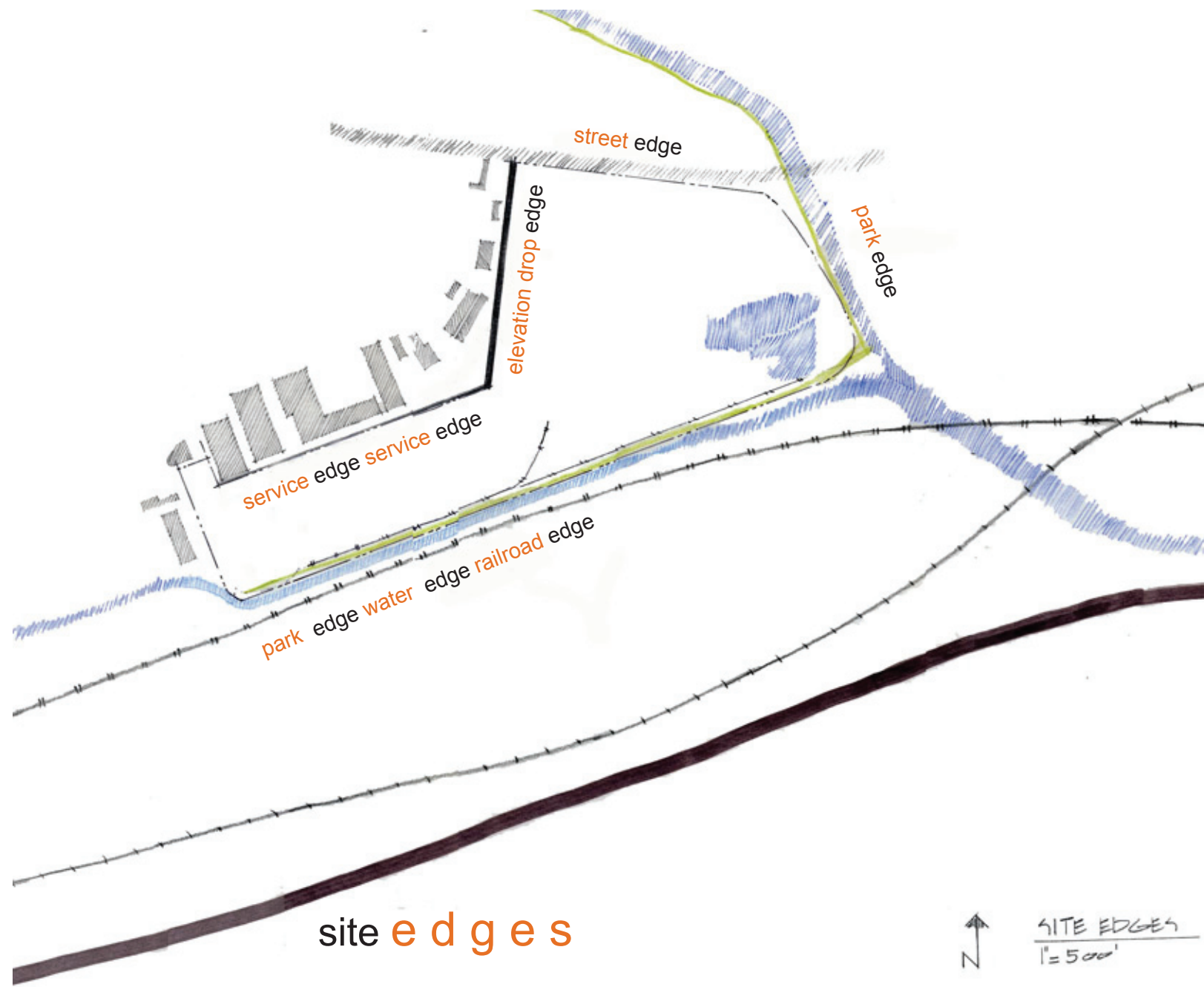


RIDE AROUND THE SITE
1:1000

history of alexandria

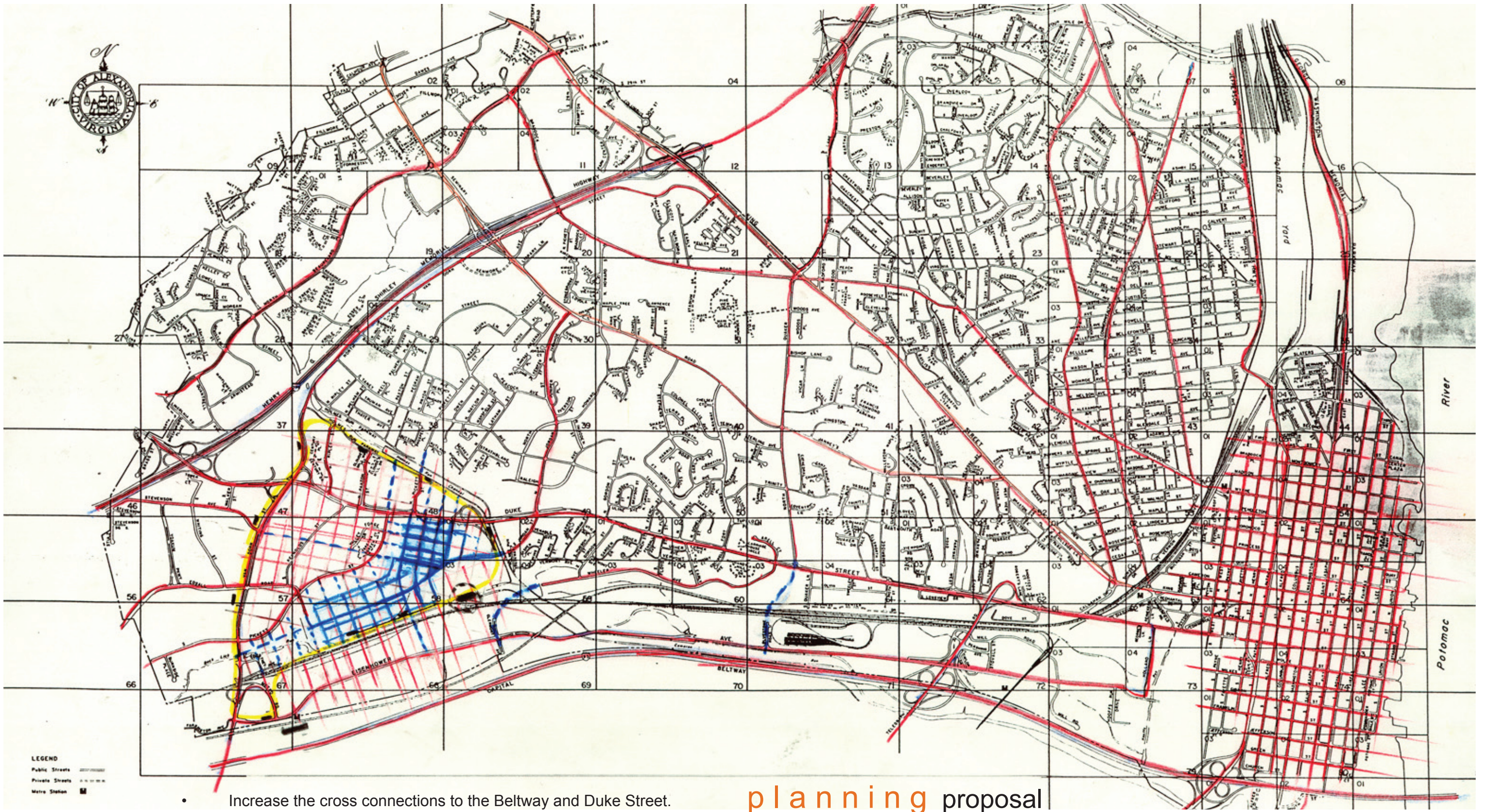


..... past present future
 planning **organizational** model



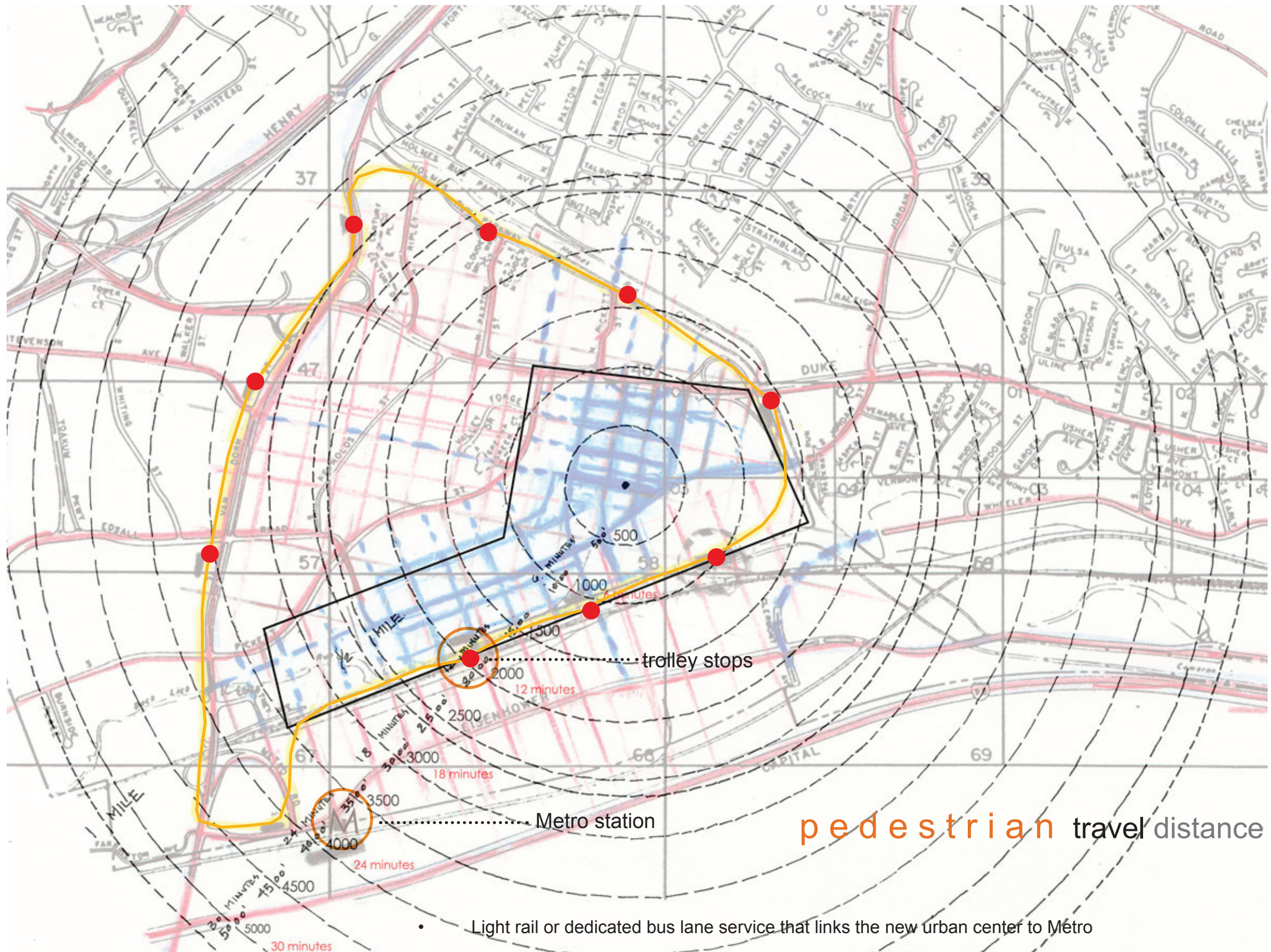
↑ SITE EDGES
1" = 500'

site access

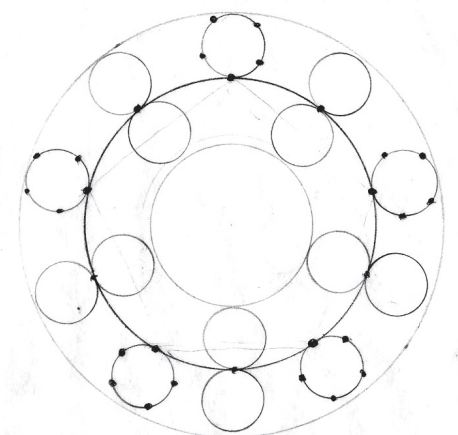


- Increase the cross connections to the Beltway and Duke Street.

planning proposal



- Light rail or dedicated bus lane service that links the new urban center to Metro
- Access (connection) to Van Dorn metro station



PROPOSED MODEL FOR GREATER CITY REGION



Baltimore city rail system

pedestrian travel distance