

# Physical Structure

The natural, agrarian and urban setting for Cornell's campus is a precious resource to protect and enhance. It has also shaped the physical structure of the campus. Buildings, roads and open spaces have responded to topographical features and the views they afford. The result is a campus distinguished by its physical and visual relationships to the natural setting. As described and illustrated in this section, future development should respect and extend this structure.



This historic image from 1882 emphasizes the dramatic topography that distinguishes Cornell's setting at the top of East Hill.

4.7

## Re-establish a threshold between town and country

Cornell's original campus was established at the threshold between the town and the countryside, along the ridge line at the top of Libe Slope. In the early 20th century, the landscape architect Warren Manning re-established the threshold at Garden Avenue—to the east were fields for research and "The Commons" for athletics and recreation. The distinction between town and country has blurred as the built campus has expanded eastward. As a central organizing feature, the campus master plan establishes the concept of a town and country campus to reinforce this important dual character, protect critical research lands and ensure a more sustainable pattern of development.

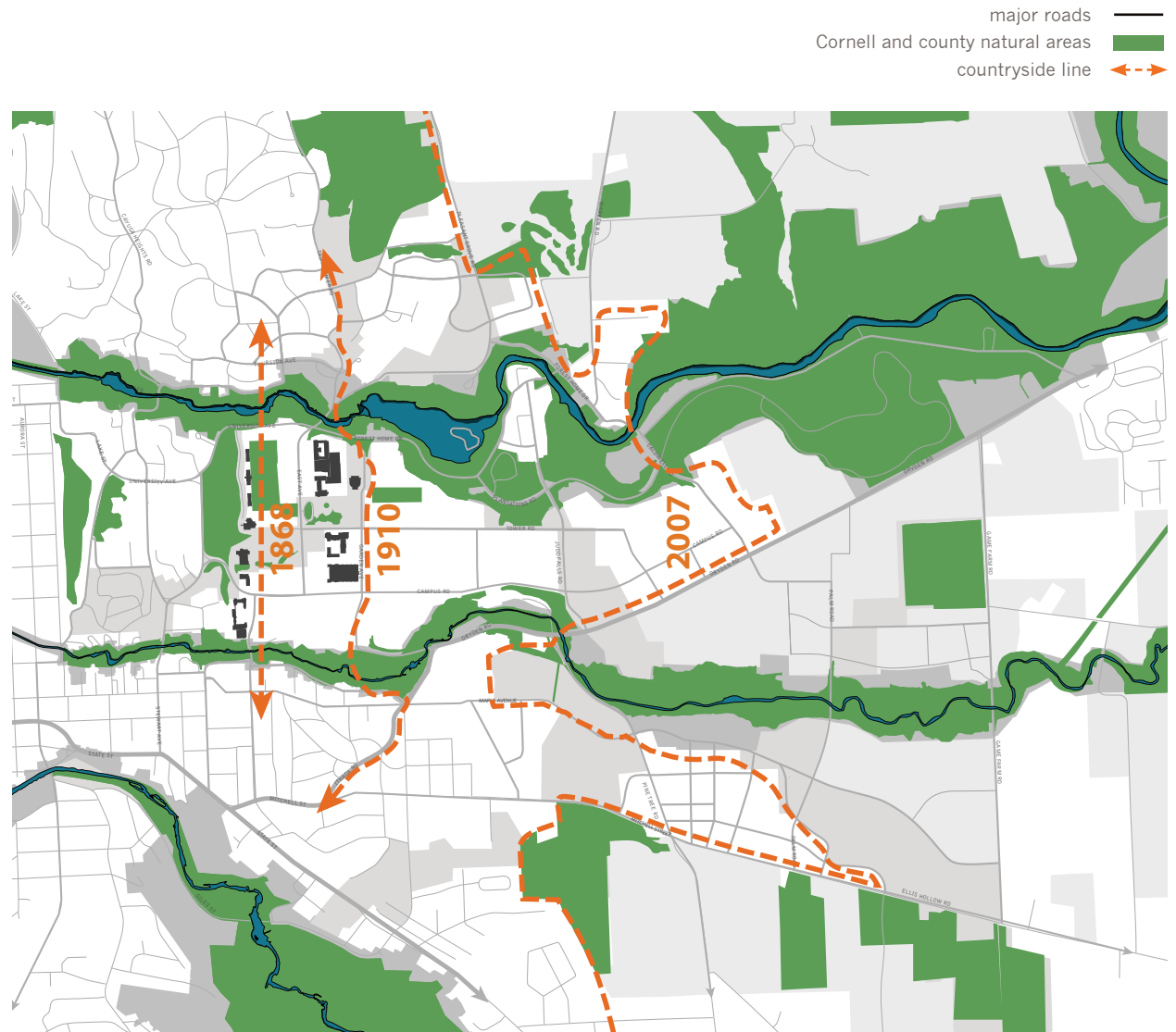


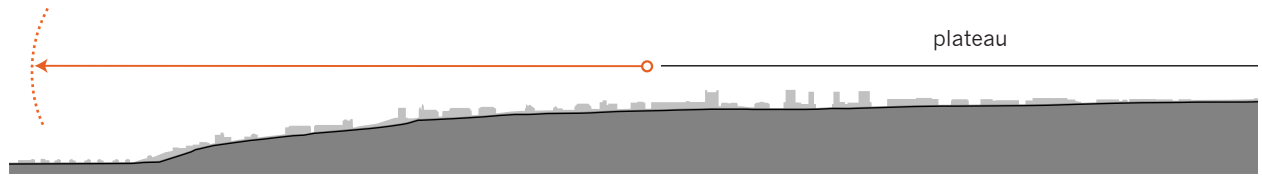
fig 10 – Town and country thresholds: The campus has always comprised both town and country, the threshold shifting east over time.

4.8

## Reinforce the relationship between the campus and its natural setting

The design of Cornell's campus utilizes the topography and the drama of its natural setting to lend presence to and amplify the impact of its architecture and designed landscapes. Buildings and streets reinforce ridge lines, towers are positioned at high points, and landscaped open spaces highlight both plateaus and slopes. The two gorges define the northern and southern limits of the academic core. The campus's panoramic views extend from the ridge and hilltops to the lake and beyond, and to the rolling landscapes to the east and south. Views to the campus from lower elevations reveal a "layered" skyline. The most loved places and buildings of the campus feel as though they fit within their landscape.

Moving eastward on Core Campus, the natural setting transitions from the drama of a series of parallel north-



Section A

fig 11 – East-west section through campus: buildings reinforce ridge lines, towers are positioned at high points and the stepped topography creates vistas. Views to the campus from lower elevations reveal a "layered" skyline.

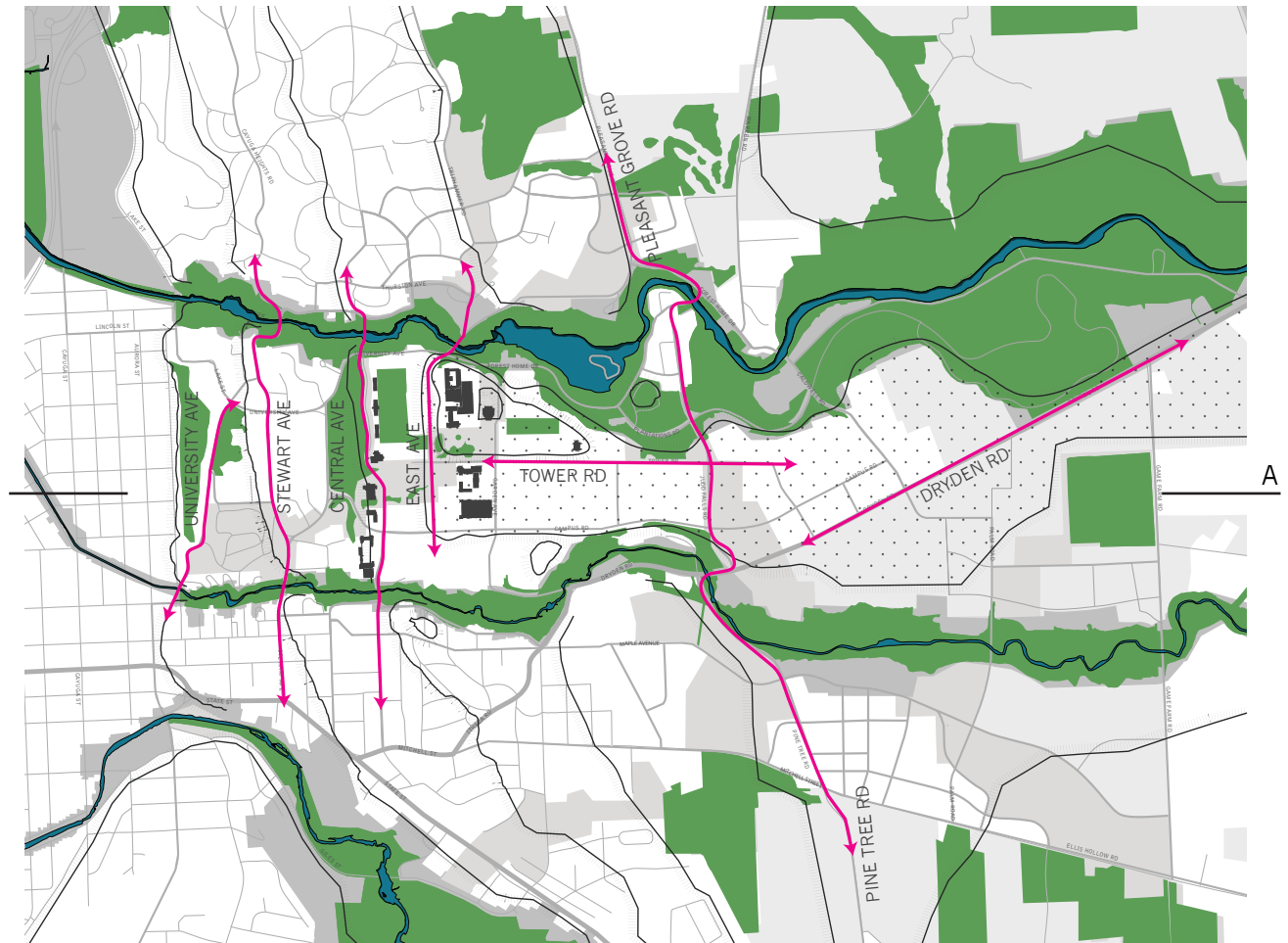
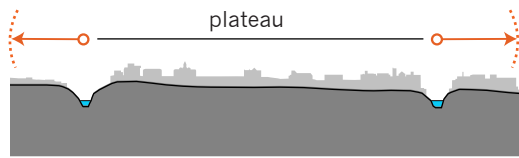
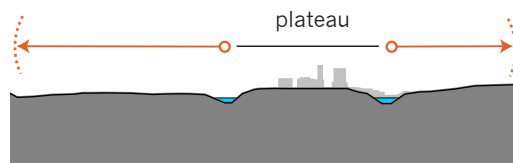


fig 12 – The natural setting has had a significant impact on the design of the campus. Vistas occur at the ridgelines and gorge edges. The campus "fits" within its setting



Section B



Section C







-  major topography
-  Cornell and county natural areas
-  primary panoramic views
-  major street network
-  campus greenways
-  campus buildings

fig 13 – North-south section through campus: where the gorges are closest together, a significant open space connection will preserve views to the surrounding countryside.

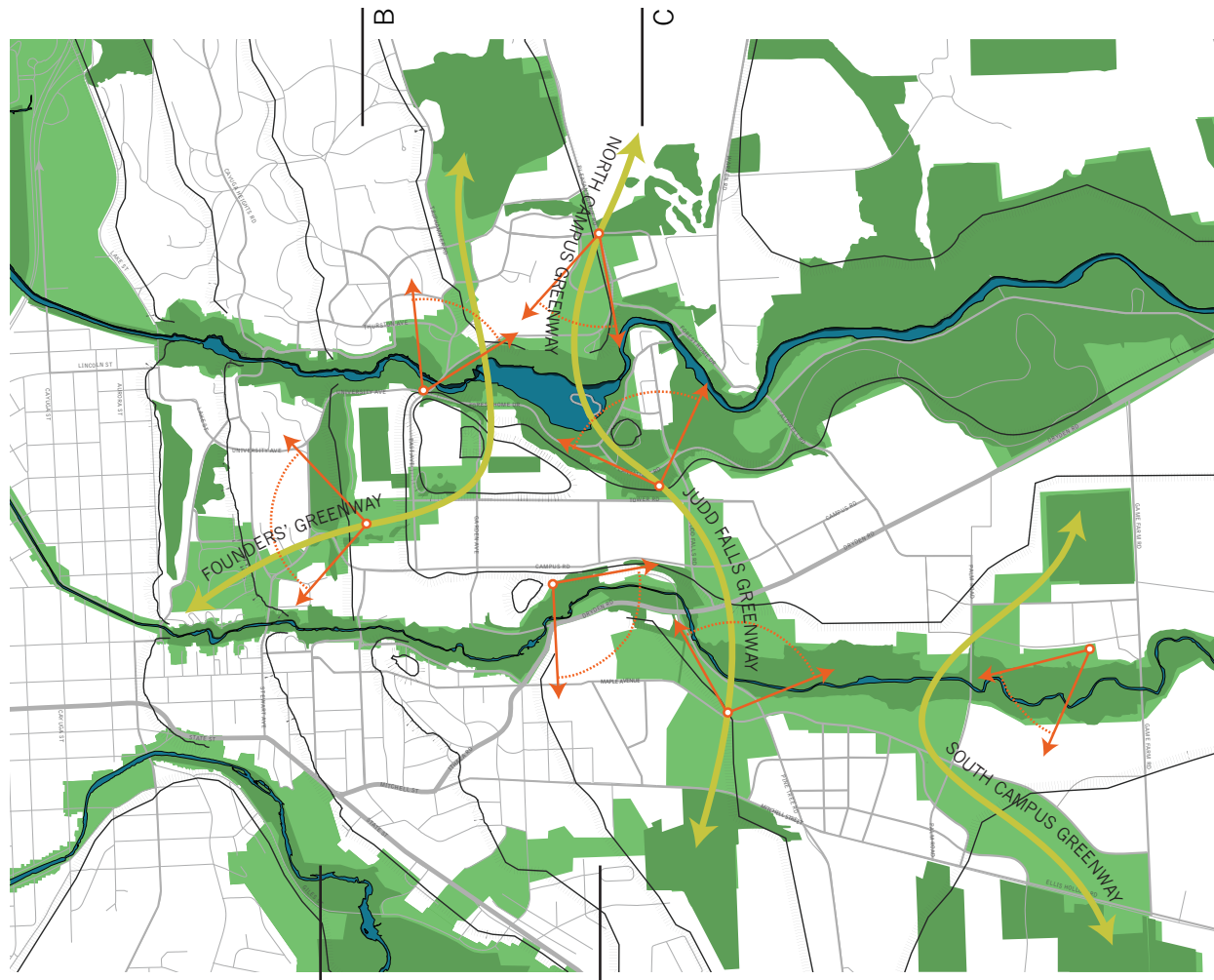


fig 14 – The campus master plan expands the territory occupied by the natural setting. The vistas are preserved and protected within this open space network.

south ridges that step up the Cayuga Lake valley to a rolling plateau extending as a narrow “finger” of land across East Campus between the Fall Creek valley and the rolling land of the Orchards and Cascadilla Creek valley. Pleasant Grove Road, Judd Falls Road and Pine Tree Road roughly follow the alignment of the eastern most ridge. To the west of this ridge the gorges exist, to the east the valleys broaden and become the setting for historic development such as Forest Home Village and the Blair Farm. The location of Tower Road and Dryden Roads coincide with the ridge that forms the spine of the plateau.

Over time, building in a manner that aligns with the natural setting has become more difficult due to the increased size of building footprints and the need for large integrated complexes of buildings that, by their scale alone, overpower all but the most dramatic aspects of the topography. Furthermore, as development pressures have increased buildings have begun to encroach deeper into the gorges.

As the campus grows and evolves, an interconnected open space network will reinforce and enlarge the extent, image and environmental habitat of the gorges and creek valleys. Four major greenways are proposed that reinforce the experience of the topography and visual relationship to the larger natural setting: Founders’ Greenway, Judd Falls

4.9

## Preserve and enhance views from the campus to its setting

Greenway, North Campus Greenway and South Campus Greenway. Greenway initiatives and the larger open space network are described in the Campus Landscapes chapter.

New campus development will be focused on the narrow plateau between the gorges and valleys of Fall Creek and Cascadilla Creek, highlighting the presence of the campus between these two dramatic natural features. An open space connection – East Center Green – will provide a physical and visual connection between the Fall Creek and Cascadilla Creek valleys.

### **Panoramic Views**

Within a dramatic setting such as Cornell's, vistas and panoramic views occur at ridgelines and hilltops, resulting in long views to Cayuga Lake and the rolling hills to the east and south of the campus. Proposed development is aligned with these ridgelines, in a manner consistent with Central Avenue and Stone Row across the top of Libe Slope. This pattern of development along ridgelines also reveals a "layered" skyline when viewing the campus from afar and below. New key open spaces, such as Alumni Quad and the Judd Falls Greenway provide opportunities for these views to be experienced deeper within Core Campus. Where the gorges are closest together, a significant open space connection, East Center Green, will preserve views to the surrounding countryside.

### **Framed Views**

Spaces along the major axes are further divided by a series



of smaller local axes and regulating lines. The result is a fine grained scale of building on the historic campus. The dialogue between finely-scaled space and distant views to the natural setting has resulted in a sense of place that is at once intimate and infinite. Framed views act as the "portal" through which this is achieved - connecting human scaled courts and quads to the larger setting of the campus.

### **Diagonal and Open Quad Views**

Using the Arts Quad as a precedent, which began as a row of buildings and over time took the form of the academic quad, the campus structure introduces a number of "open quads". These quads and key places establish a formal geometric order while at the same time admitting the surrounding natural landscape. This balance between formal and natural spaces also provides for diagonal pedestrian movement and views.

- existing quads, greens and courtyards
- proposed quads, greens and courtyards
- primary views
- campus buildings

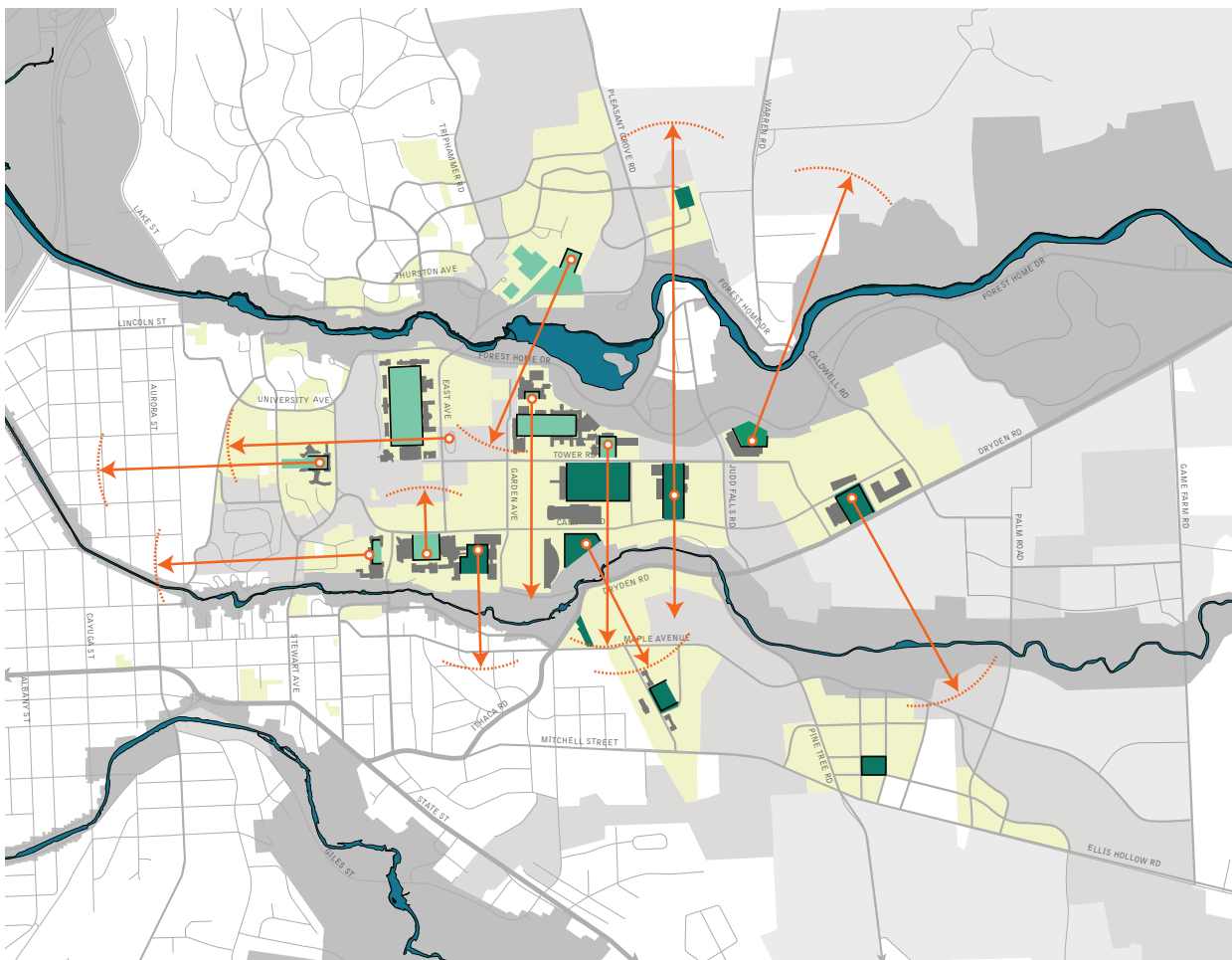


fig 15 – Like the existing open quads, new quads, greens and courtyards will provide diagonal views to the surrounding setting.

#### 4.10

## Extend the formal pattern of quads, courts, walks and streets

Much of the campus is organized by a series of axes running north-south, east-west and diagonally. These axes provide a structure that coherently organizes the campus, defines movement corridors and creates a sense of unity among buildings and landscapes even within the diverse architectural styles and settings. Within this framework, a highly formal and overlapping system of quads, walks, courts and avenues has been laid out over the topography of the campus. Each of these spaces is clearly defined, with the quads and many of the courts providing identity for the colleges that surround them. While the spaces provide foci for Cornell communities, they also lead the eye of the pedestrian to framed views of the distant countryside. This complex pattern of open spaces that celebrates views engenders a unique sense of both intimacy and infinity. This formal pattern plays against the dramatic topography and natural landscapes on campus,

providing variety and drama to the character of the campus and creating opportunities for diagonal movement and views within the grid.

As the academic core continues to intensify and redevelop, a formal pattern of axes and open spaces that builds upon the existing fine-grained structure will be extended. Tower Road and Campus Road will become more significant spines, physically and functionally unifying Core Campus. They will be flanked by quads and other open spaces, which will offer relief and distant views and allow for diagonal paths. Between and parallel to Tower Road and Campus Road, a continuous “Mid-Campus Walk” will provide an alternative pedestrian route. North-south interstitial spaces and streets will intersect the primary east-west corridors to ensure “pedestrian permeability” and reinforce a sense of openness. As this formal grid is extended eastward, the underlying ridgeline along which it is organized rotates towards the north, resulting in a splayed pattern where the grid intersects with the Judd Falls Greenway.

- existing quads, greens and courtyards
- proposed quads, greens and courtyards
- primary views
- campus buildings
- primary campus axis

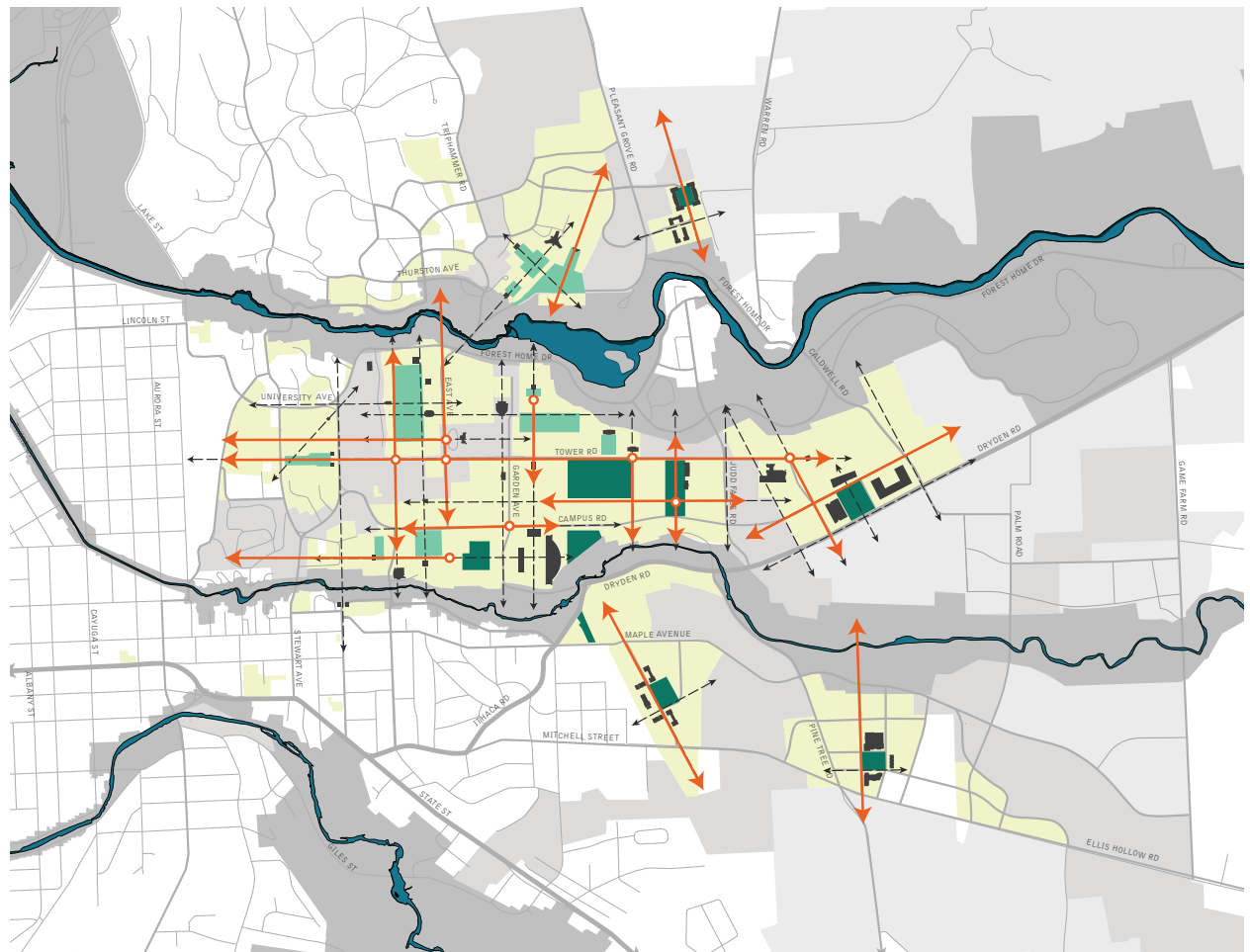


fig 16 – The axial pattern of quads, walks, streets and courts is extended across Core Campus. Framed views to the surrounding open space network are protected and new views created.

# Physical Structure Plan

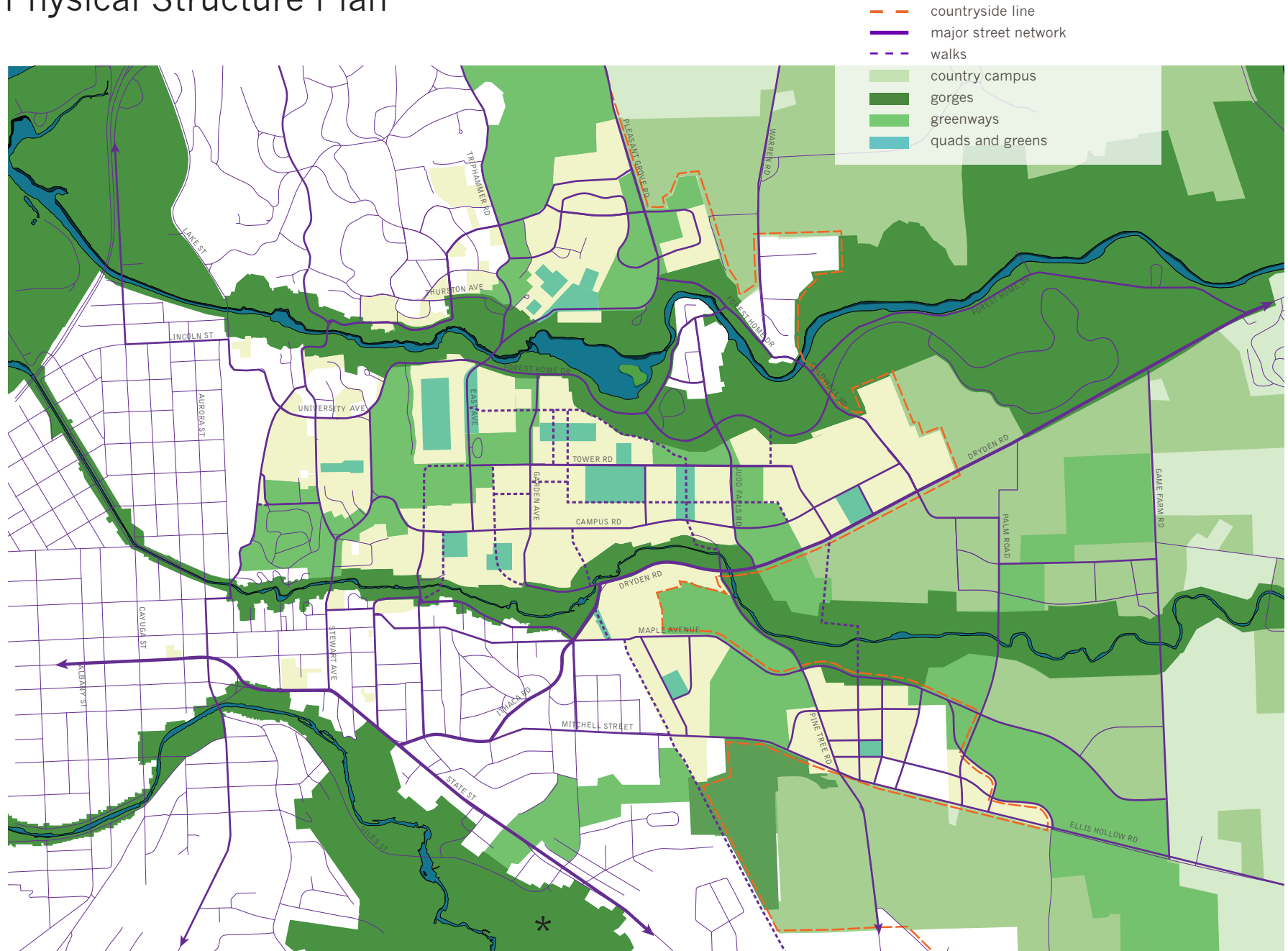


fig 17 – The Physical Structure Plan underlies the functional layers of the campus and is the basis for the primary open space, movement and utility networks. Gorges, open spaces, streets and walks define parcels for existing and future development.