## **Campus Development**

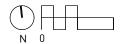
Established uses on the campus are mostly grouped together into clearly identifiable areas. This is the result of numerous decisions over the long history of the College, and suggests a natural affinity or functional adjacency between buildings in each group. With few exceptions, this pattern of uses should be respected and maintained; the exceptions are mixed uses, and those academic uses that also have a public function.

Old West and the Academic Green represent the ancient tradition of Dickinson College, supported by East College, Stern and Bosler Hall. Most of the buildings to the west of them were built in the last half century; some more compatible with their noble antecedents than others.

The 'Building Use' map is more finely grained than the preceding 'campus Development' map, but tells a similar story.

## **Campus Use Organization**





# **Building Use Campus Evolution** 1700's Academic 1800's Admin - Common 1900-1950 Residential 1950-2007 Support

A Visual Survey of Campus Facilities

The buildings and open spaces built before 1950 generally contribute to the quality of the campus. However, some significant buildings constructed in the last 50 years, such as ATS and the HUB, and their adjoining surface parking, detract from the campus quality due to their siting and introspective architecture, blank walls, and incompatible materials.

## Campus Landscape

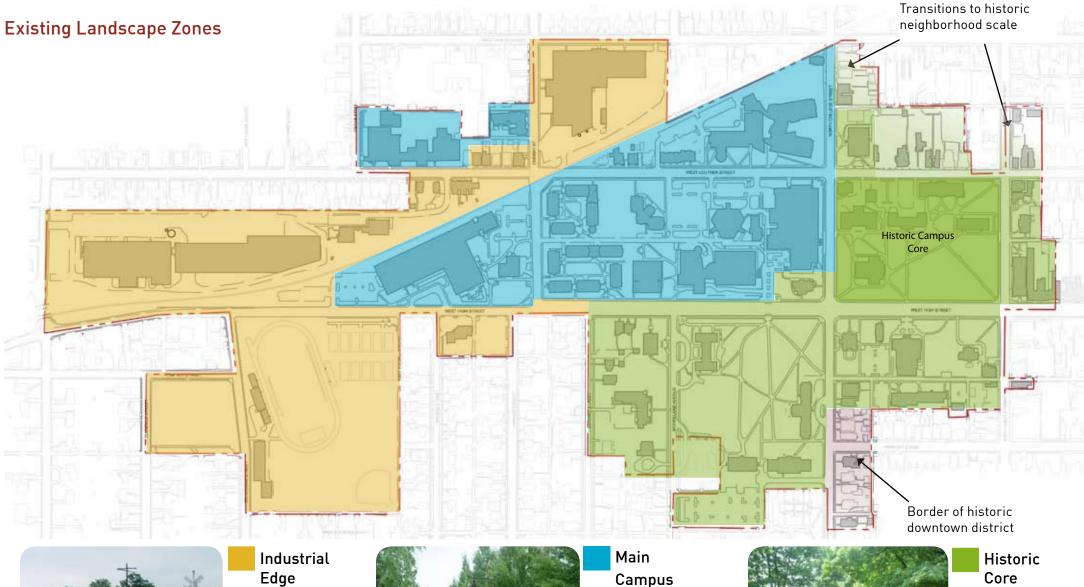
Parts of the campus, such as Academic Campus and Morgan Green are considered 'sacred' and will remain essentially unchanged. Other parts are open to changes that will embody the College's commitment to sustainable materials and practices. Some western parts of the campus are essentially industrial in character, and while adhering to principles of sustainability, merit utilitarian treatment. Edges of the campus that abut parts of Carlisle where neighbor sensitivities to College activities are an issue demand special attention.

A close examination of the campus reveals many subcategories of landscape by use. The ways in which each responds to adjacent building uses and circulation reveals its appropriateness. In some cases, uses have changed, but the landscape has not.

Primary circulation routes through the campus and principal or destination open spaces are the primary form-givers. Any changes in these will change the dynamic of landscape and circulation.

The campus has an impressive heritage of mature trees, and these are very important to its landscape character. Some of those trees are nearing the end of their lives, suggesting that succession planting of young trees be established. The particular relationship of individual trees to buildings and open spaces throughout the campus is not evident in this plan, but must nevertheless be considered.

Combining the tree plan with campus character emphasizes the differences between historic, intermediate and industrial areas. Trees also give identity to the streets that subdivide the campus: some by their consistency and maturity; some, like north Cherry Street, by their complete absence.



- The western edge of the Campus has long, low buildings, large roads, and undefined spaces that lack intimacy and make the area feel utilitarian.
- The area lacks a landscape structure, hierarchy, and plantings that help to define spaces and frame views.



The Main Campus has an intimate spatial quality.

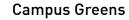
- The buildings are closely spaced and are arranged around smaller open spaces or courtyards. The majority of the buildings face inward and away from the streets. In many cases the buildings have small garden spaces. These spaces create successful "thresholds" between open spaces and the buildings and a strong sense of a "green" campus. Lack of plantings and enclosures in some places, leads to a bare and exposed spatial quality.
- The parking and services that are integrated into the campus interrupt the flow of pedestrian movement and undermine the sense of a coherent campus.



Core

- The Historic Core covers mostly the John Dickinson and the Benjamin Rush Campuses.
- The Historic Core has a majestic, tranquil, and enduring quality.
- The buildings are arranged around large central "Greens" but lack building related landscapes such as forecourts and terraces that create transitions from the "Greens" to the buildings.





• Large green open spaces with lawns and specimen canopy trees, prevalent in the historic campus core.

#### Quadrangles

- Contained spaces that are bordered and protected by long low buildings. These occur south and west of the historic campus core.
- Quadrangles are open spaces that feel like an extension of spaces within the surrounding buildings.



- Spaces of intermediate size that are actively used at building entrances or as gathering
- Vegetation can be used to reduce the monolithic appearance of paving.

#### Threshold Gardens

- Landscape related directly to a building that complements the architecture and provides orientation at an entrance.
- Threshold gardens support casual outdoor activity and enliven the campus landscape.



#### Unique features

• Places of interaction with a particular identity, such as Morgan Rocks.

#### Athletic Fields

• Playing fields, track and tennis courts on the western fringes of the campus across High Street from industrial buildings, marking western entry to the campus.

#### **Streetscapes**

- Formal landscapes characterized by a linear arrangement of buildings, street trees and other landscape elements.
- Streetscapes can include traditional allees and clipped hedges.

#### Transitional Landscapes

• Discontinuous exterior space lacks a sense of scale.



Major Exterior Spaces **Existing Underutilized Areas** 

- Private Events, weddings
- Small upscale college events, receptions

#### John Dickinson Campus

- Outdoor classrooms
- Informal meeting area
- Summer Camps
- Convocation & Commencements



#### Memorial Gardens

• Admission related events

## Morgan Green

- Concerts
- Orientation
- Large picnics
- Spring and Fall Fests
- Community Activities



## Morgan Green Rock Outcrop

- Informal meeting area
- Outdoor classroom

## **Upper & Lower Quad Courtyards**

• Informal meeting area

## Volleyball Court

• Informal games

#### 8 Biddle Field

• Sporting Events

**Existing Vegetation Characteristics** 









#### Industrial Edge

 The industrial zone has minimal green landscape and very few plantings around the buildings.





#### Main Campus

- The Main Campus zone is characterized by multi-layered plantings. Shrubs and understory plantings create a lush landscape.
- This zone has no central green. Green spaces here are smaller courtyards, threshold gardens, streets, and paths.





#### Historic Core

- The historic vegetation zone is characterized by flat, shadowed lawn with large mature canopy trees.
- Some of the mature, large canopy specimen trees are in decline. New plantings are of species that will not achieve the same majestic scale. Assessment and maintenance by a certified arborist is advised.
- Plantings other than lawn and trees are limited to remnant spaces.



#### **Boulevard**

- The major campus boulevards are typically planted with evenly spaced rows or allees of a single tree species.
- Irregular gaps show in the allees where trees have been removed.
   Few have been replaced.
- The broad canopy trees chosen as street trees overarch the street and fit the scale of a grand boulevard.
- In some places, tree planting along streets and close to buildings is scattered and looks incomplete.



#### **Campus Street**

- Typically, campus streets are planted with rows of trees of a single species.
- In places, there are irregular gaps where trees are missing. Few have been replaced.
- The size and branching characteristics of chosen tree species are often out of scale with the campus streets that they line.

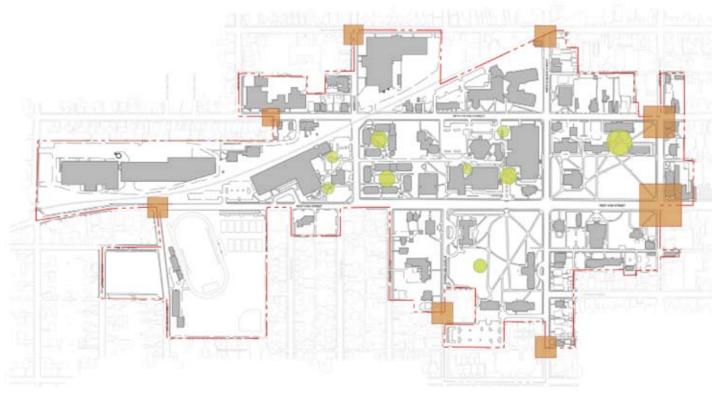


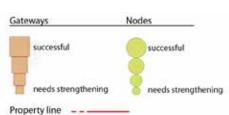


#### **Industrial Corridor**

- Plantings are often unbalanced and fail to enhance the quality of the corridor.
- Scattered tree planting along the streets and near buildings does not relieve the harshness of the environment.

#### **Gateways and Nodes**







#### Gateways

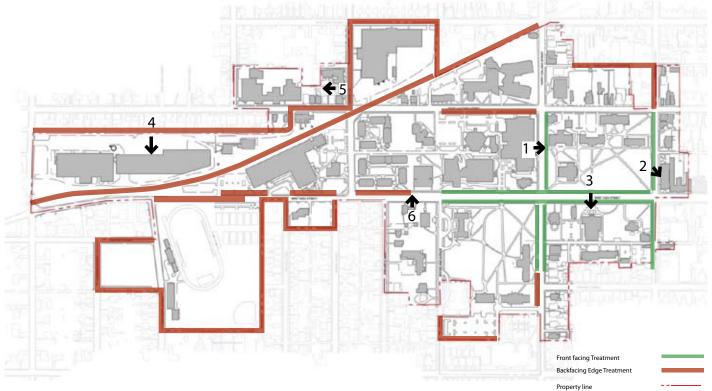
- Gateways mark the thresholds from the surrounding areas into the Campus.
- Dickinson Campus has many entry points that are marked by historic gates. These gates, in conjunction with the buildings and the landscape, help to establish the campus as an identifiable place.



#### Nodes

- Nodes are areas of pause in the landscape where people gather informally, usually at the intersection of different routes or at areas of interest.
- The Dickinson campus has numerous identifiable nodes that either occur along major pedestrian routes or adjacent to large outdoor spaces. These nodes help to populate the larger outdoor spaces, thus contributing to the safety and security of the campus.

#### Visual Assessment - Iconic Views & Edges



#### **Iconic Views**

- A number of gateways are located throughout the campus and they mark thresholds into various precincts and help define the sense of "campus".
- Views of historic buildings such as Old West are to be preserved, maintaining a sense of permanence of the campus.

#### Edge Conditions

- As the campus expanded to the west, the image and identity of the original college buildings was lost.
- Buildings along certain parts of the campus boundary are out of scale with nearby institutional buildings.
- Many buildings, such as the housing quads, are oriented towards interior courtyards and do not relate to campus streets.













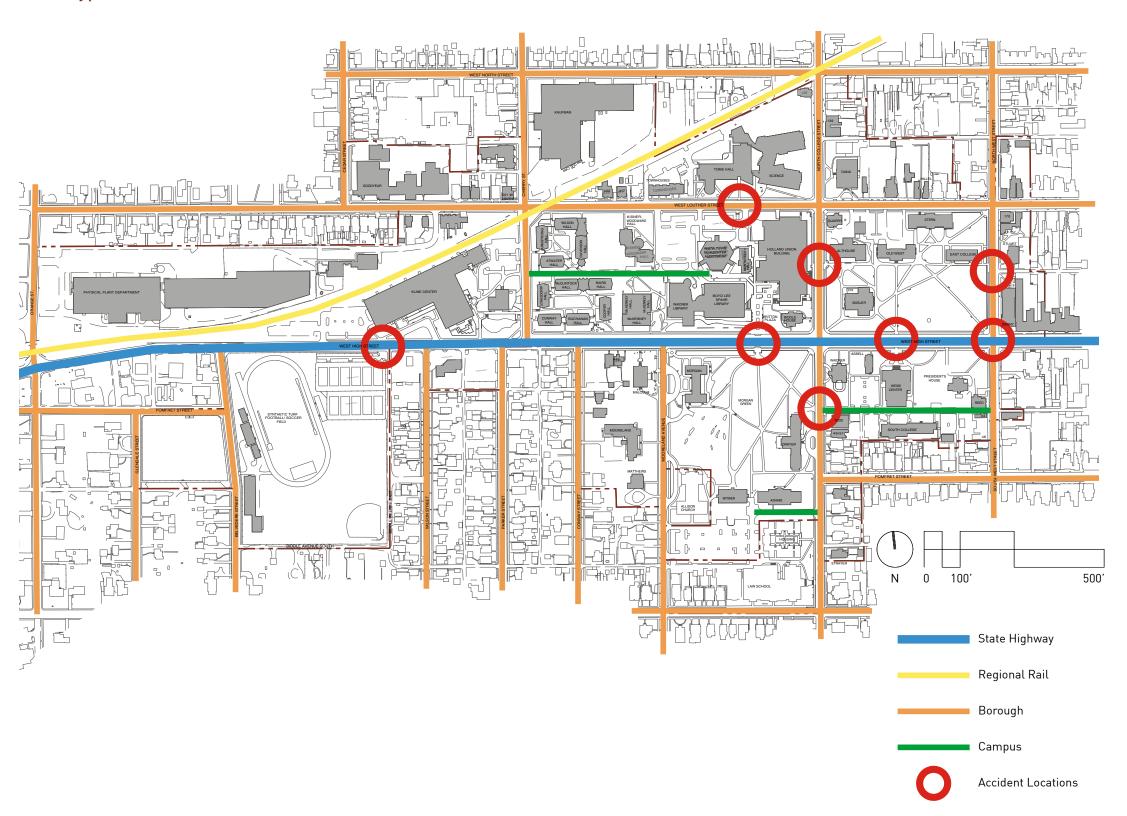
## **Campus Circulation**

The function and character of streets and right-of-ways through the campus have clearly influenced the location and orientation of buildings and open spaces. The locations of accidents involving pedestrians prompts attention to improving safety measures at those and similar places.

Separate from street function is streetscape character. Downtown streets are typically defined by tall buildings built up to the sidewalks. By contrast, industrial character streets like those west of the campus are irregularly developed, often with single-story buildings set back from the sidewalk, and many undeveloped lots.

Four street function types (see map this page) and eight character types (map next page) are illustrated here.

## **Street Type**



## **Existing Streetscape Character**



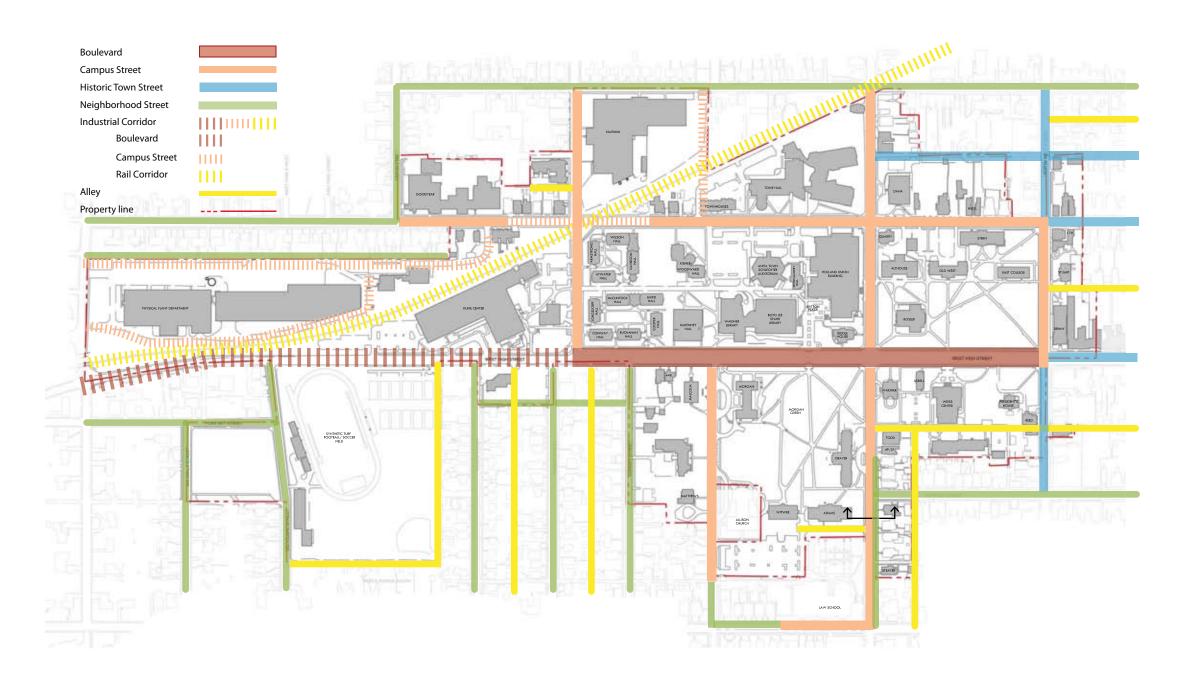
Mid-block crossing at West High Street



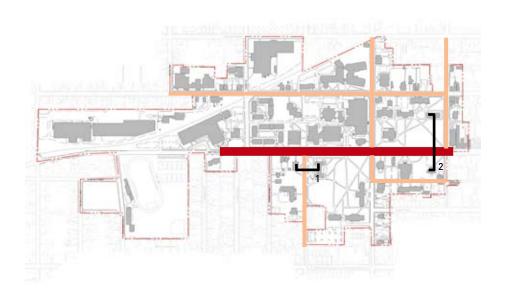
Mid-block crossing at North College Street



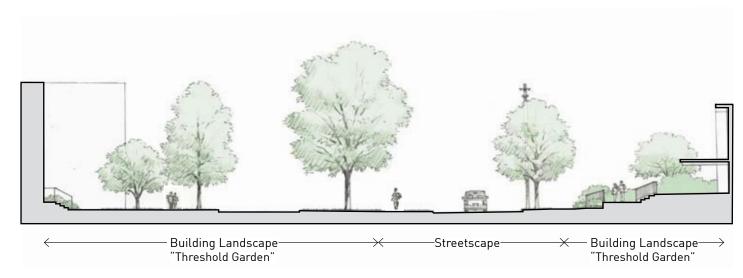
Freight Rail crossing at Louther and Cherry St.



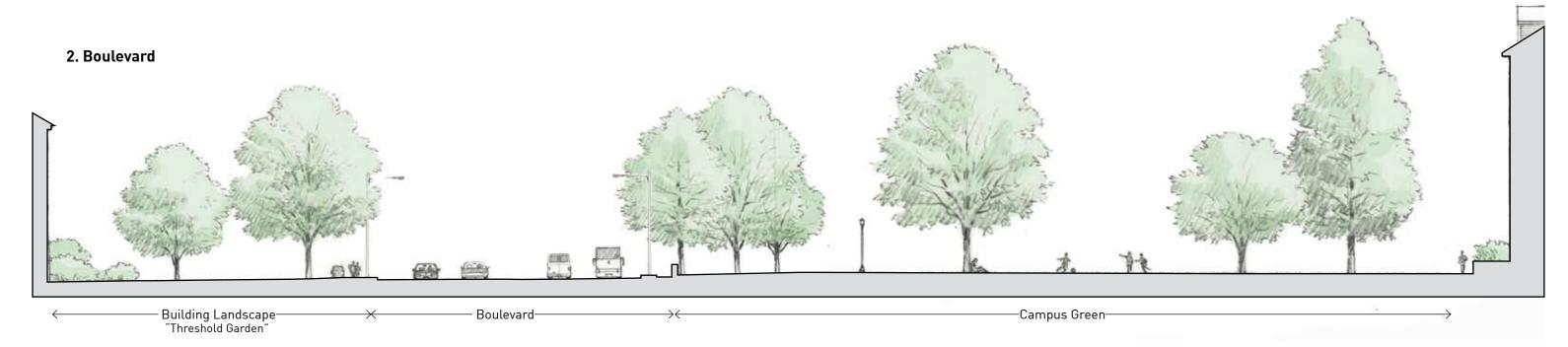
## **Streetscape Character**



#### 1. Campus Street

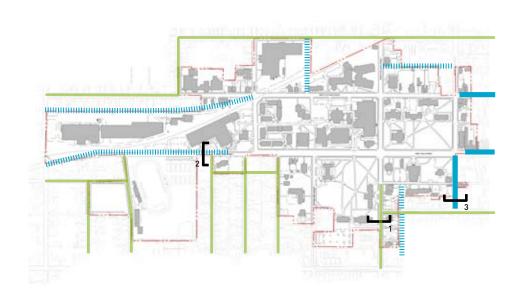


• Internal campus streets are generally of pedestrian scale with tree lined sidewalks

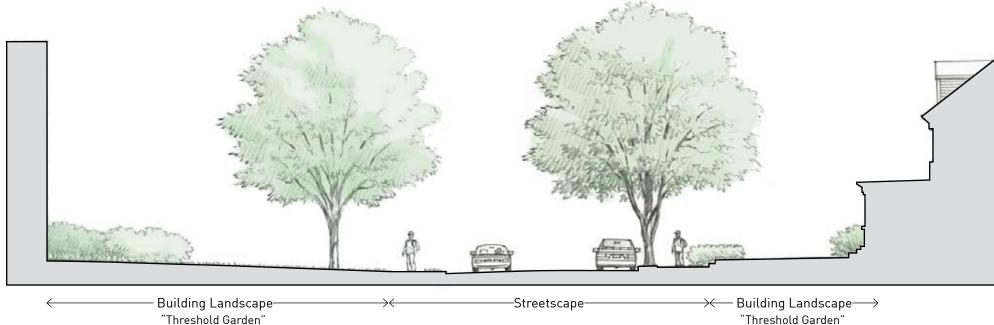


- High Street bisects the campus. This road brings heavy traffic into the center of the campus, resulting in numerous conflicts with pedestrian movement.
  High Street is built to an arterial scale. It is very wide: street design favors fast moving vehicles, making it unsafe and intimidating for pedestrians crossing the campus.

## **Streetscape Character**



#### 1. Neighborhood Street

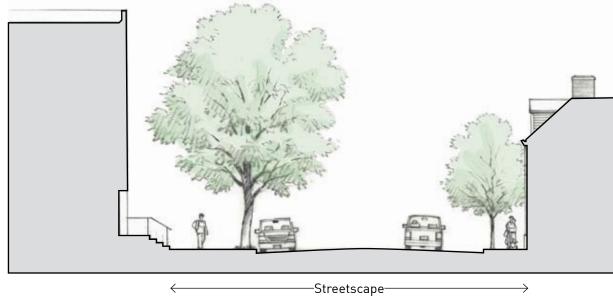


- Neighborhood Streets are characterized by front lawns and porches forming semi-private spaces that are perceived as part of the streetscape.
- Property boundaries defined by low hedges or fences help create outdoor rooms adjacent to the street, shared by street users.
- Tree lined sidewalks make the streets more pedestrian friendly.



- Industrial Streets are wide and characterized by large, amorphous spaces and ill-defined edges that allow the space to bleed away.
- The sidewalks have no tree canopy or enclosure, feel exposed and are unpleasant in the summer.
- These streets are not "pedestrian friendly".

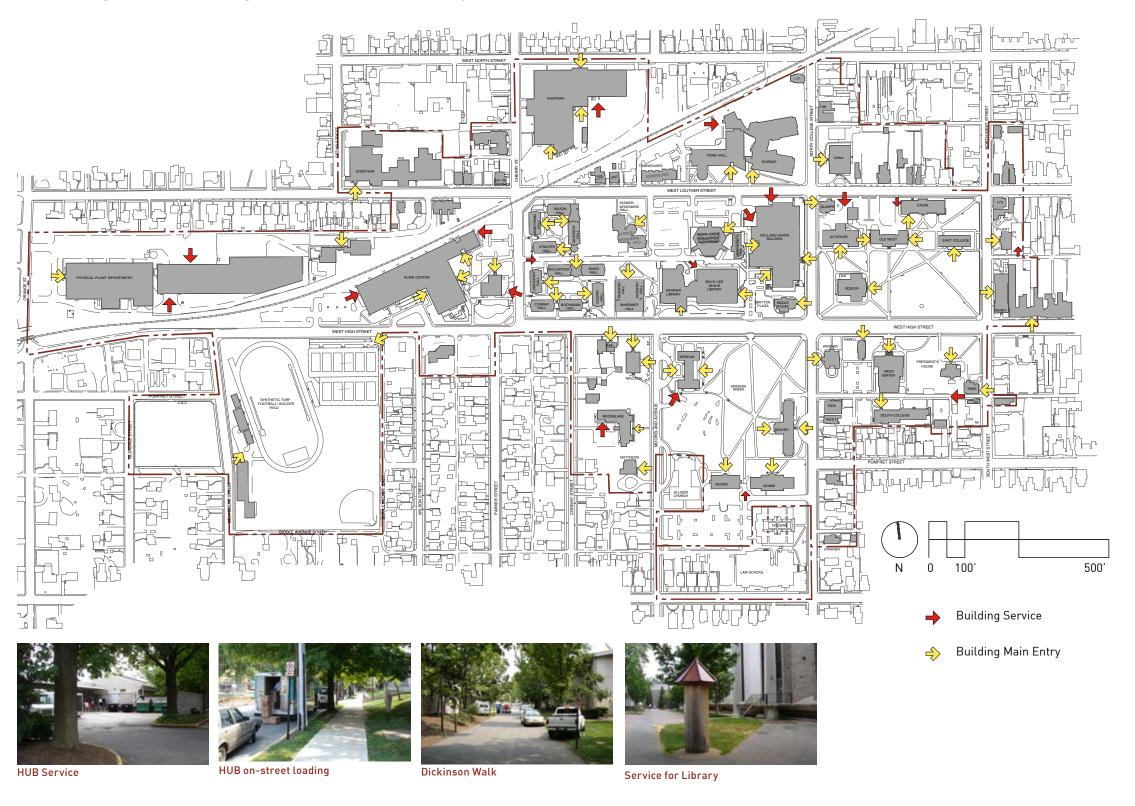
#### 3. Historic Street



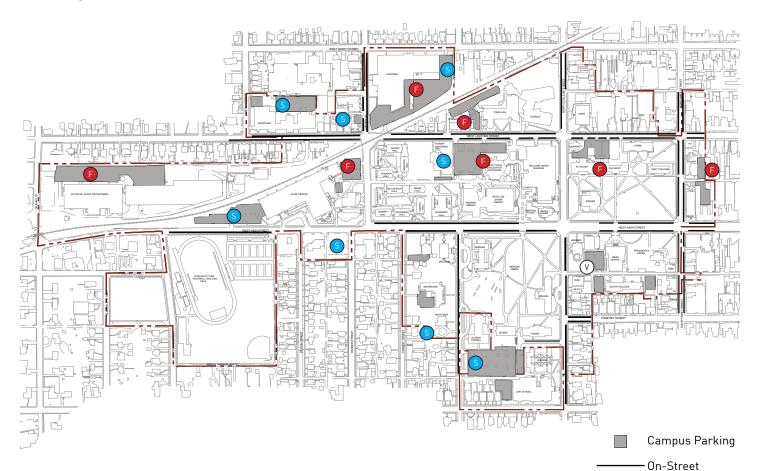
- Most historic streets are compatible with human scale and are pedestrian friendly.
- College and Borough interests overlap in historic streets where housing and commerce serve both.

## Building Entries, Parking, Service and Accessibility

The urban street grid that subdivides the campus has determined the location and orientation of many campus buildings, parking lots and footpaths. The location of service entries to buildings relative to pedestrian entrance and access routes betrays a number of points of conflict that need to be rectified. In some cases, established service entries may be difficult to reconcile with changes in landscape and pedestrian circulation, and must be reconsidered.



## **Parking**



Parking lots represent opportunities for redevelopment for buildings and open spaces, provided that parking demands can be satisfied elsewhere. Dickinson's commitment to reduce its carbon footprint demands that the necessity of driving alone onto campus by anyone be challenged, and that viable alternatives be promoted. The objective of minimizing conflicts between pedestrians, cyclists and vehicles also suggests that vehicular access into the campus be minimized. Accordingly, parking demands should be satisfied on the perimeter of the campus, making walking the primary means of circulation within the campus.





Faculty and

Staff Parking









Note: Parking inventory is included in Appendix.

## **Accessibility**



Issues with ADA Compliance

- Site Paths Limited or No Access
- **Building Entry** Limited or No Access
- Building Limited or No Access

The Americans with Disabilities Act did not come into effect until 1991, long after most of the buildings at Dickinson College were completed. Since that date, great progress has been made in remodeling buildings to satisfy current standards of accessibility. This is not always possible without violating the qualities of a historic building, so a number of exceptions to ADA compliance exist. However, the effort to achieve compliance is ongoing, both for buildings and for pathways.

## **Campus Utilities**

Utility conduits and other main links are shown. The new Central Energy Plant will provide steam and chilled water for the entire campus. The existing Central Heating Plant will continue to be a transfer point for campus steam and chilled water pipes and conduits with plans for the above grade structure to be removed in 2008



1 The central heating building



2 Addition for New Central Energy Plant and Solar Collectors

## **Campus Utilities**



Steam and Chilled Water
Conduits

Note: Locations are Generalized

## Campus Energy Use



This diagram identifies the highest energy users on campus. With the exception of the energy plants, the highest consumers of electricity on the campus are the residence halls.

#### Energy Usage

Total 49,863 Gallons

G Natural Gas Total 598,777 CCF

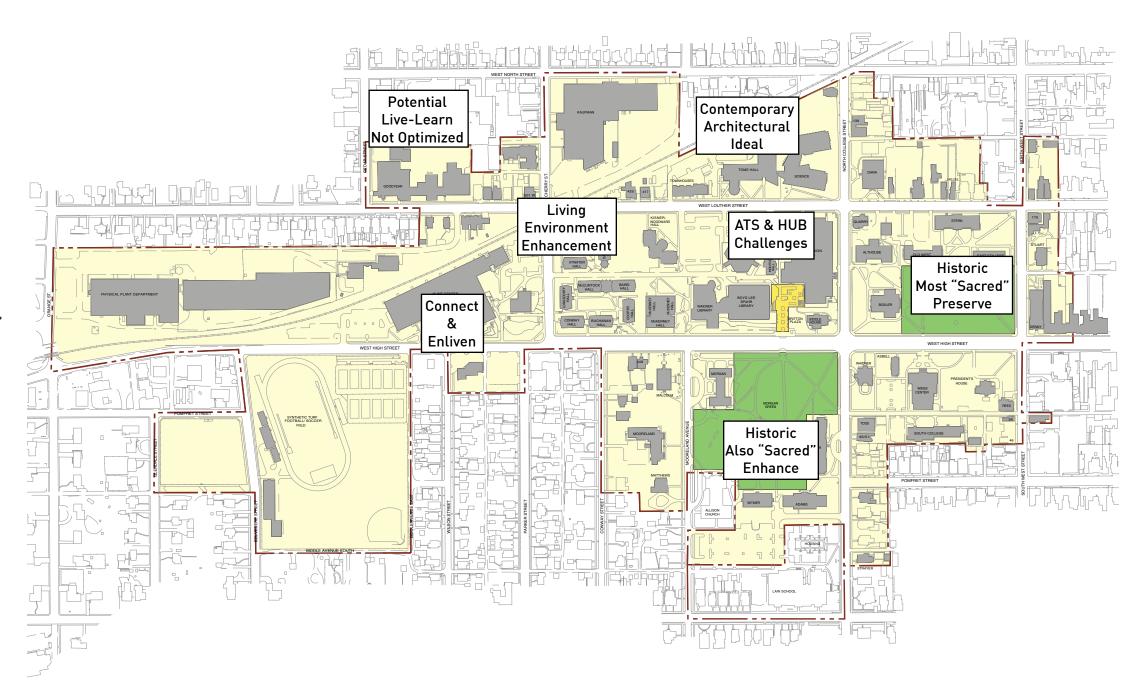
E Electrical Total 15,888,945 KWH

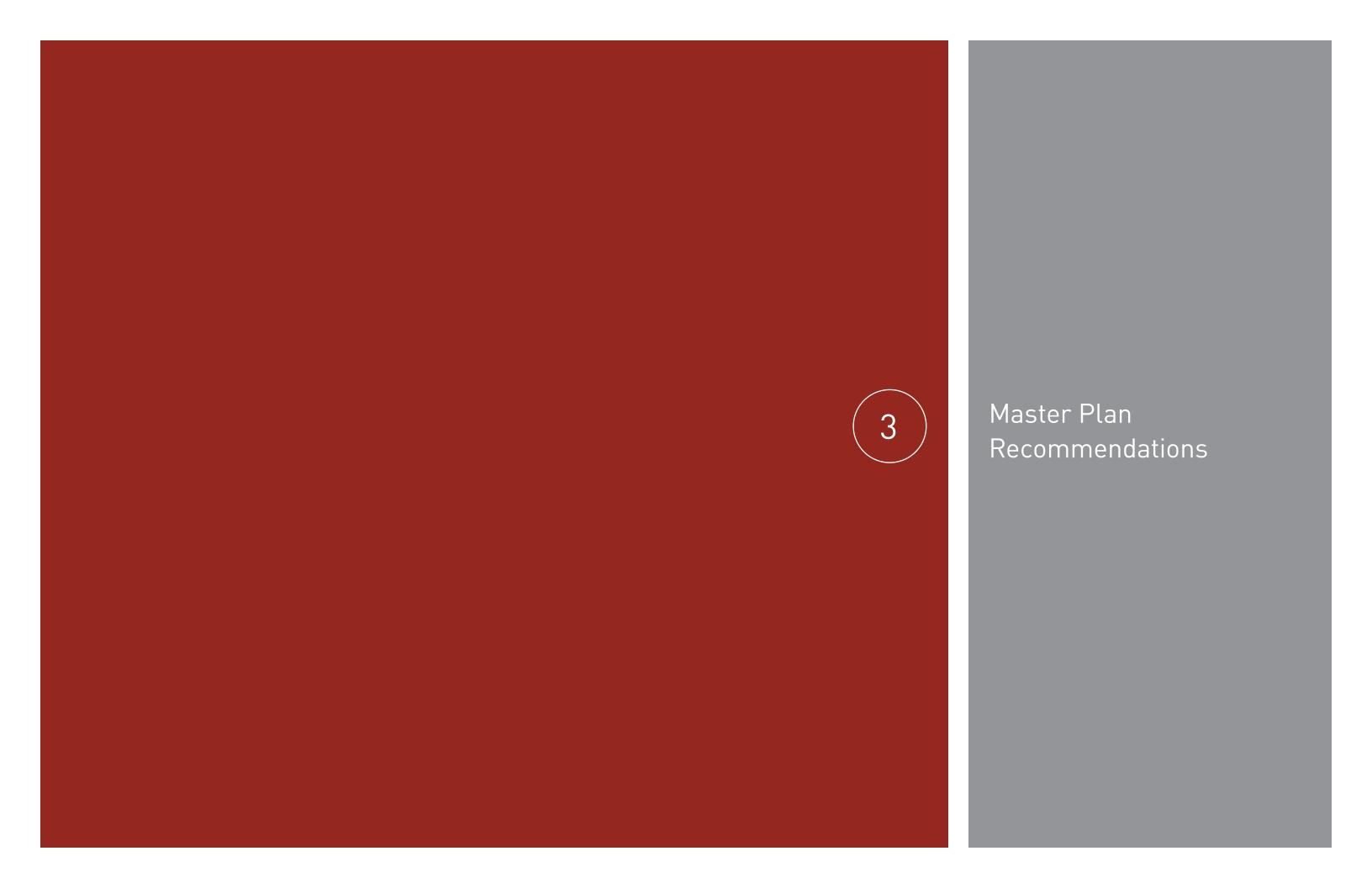
## **Conclusions - Campus Opportunities**

The preceding review of prevailing conditions on the campus suggests some features of the campus that should not change appreciably: the character-giving qualities of Academic Green and Morgan Green are examples. By contrast, significant changes in the functions and configuration of the HUB and ATS seem necessary; their location near the center of the campus suggest a thorough evaluation of that area. At Goodyear, the potential is for a greater success than has been achieved to date: pushing the opportunities for a living-learning environment further. Similarly, enrichment of the living environment within the Quads housing is indicated – including perhaps a stronger tie to an expanded Kline Athletic Center.

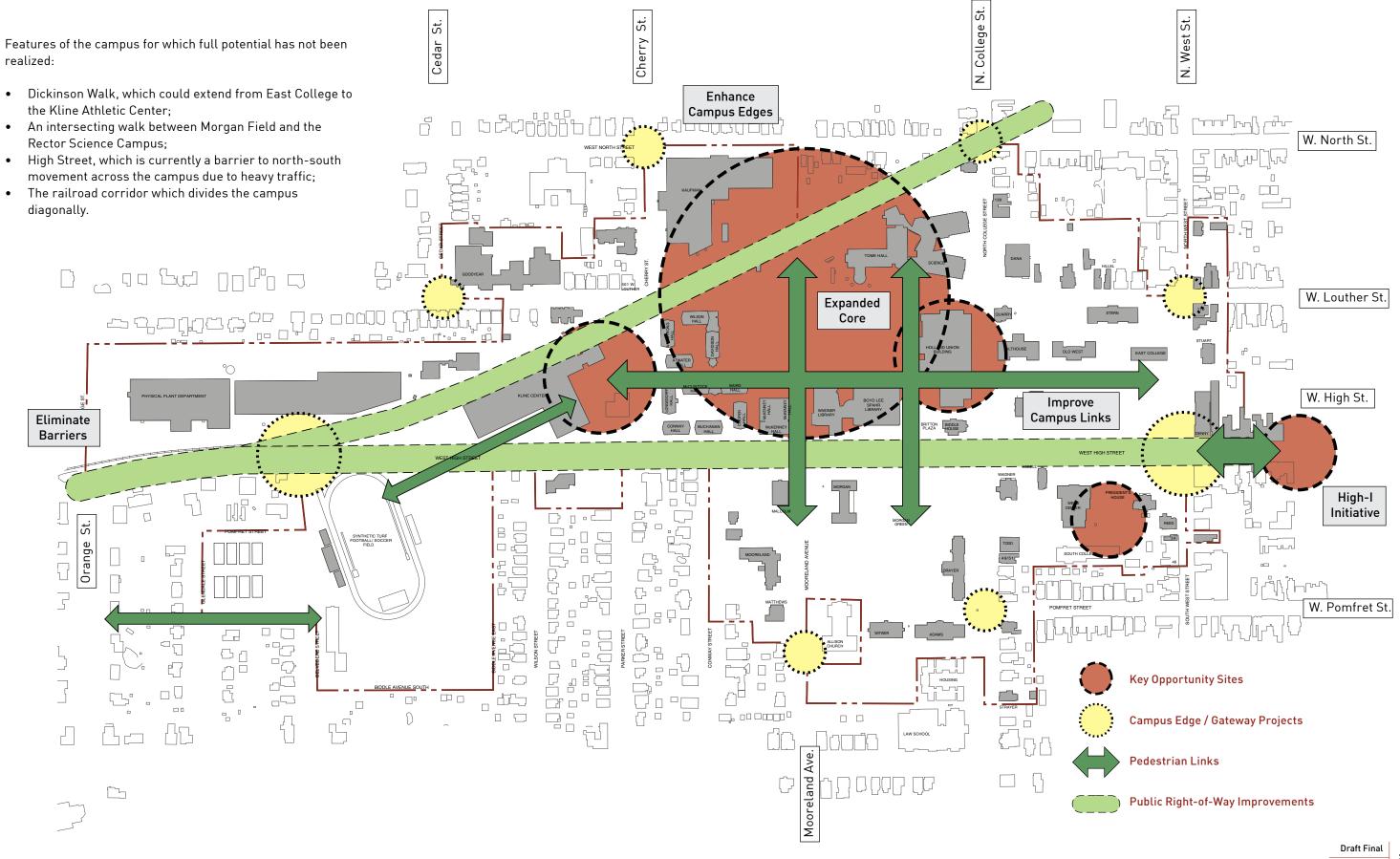
The landscape also provides an important role in strengthening the living-learning environment. Currently, there are few exterior spaces beyond the major greens that offer opportunities to promote interaction between students and faculty.

These opportunities are the starting point for more rigorous evaluation of what is and what could be, coupled to changing programmatic needs throughout the campus. That is the subject of the next chapter.





## Campus Opportunities: Core, Links and Edges



## Potential Development, Building Uses and Open Space

Deficiencies in facilities and anticipated additional needs are addressed in the approximate footprints of future buildings in red. Also included are footprints for future uses that have yet to be defined, as additional facilities will become necessary even if enrollment does not change. Potential building removal is shown in blue.

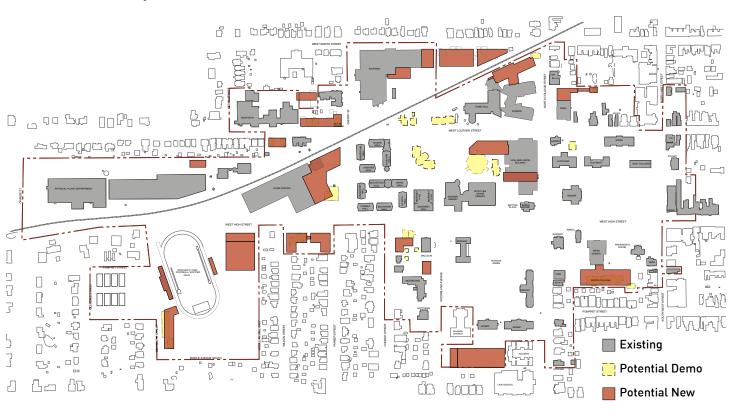
Buildings and open spaces on campus are functionally and aesthetically co-dependent, through circulation, architectural setting, landscape quality, microclimate, and aptitude for social interaction. Consequently, the campus master plan recommendations address buildings and open spaces together.

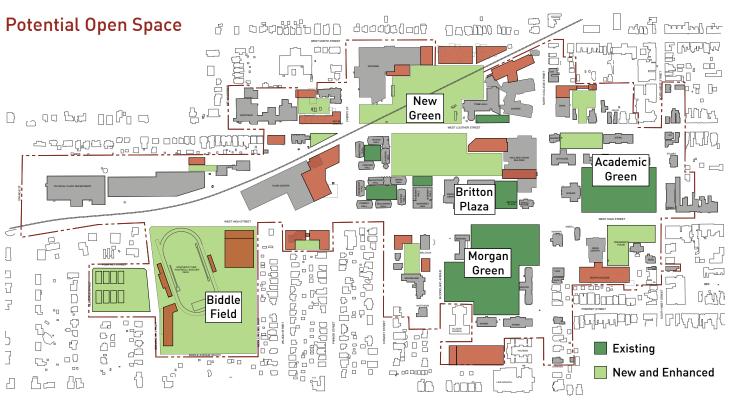
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Draft Final

#### **Potential Development**





## **Open Space Framework**

The enhancement of the campus' existing open space and future development will be guided by a framework of enhanced green corridors, connecting paths, gateways, campus greens and special areas, or nodes.

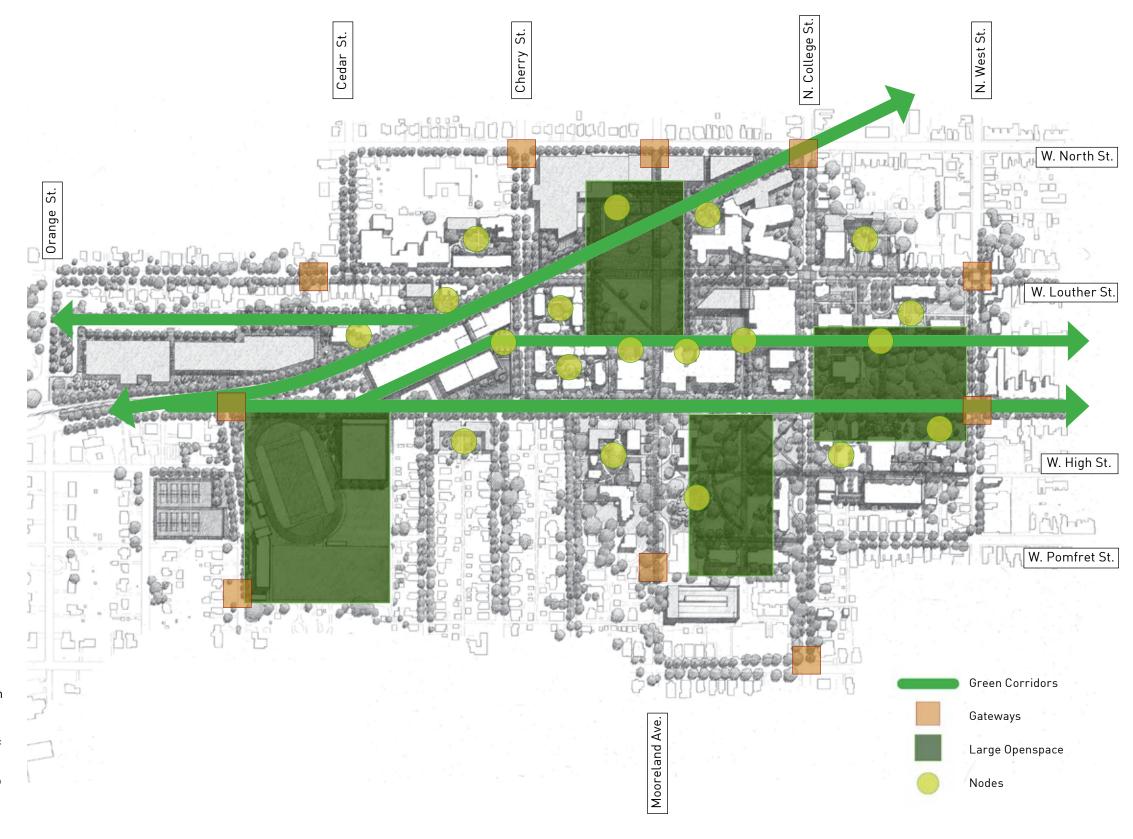
Points of entry to the campus will be identifiable gateways, marking arrival at the campus. 'Nodes' signify concentrations of outdoor activity.

#### Goals for the Landscape Framework:

- 1. Reinforce campus identity within the town and promote campus-town connectivity.
- 2. Create an open space structure that promotes student life and activities around the campus core.
- 3. Promote an accessible pedestrian campus with emphasis on pedestrian safety, security, and ease of movement.
- 4. Promote open space development based on sustainable principles.

#### Preliminary Landscape Opportunities:

- The campus has an extensive interface with the Borough of Carlisle. The thresholds provide an opportunity for new Gateways.
- The strong circulation system within the town fabric can be expanded to realize a pedestrian friendly campus as well as create positive connections to the immediate neighborhood while maintaining the historical context.
- The existing landscape fabric can provide new outdoor places for student life.
- Vegetation can be used to define the Landscape structure of the campus and enhance linkages through the campus. The Railroad ROW offers an opportunity for a "green" core that can function as an ecological connector.
- The Historical Core of the campus: the John Dickinson Campus and The Benjamin Rush Campus still have recognizable characters with mature trees. The Landscape Precincts can be "greened" with the use of appropriate native vegetation.
- Back streets and alleys can be developed creatively to enliven the campus edges.
- Paved parking areas within the campus can be converted to sustainable landscape spaces.
- Efforts of the faculty and the students already underway can be expanded to develop a sustainable approach to Landscape restoration, maintenance and management.

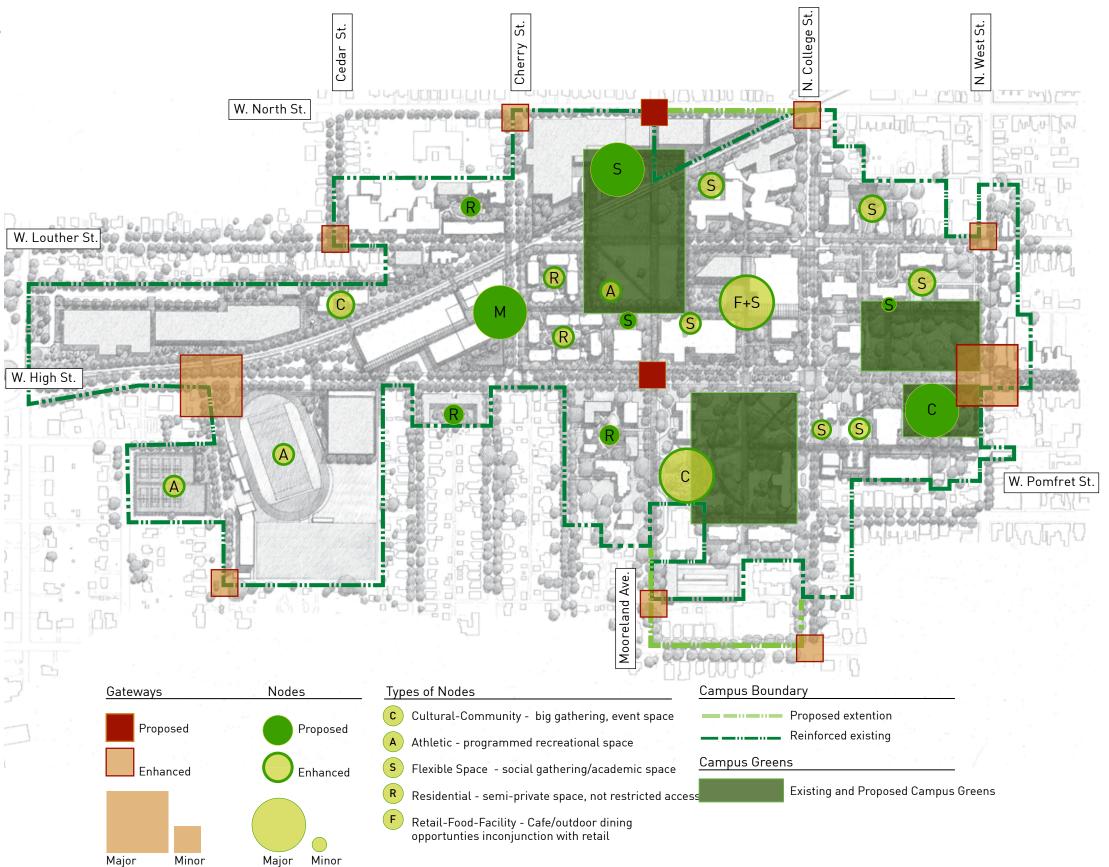


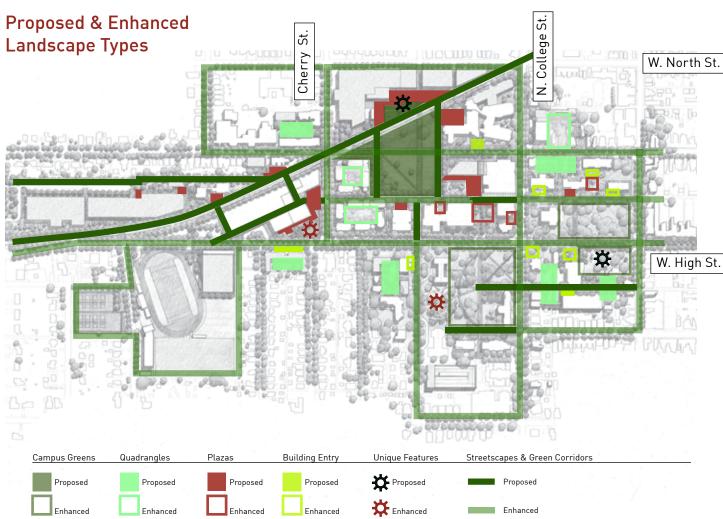
## Proposed Gateways, Nodes, and Boundaries

GATEWAYS mark entrances to the campus and can be used to strengthen campus identity, differentiating College uses.

NODES are outdoor gathering spaces strategically placed at path intersections or adjacent to larger open spaces. Occupation of such spaces enlivens the whole area, and by populating it, places all in public view thus improving public saftey. Nodes may also be associated with building entrances.

- The experience of arrival can be strengthened by marking passage into the campus with special gateway features. The entrance to east campus from High Street at West Street is distinguished by a transition from buildings flanking the sidewalk to open greens and mature trees. Introduction of crosswalks designed to calm traffic would further emphasize this gateway.
- Boundaries can be defined effectively using a suitable landscape vocabulary of hardscape and planting materials without resort to buildings or barriers.
- Sometimes, rather than marking a boundary it is preferable to create a space that can be shared with neighbors for community events and festivals. For instance, the space between the Weiss Center and the President's House could accommodate a sculpture garden that can be opened to the Carlisle community.
- Outdoor dining facilities can be included in the open space system; spaces that could on occasion be used to host community events.
- Consistent use of a palette of materials that are complementary to the historical campus can give visual continuity to the whole.





roadway network and the rail corridor. Since a large part of the campus is a streetscape, converting these into "Green Corridors" will help to integrate pedestrian and bike linkages into the existing right of ways and create a pedestrian friendly campus.

- Create a hierarchy of new gathering spaces and enhance existing spaces along primary, secondary, and tertiary pedestrian routes as well as building entries. These improvements will help to enhance student life near the campus core. Design and location of spaces can be based on use, views, adjacencies, and microclimate considerations.
- Both plantings and architectural elements can be used to enhance the landscape spaces. Landscapes at building entries can provide focal points and act as threshold gardens or transition spaces between the private and public realm.

Promoting a pedestrian friendly campus will involve creating new walkways, consolidating existing ones, improving crosswalks, and providing shaded walkways.

**Proposed Path System** 

#### Strategies:

- Create pedestrian linkages between different neighborhoods of the campus and integrate bike lanes into the circulation system. This will shorten perceived distances and promote a walkable Campus.
- Develop an appropriate hierarchy of paths based on function. This will contribute to ease of pedestrian movement on the Campus and eliminate redundant paths and excess pavement.
- Integrate speed tables or traffic calming structures at pedestrian crosswalks to improve pedestrian safety.

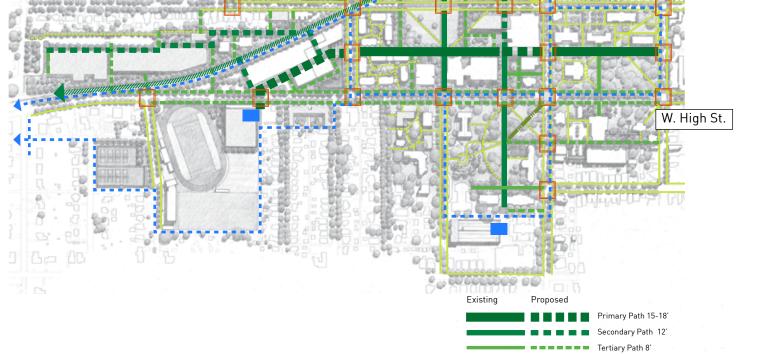
 Develop a comprehensive system of signage within the campus to support an enhanced circulation system. Strategically locate way finding, building, and interpretive signage at "nodes", destinations, intersections, and outdoor sustainability demonstration areas around the campus.

Dickinson College has several unique outdoor spaces like the Historic "Greens", Morgan rocks, and the Pond. Ongoing projects and future campus growth will allow Dickinson to create a new open space structure that integrates the natural structure of the Campus with the existing historic heritage as well as offer opportunities for new special places.

Creating an open space structure will involve enhancing existing landscape types, creating new landscape types, and linking the spaces with pedestrian oriented circulation corridors.

#### Strategies:

- Create new large open spaces and use them as organizing elements to rebalance the campus fabric.
- Integrate a strong pedestrian pathway and a bikeway system into existing circulation corridors like the

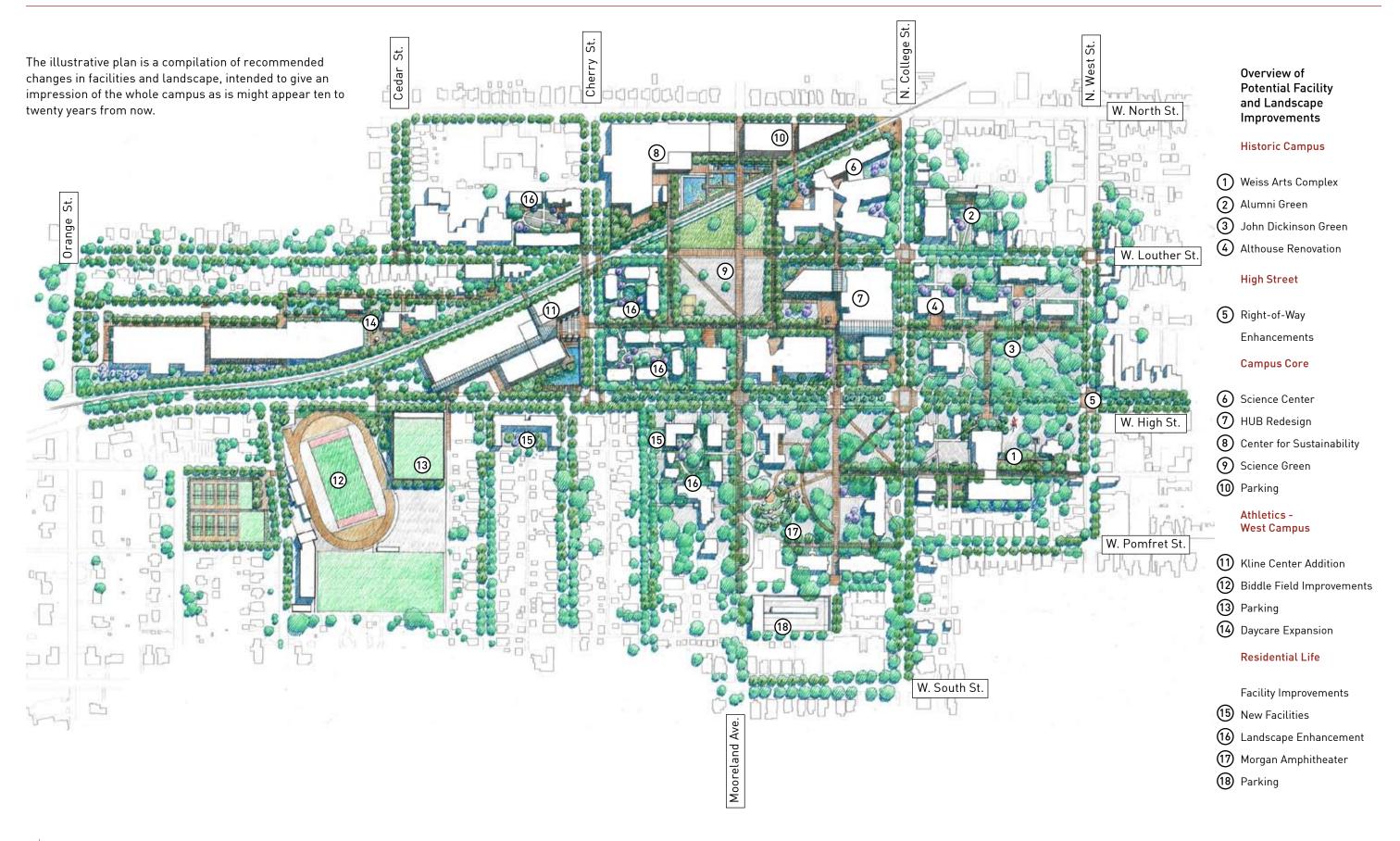


Share car parking and Bike stations

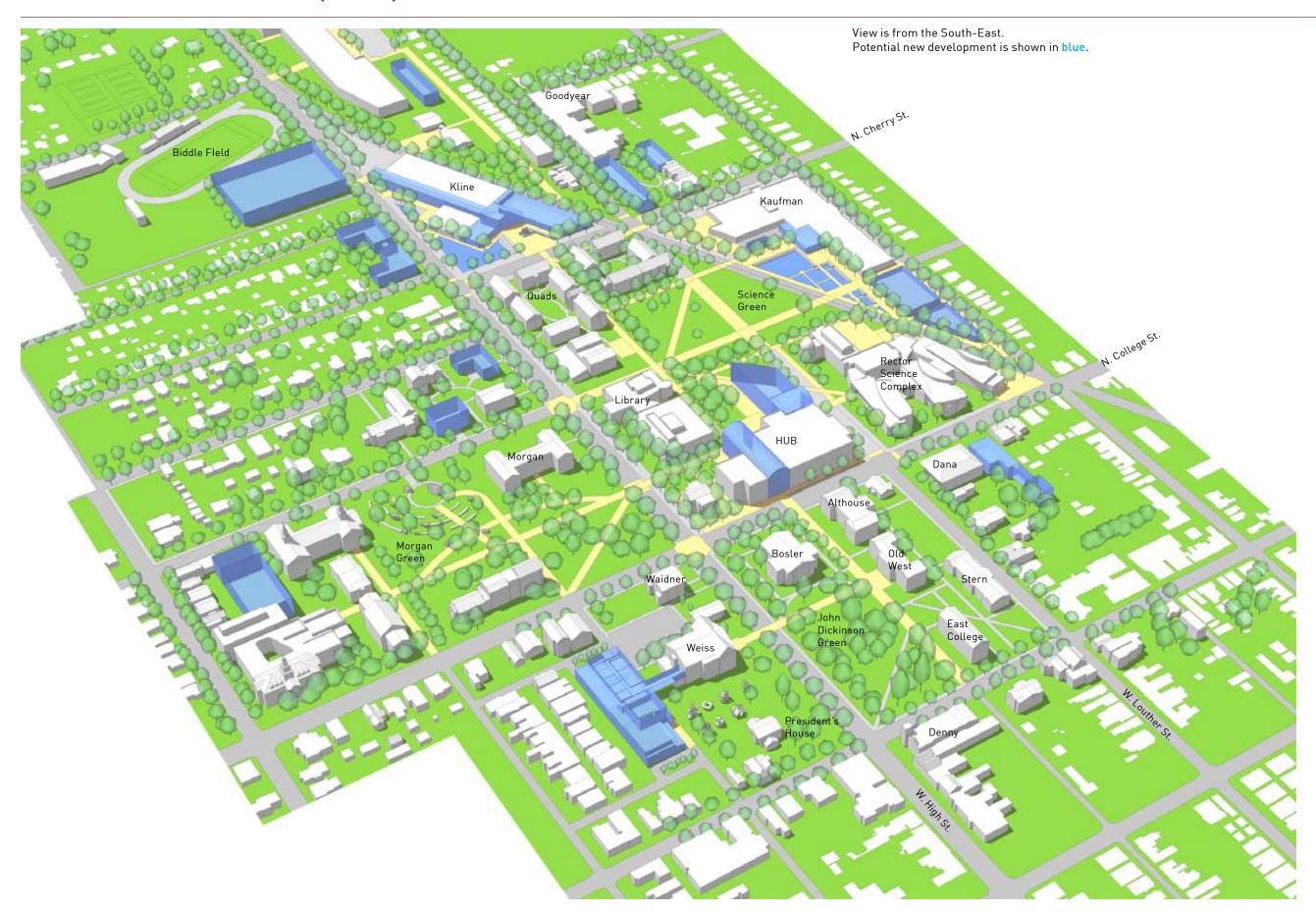
Traffic Calming Device

W. North St.

## Illustrative Plan



# **Aerial View of Potential Campus Improvements**



## The Historic Campus: The Academic Green, East College, South College

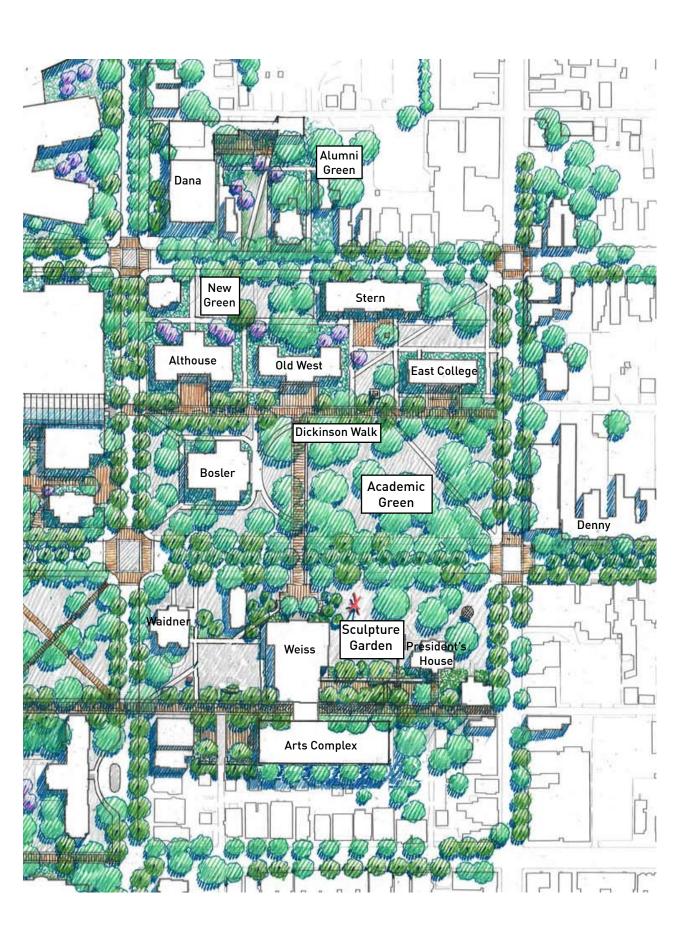
The historic campus epitomizes Dickinson College for many, and the precedents it establishes in architecture and open space design have quite rightly been adhered to in most subsequent expansions of the campus. This does not imply architectural pastiche for new buildings, nor a limitation to mowed lawns and specimen trees for open spaces. However it does demand compatibility with the historic campus in the scale and materials of buildings and in the scale and quality of landscape.

There is an opportunity to create a sculpture garden between the Weiss Center and the President's House. There is also an opportunity to replace performing arts space in ATS with new space complementary to Rubendall Recital Hall.

Removal of the old energy plant north of Althouse provides an opportunity to rethink the use of parking lots north of Althouse and Old West. A place of outdoor congress could be created through some simple landscape interventions south of Stern between Old West and East College.

- Introduce traffic-calming pedestrian crossings at the corner of High Street and West Street, strengthening an important gateway for the Campus.
- Create a sculpture park and an Arts Alley between Weiss Center and the President's House, with outdoor display areas and seating. This pedestrian connection with the town will provide opportunities for interaction at the edge of the campus. Both permanant artwork and temporary exhibits can be displayed.
- Extending Dickinson walk into the John Dickinson Campus will complete pedestrian linkage between the historic part of the Campus and the residential west
- Rearrange the paved areas in the John Dickinson Campus and the Benjamin Rush Campus to enhance open spaces and reduce stormwater runoff.

Note: Preliminary Weiss Art Center studies are in Appendix.





New Green near Althouse and the Quarry



Weiss Center - Sculpture Garden



Stern Center - Landscape Enhancement Example

## The Expanded Core Area: Dickinson Walk, New Green, the HUB, and the Science Campus

Perhaps the most momentous change to the campus will be redefinition of functions and spaces between College and Cherry Streets. The Rector Science Campus will include the entire area between North and Louther Streets. Removal of townhouses on the north side of Louther Street, and of Kisner-Woodward Hall to the south will create a major new open space equivalent in scale to Morgan Green. It will be bisected by Louther Street, but will otherwise present an open green prospect from Dickinson Walk in the south to Kaufman in the north. Reconfiguration of the HUB and removal of ATS and Montgomery Hall will extend the new open space to the southeast giving prominence to the Library and to the eastward extension of Dickinson Walk across College Street to East College and the Academic Green.

#### Strategies:

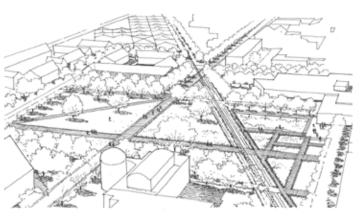
- Dickinson Walk is to be extended from the Kline Athletic Center in the west to Denny Hall at its eastern terminus as the primary east-west pedestrian route through the campus. It will be accessible to emergency vehicles, and limited vehicular access will be allowed during moving in days and for deliveries; otherwise it will be the exclusive preserve of those on foot.
- New plazas, enhanced building entries and variously sized open spaces will be located along Dickinson Walk, providing opportunities for active, social, recreational and contemplative uses.
- The footpath from the Rector Science Campus through the HUB to Morgan Green will create a major new north-south pedestrian route, complementing Dickinson Walk.
- Interruption of cross-campus movements at streets will be reduced by introduction of traffic-calming pedestrian crossings at intersections.
- The railroad corridor is a remnant of Carlisle's past, and may one day carry passenger rail, linking the campus to Harrisburg and elsewhere. In the meantime, it can accommodate a green trail as part of a regional initiative, providing safe passage for hikers and cyclists, as well as a direct route to Dickinson Park.
- A major new open space between Dickinson Walk and Kaufman Hall can include stormwater management features, providing a working landscape that can enrich the academic and social life of the College.

Note: Preliminary HUB studies are in Appendix.

Kaufman Center for Sustainability

#### Science Green

- (1) Housing Green
- (2) Kaufman Meadow
- (3) Kaufman Education Wetlands
- (4) Tome Outdoor Classroom
- (5) Benjamin Rush Walk
- (6) Dickinson Walk
- (7) HUB Plaza
- (8) Dickinson Greenway



Aerial view of Science Green



New landscaping and pathways along Rail-line



Enhanced Pedestrian Spine along Dickinson Walk

## **Athletics and West Campus**

The Kline Center is the most intensely used of the College's athletic facilities, and is appropriately closest to the center of campus. Expansion of the building will create a new entry off Cherry Street and a western terminus to Dickinson Walk.

Creation of a trail along the railroad corridor will give direct access from the campus to Dickinson Park for pedestrians and cyclists. Improved pedestrian crossings on High Street will ease access to Herman Bosler Biddle Athletic Fields. Parking is necessary for events here and at the Kline Center, so a multi-story parking garage is proposed on the site of the tennis courts, which would be relocated further west. This garage will also serve every day access to the campus without bringing cars into the campus or occupying precious open space.

Both recreational and competitive athletics are important components of the Dickinson experience. Proposed expansion of Kline Center would make Athletics more visible, with a new lobby terminating the extended Dickinson Walk. Parking displaced by the building expansion would be relocated to a new multi-story garage across High Street. Surface parking at the west end of Kline would continue to be used until addition of another indoor court becomes necessary on that site.

#### Strategies:

- Terminate Dickinson Walk in the new Kline Center lobby.
- Link the Kline Center directly to the proposed green trail in the railroad corridor, providing access to Dickinson Park.
- Implement such Best Management Practices (BMP's)
  as pervious pavement, storage cisterns, and rain
  gardens, incorporating them into the transitional
  landscape fragments. These initiatives will not only
  provide the essential ecosystem functions but will
  also enhance the identity of Dickinson within the
  Borough.
- Create paths that link various athletic facilities to expand the pedestrian network. Linking these paths and nodes to bike routes make alternatives to driving more attractive.

Note: Preliminary Kline Center studies are in Appendix.

