

Penn State  
**Lehigh Valley**



Campus Exterior Architectural Plan  
January 2008

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## Introduction and purpose

Penn State's Mission:

***Penn State is a multi-campus public land-grant university that improves the lives of the people of Pennsylvania, the nation, and the world through integrated, high-quality programs in teaching, research, and service.***

To assist in achieving this mission, a Campus Exterior Architecture Plan, know as a CEAP, has been developed to suggest ways to improve the exterior aesthetic qualities of campus with low-cost and easy-to-implement concepts that can have meaningful impacts. The CEAP is a planning tool that is an outgrowth of the campus master planning process.

The CEAP includes graphic and narrative descriptions of existing conditions on campus and a list of improvement concepts. Positive features may also be identified as elements to emulate.

The improvement concepts are ranked and prioritized according to their visual impact and estimated cost. The concepts are not final designs. Further study and design are required prior to implementation.

# Existing Conditions Inventory

## Background:

A walking tour focused on assessment of the campus exterior established the foundation for the recommendations and concepts contained in this CEAP document.

## General Observations:

The campus is situated in a suburban location amidst well cared for residential properties. Isolation from busy streets and commercial activity contribute to the intimate, park-like feeling of the campus. The buildings and grounds are well maintained and demonstrate to students, faculty and staff as well as the general public a genuine concern for their welfare.

The sloping topographic character of the campus affords distant panoramic views to the south. Despite its visual interest, the sloping topography poses challenges to pedestrian movement. Circulation from parking lots to the Academic Building are uncomfortably steep necessitating the placement of a continuous handrail. A distracting variety of walkway surface materials are present.

Parking lots are well illuminated and sufficiently landscaped. The lots are located and organized to minimize pedestrian conflicts.

In addition to an abundance of informal outdoor activity space the campus has developed a patio area for organized activities. It is noted that the patio is not furnished for seating.

The abundant use of perennial and annual flowering plant materials is noted.

# Architecture

Existing Conditions Inventory



Major architectural modifications, additions, and new construction are beyond the scope of this CEAP.

However, the aesthetic character of campus is defined to a great extent by the structures that comprised it. The campus architectural style can be categorized as modern.



# Site Furnishings

## Existing Conditions Inventory

Site furnishings play an important role in strengthening and unifying campus appearance. Existing furnishings are too diverse in style, color, material and quality.



# Lighting

Existing Conditions Inventory



Exterior light styles are uniform across the campus.

Note that the use of cut-off optics are recommended to diminish the effect of light trespass and glare.

Metal halide lamps are also recommended for the quality of illumination they provide.

# Signage

## Existing Conditions Inventory

Campus identification, directional and building identification signs should reflect the University standard.





# Landscape

Existing Conditions Inventory

The landscape of the campus is characterized by large sloping lawn expanses. Ornamental shrub plantings are conservative. The abundant use of perennial and annual flowers is noted. Turf areas appear to be weed-free and well maintained.



# Pedestrian Circulation

Existing Conditions Inventory

Pedestrian circulation routes follow logical and efficient lines between destinations. The topographic condition has required the use of exterior stairs and uncomfortably sloping walkways.

The use of asphalt surfacing material diminishes the aesthetic quality of major pedestrian routes.

The practice of painting symbols on walkways is discouraged.



# Improvement Concepts

The following figures describe and illustrate possible solutions to specific aesthetic and functional shortcomings on campus, most of which are addressable through the CEAP program. In addition to the recommendations that follow, there are routine maintenance tasks that will enhance the aesthetic appeal of campus. Suggestions include:

- Mulch landscape beds annually
- Eradicate weeds and other invasive vegetation
- Fertilize lawn areas
- Re-seed lawn areas adjacent to walkways that are killed by winter salt
- Limit the use of annual and perennial plantings to manageable locations
- Re-stripe parking areas and cross-walks

An implementation priority matrix has been prepared that lists improvement concepts and recommends the order in which they could be executed. The implementation ranking is intended as a guideline for realizing the most significant impacts early in the plan implementation. It should be noted that some of the recommendations will require additional design and documentation prior to implementation. Office of Physical Plant staff may be available to assist in these efforts.

Location specific concepts/projects are keyed to the campus map with color and number corresponding to the listing on the matrix at the end of this report.

# 1a

## Powerwash

Improvement Recommendation



Existing

Airborne dirt accumulates on building surfaces over time. Discoloration is particularly noticeable on light colored surfaces.

Recommend that all masonry building facades be pressure washed to remove discolorations



Existing

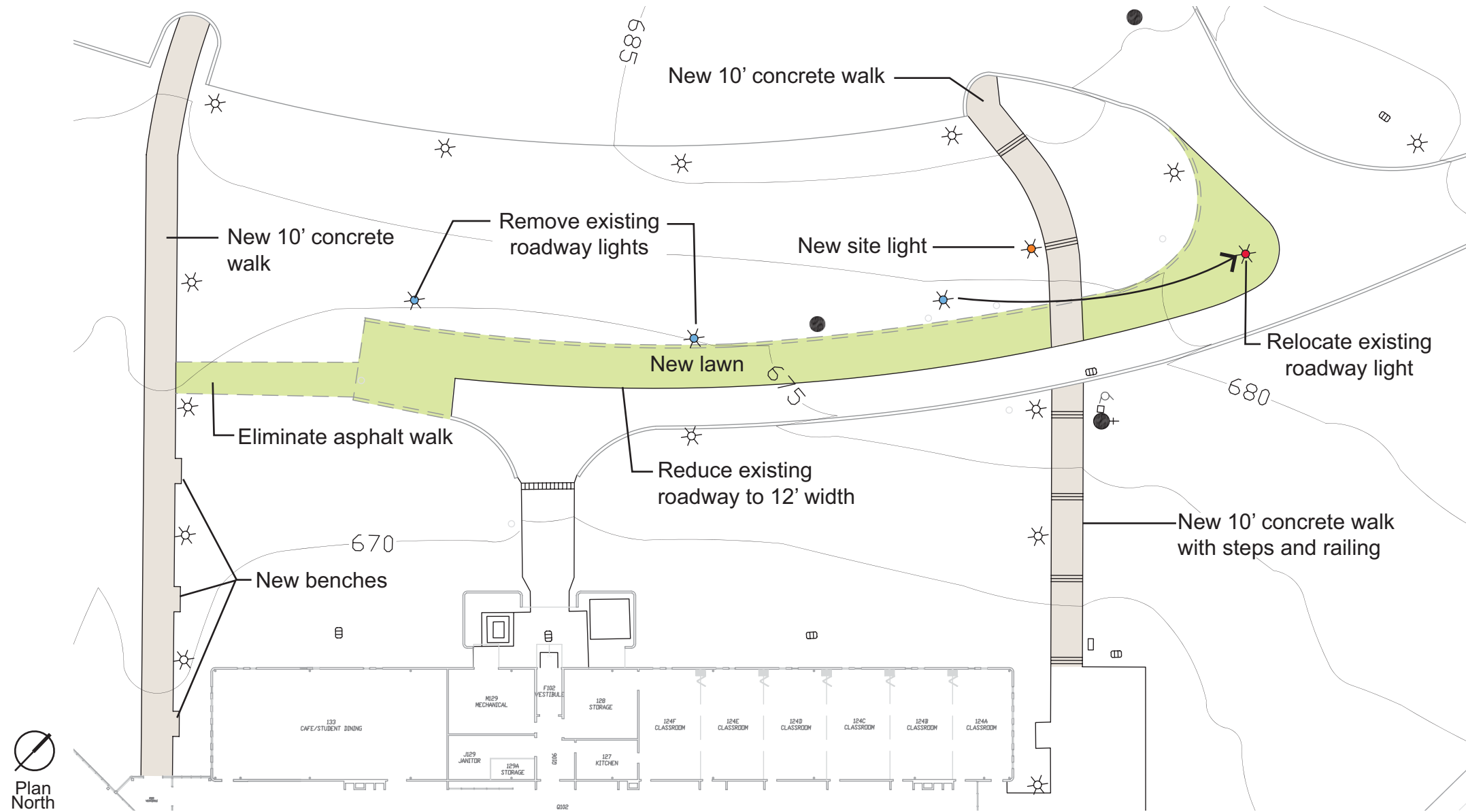
# Pavement Modifications 2a

Improvement Recommendation

Various pavement modification opportunities exist that will enhance the visual quality of campus as well as reduce excess impervious surfaces.

Paved access to the service area at the Academic Building must be maintained. However the width of the drive could easily be reduced by 50%. The head of the island separating the parking lot from the service drive can be expanded to provide a "greener" view to users entering the campus from Mohr Lane. This modification will also facilitate the removal and/ or relocation of several light fixtures.

This figure also illustrates in plan view, the replacement of asphalt walk surfaces with concrete and stairs as required. These projects are also illustrated on Figures 2b & 2c.



Existing

# South Entrance Walk <sup>2b</sup>

Improvement Recommendation

The existing walkway to the south entrance of the Academic Building should mimic the north entrance walk. Due to a gentler slope there is no need for stairs or railings.

Recommend the replacement of the asphalt surface with concrete, a more refined and clean looking material. Placement of benches along the walk is also recommended.

See Figure 2d for patio development opportunity at the entrance to the building.



After



Before

# North Entrance Walk <sup>2c</sup>

Improvement Recommendation



Before



After

The asphalt walkway that leads campus users to the Academic Building is sloped in excess of 10% necessitating the placement of a continuous handrail the length of the walk. The excessive slope makes the walk uncomfortable as well as hazardous.

Recommend the replacement of the existing walk with concrete and a series of stairs to more gently transition the grade. The existing continuous handrail can be removed.

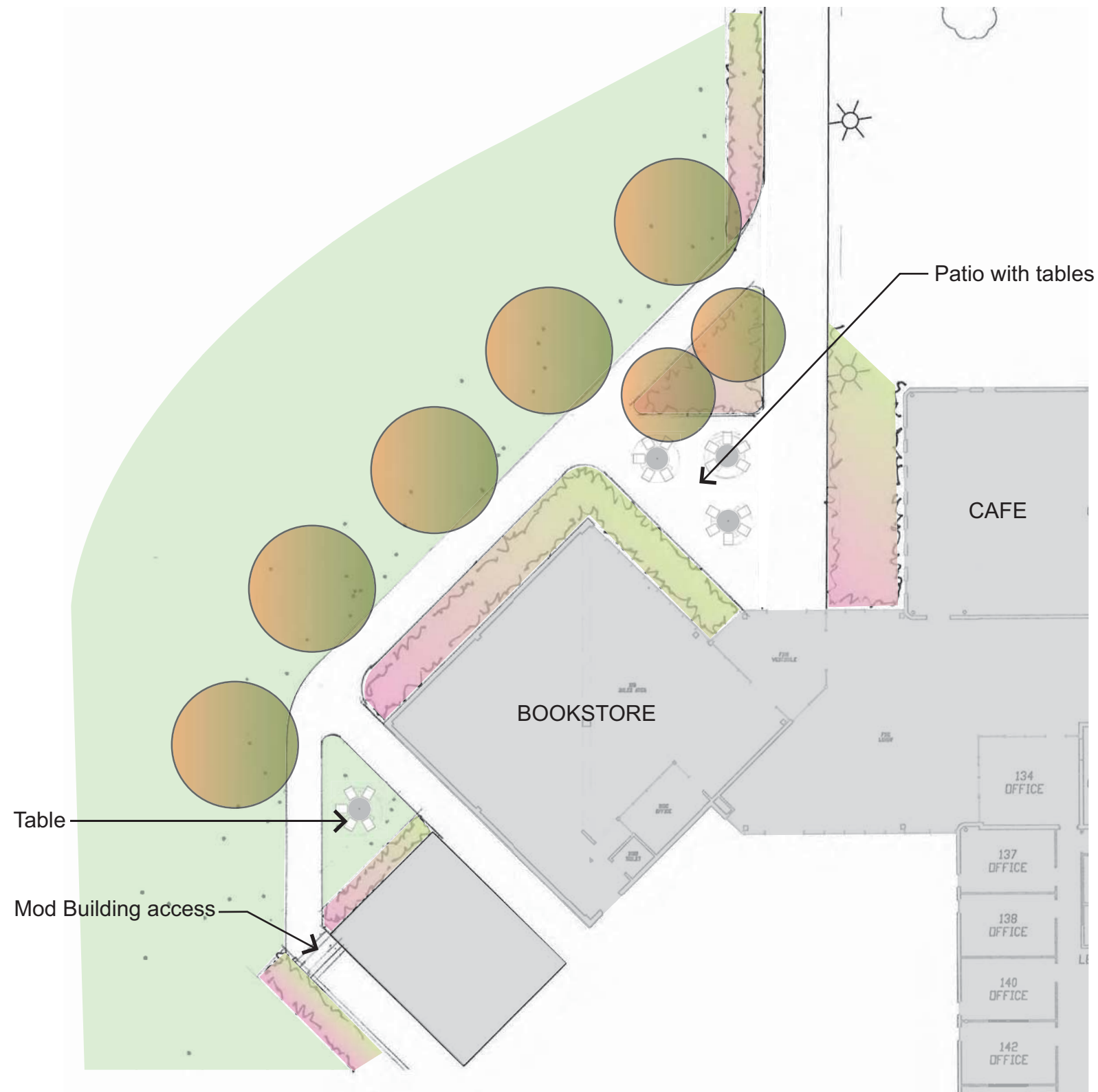
Supplemental landscaping along the walk will strengthen the sense of entry.

# South Patio 2d

Improvement Recommendation

There is a shortage of outdoor seating areas at the campus. The opportunity exists to provide a patio furnished with tables adjacent to the south entrance of the Academic Building. This location is in close proximity to the cafe and bookstore.

An alternate pedestrian route to the Mod/Pictel Building is also proposed.





# Fitness Center Walkway 2e

Improvement Recommendation

Pedestrian access to the Fitness Center and tennis courts from the main campus south of Mohr Lane is incomplete.

Recommend the installation of a concrete sidewalk to complete the pedestrian connection. Additional improvements include replacement of the existing flood light with a new walkway light and striped crosswalk on Mohr Lane.



Install new concrete sidewalk and stripe crosswalk



Existing

Replace existing floodlight with campus standard walkway light



# Shrub Removal 3a

Improvement Recommendation



Existing

Existing shrub plantings at the corner of the Academic Building no longer possess the ornamental value they once had.

Recommend removal of overgrown plants to improve visibility to building. Continued pruning/maintenance of trees in this area is recommended.



# Tree Removal 3b

Improvement Recommendation

Existing Sycamore trees in parking lot island exhibit severe die-back condition compromising the value of the specimens.

Recommend removal and replacement. Prior to re-planting it is recommended that the soil condition be assessed to determine suitability as growing medium.



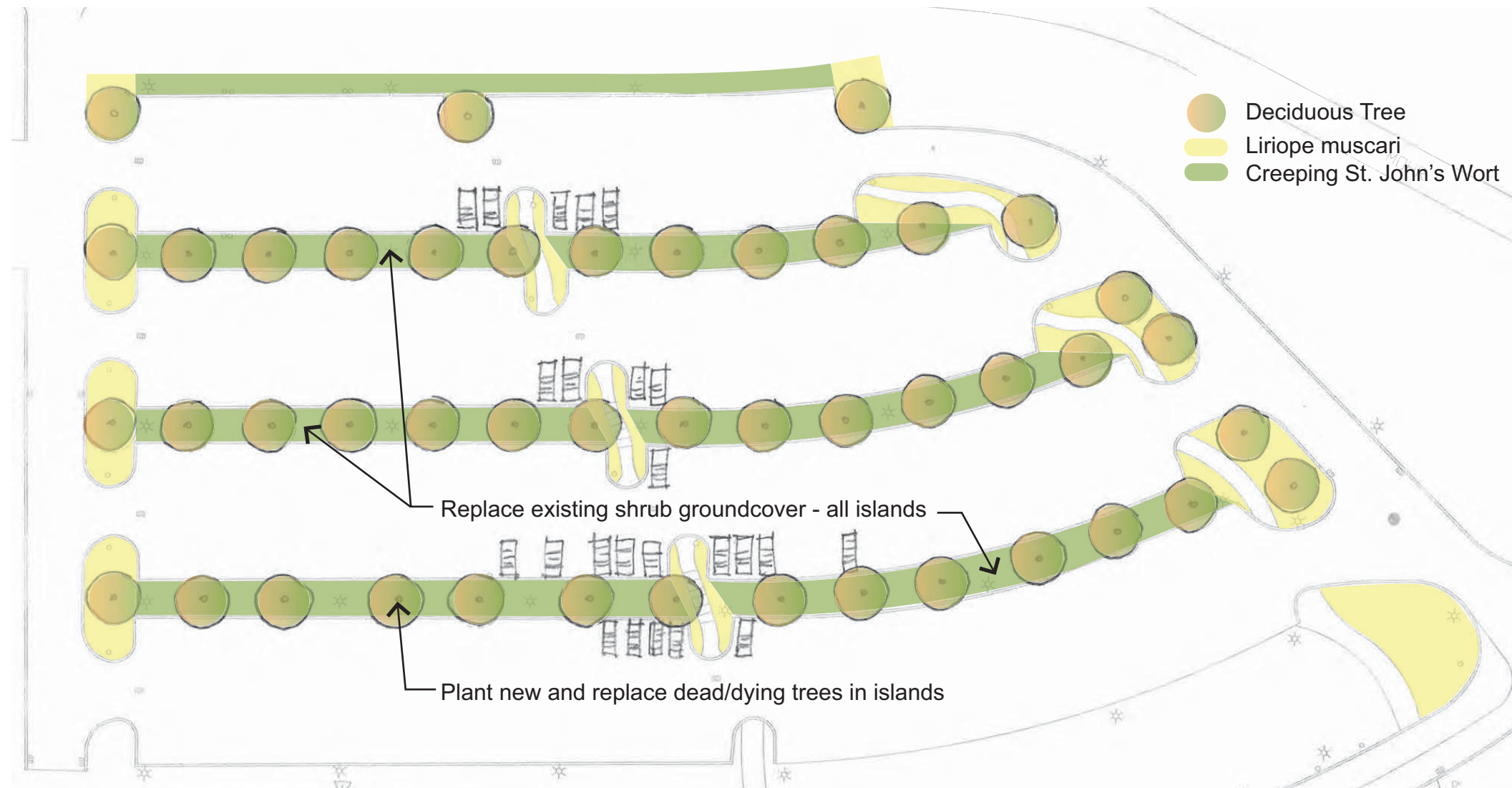
Existing

# Island Landscaping 3C

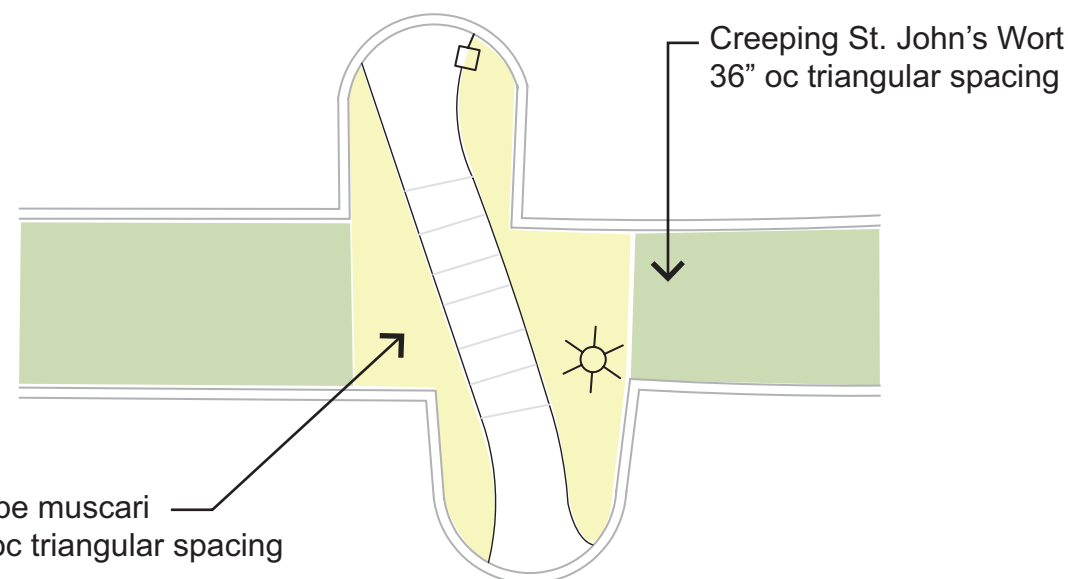
Improvement Recommendation

Existing groundcover vegetation in the parking lot islands traps debris and attracts bees. In addition, there's an absence of tree planting within the islands.

Recommend the replacement of existing vegetation with varieties described on the plan. Prior to any new landscape installations it will be necessary to conduct soils testing to determine suitability for sustaining new plantings.



Liriope muscari  
16" oc triangular spacing



Creeping St. John's Wort  
36" oc triangular spacing

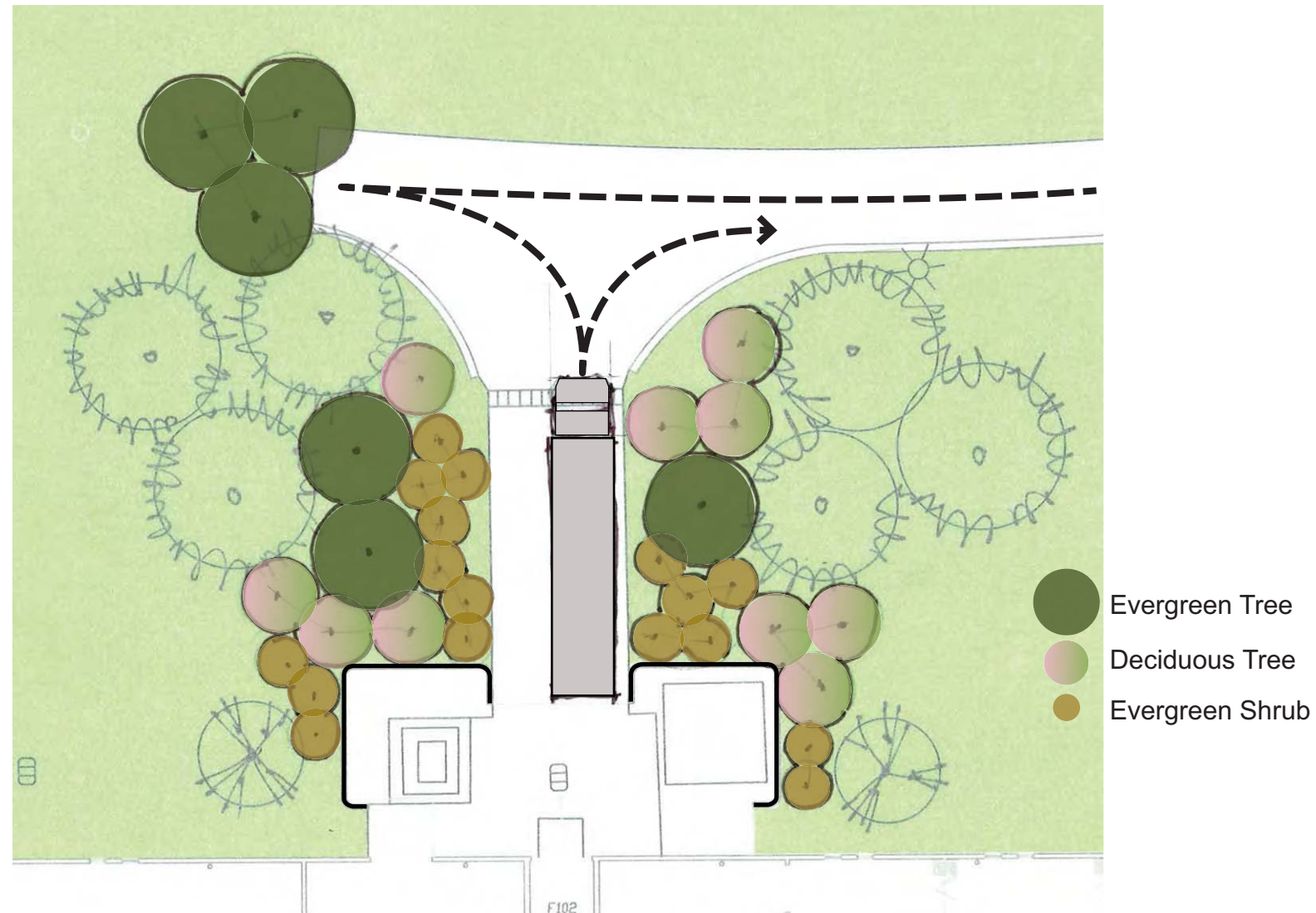


# Service Dock Screening 3d

Improvement Recommendation

The functionality of this service area must be maintained. Delivery trucks and waste handling equipment pose challenges to the aesthetic quality of the space.

The improvement of this area involves the relocation of dumpsters (see Fig. 3e) and reduction of asphalt paving. The screening effect of the existing masonry walls surrounding the dock can be enhanced by additional planting.



Existing

TOWNSHIP

ROAD

# Garage Screening 3e

Improvement Recommendation

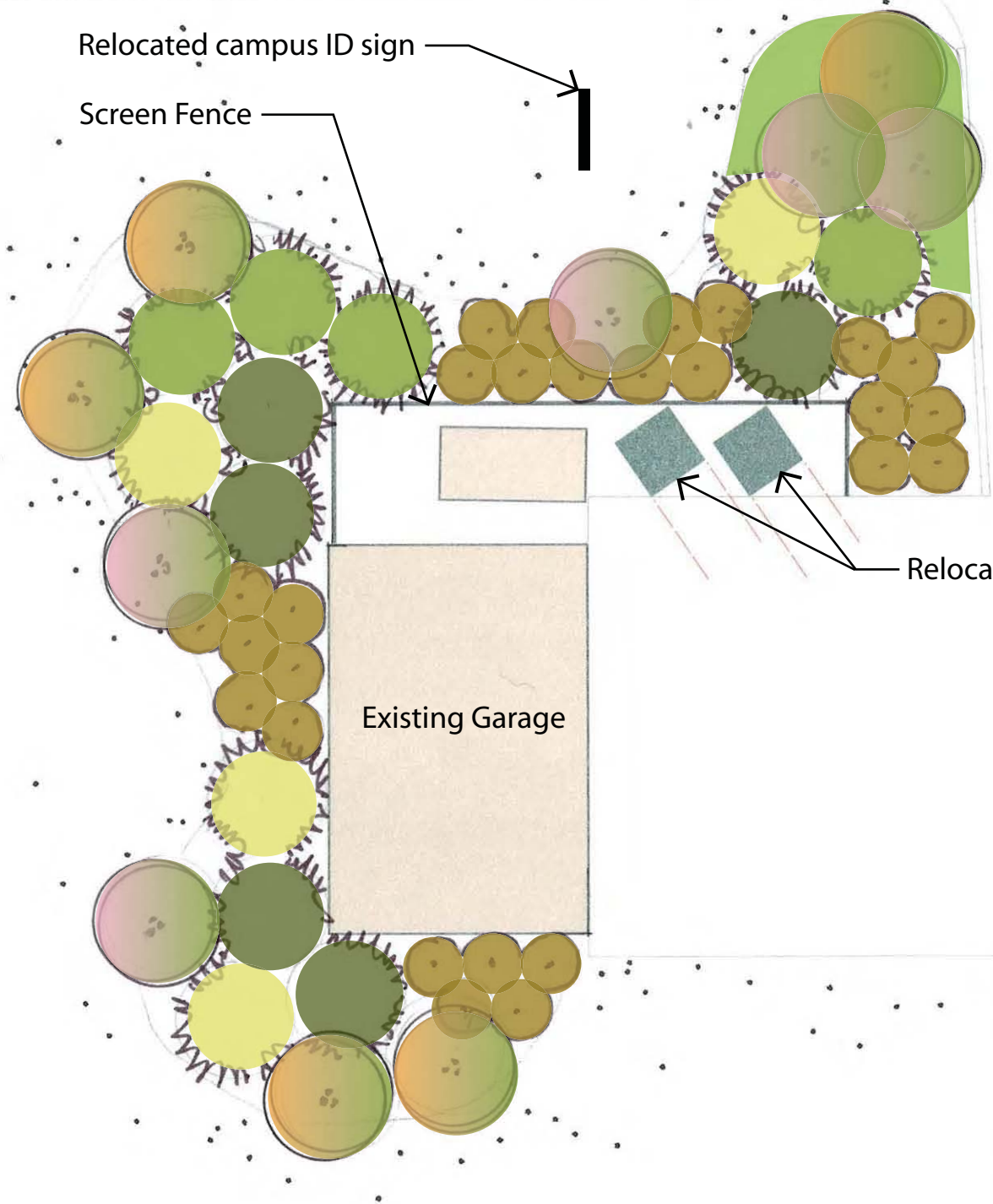
The view of campus from the eastbound approach along Twp. Rd. 609 is dominated by the maintenance garage and storage shed. This vantage point may be the initial impression of campus to visitors.

Recommend that trash dumpsters be relocated to this area from the front of the Academic Building.

All structures should be densely screened with fence, evergreen trees and shrubs and accented with deciduous trees.



Screen fence fabricated from painted steel tube posts, and frame with recycled lumber planks.










Relocated trash dumpsters

Existing Garage

Relocated campus ID sign

Screen Fence

### PLANT LEGEND

-  River Birch, clump form, 10'-12' height
-  River Birch, clump form, 14'-16' height
-  Deodar Cedar, 6' height
-  Deodar Cedar, 8' height
-  Deodar Cedar, 10' height
-  Northern Bayberry, 12"-24" height
-  Gro-Low Sumac, 18"-24" Spread, 30" o.c. tri. spacing

# Garage Screening

Improvement Recommendation



After



Before

# Campus Identification Sign 4a

Improvement Recommendation

One objective of the CEAP program is to unify the Penn State “brand” across the state. The signature mark of the campus should be displayed using standard colors and typeface. The main entrance sign is typically located near the primary campus entrance as a directional cue in addition to identifying the campus.

Recommend the installation of a new sign on a masonry structure. The illustration depicts the size, scale and proportion being recommended. The graphics on the following pages simulate the appearance of the sign from the eastbound and westbound vehicular approaches.



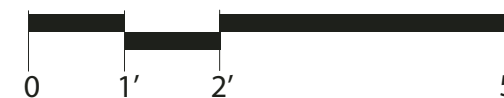
## New Entrance Sign

### Sign fabrication

Masonry sign structure (CMU core, stone veneer, cast stone cap)

Painted aluminum backer pan with pin mounted letters and shield mounted to wall face (2 sides).

Sign to oriented perpendicular to Mohr Lane.



Colors and format of the mark are carefully specified to ensure consistency across the University system.

See Penn State Signage Standards Manual and Penn State Graphic Identity System.

<http://www.opp.psu.edu/construction/standards/signage/index.cfm>

[http://publications.psu.edu/graph\\_ident\\_system/graphunivmk.html](http://publications.psu.edu/graph_ident_system/graphunivmk.html)

Campus Signature Mark layout and composition to be based on 7" letter height.



Existing campus identification sign



# Entrance Sign East View

Improvement Recommendation



After



Before

# Entrance Sign West View

Improvement Recommendation



After



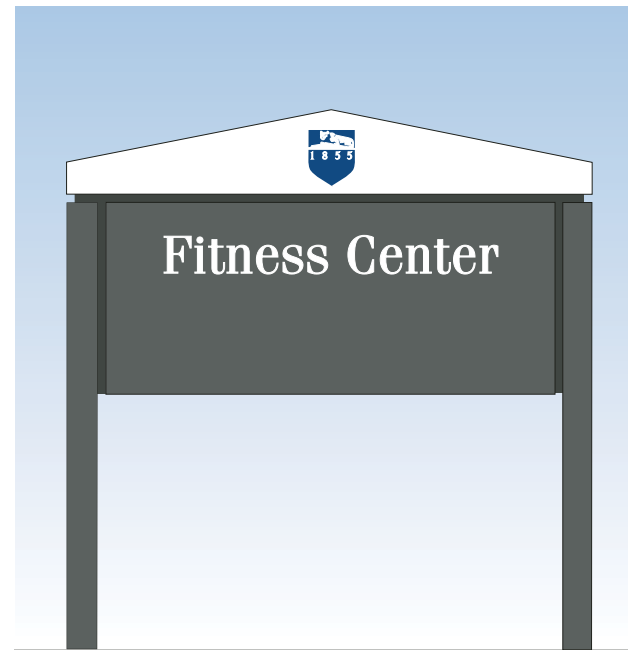
Before

# Directional Signage <sup>4b</sup>

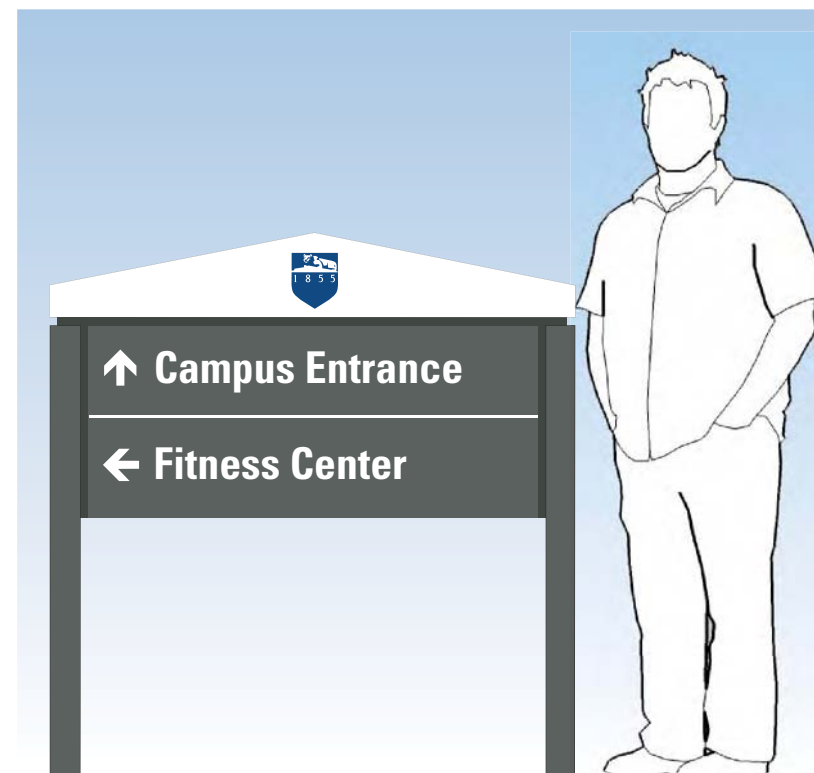
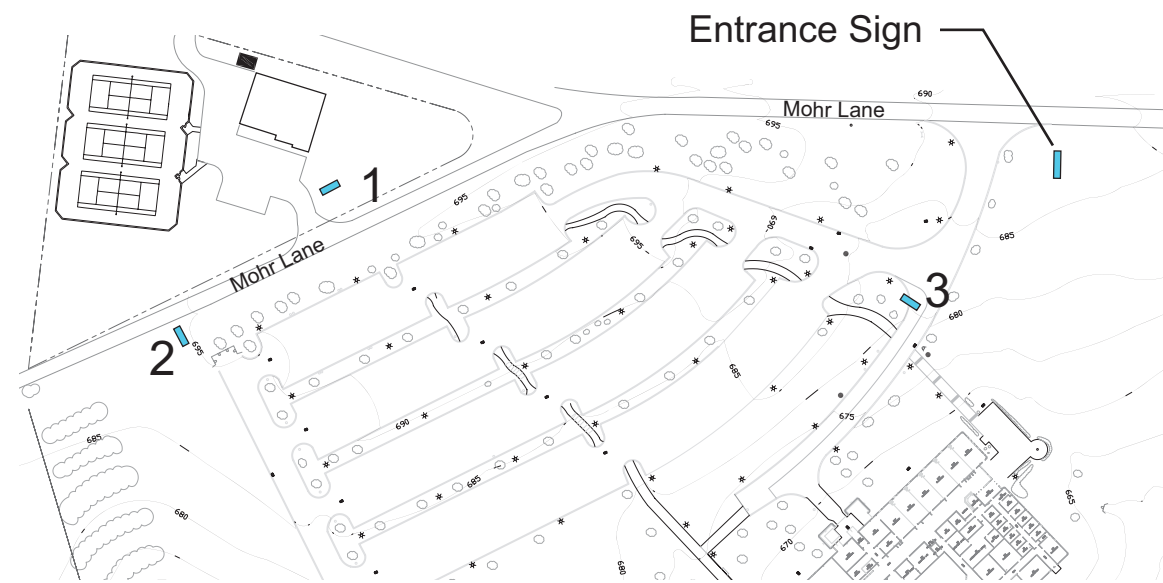
Improvement Recommendation

Directional signage to assist visitors in locating the campus entrance are proposed.

These mock-ups illustrate size, scale and content of directional signs. Graphic standards referenced on Figure 4a apply to these signs as well.



1 Building Identification Sign  
Single-sided parallel to Mohr Lane



2 Directional Sign  
Single-sided perpendicular to Mohr Lane



3 Directional Sign  
Single-sided perpendicular to entrance drive

# 4c Site Furnishings Improvement Recommendation



Site furnishings surrounding the Academic Building are mismatched stylistically.

Recommend the replacement of all benches, tables, trash receptacles and movable planters with appropriately scaled furnishings from a stylistic "family" to unify the aesthetics of the campus exterior.

It is also noted that the garden space south of the Academic Building is not suitably furnished for seating. The bench style illustrated here is available in curved segments that can be integrated into the masonry cove walls that presently exist. The walls themselves are too high and narrow to provide comfortable seating.



# Sign Removal 4d

Improvement Recommendation

Existing campus identification signs do not comply with University signage and graphic standards.

Recommend the removal of antiquated signage and replacement with new.



Existing



Existing

# Site Lights <sup>4e</sup>

Improvement Recommendation



Existing site lights at the campus are stylistically uniform and most are in good working order. However, the type of luminaire does not provide a cut-off refractor to prevent light pollution and excess glare.

If and when the manufacturer produces a retrofit that will provide illumination cut-off it is recommended that the existing fixtures on campus be modified. Metal halide lamping is also advised due to the quality of the light produced.

# Stair Railing 4f

Improvement Recommendation

Safety codes mandate the placement of handrails on the outside edges of exterior stairs.

New handrails should match existing designs on campus.



Existing



# Drainage Mitigation 4g

Improvement Recommendation



Existing



The existing asphalt lined swale at the discharge end of the storm sewer is problematic on several levels. In addition to being unsightly, the current condition is a maintenance problem.

The remedy to the current condition is installation of a storm sewer junction box at the end of the existing pipe and a new underground conveyance to a discharge location down slope. The outlet of the new pipe will require soil stabilization to prevent erosion at this water concentration point.



# Project Key Map



## Architectural

1a Powerwash

## Circulation

2a Pavement Modification  
 2b South Entrance Walk  
 2c North Entrance Walk  
 2d South Patio

## Landscape Planting

3a Shrub Removal  
 3b Tree Removal  
 3c Island Landscaping  
 3d Service Dock Screening  
 3e Garage Screening

## Miscellaneous

4a Campus Identification Sign  
 4b Directional Signage  
 4c Site Furnishings  
 4d Sign Removal  
 4e Site Lights  
 4f Stair Railings  
 4g Drainage Mitigation

2a 4b 4c 4e Campus Wide



Penn State Lehigh Valley  
 Campus Exterior Architectural Plan  
 Project Prioritization Matrix  
 Spring 2008

Proposed exterior improvement projects have been assessed with respect to the following criteria and assigned an implementation priority value.

Criteria include:

**Visual Impact** - degree to which the project improves the visual quality of the campus

**Cost** - level of capital investment required to implement the project (assumes no volunteer or donor contribution)

The projects with the highest numeric score should be given the highest priority for implementation

#	PROJECT	VISUAL IMPACT				COST			SCORE
		1	2	3	4	1	2	3	
1a	Academic Bldg. powerwash				X			X	7
2a	Pavement Modifications				X	X			5
2b	South Entrance Walk				X	X			5
2c	North Entrance Walk				X	X			5
2d	South Patio			X		X			4
2e	Fitness Center Walk			X			X		5
3a	Shrub Removal				X			X	7
3b	Tree Removal			X				X	5
3c	Parking Island Landscape			X			X		5
3d	Service Dock Screening			X				X	6
3e	Garage Screening				X		X		6
4a	Campus Identification Sign				X		X		6
4b	Directional Signage			X				X	6
4c	Site Furnishings				X	X			5
4d	Sign Removal				X			X	7
4e	Site Lights			X		X			4
4f	Stair Railing	X						X	4
4g	Drainage Mitigation			X				X	6

Note:

Cost ranges identified in this matrix are for planning purposes only. Actual costs will be dependent upon fully developed plans for the respective project. Some of the projects listed above can be broken down into smaller pieces and implemented in phases.