

Penn State
Erie
The Behrend College



Campus Exterior Architectural Plan
January 2008

Contents

Introduction and Purpose

Existing Conditions Inventory

Improvement Recommendations



Campus Map



- 1 Benson Building
- 2 Bookstore
- 3 Carriage House
- 4 Dobbins Dining Hall
- 5 Erie Hall
- 6 Fasenmyer Building
- 7 Glenhill Farmhouse
- 8 Hammermill / Zurn Building
- 9 Junker Center
- 10 Kochel Center
- 11 Lilley Library
- 12 Maintenance Building
- 13 Nick Building
- 14 Otto Behrend Science Building
- 15 Prischak Building
- 16 Reed Union Building
- 17 Research & Economic Development Center (REDC)
- 18 Smith Chapel & carillon
- 19 Stair tower
- 20 Studio Theatre
- 21 Turnbull Hall
- 22 Witkowski Building
- 23 Almy Hall
- 24 Lawrence Hall
- 25 Niagara Hall
- 26 Ohio Hall
- 27 Perry Hall
- 28 Porcupine Hall
- 29 Senat Hall
- 30 Tiffany Hall
- 31 Tigress Hall
- 32 Apartments

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 between Lake Erie and I-90 in Harborcreek Township. Growth of the physical plant at the campus has radiated from the Glenhill Farmhouse complex that houses campus administration. 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 has created intermittent drainage ways and deeply carved gorges that offer a unique beauty. Distant views of Lake Erie are possible from many vantage points on the campus. Despite its visual interest and beauty, the sloping wooded topography of the campus imposes challenges to pedestrian movement. Major circulation corridors have been developed that parallel the topography where possible. Still, exterior stairs and non-ADA compliant walkways challenge even the fully ambulatory user. Opportunities exist to modify alignments and surface materials to visually unify buildings and better organize exterior space. Maintenance, operational and environmental efficiencies could be realized by consolidating and reducing unnecessary, redundant and excessive paved surfaces.

The academic buildings have been developed along an east/west axis midway up the hillside of campus. Parking and athletic fields occupy the flatter low lying areas and student housing and parking are located at the highest elevations on campus. Athletic, academic and residential areas are well defined and distinct.

Natural open space areas are prevalent. Improved outdoor gathering spaces suitable for organized activities are limited. With few exceptions parking facilities are suitably located on the campus perimeter minimizing conflicts with pedestrians. A comprehensive signage and wayfinding master plan is currently in the implementation stage.

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. Brick and stone materials and metal roofs to shed snow are common on the campus.

With the exception of the Glenhill Farmhouse and surrounding cottages, the campus architectural style can be categorized as modern.



Site Furnishings

Existing Conditions Inventory

The campus is sparsely furnished with benches and trash receptacles. With the exception of a few benches like the one in the photo at left, existing site furnishings are not comparable to the high quality of buildings on campus. Aesthetic continuity and unity can be enhanced through the use of a stylistically appropriate “family” of furnishings.



The use of wooden post & chain to direct pedestrian and vehicular flow should be minimized. Where its use is deemed necessary, the post and chain should compliment the style and quality of other site furnishings.



Lighting

Existing Conditions Inventory

Exterior light styles are uniform across the campus for the most part. Outdated pedestrian walkway and parking lot light fixtures should continue to be replaced with the existing campus standard. Note that the use of cut-off optics are recommended to diminish the effect of light trespass and glare.



Signage

Existing Conditions Inventory

A comprehensive wayfinding and signage program has been completed for the campus and is partially installed. Signage is critically important in conveying not only necessary information but also in establishing and perpetuating the brand image of the University as a whole.



Landscape

Existing Conditions Inventory

The landscape of the campus is characterized by large lawn expanses and densely wooded areas.

Ornamental shrub plantings are conservative.

Opportunities exist for the limited use of perennial and annual flower color. Turf areas appear to be weed-free and well maintained.



Pedestrian Circulation

Existing Conditions Inventory



Pedestrian circulation routes across campus follow logical and efficient lines between destinations. Topographic extremes have required the use of exterior stairs and enclosed vertical circulation towers. As a result of weather extremes and the need for the use of de-icing materials, it has been difficult to maintain conventional concrete surfacing.



A campus design standard of asphaltic material for the construction of new and replacement of existing walkways is recommended. To avoid the expense of construction, maintenance and adverse aesthetic impact it is recommended that walkway width standards be developed and implemented at the campus.



Unique Features

Existing Conditions Inventory

The expansive limits of the campus and varied landscapes are unique features in and of themselves at Behrend.

Fully developed athletic fields accommodate active recreational needs. Passive recreational opportunities are also prevalent within the confines of the campus.



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
- Seal and 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.

Reed NW Entrance 1a

Improvement Recommendation



The northwest entrance to Reed Building is severely austere and does not visually represent the significance of the entrance.

Recommend that the existing roof structure and support posts be modified/enhanced to strengthen the visual character of the entrance.

In addition to the architectural modification, it is recommended that excessive paved areas at the entrance be reduced and landscape planting increased.

The opportunity exists for the placement of site furnishings to support the use.

Site lighting in the area should be upgraded to the campus standard.

Additional signage is also recommended to identify the name and use of the building.



Existing

Reed S Entrance

Improvement Recommendation

1b



As with the northwest entrance to Reed Building (see 1a), this entrance is also severely austere and does not visually communicate the significance of the entrance.

Recommend that the existing roof structure and support posts be modified/enhanced to strengthen the visual character of the entrance. The design and detail of the modification should be consistent with modifications to the northwest entrance. Design cues may be borrowed from the existing north entrance to the building.

Paved areas at the entrance should be integrated into proposed improvement to the open space adjacent to the building. The opportunity exists to provide seating for outdoor dining (see 2h).

Campus standard site furnishings should be integrated into this heavily trafficed area.



Existing



Inspiration

Additional signage is recommended to identify the name and use of the building.

Landscape plantings to soften the appearance of the space and screen unsightly utilities is necessary.

Reed Roof Improvement Recommendation

The roof of Reed Building is visible from many vantage points to the south. The roof is occupied by a variety of unsightly though necessary mechanical and communications infrastructure.

Standing seam metal is a predominant roofing material campus wide. It is recommended that a modified mansard type roof screen be placed at the perimeter of the building to screen unsightly equipment from view.



Metal roof material to screen roof top equipment



View of existing roof

Pavement Reduction 2a

Improvement Recommendation



Existing

The paved area along the east/west walk/drive is excessive in width. The transition to the Glenhill Farmhouse is abrupt and unceremonious.

It is recommended that pavement be removed adjacent to the existing stone wall to be replaced by a seasonal planting bed of annual flowers.

Stoop thresholds to the walkways at Glenhill Farmhouse should be improved as well.

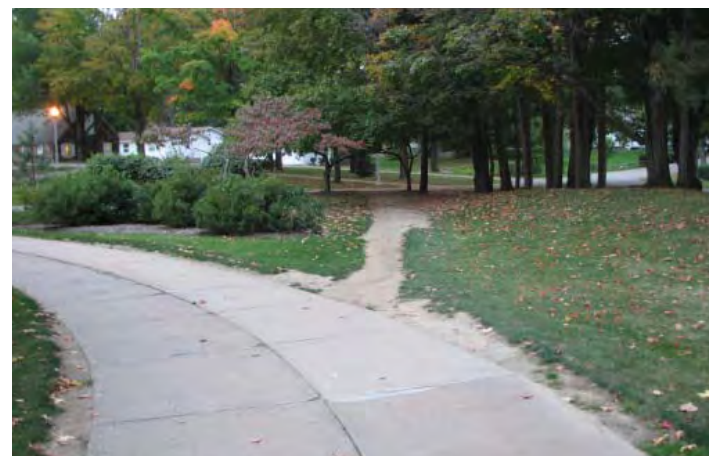
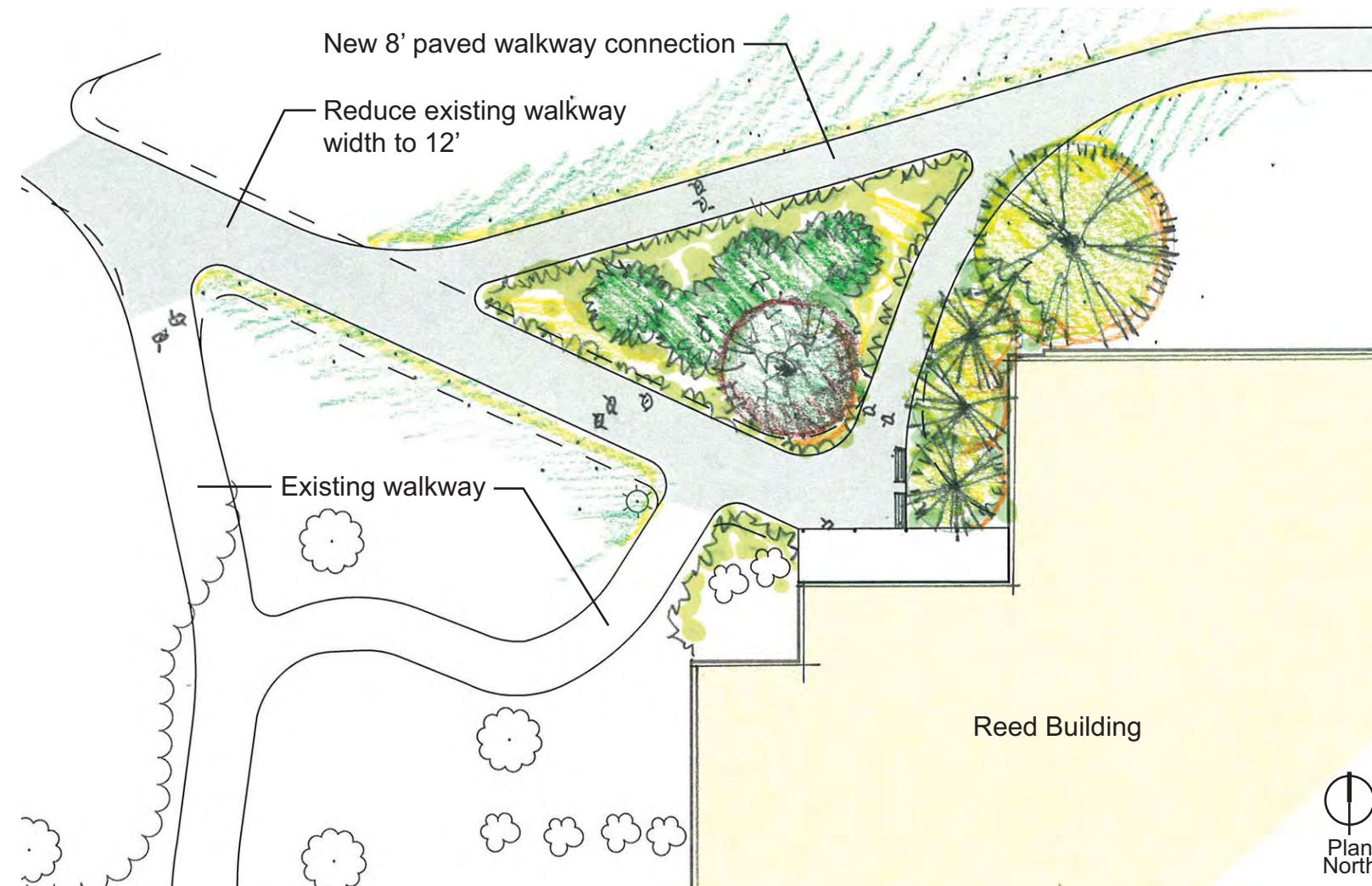


Reed NW Entrance ^{2b}

Improvement Recommendation

As indicated in concept recommendation 1a, the walkways and paved areas at the northwest entrance to Reed Building should be reduced to allow for enhanced landscape plantings and give the entrance a more significant aesthetic appeal.

The presence of a long-standing unimproved pedestrian route across the lawn should be remediated by installing a paved surface. The need for additional site lighting along this new segment of walkway should be assessed.



Existing



Reed Service Area 2c

Improvement Recommendation



This concept diagram illustrates several recommended improvements to the east end of Reed Building.

- Projects include:
- Reduce excess paving and create pedestrian circulation separated from vehicular circulation areas
 - Consolidate and screen loading dock/service area (see 4f for additional recommendation)
 - Reconfigure lift dock at Bookstore (see 4g for additional recommendation)
 - Create new walk to Library.
 - Supplement landscape planting.
 - Replace existing east/west walkway and resolve drainage issues

Note that the proposed reduction in paved areas will result in the loss of 12 existing parking spaces.

Reduction in impervious surfaces reduces storm water runoff and heat island effect.



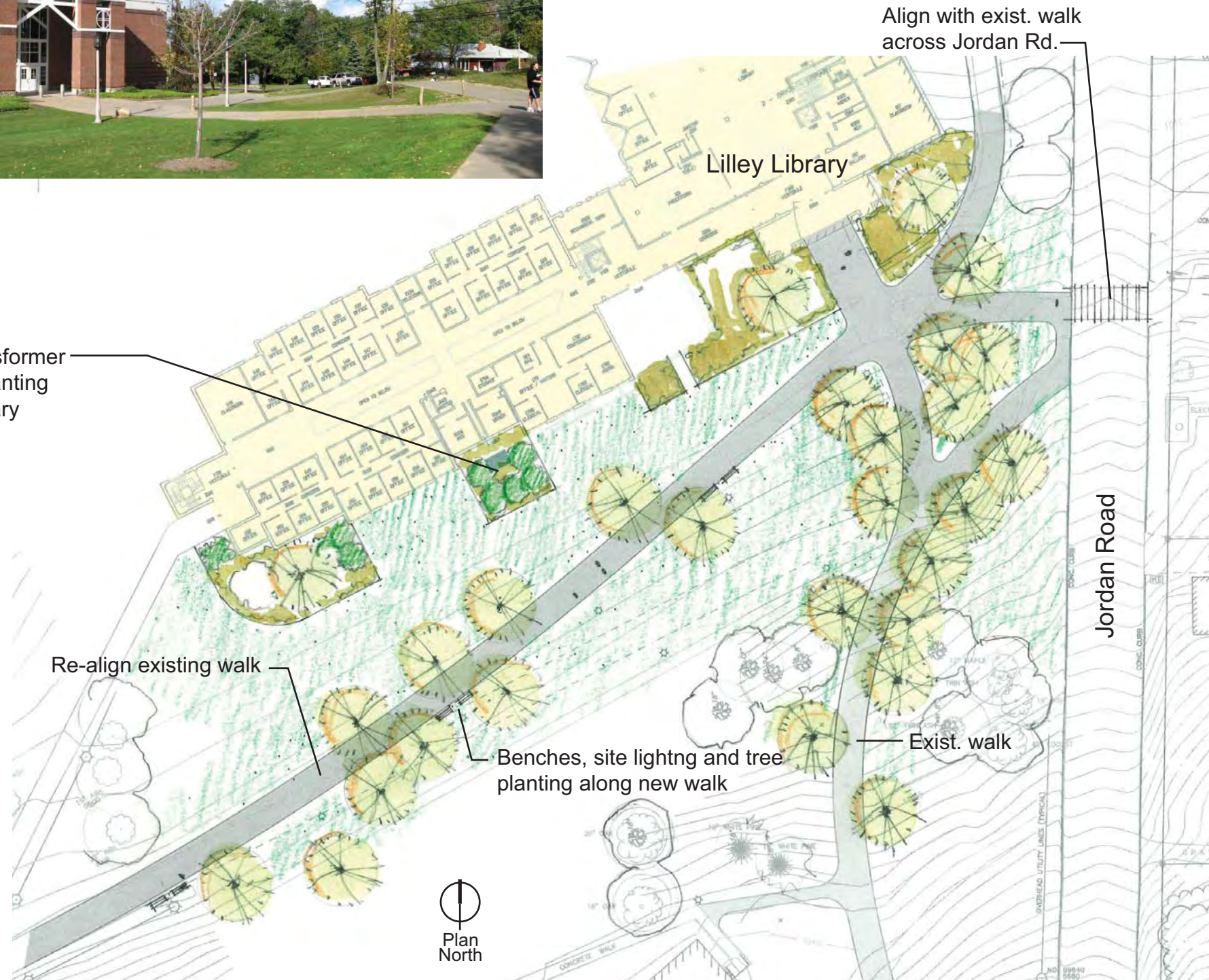
Library Entrance 2d

Improvement Recommendation



Existing

Screen exist. transformer
Add landscape planting
along face of Library



The existing east/west walkway south of the Library does not align with the newly installed pedestrian walk on the east side of Jordan Road. Present walkway alignments do not promote a fluid movement from one side of campus to the other along this major route.

Recommend the re-alignment of existing walks to eliminate awkward angles. Bollards placed to direct pedestrian movement can be eliminated as a result of the improved flow.

Recommend supplemental landscape planting to enhance the library entrance.

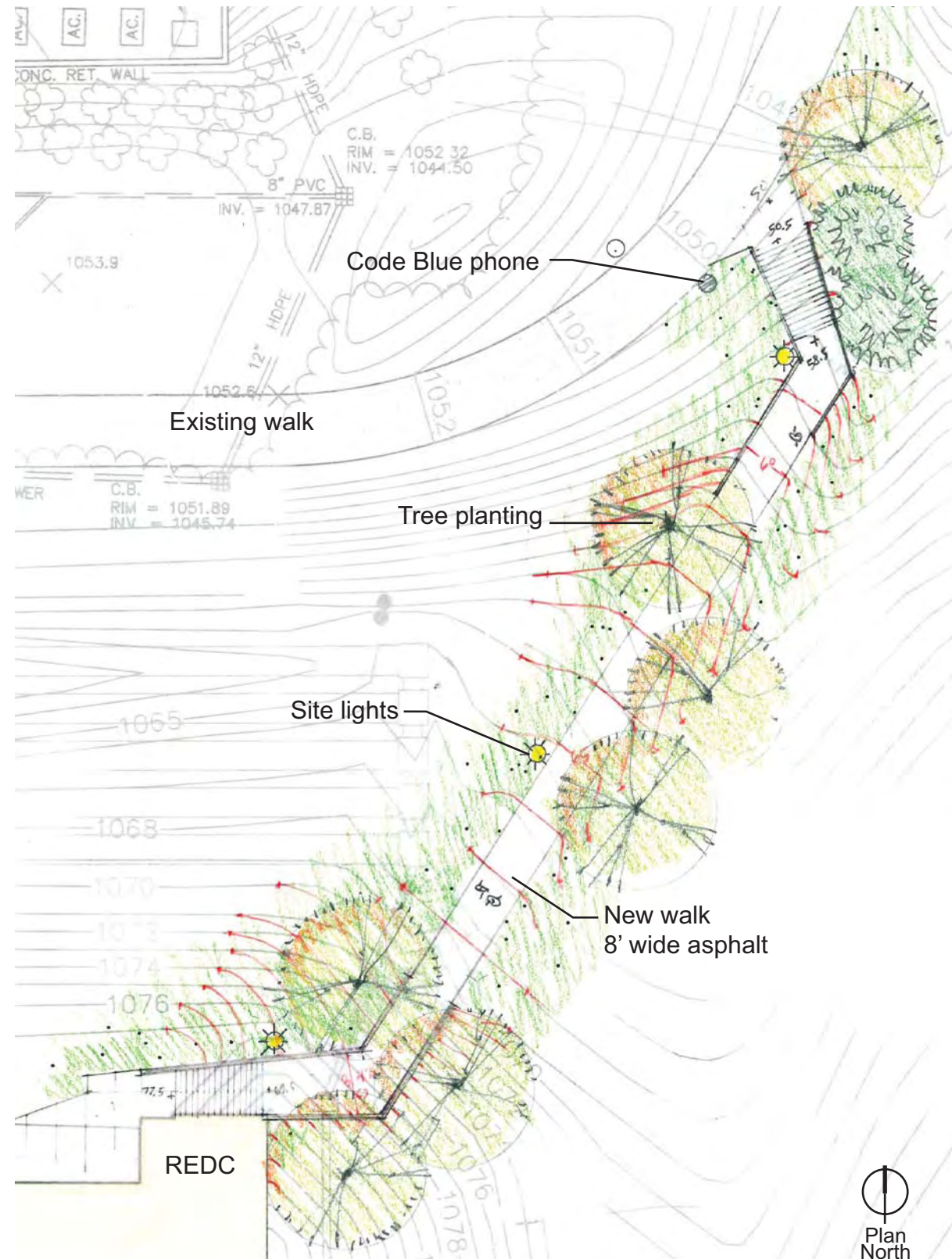


REDC Walk Access 2e

Improvement Recommendation

Pedestrian access to and from the REDC in a north south direction is circuitous resulting in the formation of an unimproved path.

Recommend the installation of a walkway and stair system with required site lighting to accommodate the inevitable traffic this route will receive.



Existing



Aquarius Drive Pavement Reduction ^{2f}

Improvement Recommendation



Existing



Aquarius Drive cartway width is excessive. With the recent installation of parallel walk at Niagra Hall the redundancy is more evident.

Recommend that existing paved area be reduced per the sketch below. New curb and storm inlet relocations will be necessary to manage water run-off. To accommodate pedestrian users, a new section of 8' walk should be placed west of the Niagra Hall parking lot entrance. Lighting along the corridor should be evaluated and supplemented as necessary. Turf ground cover should replace pavement reduction areas. Tree planting along the drive is also recommended.



Nick Walk/Stair

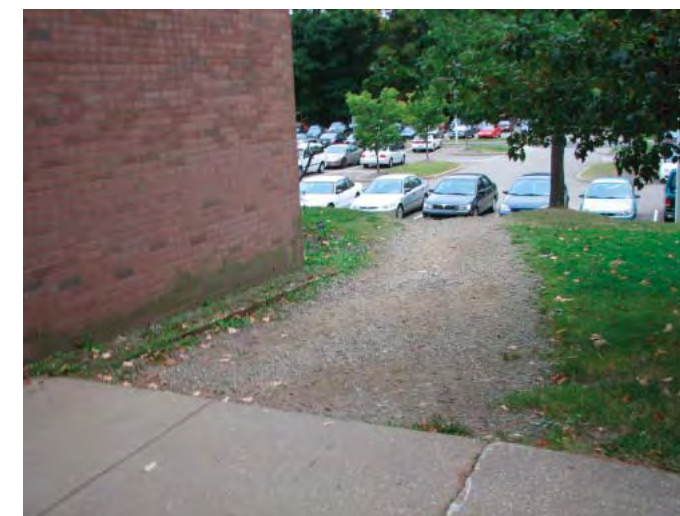
Improvement Recommendation 2g

The unimproved pedestrian path connecting the east end of the Nick Building with existing commuter parking to the north is a logical and inevitable route. Recommend that a permanent, maintainable surface be installed. A landing area in the parking lot should also be incorporated into the design to signal the walk location from the parking lot side. Additional analysis is needed to determine if gradient of proposed walk is excessive. If it's deemed to be too steep there will be a need for stairs to transition grade.

Additional landscaping and site lighting should be incorporated into the improvement.



Existing



Reed South Entrance

Improvement Recommendation

"Inspiration Images"



Seat wall

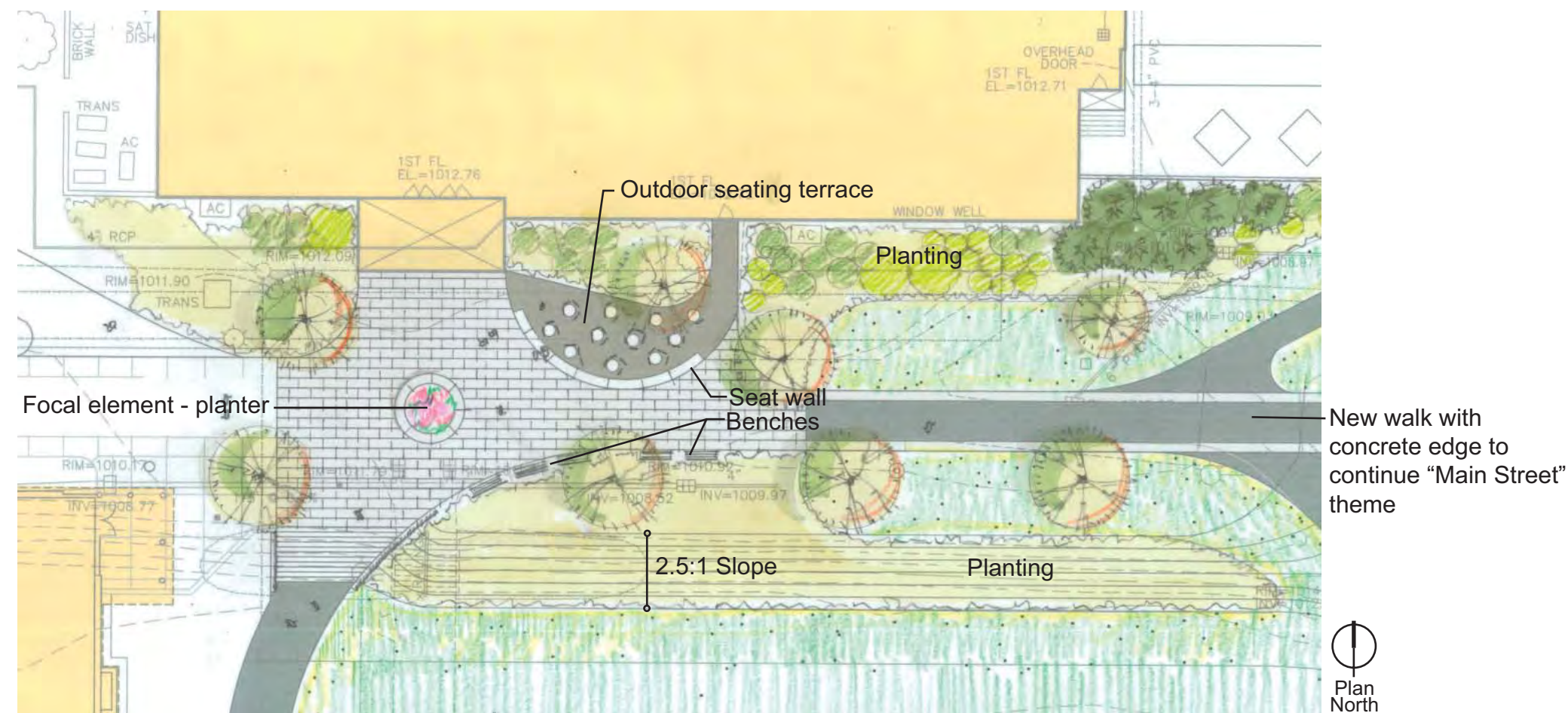


Table and Chairs

The area on the south side of Reed Building is a major pedestrian cross roads in the core of campus as well as a hub of social activity due to its adjacency to Bruno's Cafe. Seating and gathering space is lacking in this key outdoor area.

Recommend the creation of a plaza area to include table seating for outdoor dining, bench seating, trash and recycling receptacles, supplemental landscape planting and an enhanced paving surface to signal the special significance of the space. Site lighting as well as management of surface water must also be integrated into the design.

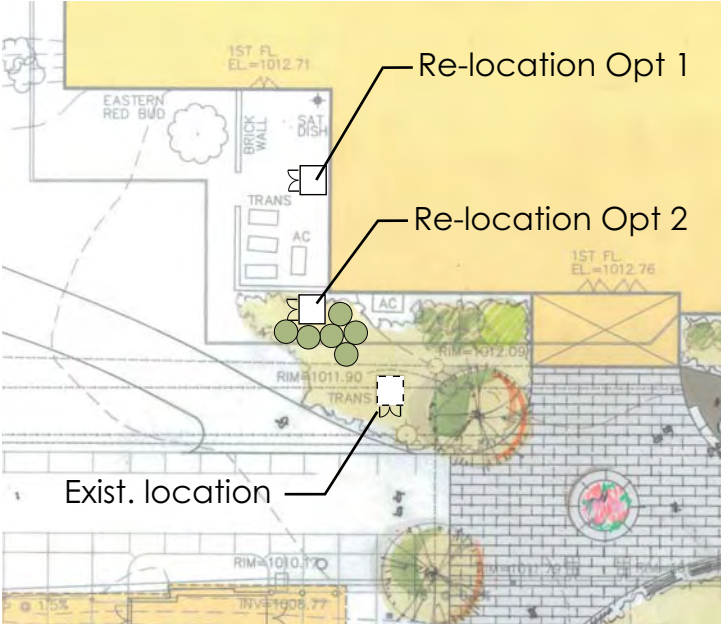
In addition to the gathering area, this concept reflects alteration to the green space and stair connection to the south (see 3c) as well as architectural entrance improvements to Reed Building (see 1b). To be successful, it's important that these improvements be integrated into one unified design solution even if implementation phasing is necessary.



Existing

Utility Relocate 3a

Improvement Recommendation



The existing electrical transformer adjacent to the south entrance to Reed Building occupies a highly visible location.

Options for mitigating this “ugly” are limited due to the critical utilitarian need for the equipment.

Recommend that the transformer be re-located to a less prominent position and be screened with landscaping.



Existing

Landscape Screen ^{3b}

Improvement Recommendation

Recommend the installation of supplemental landscape plantings along the south face of the Lilley Library. Objectives include screening of utilities, increased visual interest and integration with proposed pedestrian circulation modification (see 2d).

The existing miniature White Pine garden at the patio area would benefit from supplemental vegetation to enhance its visual impact.

Existing transformer to be screened



Existing

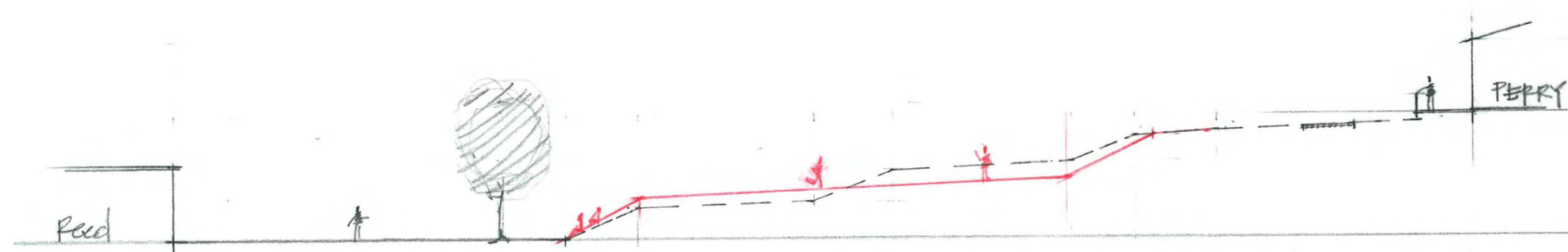
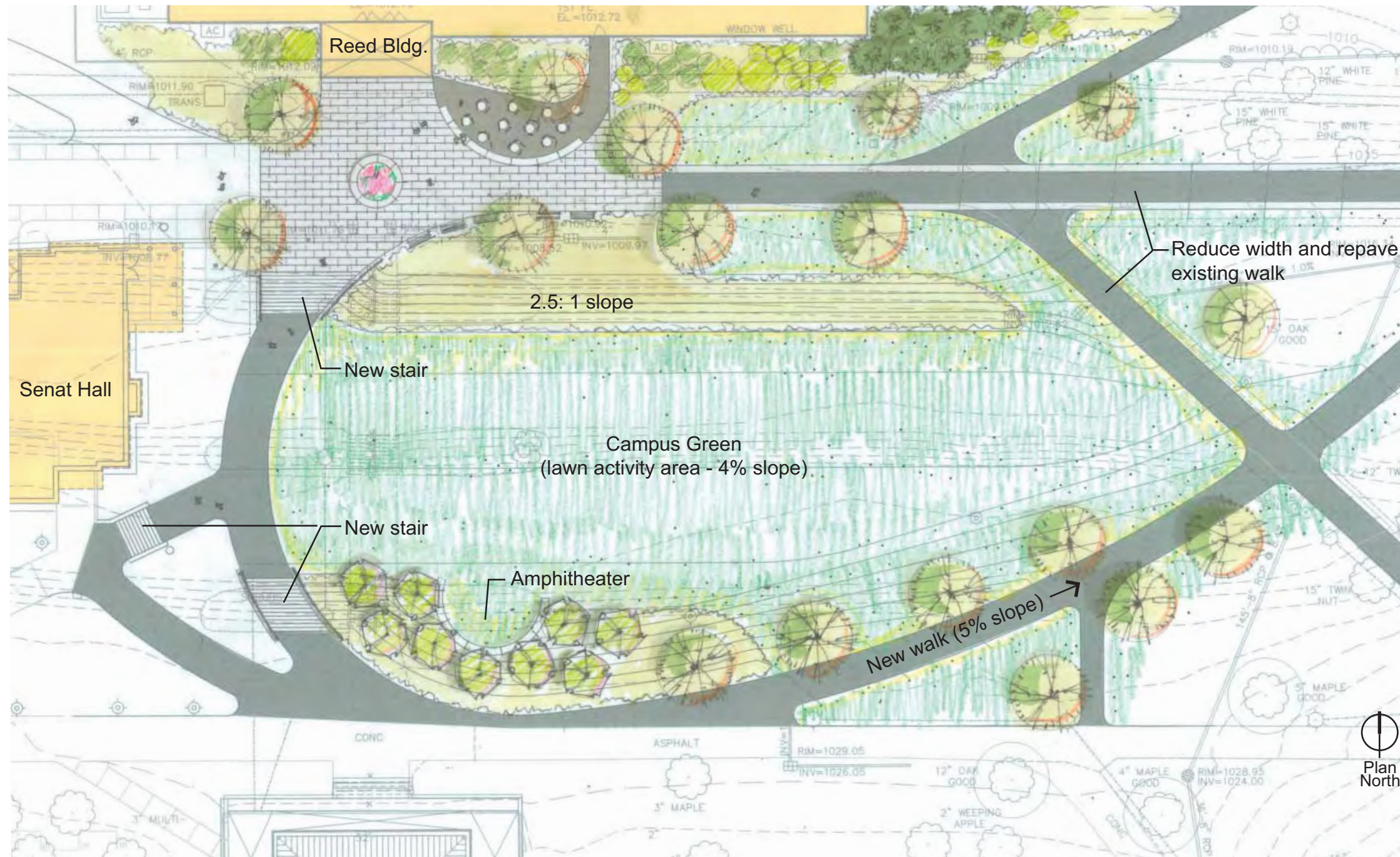
Campus Green 3c

Improvement Recommendation

The green space between Reed Building and Perry Hall presents a perfect opportunity to establish a functional and attractive campus green. The landform and circulation is presently broken into segments by vertical terraces that prohibit active use of the space. Circulation paths and stairs that bisect the space don't efficiently facilitate pedestrian movement to and from the student housing area to the south.

This concept proposes the creation of a gently sloping green space between heightened grade transitions north and south. This expanded green will accommodate a larger variety of activities in addition to creating a visual heart to the core area.

Reconfigured walkways bolstered by landscape plantings will define the space visually, efficiently accommodate pedestrian movement in all directions and transition grade gracefully.



Landscape Improvement ^{3d}

Improvement Recommendation

Considerable effort and expense has gone into the existing patio area west of Prischak and Witkowski Buildings. However, the aesthetic quality of the patio area is diminished by the effect of excessive paved surfaces.

Recommend the removal of unnecessary asphalt paving and replacement with lawn and trees.



Existing



Garden Restoration ^{3e}

Improvement Recommendation



Existing Gazebo

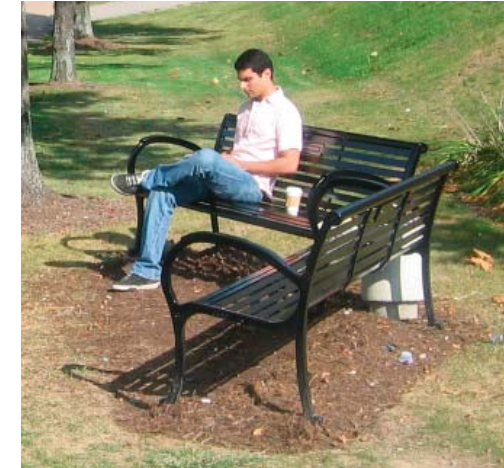
Only remnants remain of the manicured gardens that once flourished under the care of Ernst and Mary Behrend. The garden area remains to this day in the historic core of campus.

Recommend that a historic restoration of the gardens be undertaken.



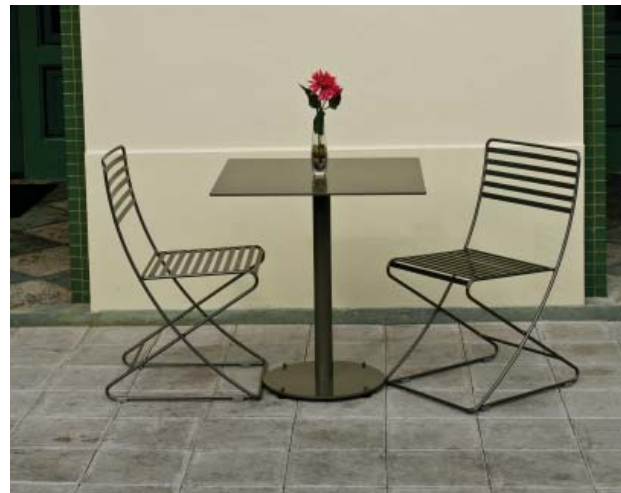
Site Furnishings 4a

Improvement Recommendation



Stylistically appropriate site furnishings fabricated from quality, enduring materials that are strategically placed throughout campus will aid in establishing an aesthetic unity in addition to serving their utilitarian function.

The black metal strap bench is currently in use on the campus in limited locations. Recommend the adoption of this style and color for all new bench purchases.



Trash and recycling containers should match the bench in style and color.

Free-standing planters are a valuable way introduce color in the form of annual and perennial flowers. Maintenance can be managed more easily and the visual impact focused through the thoughtful placement of planters. It's critical that planters be an appropriate scale for whatever space they occupy.



Post & Chain 4b

Improvement Recommendation



Bollards and post & chain barriers serve a vital function where traffic must be controlled. However, as with other site furnishings, the aesthetic appeal of this utilitarian necessity need not be sacrificed.

Propose the replacement of wooded post & chain with barriers that compliment other furnishings. The barrier(s) should be fabricated from quality, enduring materials.



Existing post & chain

As a result of changes made to campus circulation over the years, it is recommended that the need for such barriers be carefully evaluated prior to replacement or addition of barriers.



Existing site bollards

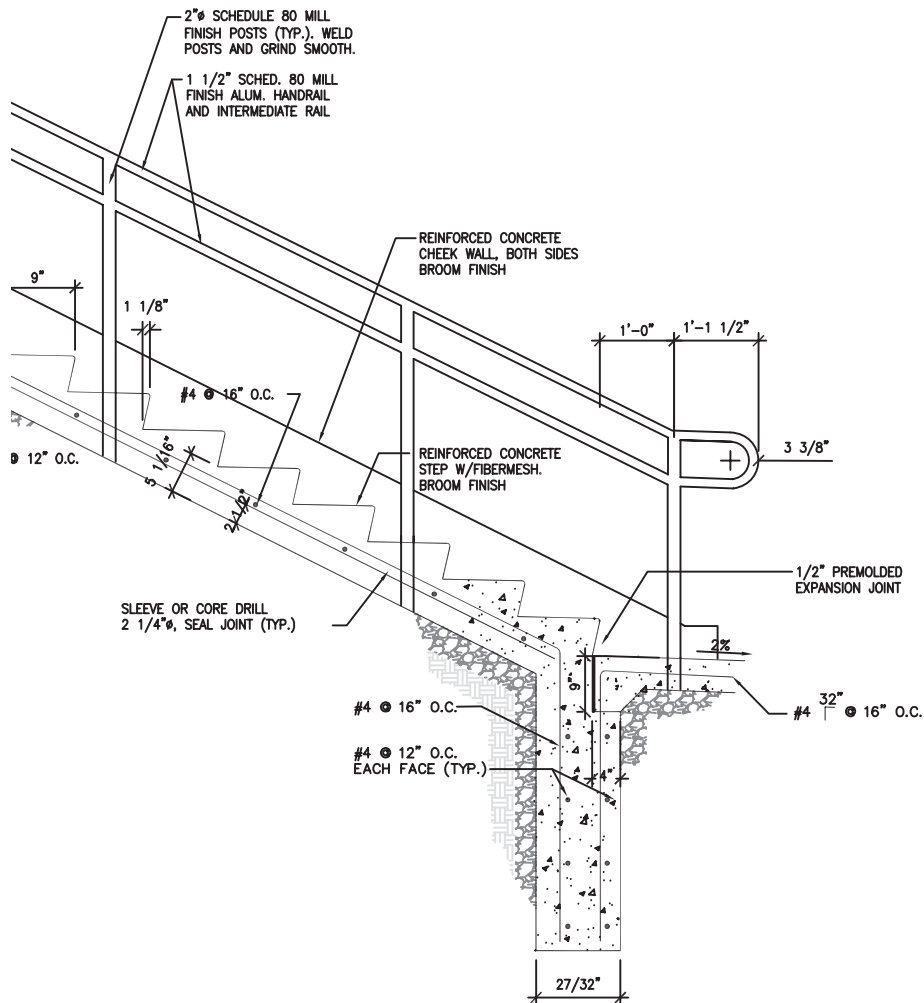
Handrail 4C

Improvement Recommendation



The stairs to the patio area west of Prischak and Witkowski Buidling lack the required handrail to be code compliant.

Recommend the installation of ADA compliant railing that's designed to be compatible with other railing systems on campus.



Tennis Court Removal 4d

Improvement Recommendation

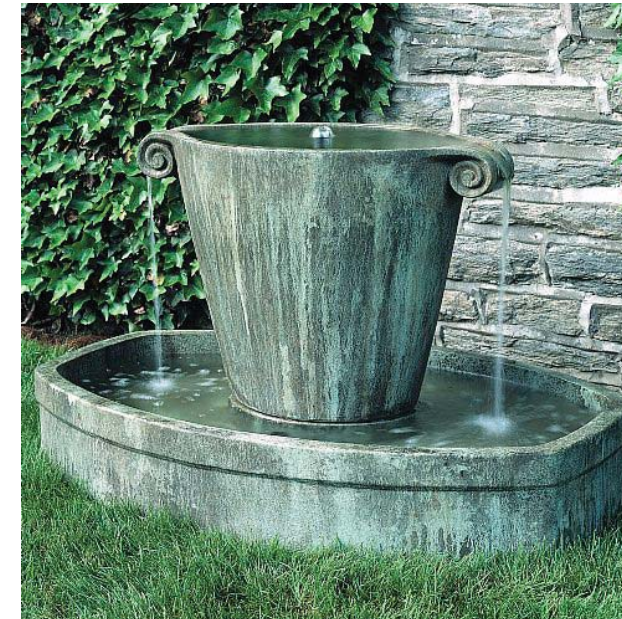
The abandoned tennis court surface and perimeter fence west of Glenhill Farmhouse should be removed and replaced with lawn area.



Existing

Pool Renovation 4e

Improvement Recommendation



Knot garden inspiration images

Water feature

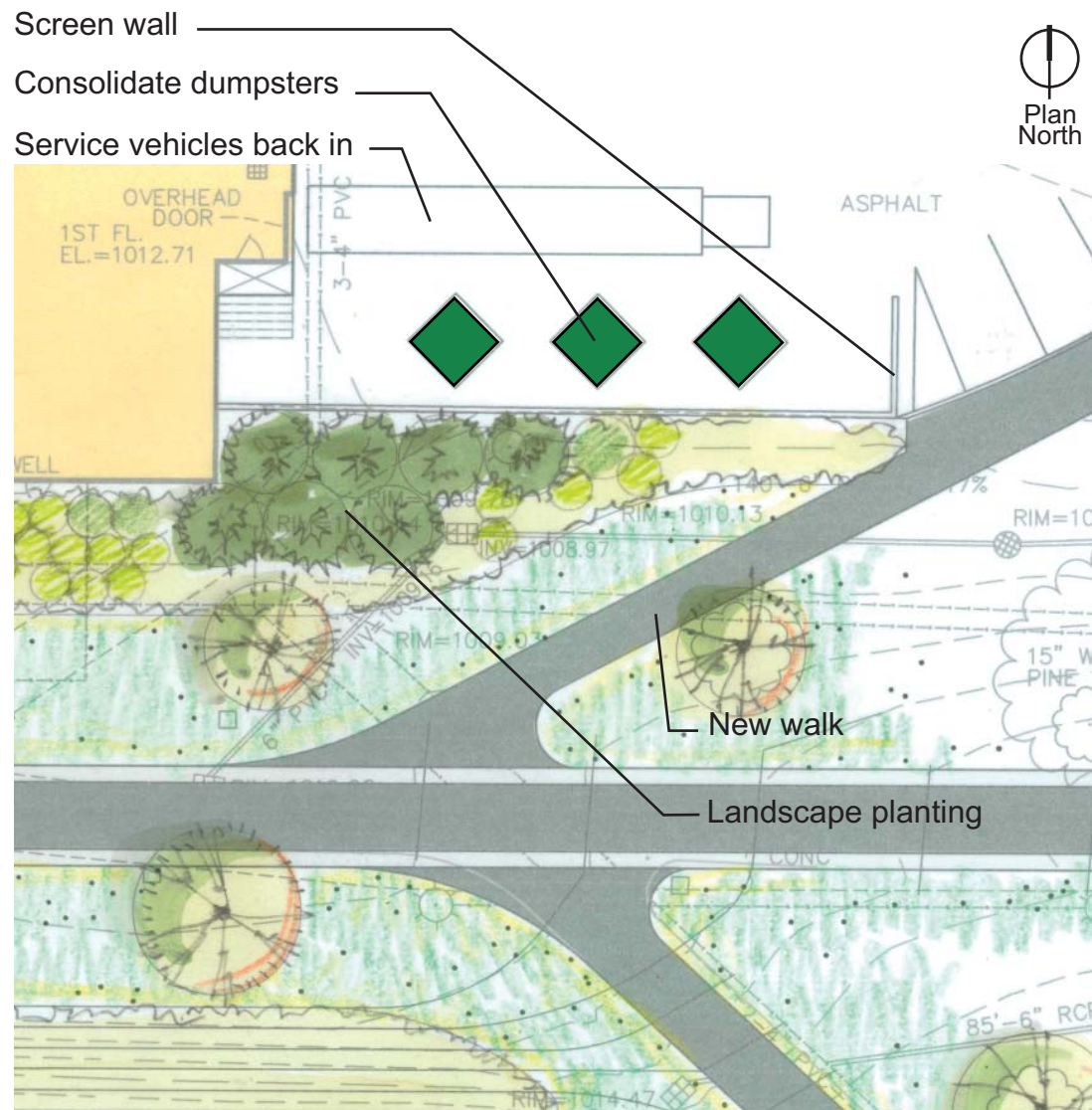
The swimming pool area east of Glenhill Farmhouse is an artfully detailed and executed remnant of the residential heritage that pre-dates Behrend's present and future use as an academic institution. The pool and patio is a unique campus feature that holds nostalgic value for Behrend alumni. Due to safety concerns surrounding unprotected pools of water, it has been necessary to restrict access by installing the chain link perimeter fence presently in place.

As with the Glenhill Farmhouse, it is recommended that the pool area be transformed into an amenity that can be accessed and enjoyed by all while preserving the historic and nostalgic value of the space.

Recommend the stabilization and infilling of the existing pool and development of a garden scheme in keeping with the cottage theme of the architecture. The chain link fence material can then be removed allowing open access. Flagstone pool deck should be furnished with period style tables, chairs and benches. To acknowledge and pay homage to its water origins, an appropriately scaled and detailed water feature can be installed.



Existing



Dumpster Screen 4f

Improvement Recommendation

The service dock area on the east end of Reed Building is vital to operations inside the building despite its unsightly nature.

In addition to the recommended reconfiguration of paved areas (see 2c), the utilitarian aesthetic of the area can be mitigated by constructing a screen wall and re-orienting the dumpster location. Precedent for this type of screen exists at two other locations around the perimeter of this building.

This recommendation includes the establishment of a new pedestrian walkway separated from vehicular areas as well as supplemental landscape plantings to soften the appearance of the new masonry wall.



Existing



Existing

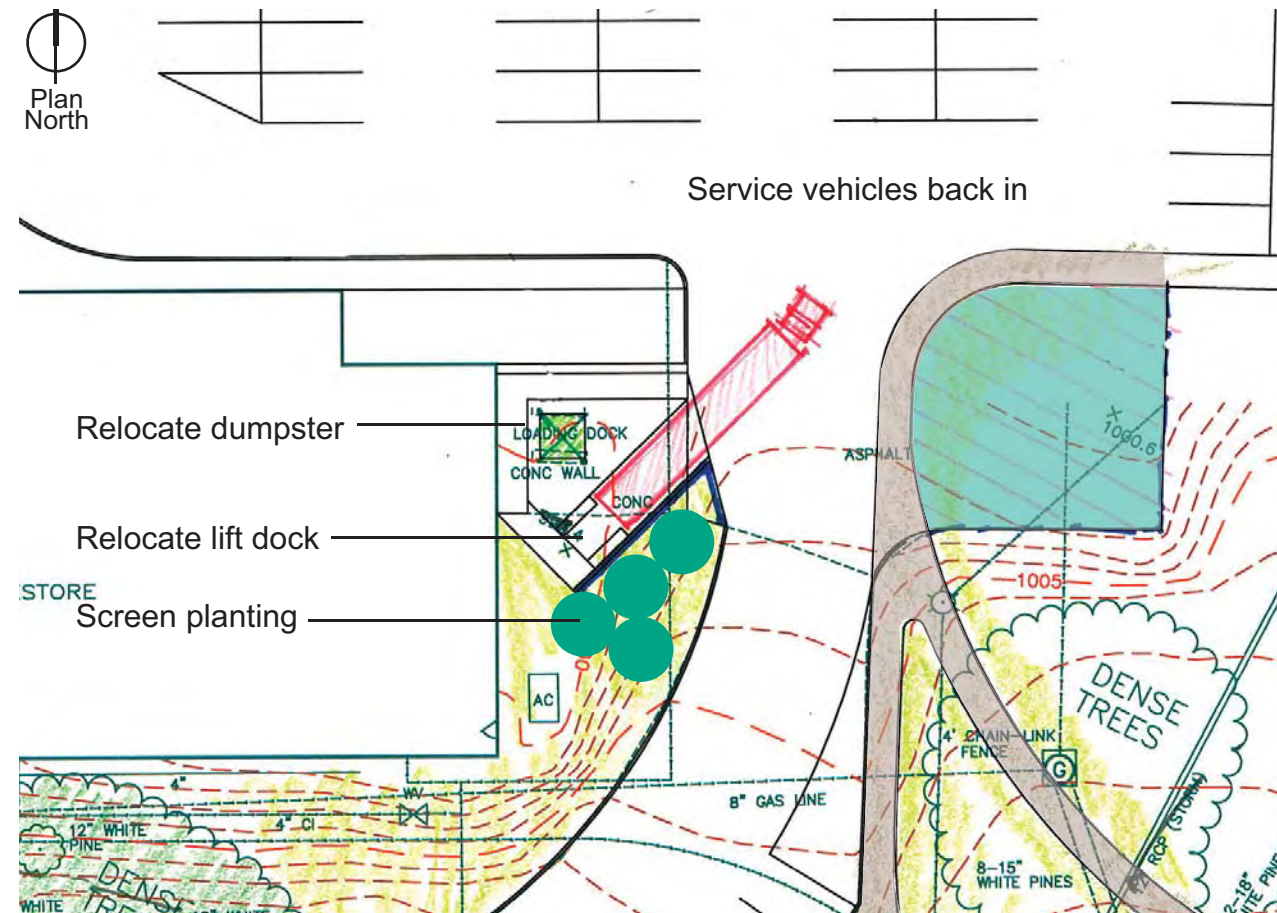


Bookstore Dock 4g

Improvement Recommendation

The removal of excess pavement recommended in concept 2c will necessitate modification to the Bookstore loading dock to make it accessible to delivery vehicles.

This recommendation proposes relocation of the existing lift dock to accommodate a backing maneuver by delivery trucks at an angle from the existing parking and driveway north of Reed Building. This shift will also enable the relocation of the trash dumpster to the inside corner of the enclosure effectively screening it from view. Strategic placement of vegetative screening on the south side of the reconfigured dock area will screen the view from the north.



Existing



Site Lights ^{4h}

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 cut-off illumination 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.



Project Key Map



4a 4b 4h Campus Wide

Architectural		Circulation		Landscape Planting		Miscellaneous	
1a	Reed Bldg. Northwest Entrance	2a	Glenhill Pavement Reduction	3a	Screen Relocate	4a	Site Furnishings
1b	Reed Bldg. South Entrance	2b	Reed Bldg. Northwest Entrance	3b	Landscape Screen	4b	Post & Chain
1c	Reed Bldg. Roof Screen	2c	Reed Bldg Service Area Pavement Reduction Pavement Reduction / New Sidewalk Walk Alignment / Drainage New Walk to Library	3c	New Campus Green	4c	Place Handrail
				3d	New Planting @ Witkowski Patio	4d	Tennis Court Removal
				3e	Garden Restoration	4e	Pool Renovation
		2d	Library Entrance			4f	Dumpster Screen
		2e	REDC Stair Access			4g	Bookstore Dock
		2f	Aquarius Drive Pavement Reduction			4h	Site Lights
		2g	Nick Bldg. Walk/Stair				
		2h	Reed Building South Entrance				

Prioritization Matrix

Penn State Erie - The Behrend College
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	Reed Bldg. Northwest Entrance				X	X			5
1b	Reed Bldg. South Entrance				X	X			5
1c	Reed Bldg. Roof Screen				X	X			5
2a	Glenhill Pavement Reduction		X				X		5
2b	Reed Bldg. Northwest Entrance			X			X		5
2c	Reed Bldg. Service Area								
	Pavement Reduction		X				X		4
	New Walk to Library		X				X		4
	Walk Alignment/Drainage		X				X		4
2d	Library Entrance Walks				X	X			5
2e	REDC Stair Access			X		X			4
2f	Aquarius Dr. Pavement Reduction			X			X		5
2g	Nick Bldg. Walk/Stair			X			X		5
2h	Reed Bldg. South Entrance				X	X			5
3a	Utility Relocate			X					
3b	Landscape Screen			X			X		5
3c	Campus Green				X	X			5
3d	Landscape Planting - Witkowski Patio			X			X		6
3e	Garden Restoration				X	X			5
4a	Site Furnishings				X		X		6
4b	Post & Chain			X		X			4
4c	New Handrail	X					X		4
4d	Tennis Court Removal			X			X		6
4e	Pool Renovation				X	X			5
4f	Dumpster screen				X	X			5
4g	Bookstore Dock			X		X			4
4h	Site Lights	X					X		4

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.