

## Brown University – Amendment #2 to the 2006 Institutional Master Plan



*Submitted November 3, 2009*



BROWN

# Amendment #2

## Overview of Amendment #2

This amendment to the 2006 Institutional Master Plan focuses primarily on Brown University's contribution to the Knowledge Economy and its participation in the development of the Jewelry District. Plans to use university space to promote economic development, to make improvements to the public realm in the Jewelry District, and to locate the Alpert Medical School in a renovated building on Richmond Street are included. The University believes this work will provide a significant boost to the area and will help stimulate future investment.

In addition, the amendment contains an update on the progress the University is making toward the implementation of the 2006 Institutional Master Plan, two clarifications about projects previously listed in the plan, and plans for several smaller renovation projects not normally included in the Master Plan. We believe these are in keeping with the objectives and strategies set forth in the City's Comprehensive Plan, the recently drafted College Hill Neighborhood Plan, and the previously approved 2006 Institutional Master Plan.

The projects listed in this amendment also represent a significant infusion of capital into the local economy, a one-time investment of nearly \$200 million and the creation of over 1000 construction jobs, according to the latest Economic Impact Report by Applesseed.

## Planning for the Jewelry District

### Background

In October 2003, the Brown University Corporation approved the Strategic Framework for Physical Planning, developed by Kliment & Halsband Architects. One of its three planning principles articulated in this framework was, "Grow Beyond College Hill". Since then, the University has worked together with the neighborhood, business leaders, and the City on a variety of studies intended to create a shared vision for success in the Jewelry District. From this work, the goal of creating a pedestrian-friendly, mixed-use environment that is effectively connected to other parts of the city by open spaces and public transit has become clear to everyone involved.

The Knowledge Economy Initiative was another outcome of this collaborative planning process, one that is endorsed by the Chamber of Commerce, the Providence Foundation, the RI-EDC, and the City as the best way to build Rhode Island's economy. This idea is already paying dividends. EpiVax and Isis Bio-Polymers are two recent examples of emerging bio-technology firms that have chosen to locate in the Jewelry District largely based on the presence of University and Hospital researchers.

In January 2007, Brown University acquired seven properties in the Jewelry District bringing the total University holdings in the area to approximately 350,000 sf of buildings and 6 acres of land. In addition, the University is leasing over 70,000 sf of office space in the Jewelry District. At present Brown University employees and graduate

students make up over 600 of the daily occupants in the area, a number that will expand to nearly 1,000 with the projects listed in this amendment.

### Public Realm Improvements in the Jewelry District

In April 2009, Brown University commissioned Kliment & Halsband to create a plan for the area within the Jewelry District where Brown has the most significant presence. In order to create more pedestrian oriented streets and to strengthen connections to Down City and College Hill, they proposed a plan to make significant improvements to both Ship Street and Richmond Street. This plan, which will require collaboration with RIDOT, the City, and Women & Infants Hospital, is incorporated into this amendment.

Ship Street is one of the oldest streets in Providence and the only street that connects Down City and the riverfront through the Jewelry District. Ship Street also leads to the Providence River at the only place where remnants of the old harbor exist today. Because it will inevitably be the primary east/west connection from down city, Johnson & Wales, and Brown to the riverside park, the proposed pedestrian bridge, and College Hill, it should be extended across Eddy Street all the way to the pedestrian bridge. With creation of small vest pocket parks along the way, Ship Street can become one of the key pedestrian connections into and through the Jewelry District and part of a chain of green spaces that connect the river to Down City.

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Richmond Street is also unique in the Jewelry District as one of only three streets that connect directly to Down City, and the only one with essentially no building edge along an entire side of the street. This opens up the opportunity to create a “promenade” along the entire west side of the street. By moving the future building line back 15-20 feet – no change to the curb, storm drainage, or traffic – and lining the street with trees and planting areas that include bio-swailes and rain gardens, a much more comfortable pedestrian atmosphere can be created along the entire length of Richmond Street. In addition, storm water run-off can be controlled, and the tree canopy can be replenished. (see map on following page)

If this plan is approved, Brown University will begin working in collaboration with the neighbors and the key stakeholders to implement it, most of which can be accomplished with relatively simple streetscape interventions, the demolition of a storage building, and modifications to the front 233 Richmond Street. Luckily, the majority of affected property is controlled by Brown University, Women & Infants Hospital, and RIDOT (see map of following page). This creates the opportunity for many of these improvements to be done in a relatively short time frame, firmly establishing a pattern for the area and a framework for future development.

### Transportation in the Jewelry District

Since 2003 Brown University has been running a shuttle system connecting the College Hill campus to the Jewelry District and the Hospital (see map at right). This shuttle continues to be improved with

more frequent headway and larger vehicles. Brown is also participating in RIPTA's UPass program, fully subsidizing student, faculty, and staff use of RIPTA. We have seen a tremendous increase in ridership since the inception of the program (over 28,000 rides per month). The combination of Brown's shuttle, RIPTA's trolley, and normal bus service creates the opportunity for Brown students, faculty, and staff to catch a free ride from the Jewelry District to College Hill every three to five minutes. Brown also remains very supportive of RIPTA's efforts to create a circulator that connect the University with the Hospitals and the Jewelry District.

Because the Jewelry District is less than ½ mile from the Main Green, and especially with the demolition of I-195, the creation of the riverside park, and the public realm improvements listed previously, we hope that many people traveling between College Hill and the Jewelry District will choose to walk or bicycle, reducing demand for parking both in the Jewelry District and College Hill. Provisions will be made in the Medical Education Building and in future buildings for bike storage and showers to encourage bicycle commuting, and pedestrian access will remain a primary consideration.

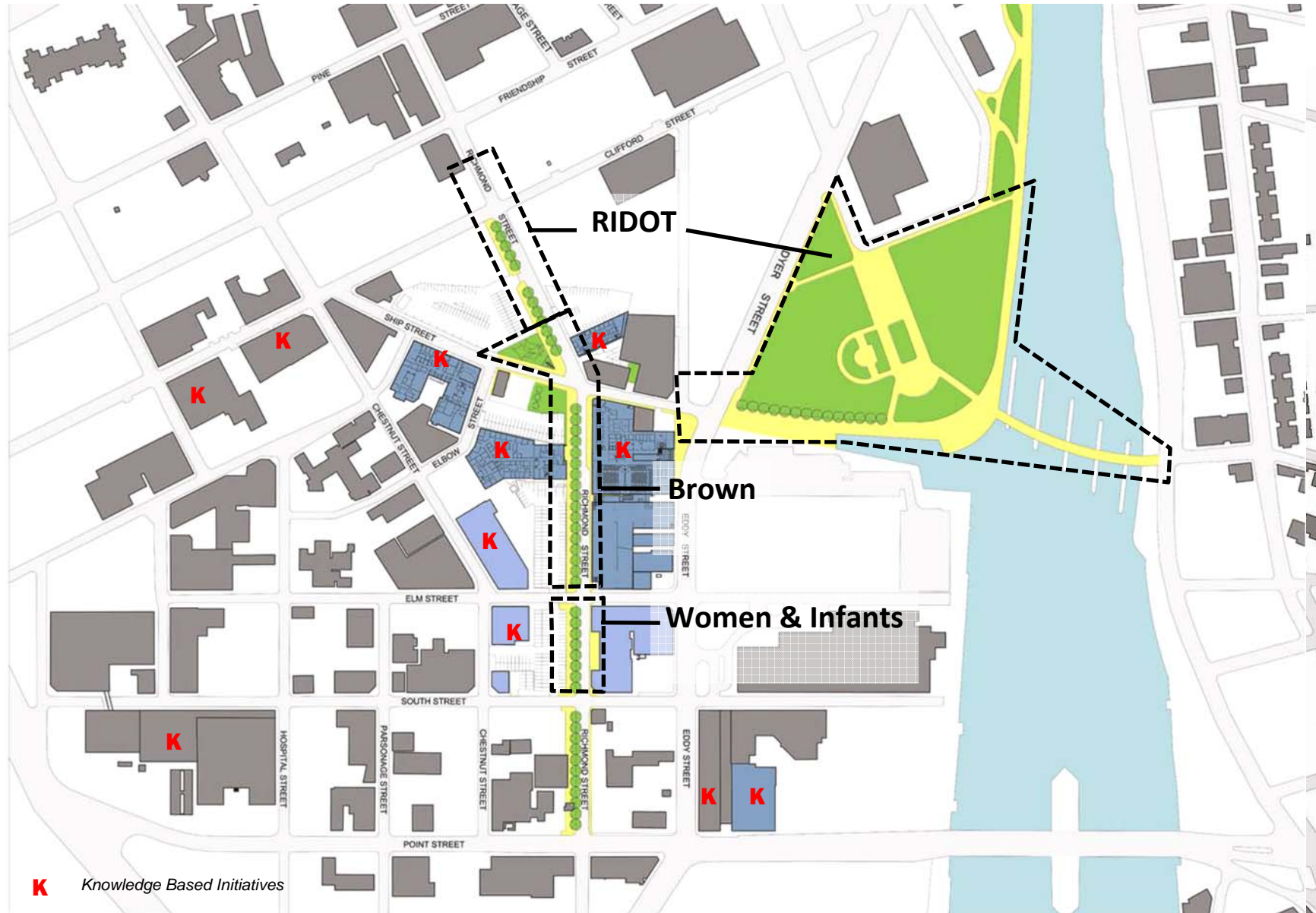
Although Section 703 in the Zoning Ordinance allows Educational Institutions to aggregate their parking requirements and supply, Brown continues to manage the supply of off-street parking spaces on a geographic basis. As the Richmond Street Parking Garage and adjacent surface lots are converted to University use (they are managed as commercial lots presently) the supply of off-street spaces will actually exceed Brown's demand in the

area, even with anticipated parking leases. Therefore, the Transportation Office will begin shifting employees located at 121 South Main Street who currently park on-campus to the Richmond Street Garage. This will relieve pressure on College Hill by freeing up spaces for employees and encourage more movement to and from the Jewelry District. (see overall parking calculation on page 7)



*Brown Shuttle Bus Routes*





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### RI Center for Innovation and Entrepreneurship

Launched in April 2009, The RI Center for Innovation and Entrepreneurship (RI-CIE) is intended to provide support for innovation and entrepreneurship in Rhode Island's knowledge economy. RI-CIE has gained stakeholder support from area universities (Brown, RISD, Johnson & Wales, URI), Greater Providence Chamber, City of Providence, RI EDC, Slater Technology Fund, RI Science and Technology Advisory Council (STAC), Lifespan, and the local entrepreneur community. Its goal is to help Rhode Island based entrepreneurs from universities, hospitals, and the private sector establish and grow new ventures in Rhode Island, particularly in the knowledge economy fields of healthcare, medical devices, environmental and alternative energy technologies, and design. Brown University is providing space in One Davol Square, which can be expanded if the Center is successful. The Center is also staffed by University personnel.



*Product Workshop at RICIE in Davol Square*

### Medical Education Building

Since granting its first MD degrees in 1975, the Alpert Medical School (formerly the Brown Medical School) Rhode Island's only school of medicine has become a national leader. By attracting physicians and researchers to Rhode Island over the past three decades, the Medical School and its seven affiliated teaching hospitals have radically improved the state's health care environment, shifting the state from an importer of health care to a net exporter.

The Medical School is a component of Brown's Division of Biology and Medicine, which also includes the Program in Biology and the Program in Public Health. Together with Brown's seven affiliated teaching hospitals, this collective research enterprise attracts over \$170 million in sponsored research funding per year.

However, the Alpert Medical School has never had a home in which to conduct its mission. Instead it has functioned out of a series of spaces on College Hill, limiting its ability to grow and challenging recruiting efforts. To address this, Brown is planning to renovate 222 Richmond Street as its new Medical Education Building. The project will place the Medical School, a significant attractor of both private sector activity and public sector funding, squarely in the Jewelry District and the proposed Knowledge District. It will also enable the Medical School to grow its class size by 25%, graduating 120 new doctors every year. At the completion of the project, over 300 people will occupy the building on a full time basis.

The historic four-story 135,000 sf building at 222 Richmond Street was originally built in 1928 by the Little Nemo Manufacturing Company. In 1978 it was converted to a multi-tenant office building. In 2007 Brown purchased the property and continued to operate it as a commercial building. Although Brown had lost nearly half of its tenants since that time, specific arrangements to relocate the remaining tenants within the Jewelry District are being made.

The renovation project is designed to activate the surrounding streets. The most public functions will be located on the first floor, including a café, two large lecture halls, corresponding surge space, and an atrium that will connect Richmond Street to Eddy Street. New entrances will be created at the corner of Richmond Street and Ship Street and in the center of the Eddy Street facade, the current location of the loading dock, to make the building more permeable. A new loading dock will be built between the adjacent parking garage and the building. Much of the building's circulation will be pushed to the perimeter of the building ensuring an active presence around the entire building, and window sills at the street level will be lowered to the ground. (see site plans and renderings on the following page)

The design documents are being prepared in accordance with strict energy efficiency standards targeting a LEED Gold rating. Windows will be replaced with high efficiency glass, solar panels will be used to heat domestic hot water, and energy efficient lighting will be used throughout.

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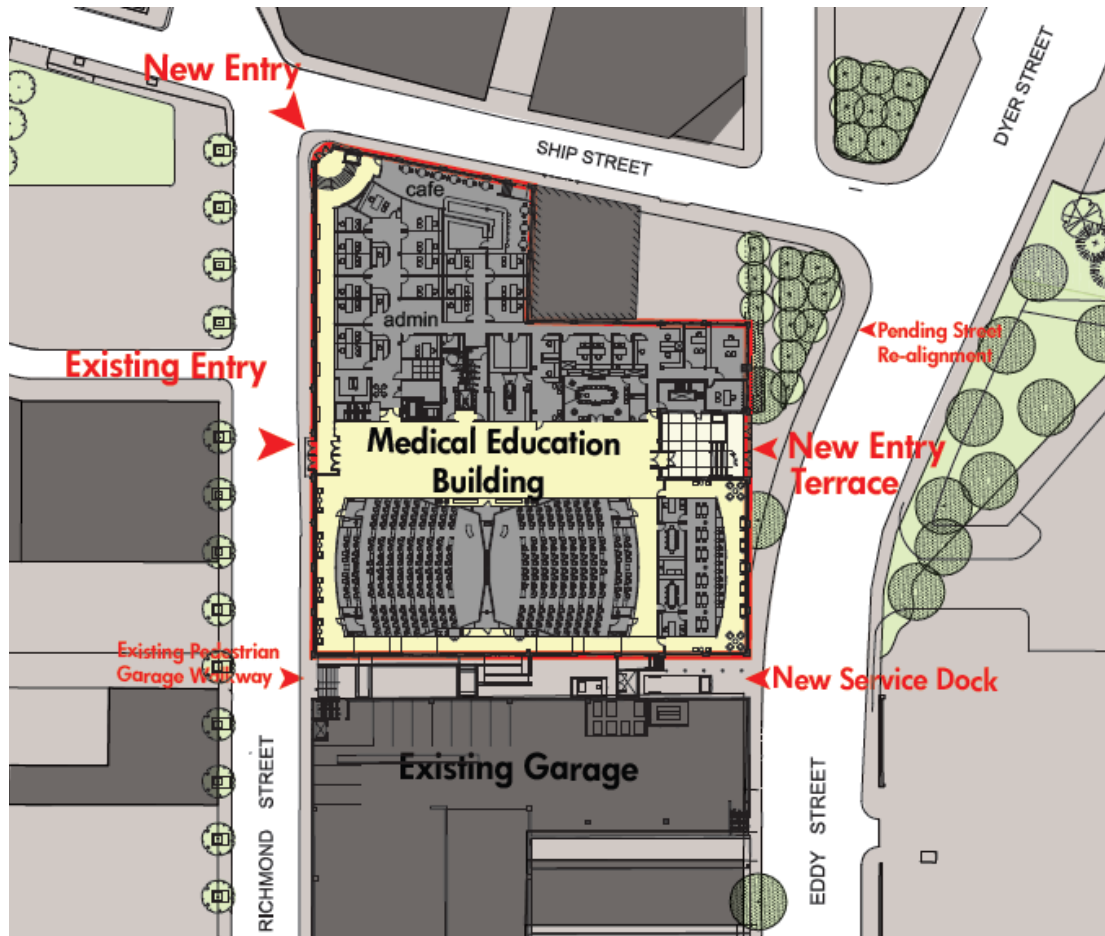
Because this project will change the use of the building from office to educational use and it is located outside the Institutional Floating Zone, a Special Use Permit will be required from the Zoning Board. In addition, as a historic building listed in the Industrial and Commercial Building District, a Certificate of Appropriateness from the Providence Historic District Commission will be required.



*Richmond Street Facade*



*Eddy Street Facade*



*Site Plan for Medical Education Building*

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## Implementation of the 2006 Master Plan

On July 24, 2006, the Providence City Plan Commission approved the Institutional Master Plan for Brown University with thirteen conditions, and on August 21, 2008 the City Plan Commission approved a brief amendment. Since that time, Brown has been moving forward with the execution of these plans and compliance with the conditions. To date the University has completed the following:

### Circulation Infrastructure

- All but one block of “The Walk” has been completed (the last block is underway), including new traffic signals at Waterman Street and Angell Street. Providence Police provided crossing guards at these intersections for three months to help establish pedestrian habits.
- Over two miles of public streetscape improvements have been completed, including portions of Lloyd Avenue, Arlington Avenue, Hope Street, Cushing Street, Thayer Street, Meeting Street, Brown Street, Angell Street, Waterman Street, and George Street.
- Improved demand management strategies to reduce traffic and parking on the East Side continue to be enhanced. IncludingRIPTA UPass and ZipCar (now with 10 cars on-campus). As a measure of success, less than 50 students are now parking on-campus. This represents a 90% reduction since 2003.
- Brown created and facilitated the College Hill Parking Task Force, which made a set of interrelated recommendations to the City intended to ease traffic and parking congestion on the streets of College Hill. The

recommendations are currently awaiting public hearings and implementation by DPW.

- A traffic study recommending Olive Street and Meeting Street becomes a one-way pair, maximizing traffic flow and on-street parking, has been completed and delivered to the City. At this point only Olive Street has been converted. Meeting Street remains unchanged.
- The synchronization of traffic lights along Angell Street and Waterman Street is underway, in conjunction with DPW's efforts to synchronize the remainder of the corridor. The combined project will address the entire corridor from the Seekonk River to the Providence River and will be completed within the next year.

### Projects

- Extensive improvements to the campus utilities systems have been completed, including the replacement of over 4 miles of underground piping, 16 miles of electrical cables, and 60 transformers.
- Historic Pembroke Hall has been renovated.
- Historic Rhode Island Hall has been renovated.
- J. Walter Wilson has been renovated as a Student Resources Building.
- Formerly vacant historic houses at 71-73 Charlesfield, 79 Charlesfield, and 125-127 Waterman Street have been renovated and converted to Visiting Scholar and Graduate Student Housing.
- The Peter Green House has been relocated and renovated, a PPS award winning project.
- Formerly vacant houses at 129 Brown, 86 Brown, 66-68 Benevolent, and 277 Brook have been renovated as part of the Brown-to-Brown Home Ownership Program.

- Brown continues to occupy space in 121 South Main Street as commercial tenants move out, currently occupying 64% of the total square footage of the building.
- A temporary pool structure has been constructed behind the Athletic Complex.

### Changes in Real Estate Holdings

- Formerly vacant houses at 129 Brown (pending), 86 Brown, and 66-68 Benevolent have been sold as single family residences in the Brown-to-Brown Home Ownership Program.
- Inactive properties at 1140 North Main, 86 South Main, and 110 South Main were sold.
- The University acquired seven properties in the Jewelry District, totaling 232,000 sf of building and 4.2 acres of land (listed in Amendment #1)
- 94 Waterman Street (Plat 12, Lot 192), a business use located within the Institutional Overlay Zone was purchased in 2008.
- The University is leasing 229 Wayland Avenue (United Way building) for temporary offices for the Cognitive Linguistic and Psychological Sciences Department.

### Demolitions

- The Shell Station on Angell Street has been demolished and the contaminated soils have been cleaned up.
- Smith Swim Center has been demolished.

### Proposed City Council Actions

- An application for the abandonment of Fones Alley has been filled, but no action has been taken by City Council.

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### Parking

In September 2008, Brown entered into a lease for student parking at Conley Piers, as indicated in the 2006 Master Plan, freeing up 250 spaces on-campus for reallocation to faculty and staff. However, largely because of the alternative means of transportation that are now being offered to students (RIPTA UPass, Zip Car, Shuttles, etc.) and continuing disincentives, only 50 students requested parking. The lease has since been terminated, and student parking is now limited to only those who can demonstrate hardship (currently less than 50). Because 85% of the students live on-campus, this is a significant reduction in parking demand. While the parking calculation defined in Section 703 (shown in the following table) does not recognize this reduction in demand, it bodes well for future demand management strategies.

	Total	Ratio	Spaces Req'd.
Employees	3934	1:3	1,311
On-Campus Students	4923	1:8	615
Off-Campus Students	2347	1:2	1,173
Total Required Spaces			3,099
Actual Parking Spaces			2,393
Grandfather Shortage			-931
<b>Surplus</b>			<b>225</b>

Although Brown University has a calculated surplus of off-street parking spaces, it is widely recognized that a large number of Brown students and employees park on the street. Data gathered by the College Hill Parking Task Force confirms this. However, it also suggests that adequate on-street parking exists to accommodate both Brown's

demand and the demand from surrounding institutions and business. Unfortunately, current parking designations and management of on-street spaces causes unnecessary congestion and a perceived lack of parking throughout the area. Implementation of the recommendations made by the College Hill Task Force will alleviate this problem.

Recognizing that the calculation at left is only a snapshot in time, the University continues to track future projections for Brown's population, the loss of parking spaces due to planned projects, parking that will be added, and future leases. The following table represents the anticipated changes through 2012.

	Projected Growth	Parking Impact
Employees	0	0
Off-Campus Students	250	125
Fitness / Aquatic Center		155
Richmond Street Garage		(367)
Richmond Street Lots		(166)
Parking Leases (W&I)		100
233 Richmond Lease (Isis)		30
Richmond Street Promenade		72
Total Parking Impact		(51)
Current Surplus		(225)
<b>Projected Surplus</b>		<b>276</b>



### Tree Canopy

Brown's campus remains one of the greenest parts of the City, something that is readily apparent when looking at aerial photography. Working with the City Forrester, the University has recently attempted to quantify the extent of tree canopy on the campus in order to confirm compliance with Section 425 of the Zoning Ordinance and monitor changes in the overall tree canopy in the future. The following chart and the map at right summarize this effort.

	Tree Canopy	Lot Area (SF)	Ratio
Athletic Complex	340,400	1,623,385	21%
Pembroke Field	48,200	77,230	62%
Pembroke Campus	290,000	515,450	56%
The Walk Area	144,600	295,080	49%
Main Campus	334,300	603,200	55%
Libraries	83,000	174,780	47%
Science Quad	223,700	441,540	51%
Keeney Quad	77,100	159,950	48%
Wriston Quad	170,900	330,160	52%
South Campus	173,100	396,545	44%
East Campus	210,300	379,570	55%
Stadium Area	116,000	663,770	17%
<b>Total Canopy</b>	<b>2,211,600</b>	<b>5,660,660</b>	<b>39%</b>

As can be seen above, all parts of the campus with the exception of the athletic areas are well above the required 30% coverage, as is the campus as a whole. Page 10 of this amendment identifies the planned improvements at the new Fitness and Aquatics Center, which include a significant green space and tree canopy, more than enough to push the coverage ratio above the required amount. At the Stadium Area, the University will be reinforcing the plantings along the street edge.



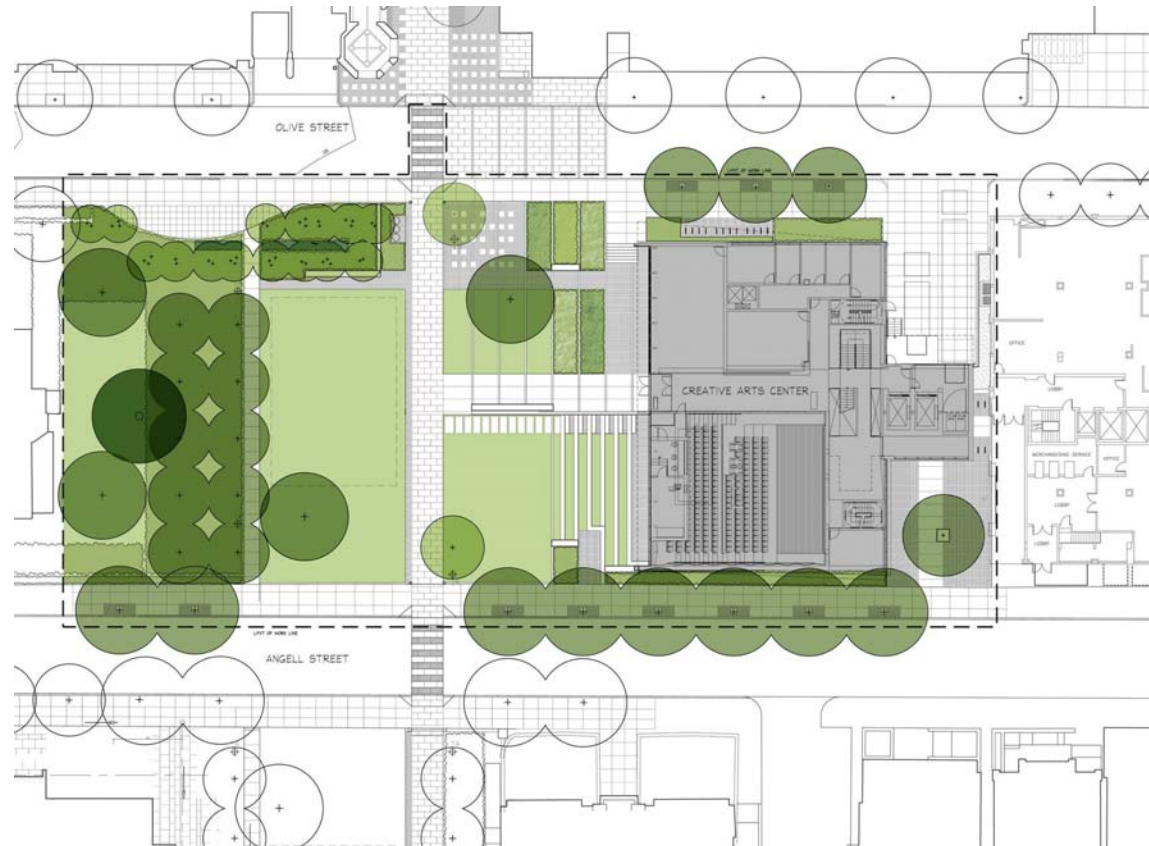
### Other Clarifications: College Hill

#### Granoff Center for the Creative Arts

The Granoff Center for the Creative Arts Center will be a new three story 35,000 square foot building located at 154 Angell Street (adjacent to the Brown Office Building). The first floor will include a public gallery, a 200 seat recital hall, administrative offices, and entrances from both The Walk and Angell Street, along with a shared two-bay loading dock between the new building and the Brown Office Building. The upper floors will include a mixture of shops, studios, and large multi-purpose rooms for multi-disciplinary art projects. The building has been designed in accordance with strict energy efficiency guidelines targeting a LEED Gold rating. It will feature a green roof and external louvered shades to control heat gain. (see site plan at right)

The site was identified in the 2006 Master Plan as the site for a new four story 45,000 sf building with public functions and a recital hall on the first floor, entrances from Angell Street and The Walk, and a shared loading dock between the new building and the Brown Office. Obviously, the current plan is very much in keeping with the previous plan, so this amendment is simply seeking to clarify the functions within the building. No zoning variances or waivers will be necessary.

As a result of this change, no new construction is planned at the location identified in the 2006 Master Plan for the Creative Arts Center. Likewise, the relocation of Norwood House and the demolition of the house at 86 Waterman Street are no longer planned in the near future.



*Site Plan for Granoff Center for the Creative Arts*

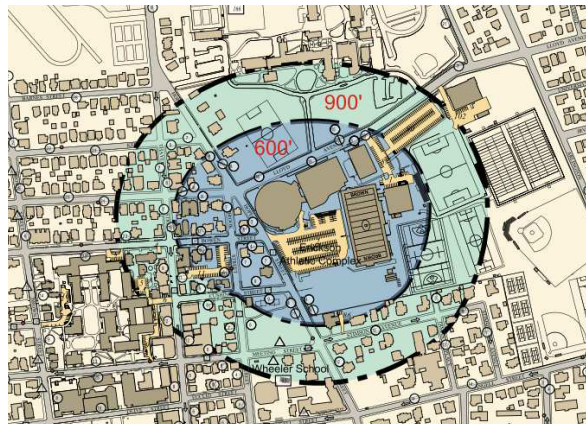


### Fitness and Aquatic Center

The previously planned 84,000 sf Fitness Center (listed in the 2006 Master Plan) and 51,000 sf Swim Center (listed in the 2008 Amendment) are now being planned as one 72,000 square foot building located in the footprint of the former Smith Swim Center. The building will contain fitness space, exercise studios, locker rooms, offices, and a 56 meter competition pool with seating for 800 spectators. It will be designed in accordance with strict energy efficiency guidelines targeting a LEED Silver Rating. No zoning variances are required.

The project is also being designed with significant landscape improvements, replacing most of the large parking lot currently located in the center of the Erickson Athletic Complex with a grassy quadrangle. All but a small section of the stone perimeter wall will be maintained. Off-street accessible parking will be located adjacent to all venues, as will bus pick-up and drop-off. (see aerial view at right)

Parking within the overall complex will be reduced from 436 spaces to 297. Based on attendance records over the last three years and parking ratios provided by VHB, this number of parking spaces will provide adequate parking for all but 10-12 events each year (typically overlapping events or large invitationals). For these large events on-street parking will make up the difference (they are held at night or weekends). There are enough spaces within 600 ft of the Athletic Complex to accommodate these events, and attendants will be on hand to help manage traffic and parking. The map at right illustrates the extent of this impact.



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### Renovation Projects

Due to increasing community concerns about the impact of renovation projects, this amendment also includes nine large renovation projects that do not meet the requirements for inclusion in the Institutional Master Plan, but could have an impact on the community. As previously stated in the 2006 Institutional Master Plan, it is not the intent to provide an all-inclusive list of projects (over 120 construction projects per year). However, it is an effort to be more transparent about significant projects undertaken by the University.

1. Berylson Family Fields: The renovation of existing lighted athletic fields in the Aldridge Dexter Field area has increased safety and utilization of previously deteriorated fields. The fields have now been reconfigured, artificial turf replaced the natural grass, the existing lights were upgraded, and a vegetative buffer was planted along the edge of the fields. An application for a height variance for the new light poles was submitted but withdrawn after significant opposition. Brown has agreed to limit the use of the lights from 7 AM to 10 PM during the academic year with extensions as allowed by the NCAA.
2. Faunce House: Exterior and interior renovations of this historic McKim Mead & White building will enhance its utilization as the campus center and protect its historic fabric. Although Faunce House will remain a 24 hour building, it is anticipated the updated facility will encourage more intense use.
3. Rockefeller Library: Exterior renovations, ongoing interior renovations, and code

upgrades in this 1960's library facility will allow it to serve as a greater magnet for students.

4. Sciences Library: Ongoing interior renovations and code upgrades in the tallest building on campus will transform the use of this building to an important student resource. This building will remain a 24 hour building, but may see more intense utilization after the renovations.
5. John Hay Library: Interior renovations in this historic library at the top of College Street, including the main reading room, will significantly increase its utilization as a student study space.
6. BioMed Center: Ongoing exterior renovations, HVAC upgrades, and interior renovations in this 1960's lab/classroom facility will renew its functionality and utilization. Because of the size and complexity of the existing building (and to reduce the impact) this work is being planned as a multi-year project.
7. The Minden: Primarily interior renovations of this former historic hotel, now used as a residence hall, will improve the reliability of the elevator and other building systems.
8. Hunter Lab: As the occupants of this building move into the Metcalf Complex, renovations are being planned to upgrade the systems and renew the interior of this 1950's lab building.
9. 229 Wayland Avenue: The temporary relocation of faculty offices and computational testing rooms to this leased space will allow the renovation of the Metcalf Complex to proceed in a more efficient manner.

### Public Access

At Brown, all campus grounds are open for the enjoyment of the public. The Main Green, the Front Lawn, and Lincoln Field are among the most pleasant open spaces on the East Side, and Pembroke Field is heavily utilized by The Wheeler School and the surrounding community. As new green spaces develop along The Walk and at the Athletic Complex, it is the University's hope that these spaces will be added to the ranks of enjoyable public spaces on the East Side.

The athletic fields located at Aldridge Dexter and near the Brown Stadium are heavily utilized by University teams, but can be scheduled through the Athletic Department. Likewise, the indoor athletic facilities can be scheduled through the Athletic Department. Many external groups, including the Moses Brown School, community sports leagues, and summer camps take advantage of Brown's athletic facilities.

Several of Brown's buildings are essentially public buildings. Venues like Meehan Auditorium, Pizzitola Gymnasium, Salomon Hall, Stuart Theater, Leed Theater, Ashamu Dance Studio, Grant Recital Hall, Sayles Hall, Alumnae Hall, and Manning Chapel frequently host performances, lectures and other events that are open to the public, and many others house spaces that can be made available to community groups through Conference Services Department. Public access is always an important consideration in the design of our buildings. For example, the newly renovated Bookstore includes a meeting room specifically designed for community use.



## Public Participation

The planning process at Brown University continues to be an open and iterative process with significant community input, and the plans presented in this amendment are no exception. The following is a list of meetings with community members specifically dealing with the development of the Jewelry District Plan and other aspects of this Amendment to the 2006 Institutional Master Plan, and the University is committed to sustaining this level of community feedback as specific design proposals emerge for each project.

5/12/09	Jewelry District Association
5/14/09	Planning Department Staff
5/19/09	Open Meeting: Creative Arts
6/01/09	Providence Foundation Leadership
6/17/09	Lifespan / Women & Infants
6/18/09	Planning Department Staff
7/22/09	Community Working Group
8/21/09	Planning Department Staff
9/16/09	Planning Department Staff
9/29/09	Women & Infants Hospital
9/29/09	Providence Foundation Leadership
10/13/09	Jewelry District Association
10/15/09	Brown Corporation
10/19/09	Planning Department Staff
10/21/09	Community Working Group
11/03/09	Representative Gordon Fox
11/09/09	Open Meeting: Brown Campus
11/09/09	Open Meeting: Jewelry District
11/12/09	Chamber of Commerce
11/17/09	Open Meeting: College Hill
11/18/09	Providence Preservation Society
TBD	City Council Representatives
12/1/09	City Plan Commission



Map of Brown Campus – Planned projects shown in red