DOWNTOWN LAWRENCE BEAUTIFICATION

PLANTING DESIGN AND MASTER PLANNING

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February 2006

DOWNTOWN LAWRENCE BEAUTIFICATION

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EXECUTIVE SUMMARY

The purpose of this study is to provide a framework and guidance for current and future development and enhancements in the Downtown Lawrence area, more specifically described as New Hampshire, Massachusetts and Vermont Streets between 6th Street and 11th Street. The main goals were directed toward increased landscaping, amenities and overall ideas for aesthetics and beautification.

The study provides general landscape design solutions and research on the evaluation of existing tree health and function within the overall downtown area. It also investigates and provides recommendations for more seasonal color and beautification along Massachusetts Street. This additional landscaping is proposed in specific and consistent planting palettes for use throughout downtown. Typical planting plans and design have been created for Massachusetts Street Intersections and Mid-block crossings to provide a common landscaping theme consistent from block to block. These landscaping plans along with a specific planting schedule and time table will allow Lawrence Park and Recreation staff an easy to follow and focused design for incorporation in the overall downtown area today and tomorrow.

Other "big picture" ideas and recommendations are investigated, including considerations for the increasing newspaper rack "clutter" problem, as well as recommendations for landscaping solutions near the Ninth Street bus stop location. Also, the use of additional amenities to create an entrance hierarchy within the downtown area is explored. Other ideas for constructing "bulb out" landscaping corners (similar to what has just been created near the Hobbs-Taylor lofts) and providing mid-block crossings along both New Hampshire and Vermont Streets are analyzed and proposed. The study is concluded by providing a general timeline and guidance for a 5 year plan of action to assist the Lawrence Parks and Recreation Department (LPRD) for budgeting purposes also has been developed.

In summary, it is recommended that all proposed landscaping plans and planting palettes be adopted for use in the entire downtown area. It also is concluded that additional year to year funding is a must to cover the increased need for additional Lawrence Parks and Recreation staff to maintain the increased landscaping and maintenance demands required to keep Downtown Lawrence unique, clean and aesthetically beautiful with plantings and other amenities.

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SECTION 1

INTRODUCTION

MISSION STATEMENT – The mission statement is to enhance Downtown Lawrence by providing a framework for the development of planting palettes and guidelines for continuous year-round color along Massachusetts Street, while also providing recommendations and master planning for the entire downtown area in general.

GOALS and OBJECTIVES – In preparing this plan we examined the downtown area, which can generally be described as New Hampshire, Massachusetts and Vermont Streets between 6th Street and 11th Street.

Various specific goals and objectives were used as criteria to help develop the Beautification Plan. They are to:

- Provide general landscape design solutions for downtown
- Evaluate tree health and function within the overall downtown area
- Provide more seasonal color along Massachusetts Street
- Provide a general timeline and guidance for a 5-10 year plan to assist the Lawrence Parks and Recreation Department (LPRD) for budgeting purposes
- Provide recommendations for landscaping solutions near the Ninth Street bus stop location

SECTION 2

PROCESS

PROCESS OF PLANNING – The planning process began in November 2005 and was completed in February 2006. The planning process was divided into several tasks and elements. An initial kick-off meeting was held with Bartlett & West Engineers, LPRD staff members, Downtown Lawrence Inc. committee members, city planning staff, city transit staff, city commissioners, city attorney and city manager. After this initial meeting, in which a general overview of the project was presented, various individuals submitted comments and/or suggestions about the downtown area and how this plan might consider investigating these ideas.

The next step in the process was a walking tour of the downtown area to discuss and observe some of the suggestions presented during the initial meeting. After the outdoor meeting/walk, Bartlett & West Engineers prepared preliminary planting palettes, timelines and ideas for the downtown area. These design ideas were discussed in a small group meeting in late December 2005. The plans and ideas were adjusted to reflect any changes that came out of the meeting and final plans were completed. The process concluded with a final presentation to all interested parties at City Hall in February 2006.

SECTION 3

PROJECT DESIGN TASKS

DESIGN RECOMMENDATIONS – The remainder of this report will illustrate identified problems or concerns and provide suggested modifications as a solution to the problem. The brief synopsis of "problem-analysis-solution" scenarios have been broken into the following categories to assist in the understanding of why these recommendations were investigated and proposed.

PLANTINGS

- Existing Tree Health in the Downtown Area
- Landscape Plantings at Street Intersections along Massachusetts Street
- Landscape Planting at Mid-block Crossings along Massachusetts Street
- Planting Types and Planting Schedule
- Lawrence Parks and Recreation Department on-going Maintenance Needs and Staffing
- Overgrown Oaks in the Arcade Areas

GENERAL DOWNTOWN MASTER PLANNING

- Overall Downtown Area
- Create Entrance Hierarchy
- Clear the Clutter, Newspaper Stand Solutions
- Future Mid-block Crosswalk Areas
- Future Bulb-out Areas
- Ninth Street Bus Stop Solutions

^{*} Please note that the following descriptions for the proposed solutions are summarized in general and are intended to be a supplement to the final verbal presentation of findings. Every idea explored through this project associated with the problem solving, analysis, and recommended design process are not discussed in their entirety within this document.*

What is the existing tree health currently in the downtown area and what tree species options need to be considered for today and in the future?

ANALYSIS:

Various trees species can have different problems over the course of time. Currently, numerous existing Ash trees along Massachusetts Street are either overgrown and continue to become deformed by constant trimming or have acquired a disease. Because of the nature of downtown pedestrian traffic and various business rehab projects, the downtown trees have become stressed and more susceptible to secondary pest problems.

During the fall of 2005 and into early 2006, thirty-four (34) trees have been identified for removal. These trees will be cut down and the remaining stumps removed from the planters over the next two years in conjunction with the currently on-going waterline projects.

Along New Hampshire, Vermont, and the side streets, various other types of trees exist in different situations. Some are in parking lots and planters, while others are in turf sections between the back of curb and the sidewalk. The LPRD in 2000 began the process of identifying dying, diseased and insect infested trees and replacing them as appropriate with improved cultivars. Over the last 5 years more than 60 Washington Hawthorn trees were removed. They had developed severe die back from Cedar Quince Rust. These trees were replaced with an ornamental Japanese Tree Lilac "Ivory Silk."

RECOMMENDATION/SOLUTION:

Our recommendation to help with current and future tree planting in the downtown area is to establish a preferential tree palette for use. Instead of guess work on what trees to use and how they fit within the downtown area, we have compiled a "Preferred Trees and Shrubs for Downtown Lawrence" planting list. This planting list is attached in the Appendix section of this report and notes which trees are best for use along Massachusetts Street as well as in other downtown areas. For example, when a tree begins to die along Massachusetts Street, another tree of the selected species and on the planting list, will replace it. This will keep the plantings consistent in the entire area and within the overall scheme for Downtown Lawrence.

How will landscaping and color be handled at street intersections along Massachusetts Street?

ANALYSIS:

Currently, the various planters at each street intersection along Massachusetts Street have diverse types of trees and various sparse permanent landscaping plantings. Most permanent landscape plants are located in linear fashion in the middle of the planter, with the entire edges of each planter for perennial flowers to be planted during the spring, summer and fall seasons. This current situation has caused some downtown business owners to express concern about the lack of color throughout the year and question as to what, where and who will receive what type of plantings in front of their building entrance.

After reviewing all of the Massachusetts Street intersections, it was determined that a consistent plan was needed for everyone (both LPRD staff and downtown business owners) to easily identify and understand what landscape plantings will be placed in various specific planter locations. A thorough evaluation of each planter size and location was performed to best evaluate which plantings will be successful in any given location.

One additional problem was identified in which some Ash trees were a visual block for the corner vehicle and pedestrian traffic lights, subsequently requiring severe pruning of street side limbs. All Ash trees in these planters will be removed and replaced with Shrub Rose landscape plantings.

RECOMMENDATION/SOLUTION:

We have created a consistent and easy to follow landscape design for all Massachusetts Street intersections. This design is illustrated on the drawing titled "Typical Intersection: Concrete Planter Year-round Landscaping Palette." The concept behind the planting layout illustrated is to provide "pockets" of both year-round permanent landscape trees and shrubs as well as other "pockets" large enough to provide a colorful flowering perennial bed. By providing pockets of plantings in an irregular shape, it illustrates that considerable thought and design has been put into each and every planting bed, not just soldier course plantings in a row to fill space. The downtown planters are of various sizes and species quantities, which will be adjusted to fit the individual planters, yet provide continuity for the entire downtown area.

Also, the City of Lawrence is currently planning future construction of new bulb outs at the Northeast and Northwest corners of the 600 Block as funding becomes available. The construction will be completed by private contractors, but all new plantings will be installed by the LPRD.

How will landscaping and color be handled at the mid-block crossings along Massachusetts Street?

ANALYSIS:

The analysis of the mid-block crossing planters is very similar to the street intersections. Most permanent landscape plants are located in linear fashion in the middle of the planter, with the entire edges of each planter for perennial flowers to be planted during the spring, summer and fall seasons. Most of the mid-block planters had 1 or 2 existing trees, but consistent permanent landscaping plantings were sporadic from block to block.

As mentioned with the street intersections, after reviewing all of the Massachusetts mid-block crossings, it was determined that a consistent plan was needed for everyone (both LPRD staff and downtown business owners) to easily identify and understand what landscape plantings will be placed in various specific planter locations. An evaluation of the planters was performed and plantings were identified to add both permanent plantings and areas for perennial beds.

RECOMMENDATION/SOLUTION:

We have created a consistent and easy to follow landscape design for all Massachusetts mid-block crossings. This design is illustrated on the drawing titled "Typical Mid-block Crossing: Concrete Planter Year-Round Landscaping Palette." The concept behind the mid-block planting layout illustrated is to provide "pockets" of both year-round permanent landscape trees and shrubs as well as other "pockets" large enough to provide a colorful flowering perennial bed similar to the street intersections. The trees used for the mid-block crossings will be identical to those used in the planters at the street intersections to provide continuity to both of these very important pedestrian areas. Trees additionally will function as a partial shade and provide a frame for adjacent park benches. They are extremely important in bringing a human scale element to these "people gathering" locations.

We also suggest the addition of semi-automatic irrigation for the eight larger midblock planters. Costs are estimated at \$3,000 total, plus the need for staff time to install. This will minimize the need for hand watering in these large planting spaces during the course of the planting season.

Since new recommended landscape plantings are being added to both the Massachusetts Street intersections and the mid-block crossings, what types of plantings and flowers are to be used? Also, at what point in the year can it be expected to see each of these types of perennials flower?

ANALYSIS:

Some people are more adept with the identification of flowering perennials than others, while some don't care what type they are, just that they look nice. In order to provide the requested year-round color, Bartlett & West Engineers worked directly with the Lawrence Parks and Recreation Department horticulture staff to identify which trees, shrubs and flowering perennials will provide the best "bang for the buck".

Additionally, the Lawrence Parks and Recreation Department has invested new resources in 2006 with the purchase of a seasonal greenhouse. This facility will create the ability to provide larger flowers at an earlier date by providing a safety net for colder temperatures and harsh early spring weather. But, with the addition of this facility comes the need for more required labor and additional funding and resources to maintain.

RECOMMENDATION/SOLUTION:

Our solution is to establish various planting palettes for each season of the year and a timeline for all of these plants to be installed and visible during the seasons. The proposed planting palettes and timeline schedule are located in the Appendix. Four separate palettes of perennial and annual flowering plants were established and then implemented into a year-round planting timeline. The coordination between planting palette, season, and installation period by LPRD staff was critical in determining a comprehensive and workable solution.

Other well known landscaping parks such as the Biltmore Estate in Asheville, North Carolina follow a similar four season planting schedule with similar species. The Biltmore Estate is a great tourist attraction and will usually generate over 100,000 spectators a year, most of which are enticed to view by the elegant landscaping. Although various ornamental grasses were requested by some members of the public, it was determined that in a dormant state they could pose a fire risk, therefore were considered, but shall not be recommended for any downtown planters.

Now that a new plan and landscape palette has been established, is it feasible for current LPRD staff to handle and maintain all of these new planting ideas in the downtown area?

ANALYSIS:

The expanded collection of new and additional landscape trees, shrubs and flowering perennial/annual beds, requires the need to water, prune, and otherwise maintain these areas. Currently, the LPRD staff is stretched very thin on manpower to keep everything on schedule in the entire downtown area, along with the entire City of Lawrence parks system. Continuous planning and preparation is needed by the LPRD staff to try and keep everything on track.

The addition of more areas for colorful and attractive plantings at every intersection and mid-block of Massachusetts Street enhances downtown and makes everyone proud of their community. With these enhancements comes the realization that additional plantings means additional time and staff commitments to keep these areas aesthetically pleasing.

RECOMMENDATION/SOLUTION:

Our recommendation to help address the upcoming future demand of increased workload to provide colorful and vibrant plantings in the downtown area is that additional staff will be necessary in the 2007 calendar year and beyond. We believe at least 1 to 2 additional full time horticultural staff members will be necessary in order to support the new plan of implementing year-round colorful planting schemes. It is not that the new plan has created a complicated network of tasks, but the time required to provide a "quality" of service to the downtown community is necessary to keep everything healthy and appealing.

The Oaks in both arcade areas (700 block and 800 block) have outgrown their useable life span and need to be replaced.

ANALYSIS:

Both arcade areas have three English Oak trees located within the planters. These Oaks are very large and have currently outgrown their use in these locations. The trees are now so large that numerous branches overhang onto adjacent business roof tops and allow for both leaves and squirrels to cause problems. These trees have aged, the cleanup of acorns and fallen branches in the area has become more of a problem and an increased maintenance headache. They are also in serious decline which is leaving the trees susceptible to secondary pest problems.

RECOMMENDATION/SOLUTION:

All of the English Oaks should be removed. All removed Oaks will be replaced with smaller shade or ornamental trees. Such trees as the Trident Maple and the upright Cherokee Sweetgum will provide more color, but will also open up these walk through areas for increased light, visibility and safety for all pedestrians.

What area is considered "Downtown Lawrence" and what improvements or suggestions can be made to give the area even more aesthetic appeal than it already has?

ANALYSIS:

As outlined in the attached "Analysis and Ideas" drawing in the Appendix section, we have noted a general area most people consider to be the Downtown Lawrence general district. This general area almost identically resembles earlier studies completed and noted in the report known as the <u>Downtown Lawrence Conservation Zoning District</u> (Architectural and Urban Design Guidelines) as on file September 5, 2001. Even though both studies do not specifically highlight either Watson Park or South Park as being located in this general area, we feel both parks provide visual reference and symbology that you are starting to enter the downtown district.

The purpose of having people identify the downtown area is very important. Significant downtown icons provide visual reference points and give the area its own unique feeling and energy. When people discuss or describe downtown, it should be with enthusiasm and excitement to truly make it a desired destination point.

During our analysis, we investigated every side street and all areas along New Hampshire, Vermont and Massachusetts Street. Even though the feeling of Massachusetts Street is different than those of its side streets, we believe New Hampshire and Vermont are becoming more and more important inside the general downtown area. Massachusetts Street is already noted as the "jewel" of downtown and has unique planters, brick paver lined crosswalks and revolving year-round sculptures on the corners to capture the eye of every person in the area. By identifying other critical places to bring attention to the entire downtown area, we believe a more comprehensive picture can be painted to include New Hampshire, Vermont and the numbered side streets.

RECOMMENDATION/SOLUTION:

Our recommendation is to consider adding some elements of continuity to the downtown district. These elements will allow all of New Hampshire, Vermont, and Massachusetts Street the feeling of being a part of "Downtown Lawrence." We suggest adding some entrance corridor hierarchy, more bulb-outs at intersection corners, more mid-block crosswalks on Vermont and New Hampshire similar to Massachusetts Street, and consider consolidating all the scattered newspaper racks. In the upcoming sections of the report, we will discuss each of these recommendations more specifically.

PROBLEM/CONCERN: (Corridor Entrance Hierarchy)

How do we make the entire downtown area more identifiable?

ANALYSIS:

When driving from anywhere in Lawrence to the downtown area, everyone knows when they come to Massachusetts Street. It has raised planters with landscaping on the corners, angled parking lined with enticing shade trees, brick paver crosswalks, and mid-block crossings. These key features make Massachusetts Street easily identifiable as being located in "Downtown". When we investigated ideas to help give the other non-Massachusetts Street areas an easily identifiable feeling of being downtown, the corridor entrance hierarchy solution became an obvious possibility.

RECOMMENDATION/SOLUTION:

Our recommendation is to create various easily identifiable intersections with different levels of hierarchy and design these areas with features or elements that allow vehicular traffic and pedestrians to easily acknowledge they are now entering Downtown Lawrence. Please refer to the attached "Analysis and Ideas" drawing in the Appendix section for visual reference of the noted ideas.

We believe these important street intersections could be enhanced using various ideas based on their general location and usage. We divided every intersection into one of three categories, Primary, Secondary or Tertiary. Primary intersections were considered major points of emphasis in which numerous vehicles will enter the area from other major arteries. Secondary intersections were heavily traveled on a daily basis from other collector type of streets, but may not be quite located in a location to be classified as a primary entrance. Tertiary intersections are the least used in the general downtown traffic pattern, but still provide a vehicular connection to the area.

Enhancing these intersections with noted ideas based on their importance and location in the downtown area will increase awareness and the desired "easier identification" that everyone is searching to find. It also needs to be duly noted that any of the proposed new archways or symbolic markers would have to be reviewed and approved by the Historic Resources Commission for compatible materials, size and placement.

PROBLEM/CONCERN: (Newspaper Stand Solutions)

There are numerous newspaper stands all over the downtown area, how can they be better organized and handled?

ANALYSIS:

When walking down Massachusetts Street, almost every single intersection and midblock crossing has multiple newspaper vending machines. Some machines require payment for the newspaper (i.e. Journal World, USA Today) while others are free publications (i.e. Hawk Sheet, Real Estate Listings). This problem is not solely a Massachusetts Street problem, but in the entire downtown area. Each vendor wants its publication to be noticed and used, thus creating a problem of having 15 machines for 15 different publications and large amounts of space consumed. The biggest problem this represents in a downtown setting is a term coined "clutter." Nobody wants to have items sitting everywhere and blocking pedestrian routes and shielding the colorful landscaping of the planters. The placement of the current vending machines also impedes planter access and caring for the landscape materials. This causes staff to access and work from the street side of the planter, adjacent to oncoming traffic.

During the process of this study, one hundred-three (103) Publication Units were identified in 17 locations along Massachusetts Street and the adjacent side streets by Lawrence Parks and Recreation staff. The following is a simplified breakdown of the specific publication units:

PAID PUBLICATIONS

| Journal-World | 17 units |
|--------------------------------|----------|
| KC Star | 6 units |
| USA Today | 6 units |
| Topeka Capital Journal | 1 unit |
| New York Times | 1 unit |
| Total Paid Publications | 31 units |

FREE PUBLICATIONS

Various organizations 72 units

Grand Total of all Publications = 103 units

The placement and type of units varied from location to location, but the common thread throughout all of the downtown area is that these units are located where pedestrians are most likely have interest in stopping and grabbing a glance at today's headlines. More specifically, these locations are either very high traffic zones (i.e. 9th Street Bus Stop) or adjacent to the downtown local coffee/espresso shops. The highest volume of units (7 paid publications and 27 free publications) were found in the 900 Block of Massachusetts Street.

RECOMMENDATION/SOLUTION:

Our recommendation to help solve the newspaper "clutter" problem is to first devise an overall plan on how each step of this process will be handled. As noted at the kick-off meeting for this master plan study, solving the newspaper stand issue will not be an easy task. It will require a precise plan to talk with local and national newspaper vendors about the problem, propose a solution by identifying how much space is needed for pedestrian traffic, identifying other areas of large open space that could be utilized, possibly drafting a new city ordinance, installing the plan, and maintaining the final product.

Using the information gathered on the number of existing publication units above, we have found that an average of about 50 to 55 square feet of space is needed per block. This averages out to be about 18 square feet at each end of the block (one corner, not both sides) and about 18 square feet at the mid-block location (which can be allowed on both sides of the street). We have identified these specific locations and adequate square footage areas on the drawings titled "Typical Intersection: Concrete Planter Year-round Landscaping Palette and "Typical Mid-block Crossing: Concrete Planter Year-Round Landscaping Palette." Please refer to those drawings for the specifically identified areas.

One product we researched combined paid publication and free publication machines in one central dispersing unit called a "CityRack" by CitySolutions, Inc. (see "Analysis and Ideas" drawing in the Appendix). This consolidated newspaper vending unit will keep all publications under one roof. It can either by leased from the manufacturer for 20 years or it can be purchased outright and would fit into the proposed square footage areas identified. If leased, the manufacturer will maintain the entire unit, but in turn sell the back of the item as advertising space. If purchased outright, the City of Lawrence will be responsible for maintaining the unit. The cost for a unit containing space for three paid publications and six free publications is about \$12,000. As noted by the City of Lawrence Historic Resources Administrator, large publication organizers have a larger impact on the downtown district rather than just square footage locations designated for the placement of multiple newspaper racks. The use of a consolidated newspaper vending organizer would have to be reviewed by the Historic Resources Commission for compatibility, size and placement prior to final approval.

PROBLEM/CONCERN: (Future Mid-block Crosswalks)

What other ideas can be used on New Hampshire and Vermont that already exist along Massachusetts Street in the downtown area?

ANALYSIS:

One very unique feature along Massachusetts Street that is heavily used and ties both sides of the street together nicely is the existence of mid-block crossings. These pedestrian friendly crossings allow shoppers to easily cross back and forth between shops, restaurants and novelty stores without heading for the end of the block or jaywalking across traffic. All of these locations contain the previous discussed mid-block planters, benches, bike racks and other amenities that allow for more colorful landscaping in the downtown area. We studied the existing mid-block crossings and examined the possibility of adding these features to both New Hampshire and Vermont Streets.

RECOMMENDATION/SOLUTION:

One very unique feature along Massachusetts Street that is heavily used are the midblock crossings. We recommend adding mid-block crossings to all blocks along New Hampshire and Vermont between 6th Street and 11th Street (see "Analysis and Ideas" drawing in the Appendix). These mid-block crossing will provide a common feature to the entire downtown district. It will allow for new raised planters to have trees, shrubs and flowers, increasing the amount of colorful plantings. It also can provide brick paver crosswalks, a nice safety feature to help motorists more easily identify specific pedestrian crossing zones. The numerous existing parking lots located behind the businesses along Massachusetts Street are used heavily by people all day long. Numerous pedestrians crossed New Hampshire and Vermont, with no marked crosswalk, to enter business located across the street from these parking lots. Adding mid-block crossings can be incorporated, but each individual block needs to be studied separately to provide adequate aesthetic and safety factors, as each block section is unique and no cookie-cutter solution can be used.

PROBLEM/CONCERN: (Future Bulb-out Intersection Corners)

Are there still more ideas that can be used on New Hampshire and Vermont that already exist along Massachusetts Street in the downtown area?

ANALYSIS:

Pedestrians are happy when crossing any public street, that is safe, easy and convenient. Throughout Massachusetts Street one common theme is easily identified, every street intersection between 7th and 11th has corner "bulb-outs." These bulb-outs are extended portions of the curb and sidewalk that allow for shorter crossing distances for pedestrians, keep vehicular drivers more alert to stay in their lanes, and provide additional space for landscaping and other amenities at the corners. The bulb outs provide a more pedestrian friendly amenity to Massachusetts Street then to adjacent New Hampshire and Vermont Streets.

It is noted that 8th and New Hampshire, where the new Hobbs-Taylor lofts have been constructed, has these new bulb-outs corners. Bartlett & West Engineers examined all intersections in the downtown area and believe that every intersection has the potential to allow for these bulb-out features. Obviously, each intersection will have its unique challenges, but every single one of these areas is workable.

RECOMMENDATION/SOLUTION:

Our recommendation to promote tying New Hampshire and Vermont Streets into Massachusetts Street and the downtown area, is to explore adding bulb-out corners on all blocks between 6th Street and 11th Street (see "Analysis and Ideas" drawing in the Appendix). These bulb-out corners will provide a common feature in the entire downtown district. As is the same for the mid-block crossings, these bulb-outs will allow for larger planting areas for additional low-growing shrubs and flowers and increase the amount of colorful plantings in the downtown area. It will also allow for potential planters, benches and other typical street corner amenities as seen on Massachusetts Street. It also will provide that added pedestrian safety factor by shortening the distance from curb to curb. Again, as with each block, every corner is unique and no cookie-cutter solution can be used. We see bulb-outs as a low to midlevel cost solution for adding both color and increased safety tying the downtown intersections together.

PROBLEM/CONCERN: (Ninth Street Bus Stop Landscape Solutions)

There are numerous pedestrians waiting anywhere from 5-20 minutes to ride the "T" and KU Buses in downtown Lawrence. What recommendations using landscaping can be incorporated into this location? Also, some pedestrians sit adjacent to windows owned by US Bank just east of the 9th and Massachusetts Street intersection. What ideas can be implemented to help alleviate this problem?

ANALYSIS:

Bartlett & West Engineers realizes that the bus transportation system is a vital part of the downtown area. The 9th and Massachusetts Street intersection is the local downtown hub for boarding different bus transportation routes. At the current time, numerous pedestrians can be seen at both the northwest and southeast corners of the intersection waiting for buses. There is currently only one covered area to wait, which is an overhang canopy attached to a building at the northwest corner. Very limited sidewalk space and landscaping are currently provided in either bus loading location. Benches are included beneath the canopy at the northwest corner and a small, glass enclosed shelter is located off the southeast corner. There is very little shade at the existing canopy, but the existing US Bank building provides a large amount of shade on the southeast corner.

RECOMMENDATION/SOLUTION:

We suggest when future bus shelters are purchased, placement of additional shade trees and buffer landscaping are provided around them. The trees will provide shade to the shelter and a landscape buffer to keep waiting pedestrians safely away from the street. We also suggest the addition of adequate benches, enhanced lighting, a specifically designated area for the newspaper racks and the possibility of a drinking fountain near the waiting zones. The limited amount of space between the back of curb and sidewalk allows for limited ideas to help assist with some of the current bus stop problems, but we believe these suggestions can at least provide more general comfort when waiting for public transportation.

As for the problem of pedestrians sitting adjacent to windows owned by US Bank just east of the 9th and Massachusetts Street intersection, the area is very limited on immediate potential solutions. The US Bank building is private property, thus providing any items on the window ledges themselves is solely up to the building owners. Also, the limited amount of sidewalk space between the building and back of curb provides no additional area for landscaping, etc. without causing a severe bottleneck in pedestrian traffic flow. Our best suggestion is to provide any future shelters or waiting areas slightly further down the block to promote pedestrians to stay further away from the US Bank building itself.

SECTION 4

COST ANALYSIS AND GENERAL TIMELINE

COST CHALLENGES AND BUDGETING – The request for new and additional items within any strict budget is always a challenge. The idea of providing more landscape plantings and new amenities in the downtown area is always made more difficult by the rising costs of materials and the care needed to adequately maintain and service these items. We have reviewed and analyzed various situations and provided some recommendations to consider for future budget planning needs. With the assistance of Mark Hecker, Superintendent of Parks and Maintenance for LPRD, a detailed list of Downtown Lawrence's current costs and potential costs have been provided for the 2006 calendar year as it pertains to landscaping and overall maintenance. If this plan is to be successful, the new level of funding must be maintained and supplemented as new landscape areas are developed in the downtown area.

| 2005 approximate costs - Item / Person | Funding Source | Amount |
|---|-------------------------------|---------------|
| Full-time Horticulturist – Downtown Area | City's General Fund | \$45,255 / yr |
| Misc Full-time Forestry, Hort & Maint Staff | City's General Fund | \$35,000 / yr |
| Full-time downtown maintenance person | Downtown Parking Fund 503 | \$30,863 / yr |
| Full-time parking garage & parking lot cleaning | Downtown Parking Fund 503 | \$36,751 / yr |
| Contracted weekend and holiday litter & trash | Downtown Parking Fund 503 | \$6,936 / yr |
| Summer watering crew June 1 – Sept 1 | Downtown Parking Fund 503 | \$15,000 / yr |
| Flowers, trees & shrubs | Downtown Parking Fund 503 | \$8,000 / yr |
| Misc- supplies(fertilizer, trash bags, trash cans) | Downtown Parking Fund 503 | \$8,000 / yr |
| | Current Funding | \$182,805 |
| Additional Funding Available for 2006 | | Amount |
| Hire a new full-time maintenance person | Newly budgeted money for 2006 | \$33,000 / yr |
| Spring bulbs for Mass Street planters | Newly budgeted money for 2006 | \$1,500 / yr |
| Spring Pansies for Mass Street planters | Newly budgeted money for 2006 | \$1,000 / yr |
| Summer annuals (1 gallon pots) Mass street | Newly budgeted money for 2006 | \$8,000 / yr |
| Fall mums for Mass street planters | Newly budgeted money for 2006 | \$1,500 / yr |
| Tree & shrub replacements along Mass street | Newly budgeted money for 2006 | \$9,000 / yr |
| Early season watering / planting crew Apr-May | Newly budgeted money for 2006 | \$3,500 / yr |
| Late season watering / planting crew Sept-Oct | Newly budgeted money for 2006 | \$3,500 / yr |
| Irrigation additions & upgrades | Newly budgeted money for 2006 | \$1,000 / yr |
| Contract mowing of downtown grass areas | Newly budgeted money for 2006 | \$8,000 / yr |
| Yearly equipment replacement (paper racks, trash cans, benches, drinking fountains, water hydrants) | Newly budgeted money for 2006 | \$20,000 / yr |
| | Newly Budgeted Money Total | \$90,000 |
| | New Total Budgeted Downtown | \$272,805 |

Other *estimated* costs for the proposed improvements to the downtown area are as follows:

<u>CLEARING THE CLUTTER – NEWSPAPER STAND SOLUTIONS</u>

Purchase of unit containing three paid publication areas and six free publication areas

\$12,000 each

FUTURE MID-BLOCK CROSSINGS FOR VERMONT & NEW HAMPSHIRE

Installation of four concrete planter, stamped concrete crosswalks, landscape plantings, updated signage, adding benches and other amenities \$35,000 each

Installation of Semi-Automatic Irrigation, for the landscape area

\$3,000 each

BULB OUTS INTERSECTION IMPROVEMENTS

Installation of curbing, drainage and crosswalks \$90,000 each

Installation of Plants & Irrigation

similar to Hobbs-Taylor on New Hampshire \$2,500 each

CREATING ENTRANCE HIERARCHY

Installation of Large Pillar Monuments at both Primary Corridor Entrance

\$40,000.00 each

Installation of a smaller Pillar Monument at all Secondary or Tertiary Locations

\$20,000.00 each

All cost notes above are for initial installation. Does not include yearly cost of maintenance, etc.

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GENERAL TIMELINE AND FUTURE PLAN – As critical as having adequate funds to provide new materials, is the importance of appropriate timing and installation. The following is a general outline illustrating a "5 Year Plan of Action" for implementing the newly recommended planting palette and other amenities.

| <u>TIME</u> | <u>ACTION</u> |
|--------------------|---|
| Winter 2006 | Begin thinning of permanent landscapes in planters along Mass to allow for more seasonal. Actual installation on new permanent plantings will take place as water line project phases are completed. Continue tree replacement program along Mass. |
| Spring 2006 | - Increase sizes and numbers of seasonal plants in planters to create additional seasonal color. |
| Summer 2006 | - Install mid block crossing in the 600 and 800 blocks of New Hampshire (Public Works Department) |
| Summer 2006 | - 700 & 800 block of Mass, waterline & electric project completed by others (Utilities Department) - Define policy and purchase one (1) newspaper dispenser |
| Fall /Winter 2006 | Begin renovation and installation of permanent landscapes and irrigation in planters in the 700, and 800 blocks of Mass (intersections and mid-blocks) Continue tree replacement program along Mass. |
| Summer 2007 | - 900, 1000 & 1100 block of Mass, waterline & electric project completed by others (Utilities Department) - Purchase one (1) newspaper dispenser |
| Fall / Winter 2007 | Begin renovation and installation of permanent landscapes in planter in the 900, 1000 blocks of Mass (intersections and midblocks) Continue tree replacement program along Mass. |
| Spring-Summer 2008 | Full "seasonal planting" palette now in rotation on Mass Street New 600 Block Mass bulb outs completed by others (TE Grant) Purchase one (1) newspaper dispenser |

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| Fa11 | / Winter | 2008 | |
|-------|----------|--------|--|
| 1'411 | / VV | 241110 | |

- Begin renovation and installation of permanent landscapes in planter in the 1100 block of Mass (intersections and midblocks)
- Landscape bulb out after construction 600 block of Mass
- Continue tree replacement program along Mass.

Spring-Summer 2009

- Begin renovation and installation of permanent landscapes and irrigation 700 & 800 block Arcades.
- Start tree replacement program on side streets & numbered streets.
- Purchase one additional (1) newspaper dispenser

Spring-Summer 2010

- Begin renovation and installation of permanent landscapes and irrigation in city parking lots on Vermont Street.
- Continue tree replacement program on side streets & numbered streets.
- Purchase one additional (1) newspaper dispenser

Spring-Summer 2011

- Begin renovation and installation of permanent landscapes and irrigation in city parking lots on New Hampshire Street.
- Continue tree replacement program on side streets & numbered streets.
- Purchase one additional (1) newspaper dispenser

Future Activities

- Repair or replace brick entrance walls to parking lots
- Explore Entrance Hierarchy ideas
- Explore Mid-block crossings for Vermont & New Hampshire
- Explore Bulb-outs for Vermont & New Hampshire

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APPENDIX

Preferred Trees and Shrubs for Downtown Lawrence

Massachusetts Street

Trees

Greenspire Linden Tilia cordata 'Greenspire' Autumn Gold Ginkgo Ginkgo Biloba 'Autumn Gold'

Imperial Honeylocust Gleditsia triacanthos var. inermis 'Imperial'

Ivory Silk Japanese Tree Lilac Syringa reticulata 'Ivory Silk'

Shrubs

Mugho Pine Pinus mugho 'Mugho'

Limemound Spirea Spiraea x bumalda 'Limemound' Gold Mound Spirea Spiraea x bumalda 'Gold Mound' Shirobana Spirea Spiraea japonica 'Shirobana'

Kobold Barberry Berberis thunbergii 'Kobold' or 'Gold Nugget'

Oregon Grapeholly Mahonia aquifolium Red Fairy Rose Rosa polyantha

Madison Rose

Arcades

Trees

Trident Maple
Cherokee Sweetgum
Fastigiata European Hornbeam
Ivory Silk Japanese Tree Lilac

Acer buergerianum
Liquidambar stryaciflua
Carpinus betulus 'Fastigiata'
Syringa reticulata 'Ivory Silk'

Shrubs

Kobold Barberry Berberis thunbergii 'Kobold' or 'Gold Nugget'
Crimson Pygmy Barberry Berberis thunbergii var. atropurpurea 'Crimson Pygmy'

Bailey Dogwood *Cornus sericea* 'Baileyi' Oregon Grapeholly Mahonia aquifolia

Chadwick Yew Taxus x media 'Chadwickii'

Parking Lots and Other Streets

Trees

Fastigiata European Hornbeam Carpinus betulus 'Fastigiata'

Skymaster English Oak

Skyline Honeylocust

Gleditsia triacanthos var. inermis 'Skyline'

Oliver Angle Angle

Cleveland Select Pear Pyrus calleryana 'Cleveland Select'

Oklahoma Redbud *Cercis canadensis var. texensis* 'Oklahoma'

Whitebud Cercis canadensis 'Alba'
Green Vase Zelkova Zelkova serrata 'Green Vase'

Baldcypress Taxodium distichum

Bloodgood London Planetree Platanus x acerifolia 'Bloodgood'

Swamp White Oak Quercus bicolor

Pacific Sunset Maple Acer truncatum 'Warrenred' Pacific SunsetTM

Armstrong Columnar Maple Acer x freemanii 'Armstrong'

Cimmaron Ash Fraxinus pennsylvanica 'Cimmzam' CimmaronTM
Autumn Purple White Ash Fraxinus americana 'Junginger' Autumn PurpleTM

White Pine Pinus strobus

Shrubs

Crimson Pygmy Barberry Berberis thunbergii var. atropurpurea 'Crimson Pygmy'

Mentor Barberry
Chadwick Yew
Taxus x media 'Chadwickii'
Goldflame Spirea
Spiraea x bumalda 'Goldflame'

Dwarf Korean Lilac Syringa meyeri

Dwarf Burning Bush Euonymus alatus 'Compactus' Broadmoor Juniper Juniperus sabina 'Broadmoor' Keteleeri Upright Junipers Juniperus chinensis 'Keteleeri'

Kalm's Hypericum Hypericum kalmianum

Blue Mist Spirea Caryopteris x clandonensis 'Blue Mist'

Northern Bayberry *Myrica pensylvanica*

SEASONAL PLANTING PALETTES

PLANTING PALETTE #1 - BULBS

PrimaryPossibleTulipsHyacinthsDaffodilsGladioliCrocusesFritillaries

Dahalias

PLANTING PALETTE #2 - SOME PERENNIALS & PANSIES

Primary

Pansy 'Delta True Blue'
Pansy 'Delta Yellow with Blotch'

Possible

Artemisia 'Powis Castle'
Coreopsis 'Sunray or Early Sunrise'
Echinacea purpea 'Magnus'
Gaillardia 'Goblin'
Rudbeckia 'Goldstrum'
Verbena canadensis 'Homestead Purple'

PLANTING PALETTE #3 - ANNUALS

Primary

Angelonia 'AngelMist Purple Improved'
Angelonia 'AngelMist White Cloud'
Ageratum 'Hawaii Blue"
Angelonia Purple
Celosia 'New Look'
Coleus 'Sun varieties'
Easy Wave Petunias 'Silver or Pink'
Ipomea 'Ace of Spades'
Ipomea 'Lady Fingers'
Pentas 'New Look Pink'
Peppers 'Emplosive Ember'
Salvia farinacea 'Blue Victoria'
Salvia farinacea 'Argent White'
Zinnia " Profusion Orange'

Possible

Vinca 'Blue Cooler' Vinca 'Rose Cooler' Vinca 'Coconut' or 'White Cooler' Vinca 'Icy Pink'

PLANTING PALETTE #4 - MUMS

<u>Primary</u>

Various Mum species

| TIME OF YEAR | APPROXIMATE TIMEFRAME | TASK(S) |
|---|-----------------------|---|
| JANUARY & FEBRUARY | 60 Days | N/A |
| MARCH (1st Half) | 15 Days | Prep for Spring Planting Season |
| | | |
| BEGIN SEASONAL PLANTING SCHEDULE | 45.0 | DI ANTINO DAI ETTE "4 |
| MARCH (2nd Half) Start around St. Patty's Day Blooming Bulbs | 15 Days | PLANTING PALETTE #1 Crocuses, Daffodils, & Tulips are blooming Plant additional items as necessary |
| APRIL 1ST | 40 Days | PLANTING PALETTE #2 |
| (goes thru Art in the Park Weekend) | | Pansies |
| MAY 1ST - START OF DOWNTOWN WATERING | | |
| MAY 8TH (1st Weekend in May) | 60 Days | PLANTING PALETTE #3 |
| (includes Mother's Day, Father's Day & KU Graduation) (May 10th is KS last day of Frost) | | Annuals, Sweet Potato Vines, Coreopsis |
| JULY 1ST | 75 Days | PLANTING PALETTE ADJUSTMENT |
| (Includes 4th & the start of KU & Labor Day) | | (Additional Perennials to be blooming) |
| SEPTEMBER 15TH | 45 Days | PLANTING PALETTE #4 |
| (Includes Band Day, KU Home Football Games & Hallowee | | Mums |
| OCTOBER 1ST - END OF DOWNTOWN WATERING | | |
| END OF SEASONAL PLANTING SCHEDULE | | |
| NOVEMBER 1ST | 40 Days | Maybe add some mums (weather appliciable) start pulling old/dying flowers Remulch Beds |
| | | ID current year tree health Plant bulbs for next March if weather decent Order plants for next year's schedule Install x-mas lights in every other tree & monitor |
| MID DECEMBER | 15 Days | Order Trees/Shrubs/Flowers for next season |
| END OF THE YEAR | | |