SWT Design would like to thank the City of University City and the community for their time and efforts during the course of the master plan. Without their help, the vision for Heman Park would not have been possible.

ACKNOWLEDGEMENTS

City of University City

Stephen Kraft       City Council Liaison
Ed Mass            Park Commission
Steve Goldstein    Park Commission
Kimberly Jones     Park Commission
William Field      Park Commission
Dawn Price         Park Commission
Kathy Standley     Park Commission
Karen Culton       Park Commission
Richard Wilson     Director of Public Works and Parks
Lynda Euell-Taylor Deputy Director of Recreation
Ewald Winker       Park Operations Supervisor
Megan Fuhler       Project Manager II
Jenny Wendt        Project Manager
The City of University City Parks System contains twenty parks totaling 280.6 acres of park land. Each park has a unique character and provides visitors a variety of active and passive recreation opportunities. University City parks fall into one of four designations adopted by the Park Commission in 2008. Park designations are based on size, service area and use. These designations are Mini Parks, Neighborhood Parks, Community Parks, and Special Use Parks. Heman Park has a unique place within the parks system as the only Community Park to service 35,405 University City Residents with a secondary service area containing an additional population of 37,215.

Named for Mayor August Heman, Heman Park was established in 1923 and holds the honor of being one of University City’s first parks. Purchased with tax money along with Flynn and Lewis Parks, Heman Park is 81 years old. Adding to the parks rich history is the Heman Park Pool. Heman Park Pool was constructed as an economic relief effort during the Great Depression in 1932. The pool was dug by hand in order to maximize job creation in the City.

Driven by a desire by city staff to continue providing residents of University City with a variety of recreational experiences within the parks system, this community input driven master plan was pursued to establish a vision for improvements to Heman Park. This master plan examines how Heman park can complement the other University City parks and fulfill its role as the Community Park within the University City parks system. This plan was developed based on input from the residents of University City, the Park Commission and City Staff. It includes design concepts that provide short and long term recommendations with order of magnitude cost opinions. This plan will serve as a valuable resource to the city in future capital budgeting and funding acquisition by providing an analysis of existing conditions, a record of public input, and a summary of recommendations and priorities for the improvements to the park and an assessment of community support for further study of the Heman Park Pool, Centennial Commons, and the Heman Park Community Center.

The following pages contains a map showing the locations of all twenty parks within the University City Parks System, their sizes, and major recreation amenities found in each park. Also included is an aerial photograph of Heman Park as it currently exists.
Current University City Parks System
Heman Park - Community Park
85.26 Acres

Janet Majerus Park - Mini Park
4.5 Acres

Kingsland Park - Mini Park
0.84 Acres

Metcalfe Park - Neighborhood Park
5.6 Acres

Eastgate Park - Mini Park
0.93 Acres

Ackert Park - Special Use Park
3.5 Acres

Greenway South - Special Use Park
0.81 Acres

Lewis Park - Mini Park
4.00 Acres

Rabe Park - Mini Park
2.0 Acres

Janet Majerus Park - Mini Park
4.5 Acres

Heman Park - Community Park
85.26 Acres

Kingsland Park - Mini Park
0.84 Acres

Metcalfe Park - Neighborhood Park
5.6 Acres

Eastgate Park - Mini Park
0.93 Acres

Ackert Park - Special Use Park
3.5 Acres

Greenway South - Special Use Park
0.81 Acres

Lewis Park - Mini Park
4.00 Acres

Rabe Park - Mini Park
2.0 Acres
Aerial view existing conditions
**Planning Process**

The methodology used in preparing the master plan included meeting with City Staff, Park Commission, and the community at multiple times throughout the process, while also researching the site, park use, previous studies, and environmental conditions. Research information included review previous planning efforts, maps, photographs, and meetings with park staff to walk the site and discuss operations and goals. This data along with input from the community were the foundation for creating an innovative master plan for the park. The plan is prepared in a way that the City of University City can implement recommendations in smaller phased projects.

The process to complete the master plan included five tasks:
1) Project Initiation / Data Collection
2) Analysis and Program Development
3) Concept Design
4) Final Design
5) Final Master Plan Document
Task I - Project Initiation / Data Collection

- Base Map Collection: Gathered existing base maps, surveys, and aerial photographs of the park.

- Site Visits and Inventories: Conducted several walking tours of the property to view, photograph, and inventory existing conditions and amenities.

- Online Community Survey: Surveyed Community Members about Heman Park usage and vision.

- Data Collection site visit and community input meetings included:
  - Kick-Off and Park Walk: March 11 & 12, 2014
  - Park Commission Meeting: March 25, 2014
  - Public Forum #1 with Workshop: April 29, 2014

Task II - Analysis and Program Development

- Evaluated natural features, hydrology, topography, park history, and the needs of the identified service area to develop opportunities related to park improvements.

- Organized feedback from site analysis, staff, and community to identify the issues relevant to the City of University City.

- Identified and evaluated programming opportunities based on data collection design direction.

- Developed concept design sketches to refine develop the park program. Program Development concepts were presented to the University City Park Commission on May 27, 2014.

Task III, IV, & V - Conceptual Design, Final Design, and Final Master Plan

- The final tasks involved the development of design concepts based upon the needs and program items identified in Tasks I and II. This information was compiled and a narrative was developed to create the Heman Park Master Plan document.

- Developed design alternatives that gave special consideration to community, Park Commission, and staff input while addressing circulation issues, environmental issues, and phasing. These concepts were reviewed with the Community in Public Forum #2 on June 17, 2014.

- Following the Public Forum, the park master plan was refined to a final design concept with an order of magnitude cost opinion. The final design concept and costing was reviewed with City Staff on July 22, 2014.
• After revisions to the Master Plan based on guidance from the Park Commission the final plan was presented to the public on August 7, 2014. At this meeting the public was given the opportunity to rank their preferred improvements providing valuable input on the values of the community in regards to the future development of the Master Plan elements.

• A cost opinion was prepared and submitted with the draft master plan document for review on September 10, 2014.

• Park Commission adopted the Master Plan at their meeting ?.

• The presentation of the final master plan was given to the City Council on ?.

The Heman Park Master Plan is a work in progress. Recommendations made within the document speak to the needs and desires at the time it was prepared. As the City of University City begins the implementation of the park improvements plan it is important to keep in mind the difficulty of anticipating future budgets, time lines and opportunities. For this reason, it is recommended that this plan be reviewed and updated periodically to ensure it continues to be based on current data, standards, and needs.
Heman Park was evaluated in two manners: by visual inspection and a review of existing site data collected by the design team. Areas of review included: vegetation and surrounding context, topography and hydrology, and, vehicular and pedestrian circulation. The study did not include a formal environmental impact review, or hydrologic study of the creeks. The following pages contain a site analysis summary as well as an inventory of existing conditions.
Vegetation and Surrounding Context

Heman Park is the “Community Park” for University City. Centrally located, the 85 acre park is the largest park in the University City parks system, and is bounded by Midland Boulevard, Purdue Avenue, Olive Boulevard, Pennsylvania Avenue, and Vernon Avenue. The park is highly used for a variety of active and passive recreation activities throughout the year. The existing vegetation reflects these uses with a mix of open, mowed lawn and mature, old growth tree cover. A significant amount of the tree cover is located along the park boundaries and along the banks of River Des Peres and the south stormwater feeder. The largest stand of tree cover within the park is a 3.25 acre area located on the south side of River Des Peres. This stand is composed of mature cottonwood, sycamore, oak and others with mowed lawn understory. Mowed lawn is the dominate landscape type throughout the park, in active recreation areas as well as lesser used passive areas of the park.

The park is divided by River Des Peres which runs through the park from Northwest to Southeast creating what is currently a significant physical barrier within the park. The vegetation along River Des Peres and the south feeder is thick with invasive plant material including bush honeysuckle and wild grape. This dense growth prevents native diversity, restricts visibility, and access along the waterways and will eventually choke out the mature trees along the creek edges. River Des Peres and the south feeder are discussed further in the Topography and Hydrology sections.

The park is bordered on all sides by the streets noted above, and has no property directly abutting the park property with the exception of the City owned public works and transfer station located on Pennsylvania Avenue. Beyond the bordering roads the park is neighbored by residential development to the south and west. There is a significant amount of retail and commercial development along the park to the north and east, but beyond the street edge these areas transition to residential neighborhoods as well.
**Topography and Hydrology**

Topography within Heman Park is not significant, but does define several areas within the park. The most significant change in elevation is found along the Olive Boulevard edge of the park with a 10-15 feet drop in elevation from Olive Boulevard to the ballfields, parking lot, and tennis courts north of River Des Peres. There is a slight change in elevation of approximately 5-6 feet on the south side of River Des Peres that runs west-east just south of Jack Buck Field and the softball and open field. This rise may be the result of the park land having been a landfill for construction materials for a time prior to being developed as a park. It was described by staff that excavation above this rise is difficult and results in unearthing considerable amount of construction materials and debris.

The River Des Peres and the south feeder are the defining elements within the park related to topography and hydrology. These elements are the low points in the park, with the surrounding parkland having an overall drainage pattern to these elements. In addition, during times of significant rainfall these waterways experience regular flash flooding and will overflow their banks into the low lying areas adjacent to the creeks. As a part of the overall combined sewer system within St. Louis the flooding of River Des Peres and access to the water is both a safety as well as health concern. The south feeder stream is fed by drainage from adjacent developments and collects surface runoff from adjacent park space. While daylighting this water is beneficial to the overall sewer system it lends itself to high velocity and erosion. Stabilization efforts are needed in this drainage. The confluence of the two waterways is located near the southeastern corner of the park property, just west of the Heman Park Community Center and city transfer station.

Due to the presence of these creeks the limits of the floodway/floodplain on the property were assessed. Based on the FEMA Flood Insurance Rate (FIRM) maps, approximately 31 acres (36%) of the site is located within the floodway, while approximately 63 acres (74%) of the site is located within the floodplain. Although development within the floodway and floodplain is possible, there are restrictions on the types of developments and structures that can exist within floodway/floodplain areas. Grading activities within the floodway/floodplain are allowed, but off-site fill materials are not to be placed in the floodplain, as it would alter the flooding storage capacity on the floodway/floodplain area. In addition, the bottom floor of any buildings that are to be constructed within the floodway/floodplain are allowed, but off-site fill materials are not to be placed in the floodplain, as it would alter the flooding storage capacity on the floodway/floodplain area. In addition, the bottom floor of any buildings that are to be constructed within the floodway/floodplain must exist above the base flood elevation (BFE) and that the buildings must be constructed to allow flow through the areas that exists below the BFE. While these restrictions will impact the level and cost of improvements that can occur within these areas of the park there are many options for improvements for both passive and active recreation.

Additional studies will be required prior to development and improvements along the creeks and within the floodway/floodplain to determine the permitting required along with the design restrictions and requirements specific for this location along the creeks.
Vehicular and Pedestrian Circulation

Vehicular access and circulation within the park is divided by River Des Peres. The south side of the park contains a single vehicular entry along Midland Boulevard. This entry has limited definition or signage to alert motorists that this is the entry to Heman Park. This entry provides access to the parking on the south side of the park. Consisting of four gravel lots and gravel parking along the east end of the drive the parking is adequate for day use, but during special events or busy days during sports seasons the unmarked parking areas are inefficient and inadequate to meet the demand. Safety is also a concern in this drive and parking configuration. Consideration should be given to removing the parking from along the entry drive as it is a concern to have visitors backing out into the main park drive. The drive is a dead end at the mulch pile just beyond the large gravel lot at the basketball court compounding issues with parking and vehicular circulation.

The north side of the park includes multiple points of vehicular entry with two entries at the Centennial Commons parking lot and an entry at the tennis courts and ballfield parking lot further east along Olive Boulevard. Similar to the west side entry these entries are nondescript, with the exception of the signage for Centennial Commons at the north parking lot entrance. These lots are paved and striped, and provide defined parking within Heman Park. Similar to the parking on the south side of the park, this parking is adequate for day use, but during special events or peak swim and activity seasons the number of parking spaces can be inadequate to meet the demand.

The Heman Park Community Center has a separate entrance on Pennsylvania Avenue with an additional exit on to Vernon Ave (but no entry from Vernon). This entry is shared with staff parking for public works and the transfer station located
north of the Community Center. This entry provides access to the front of the building and the Community Center parking lot located west of the building with parking for approximately 60 vehicles. This entry and parking are not connected to any of the entries or drives within the park.

Pedestrian and bicycle connectivity throughout University City has been an important focus in recent years, and is now defined by the Bicycle and Pedestrian Master Plan adopted by the City Council on October 14, 2013. Heman Park is interwoven into this network through a variety of bicycle and pedestrian facilities including bike lanes along Olive Boulevard and pedestrian and streetscape enhancements along the other sides of the park. This plan will also increase the use of bike and pedestrian facilities as a means of access to the Heman Park.

Currently pedestrian and bicycle entries and circulation have many of the same issues as vehicular entries and circulation. Identification of these entries is limited and not well defined, and once in the park River Des Peres are still significant obstacles for pedestrian and bike circulation throughout the park.

Internal circulation is provided by perimeter sidewalks along the park edges and a series of internal walks that run along the north and south sides of River Des Peres linking to parking, amenities, and the perimeter sidewalks. These trails only connect at the north end of the park at the Purdue pedestrian bridge. A second crossing of River Des Peres is located towards the southern half of the park, but is not ideal for pedestrian usage. This low water crossing is used mainly for park vehicles and transferring mulch from the public works facility north of the creek to the mulch pile on the south side of the creek.

Heman Park plays a role in the regional connectivity plan with a section of the Centennial Greenway passing through the park along Purdue Avenue, and a proposed alternate route for the Greenway running the length of the park along the newest section of trail with a bridge crossing of the south feeder from Vernon Avenue to the Centennial Greenway at the Purdue bridge. This section of trail should be the standard for primary multiuse trails within the park. Narrower walks can be used for secondary access within the park and pedestrian only connections.
Program development for the park concepts began with a review of the park property and existing development constraints, identification of recreation opportunities within the existing parks system, and discussion of parks and recreation needs. This analysis formed a foundation for the development of a park vision statement. A public survey and public input workshop further developed the vision statement and identified desired program components for the park. Combined, this analysis and input information was the basis for the concept designs developed for the park.

Combined input from the public workshop and the community survey provided significant direction in further developing the Heman Park programs. The final master plan does not include every issue brought up in these meetings and on the survey, but these items were recognized and included in the concept design development process and are listed in the program statement on the following pages. Copies of all written input received during the planning process are included in the appendix of this report.

Each community and parks system is unique. While benchmarks can validate a need for park land or a specific component, a community should consider which improvements will meet the greatest needs and are economically viable for construction and maintenance when determining need and priority of park improvements. For the improvements proposed within Heman Park, a vision was defined based on the needs and desires of the community. This vision is to provide a community park for everyone with destination amenities that compliment the overall parks system and meets identified needs of the community. The master plan serves as the framework for this vision and dictates priorities for the implementation of the improvements.
**Program Elements**

To achieve this vision, a list of potential program components was developed based on community, Park Commission, and staff input. Below are the program items identified for the master plan, in no particular order or hierarchy:

- Walking / bike trail (loop)
- Improve landscape
- Accessible Playground
- Enhance River Des Peres
- Nature settings – butterfly garden and bird watching
- Renovate athletic fields
- Wildlife area
- Connections to other trails / neighborhoods / greenways
- Additional parking
- Destination playground
- Expanded trail system with trail markers
- Exercise stations
- More passive recreation areas
- Additional shelters
- Keep natural / wildlife
- Skate Park
- Enhanced entry with new signage
- Improve parking and site circulation
- Restore riparian vegetation
- Pools and riffles along creek
- Shelter adjacent to parking
- Dog park
- Velodrome (Bicycle Track)
- Nature trail
- Bandstand
- Accessibility of entire park
- Make the creek safer and enhance appearance
- Renovate pool & bathhouse
- North South connections throughout park
- More bridges across River Des Peres
- Indoor Aquatics
- Renovate indoor Soccer
- Move Community Center to Centennial Commons

The following page contains images from the public workshop and an example of the online community survey.
Community workshop

Results from community workshop

Online Community Survey
Several concept designs were prepared for the park, and presented to the park commission, community and staff for feedback and direction in a series of meetings. These concepts reflect the keys goals, objectives and program items identified during data collection discussions with the community and city staff. The concepts, along with design imagery, were presented to the community during Public Forum #2 on June 17, 2014.

The following pages include the two conceptual park designs that were presented to the public. These concepts vary in the program items included as well as the size and location of the items within the park. Several consistent features within the park concepts are proposed. These items are: park entry improvements, a new destination playground, improved parking, improved athletic fields, passive recreation and landscape enhancements, and a loop trail system.
CONCEPT A

- Focus on restructuring existing park elements to maximize efficiency and park use.
- Retain and renovate existing Community Center.
- Retain Public Works and transfer station facilities.
- Renovate existing pool facilities.
- Develop destination playground to serve community.
- Redevelop central parking and site circulation to promote efficiency, capacity, and safety.
- Maximize passive recreation space throughout park.
**Concept B**

- Additive to Concept A
- Remove Public Works facilities and Community Center.
- Develop Action Park on southeast corner of park to activate space and provide teen and young adult recreation value.
- Incorporate Community Center functions into expanded Centennial Commons.
- Renovate outdoor pool and bathhouse.
- Develop indoor aquatics center.
- Develop new indoor soccer facilities.
The following improvement recommendations for Heman Park were prepared through review and analysis of the existing conditions, community-wide park needs analysis, and discussions with city staff, Park Commission and community. This plan is presented to meet recreation needs and desires of the City of University City now and in the future, while attempting to protect and enhance the natural systems present within the park property.

Sustainability and ADA compliance are general goals of the master plan. All park amenities should be accessible and ADA guidelines should be met whenever possible. Sustainable design practices and materials should be explored and applied when appropriate.

Trails and connectivity are passive recreation amenities that continually rank high in regional and national parks and recreation surveys and this was consistent with our community survey and input throughout this process. Trails are an amenity that can be enjoyed by all residents throughout the year. Along with the internal trail system connections should be made to link the park to the larger community-wide trails and greenways system when possible.

The trail system within the park will be the primary means of circulation and is intended to provide users the opportunity to explore the park and the variety of experiences it provides. To accomplish this park wide trails system, a hierarchy of trails will be required to define use.

Landscape is another important amenity in the park. The master plan recommendations for the park landscape are intended to enhance the existing landscape, maximize the diversity of recreational opportunities, minimize the amount of landscape maintenance required in the park, increase ecological value within the park, create wildlife habitat, and create an identity at the park entries, the park boundary, and specific locations throughout the park.

The final master plan graphics and recommendation narratives for Heman Park are presented on the following pages.
Final Park Master Plan

- Fountain and Landscape Enhancements
- New Bathhouse & Indoor Aquatics Center
- Centennial Commons Expansion / Community Center
- Indoor Soccer Renovation
- Sand Volleyball & Pool Sun deck
- Two Soccer / Football Fields with Two Softball & Six T-Ball Field Overlays
- Modified Parking Lot
- Enhanced Corner Identity
- Improved Pedestrian Crossings & Park Entry
- Basketball / Action Park / Parking Lot
- Marked Trail / Pedestrian Bridge
- Loop Drive with Parking / Park Entry Enhancements
- Destination Playground with Picnic Shelter(s)
- Community Event Lawn with Overlay Fields and Shelter/Bandstand
- Parking Lot Improvements
- Creek Edge Enhancements and Riparian Landscape
- Native Landscape Edge
- Art / Native Landscape
- Athletic Field Complex Improvements
- Jack Buck Field
- Proposed / Improved Shelters
- Corner Identity Improvements
- Park Entry Improvements
- Public Art
KEY

1 Fountain and Landscape Enhancements
2 Renovated Bathhouse & Indoor Aquatics Center
3 Centennial Commons Expansion / Community Center
4 Indoor Soccer Renovation
5 Sand Volleyball & Pool Sun deck
6 Two Soccer / Football Fields with Two Softball & Six T-Ball Field Overlays
7 Modified Parking Lot
8 Enhanced Corner Identity
9 Improved Pedestrian Crossings & Park Entry
10 Basketball / Action Park / Parking Lot
11 Marked Trail / Pedestrian Bridge
12 Loop Drive with Parking / Park Entry Enhancements
13 Destination Playground with Picnic Shelter(s)
14 Community Event Lawn with Overlay Fields and Shelter/Bandstand
15 Parking Lot Improvements
16 Creek Edge Enhancements and Riparian Landscape
17 Native Landscape Edge
18 Art / Native Landscape
19 Athletic Field Complex Improvements
20 Jack Buck Field
21 Proposed / Improved Shelters
22 Corner Identity Improvements
23 Park Entry Improvements
24 Public Art
Active Recreation
Heman Park features a large amount of active recreation space that serves a broad section of the University City population. Renovating athletic fields and tennis courts within the park coupled with the construction of regulation basketball and sand volleyball courts increases the level of service Heman Park provides both youth and adult users. The addition of an active use “action park” node on the Southeast corner of the park provides recreation targeted at teens and young adults.
Passive Recreation

Heman Park is permeated by passive recreation space. A large percentage of park use is in the form of walking or jogging. Renovating and expanding the existing trail system strengthens Heman Park as a community park with a larger appeal for those wishing to passively recreate. In addition to trail upgrades the expansion of native vegetation and the improvement of River Des Peres facilitates recreation activities such as bird watching, educational nature trails, and public art.
Vehicular Circulation

A majority of the visitors to Heman Park arrive via automobile. Redefining the parking and vehicular circulation will help to facilitate the function of Heman park as the community park within the University City park system. The master plan approach provides a parking concept that allows all parking lots to service a specific area of the park while also easily serving as overflow parking when needed. The realigned park drive on the south side of the park allows for expanded parking and a loop drive to eliminate the dead end situation that currently exists.
Pedestrian Circulation

Pedestrian trails serve not only as a key piece of infrastructure providing access to features within Heman Park but also as one of the primary attractions to the park. Walking and Jogging has the highest participation rate among the recreational opportunities available at Heman Park. Pedestrian Circulation within Heman Park features a hierarchy based on use. Primary, secondary and tertiary trails permit access to all areas of the park and connections beyond the park to the community and the Regional Centennial Trail.
Stormwater Management

The flow of River Des Peres through Heman Park creates a potentially dynamic stormwater management opportunity. All parking areas feature stormwater infrastructure and the extensive use of native vegetation throughout the park promotes infiltration and reduces stormwater runoff velocity and volume into the creeks and storm sewer system.
**GREEN PRACTICES**

Sustainability and environmental stewardship is an important component of all future development within Heman Park. In April of 2014 the City Council of University City adopted an energy efficiency, renewable energy, and greenhouse gas reduction ordinance. This ordinance requires the use of energy efficient practices on all new City-owned buildings. While these requirements will apply to the building renovations and expansions proposed in this document it is important to apply green practices to the outdoor portion of Heman Park. All phases of the implementation of this master plan should involve the University City Green Practices Commission and should strive to meet the goals of the University City Sustainability Strategic Plan. Seven categories have been identified as areas in which to focus sustainable efforts.

**Ecosystems and Habitat** | Heman Park straddles the River Des Peres and has a unique opportunity to serve as an ecological node within the urban context of the St. Louis region. Converting existing underutilized turf areas to native vegetation significantly increases the ecological value of Heman Park within the regional ecosystem. Expanding native areas in conjunction with the restoration of the riparian corridor along River Des Peres not only creates a recreational and educational amenity for visitors to Heman Park but adds critical biodiversity to University City. These improvements will serve to mitigate excess stormwater by increasing permeability and time of concentration during storm events. Improvements to the River Des Peres corridor will reduce invasive species, stabilize the stream banks, improve water quality and attract animal life. Incorporating ecological improvements within University City’s Community Park creates educational opportunities for all members of the community. Signage and key moments of engagement allow visitors to the park to gain an intimate level of exposure to all facets of the ecological processes that take place in native Missouri habitat.

**Water and Stormwater** | Once again the presence of River Des Peres within Heman Park present unique opportunities as well as challenges. A majority of Heman Park falls within the 100 year flood plain of River Des Peres and significant space is considered floodway. For these reasons stormwater management is especially important within the park. Every opportunity to implement stormwater best management practices (BMPs) within the park must be taken. All structures and paved areas should be designed to achieve net zero runoff in order to reduce runoff contributions from the park helping to mitigate flooding. Improvements such as bio-swales, permeable paving, green roofs and bioretention facilities create prime opportunities to educate the public on the effects of development on urban streams and the water cycle. Stormwater capture should also be considered to reduce the amount of potable water consumed for park maintenance and irrigation to further reduce the environmental impacts of Heman Park.

**Air Quality and Transportation** | Community survey results collected during the development of this master plan indicated that a large percentage of visitors to Heman Park arrive via automobile. It is imperative that the importance of pedestrian connections be highlighted within the park to encourage alternative means of transportation. Increased safety on the perimeter of the park through formal pedestrian crossings and clearly delineated entrances make walking and biking more appealing to park visitors. Trails within the park should feature amenities such as distance markers, shade structures, seating areas and bike racks to increase comfort and appeal for visitors. In addition to promoting alternative modes of transportation to Heman Park air quality can be improved through the use of native vegetation within the park. Native plants sequester carbon at a higher rate than turf grass and require significantly less mowing to maintain. Both of these traits help to improve air quality by offsetting the impacts of fossil fuel consumption. Furthermore the establishment of tree canopy within the park, especially near paved areas, reduces heat island effect and the associated ozone creation. To capitalize on these benefits this master plan significantly increases native landscape within Heman Park.
Waste and Resource Conservation | Heman Park currently hosts the University City recycling and trash facilities as well as the compost and mulch pick up location. It is the recommendation of this master plan that these facilities be relocated to a more desirable location. Relocation of these functions would eliminate the conflict of use that currently exists between the recreational function of Heman park and the City operations requirements. Development of a new recycling and waste facility would allow for these operations to be updated to the most efficient available technology and further increase the ability of University City to mitigate waste and conserve resources.

Land Use, Open Space and Parks | Heman Park serves as the University City Community Park and it is important that this park function at the highest level of service to the community possible. Planning effort such as this master plan and the projects that result are an example of University City ensuring the best use of parks and open space.

Energy | Heman Park hosts University City’s marques recreation facility, Centennial Commons. It is the recommendation of this plan that renovations and expansion be made to the Centennial Commons facility. These improvements present an opportunity for University City to strive for a high level of efficiency in its facilities. LEED and SITES certification should be a goal of the city as plans are developed for Centennial Commons and the Heman Park Pool. In addition to facilities improvements energy consumption should be a concern throughout the entirety of Heman Park. Solar power should be considered for shelter and site lighting improvements proposed by this master plan.

Green Buildings | LEED and Energy Star ratings certifications should be pursued to the fullest extent in the development of Centennial Commons. As previously stated achieving Green certifications will ensure the use of energy by Heman Park will be reduced. Furthermore, these achievements will position University City as a city that is taking strides to increase its level of environmental stewardship.
Master Plan Improvement Areas

- Midland Entry & Parking
- South Field Improvements
- South Drainage Feeder Improvements
- Vernon Art Walk*
- Destination Playground
- Event & Multi-Use Lawn
- Purdue Art Walk & Parking*
- River Des Peres Improvements
- Action Park & Parking
- Tennis Court Improvements & Parking
- North Field Improvements
- Centennial Commons & Aquatics Facility*
- Park Boundary and Entry Improvements
- Park Corner Improvements
- Trails & Park Landscape
- Jack Buck Field

Subtotal: $10,960,645.00

General Conditions, Contingency & Design Fees: $4,669,234.77

Total Master Plan Cost: $15,629,879.77

*Cost Opinion does not include:
- Community Center and Public Works Demolition
- Centennial Commons Expansion
- Heman Park Pool Improvements
- Art, Art Installations, Art Lighting
- Required Utility Upgrades

August 7, 2014
KEY

A  Midland Entry & Parking
B  South Field Improvements
C  South Drainage Feeder Improvements
D  Vernon Art Walk
E  Destination Playground
F  Event & Multi-Use Lawn
G  Purdue Art Walk & Parking
H  River Des Peres Improvements
I  Action Park & Parking
J  Tennis Court Improvements & Parking
K  North Field Improvements
L  Centennial Commons & Aquatics Facility
M  Park Boundary and Entry Improvements
N  Park Corner Improvements
O  Trails & Park Landscape
P  Jack Buck Field
**Midland Entry and Parking**

The Midland entry is one of the most important features of the park because it provides the first impression for a large number of users and passersby. The Midland entry serves as one of two primary entries to the park, and should be a welcoming gateway inviting park users and announcing the park’s presence. Redeveloping the existing entry drive into a loop drive allows for more efficient site circulation. Parking bays along the entry drive maximize parking capacity while minimizing visual impacts on the park. All parking in the park should utilize best management practices in design of stormwater management and infrastructure.
Park Entry Signage

- Entry signage and landscape should be designed to create a noticeable entry feature, and announce the park, while keeping in context with the scale and character of the park. Design elements should be consistent at all park entrances.
- Entry signage should draw it’s character from local design aesthetic and serve as a visual link to the history of University City and Heman Park.
- Landscape near park entries should intensify as a visual key to park visitors indicating the location of the entry.
- Landscape at the park entries should provide seasonal color and year round interest. Scale and amount of landscape will help define the vehicular entries from the pedestrian entries.
- Landscape in these areas may require a higher level of maintenance and attention based on the plant material selected and scale of the entry feature.

Loop Drive

- Reconfigured parking allows for two-way traffic with a one way loop drive eliminating the current dead-end parking situation.
- Due to the volume of traffic and turn movements, it is recommended that the drive lanes within the parking lot be constructed of asphalt paving or concrete depending on the cost at the time of implementation. Parking stalls can be permeable pavers or concrete/asphalt based on stormwater BMP needs.
- Use of native canopy and flowering trees within and along the perimeter of the parking lot will provide shade and visual interest.
- Central space within loop drive serves as a wooded picnic grove with a picnic shelter, native plantings, and open lawn.

Reconfigured Parking

- The two existing lots on the west end of the entry drive should be restructured to improve efficiency and maximize parking.
- Parking off of the loop drive is broken into two bays (North and South) allowing for phased development. All parking lots should be net zero for runoff utilizing the most efficient BMP’s at the time of construction.
- Permeable paving should be considered for parking bays to promote infiltration and eliminate stormwater runoff. Tree plantings adjacent to parking lots is important to provide pedestrian comfort and reduce heat island effects.
- Solar Lighting utilized for parking lot areas.

Best Management Practices

- All parking bays designed with clearly delineated entries and planting buffers to accommodate necessary BMP’s.
- The use of bio-swales within the islands can help capture parking lot runoff for on-site filtration and detention slowing release into the creek
- Biofiltration gardens are special gardens that capture run-off water from pavements and allow the water to soak into the earth.
- Specialized plants and the soil mix filter silts and pollutants out of the run-off water.
- The capturing and filtering of rain water helps to minimize downstream flooding and contributes to groundwater recharge.
- Provide habitat for flora and wildlife.
- Provides an opportunity for educational signage.

Picnic Grove

- Utilizing the space created by the implementation of a loop entry drive, the picnic grove creates an intimate family scale picnic space.
- Heavy tree planting helps to scale the space and soften views of the adjacent drive.
- A rentable picnic shelter provides a picnic opportunity that embraces the character of Heman Park and provides seclusion from the more active land uses present in the park such as the destination playground and athletic fields.
- This space also provides an opportunity for educational signage on the trees present in the grove.
Midland Entry and Parking
LEGEND

1 Park Entry Signage
2 Main Loop Drive
3 Refined Parking (Permeable option)
4 Best Management Practices
5 Picnic Grove
**South Athletic Field Improvements**

Slight realignment and renovation of the southern athletic fields will allow for maximum utilization of this space. By moving the easternmost field further to the east all three softball fields in this space can be activated at the same time. Regrading the fields to ensure proper site drainage coupled with updates to the irrigation system will greatly improve the playability and reduce maintenance requirements of the fields. Lighting all three fields in a way that allows the outfields to continue to be multi-purposed for soccer and football fields would be a positive upgrade as well. This would extend the hours of operation and maximize profitability of the fields. Each of the three softball fields in this area should be fitted with backstops and dugouts to address the needs of all age groups to maximize utilization of the fields.

1. **Softball Fields**
   - Reconfigured layout allows three fields to accommodate youth & adult softball with three simultaneous games by adding outfield space thus maximizing utilization of the space.
   - Fields to be graded, resodded and fully irrigated to create the best playing surface.
   - Fields to feature fence backstops and team benches.
   - Striping to be adjusted as needed to accommodate field use for different sports.

2. **Flexible Athletic Fields**
   - Softball field complex layout designed to accommodate overlay practice and game fields as needed. This allows full utilization of this space for sports such as football or soccer during times when softball is not being played.
**LEGEND**

1. Softball Fields
2. Flexible Practice Fields
## SOUTH DRAINAGE FEEDER IMPROVEMENTS

Addressing the southern drainage way will improve aesthetics, circulation, visual connectivity and the ecology of the southern edge of Heman Park. Currently the incised and overgrown drainage corridor creates a physical and visual barrier that partitions a small section of the park along Vernon Ave from the rest of the park. Opening the banks of this drainage and removing all invasive vegetation will strengthen the connection of Heman Park to Vernon Ave. Reintroducing native riparian plantings in this area will create valuable plant and animal habitat adjacent to River Des Peres. Improving this corridor will increase the opportunity for passive recreation within Heman park with bird watching, environmental education and additional walking and biking trails.

### Stream Restoration
- Grading the area to lay back the incised banks and stabilize the stream banks will create an approachable feature within Heman Park that can serve as not only a recreational and visual amenity but as an educational opportunity as well.
- Regrading efforts within the stream channel will increase the volume of storage within the stream reach and reduce velocity within the channel.
- Native stone material and river gravel is utilized to visually highlight the stream as an amenity as well as aide in stabilization efforts.
- Native riparian plant material takes the place of honeysuckle and other invasive species that area removed during the grading process. Selective planting of the stream reach creates a visual connection from Vernon Ave. into the heart of Heman Park.

### Informal Access
- Embracing the improved stream reach by allowing visitors to visually access the stream as well as physically access the stream via informal paths and stone steppers further expands the utilization of the stream as a park amenity.

### Recreational & Educational Opportunities
- Restoring the south drainage in Heman Park creates a unique opportunity to expand recreational opportunities in the park.
- Introducing a large swath of native vegetation to the park will allow visitors to enjoy increased biodiversity.
- Additional animal life that will utilize the native riparian vegetation facilitates educational and recreational activities such as bird watching and plant and animal identification.
- Restoring the south drainage in Heman Park creates a unique opportunity to expand recreational opportunities in the park.

### Pedestrian Trail & Bridge
- Existing bridge and trail to be integrated into proposed trail network.
LEGEND

1. Stream Restoration
2. Informal Access
3. Recreational & Educational Opportunities
4. Pedestrian Bridge
**Vernon and Purdue Ave Art Walks**

Expanding on the improvements along the southern drainage way the addition of an art walk along Vernon Ave further activates the Southern edge of Heman Park. A meandering trail connecting small seating and sculpture nodes engage pedestrians along Vernon Ave. Similarly engaging to Midland Blvd. is an art walk near the intersection with Purdue Ave. The art walks are planted with native vegetation further expanding the ecological footprint of Heman park and helping to create a node of native habitat in University City along the River Des Peres corridor. Art in this area can be obtained from a variety of sources and presents opportunities for partnerships both inside and outside the University City community. Together these art walks add a unique recreation amenity within the park and represent a bold statement and help to create a strong identity for Heman Park.
1 Sculpture Node
• Seating nodes placed along the art walk provide opportunities for visitors to stop, sit and enjoy both the sculpture and the native landscape.
• Sculpture nodes are diverse in scale and may function as larger plazas or intimate pass by spaces allowing sculpture to be observed in unique ways. Placement of sculpture pieces should be coordinated with the artist to create the best presentation.

2 Concrete Walks
• Wide meandering walks immerse visitors in the native landscape and create a unique recreational experience on the edges of Heman Park.

3 Native Landscape
• Native prairie type landscape anchors the art walk providing a strong visual statement along the southern edge of Heman Park.
• Maintain a mowed edge along trail edge.
• In addition to strong aesthetics and identity the native landscape bolsters the environmental value of Heman Park as an ecologic stepping stone along the River Des Peres corridor.
**Destination Playground**

Located in the heart of the park, this playground and picnic area will create a family destination that is currently not present in Heman Park. The playground area design should create an experience with the play components and site design. It can include pieces of traditional play equipment, but consideration should be given to alternative experience play equipment and possible connection to the creeks, tree stands, and native landscape that create the setting and backdrop for the playground.

Along with the playground, the area includes the existing restrooms and a series of picnic shelters at various sizes. This area would also include open lawn with tables for additional picnic and gathering space. A sprayground for seasonal use may be incorporated into this play experience.

This amenity is connected to the loop parking lot by accessible concrete walks and is located along the overall park trail system.

**1 Destination Playground & Sprayground**

- Create an entry to the playground from the parking lot and along the trail system containing a focal feature and ornamental landscape.
- Playground should engage the site topography and woodland setting.
- Utilize landforms, sculpture, water, plants, and malleable materials to engage children and stimulate the senses.
- Playground is designed for children of all age ranges and physical abilities.
- Include small shade structures and seating along walks and playground areas.
- Sprayground consisting of a paved pad with user activated jets and sprays is located within the playground area. The design of the amenity should integrate into the branding and identity of the playground area.
- Sprayground pad can function as a plaza space for events when not in use.
- Benches and shade trees create a comfortable location of for users adjacent to the parking lot.

**2 Family Shelter**

- The shelter is located on the east side of the playground along the park loop trail. In this location the shelter is set against the backdrop of native landscape areas and improved River Des Peres. Accessible routes are provided from the shelter to the playground area.
- The shelter accommodates 50-60 people and includes a drinking fountain and electric service with security light. This shelter could be a rental shelter.
- Design details and materials should be used to create a unique playground shelter that fits the context of the park and surrounding playground.
3 Successional Tree Planting

- Heman Park is home to many mature trees that are valued by the community. During the construction of elements identified within the master plan, including the Destination Playground, selective demolition of trees will occur. It is important to follow construction with the successional planting of young trees to ensure the establishment of successional tree cover in the future.

4 Existing Restrooms

- The existing restroom facilities will remain and improved as necessary over time to accommodate the needs of the park. This structure should be seamlessly integrated into the proposed trail system and design of the Destination Playground.

5 Picnic Lawn

- Lawn area around the destination playground and family shelter should be used for picnics and informal gatherings. Picnic tables and the exiting shade trees will provide a variety of picnic opportunities.
- This area will also provide an open play lawn for park visitors adjacent to the playground.

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**LEGEND**

1 Destination Playground
2 Family Shelter
3 Successional Tree Planting
4 Existing Restrooms
5 Picnic Lawn
Event and Multi-use Lawn

As the Community Park within University City Heman park plays host to many community events. The development of a multi-use lawn space that can be programmed throughout the year to accommodate a variety of uses is a vitally important piece of the master plan. The multi-use lawn is equipped with a dual purpose shelter and bandstand. This shelter can be utilized as a picnic pavilion year-round and would serve as a typical picnic shelter. However, this pavilion should also be equipped with electrical service and designed to function as a bandstand/stage for community events. The multi-use lawn will be an ideal place to host activities such as movies in the park, the University City High School Reunion, community festivals, and concerts. During sports seasons if additional field facilities are needed this space can be striped and activated as additional field space.
1 Shelter / Bandstand

- A large shelter serving multiple functions to ensure full utilization of the space.
- This shelter will be rentable as a picnic shelter throughout the year and should be sized accordingly.
- Electrical hookups as needed to accommodate the functions of a bandstand are featured in this structure allowing the space to be utilized for community functions such as the Starlight Concert Series or Fair U City.
- Design of shelter will need to meet requirements for flood plain development.

2 Multi-use Lawn

- Renovated lawn sized and designed as a community gathering space for special events and as multi-use athletic fields to accommodate overflow from adjacent field sports as well as community functions requiring large open space.
- A backstop should be provided for softball.
- Portable soccer goals should be provided for this area as well.
- In the event of a large outdoor community gathering such as Fair U City the lawn can be cleared of sports related structures and used as community open space.

LEGEND
1 Shelter / Bandstand
2 Multi-use Lawn
River Des Peres bisects Heman Park and represents the single boldest natural feature within the park. Currently the creek creates a barrier between the north and south portions of Heman Park. Restoring the river and bridging it in places that promote connections to the high use areas of the park transform River Des Peres into an engaging amenity within the park.

Restoration of the river is a multistep process. Relaxing the banks to increase flood capacity and reduce erosion will begin to connect people to the river. Removing the invasive species and reintroducing native riparian habitat will create an important ecological corridor through the park. This corridor creates an opportunity for recreational and educational activities within the park. Improving the linear trails along both sides of the river is a great opportunity to introduce an educational component informing visitors of the impacts urban stream have on humans as well as plant and animal life within the city.
River Overlook
- A formal viewing platform overlooking the creek providing an opportunity for rest or interpretive education.
- Ideally the overlook should be located with views of the creek both north and south, and should be within the creek edge landscape to provide visual interest and seasonal shade.
- Interpretative signage in this location will provide park users information related to the creek. This may include hydrology, fauna, and/or flora.

Riparian Landscape & Creek Stabilization
- Regrade banks of river to lessen slope and increase water storage capacity within river channel.
- Rock outcroppings along creek reduce velocity while increasing aesthetics.
- Improve and enhance the creek edges to address erosion and invasive species.
- Landscapes should include the establishment of woodland edges to the creek along with understory planting.
- Establish a native riparian landscape to slow runoff, prevent erosion, and provide year round visual interest, and wildlife habitat.
- Should include a native landscape consisting of a mix of grasses, sedges, forbs, ferns, shrubs, and trees.

Pedestrian Bridge
- Prefabricated pedestrian bridges designed to create a unified design language with the existing park bridges and the new bridges.
- Bridge replacing the existing low water crossing to be designed to accommodate vehicular traffic in order to facilitate the maintenance of the park.
**Action Park & Parking**

In serving as a Community Park it is important that Heman Park address the recreational concerns of all age groups. It was identified during the community engagement process and the market analysis that recreation opportunities were needed for teens and young adults in Heman Park. To address these needs the master plan activates the southeast corner of the park with high intensity recreation in the form of a basketball court complex and action park. These improvement take the place of the existing Community Center and public works facilities, and would require these facilities to be removed prior to implementation. This study suggests moving the Community Center functions to the Centennial Commons building via expansion of the existing building, and relocation of public works & transfer station off site. Activating the Southeast corner of the park creates a unique identity for Heman Park by placing vibrant and active recreation in a highly visible and accessible area. This visibility subsequently works to increase the safety of the action park by placing activity in the area within sight of the public and police.
1 **Action Park**
   • The Action park area has the potential to take on many forms including:
     - Skate Park
     - Velodrome
     - BMX track
     - Multi-use courts (volleyball, roller hockey, handball)
     - Pickleball

2 **Basketball Courts**
   • Three regulation sized fully fenced basketball courts.
   • Courts should be lighted in order to maximize utilization of the space as well as address safety concerns.

3 **Parking**
   • Parking sized to accommodate potential parking needs as determined at time of design.
   • Parking to feature best management practices to address stormwater runoff.

4 **Shelters**
   • 15-20 person picnic structures are featured at both the basketball courts and the skate park to accommodate visitors to these spaces.
   • Shelters should provide drinking fountain and electrical service.
   • Bicycle parking should be included at these locations.

5 **Native Landscape**
   • Native plant palette used to anchor the action park area of the park.
   • Heavy tree planting used to create natural shade, reduce heat island effect and create human scale spaces.
   • Central greenspace within parking lot to be planted as native Missouri woodland or used as stormwater management space as required to mitigate stormwater runoff in the action park area.
LEGEND
1 Skate Park
2 Basketball Courts
3 Parking
4 Shelters
5 Native Landscape
TENNIS COURT IMPROVEMENTS & PARKING

Heman Park offers visitors the opportunity to enjoy eight post-tensioned tennis courts. These courts are in good condition and should be enjoyed by the community into the foreseeable future. Currently four of these courts are lighted. In order to maximize the utilization of the courts and available use hours the other four courts should be lighted. The existing parking lot adjacent to the tennis courts is redesigned to provide room for potential field realignments to the north and expansion of the Centennial Commons facility. The proposed parking realignment shifts the parking to the southeast and replaces the existing open space to the northwest of the tennis courts. The orientation of the parking is rotated 90 degrees to address pedestrian circulation and better respond to existing park topography.
1 Parking realignment
   • Reconfigured parking lot equipped with best management practices as determined at time of development in order to eliminate stormwater runoff.
   • Parking to be aligned in such a way to provide maximum spatial allocation to the fields northwest of the parking.

2 Tennis Court Lighting
   • Expansion of existing lighting to encompass all eight tennis courts.
   • Lighting to meet all tennis lighting standards in order to provide best possible playing conditions and allow for potential tournament play.

LEGEND
1 Parking Realignment
2 Tennis Court Lighting
NORTH ATHLETIC FIELD IMPROVEMENTS

Restructuring the northern athletic fields allows for maximum utilization of the available field space. Currently five skinned infields occupy the north field area though the layout prohibits the use of all of the infields at the same time. Reducing the number of skinned infields to two allows for two adult games of softball or youth baseball to be played at the same time. Four tee ball fields with portable backstops can be arranged in the area between the two large fields. This arrangement allows for maximum flexibility in the space. Potential layouts result in four tee ball and two softball fields or up to eight tee ball fields. Through the use of a temporary backstop the tee ball fields can be replaced by a third softball field allowing three full adult sized games to be played in the north field area. A reduction in the number of skinned infields also helps to maximize the utilization of the space by allowing two soccer or football overlays to be painted over the space without the interference of backstops in the playing surface.
1 Softball Fields
   • 250’ softball fields suitable for use by youth and adults.
   • Skinned infield with backstops and team benches.
   • New sod and regraded playing surface and outfields to maximize safety, drainage
     and playing conditions.

2 Tee Ball Fields (125’)
   • Portable backstops and striping to be adjusted as needed based on demand.
   • New sod and field grading to promote safe play.
   • Six potential locations for tee ball fields in addition to the two softball fields.

3 Portable Backstops
   • Portable chain link backstops allow for maximum flexibility in field layout by
     eliminating permanent infrastructure associated with fields when they are not in use.

4 Soccer / Football Overlay Fields
   • Area sized to accommodate two 100yd x 60yd soccer/football fields with minimal overlap
     onto skinned softball fields.
   • New sod and grading to ensure positive drainage for optimal playing conditions.

5 Shelter
   • 30-50 person shelter with electricity and security lighting.
   • Shelter area to include oversized concrete pad and drinking fountain.
   • Shelter intended for use by field sports participants and spectators though area
     could be made available for rental.
   • Bicycle parking should be provided at the shelter.
Final Park Master Plan
LEGEND

1. Softball Fields
2. Tee Ball Fields
3. Portable Backstops
4. Soccer/football overlay
5. Shelter
Centennial Commons and the Heman Park Pool are major attractions within Heman Park and help the park fulfill its role as the University City Community Park. As mentioned earlier this document does not look in depth at the renovation, realignment and expansion of Centennial Commons and the Heman Park Pool. However, this area is a vital part of the park and the community interest in further study of these amenities was made clear throughout this master planning process. Items identified by the community as well as the market analysis include the renovation of the soccer facility, the development of an indoor aquatics facility, the renovation of the pool house (currently being developed), and the expansion of Centennial Commons to include the functions of the Community Center and a Senior Center. The Master plan shows a potential layout of these elements roughly sized to accommodate the required square footages. While advanced studies must be undertaken to develop these improvements this plan represents the desires of the community as determined by our study.
1 Renovated Bathhouse
   • Renovations to the bathhouse are currently being examined in a separate study.
   • Historical importance of the exterior should be preserved regardless of improvements.

2 Indoor Aquatics Center
   • Mixed use indoor aquatics center featuring water park features as well as lap swimming opportunities.
   • Important to consider the role and future of the University City Natatorium when designing indoor aquatics facility.

3 Indoor Soccer Redevelopment
   • In depth renovation or full redevelopment of existing indoor soccer facility in order to expand utilization of this space.
   • Primary objective of this renovation is to provide proper HVAC system to allow all seasons use of space.
   • In depth study required to determine proper course of action in this area. To be designed in conjunction with the design of the expansion to Centennial Commons and the Indoor Aquatics Center.

4 Centennial Commons Expansion
   • Multi-purpose expansion.
   • Designed to accommodate all of the functions currently serviced by the Heman Park Community Center.
   • Should include space specifically dedicated to senior services. In depth study required to determine the spatial requirements of this feature.
   • Expansion to address any shortcomings in programmable and non programmed recreation space within Centennial Commons at the time of design.

5 Sand Volleyball Courts
   • Two regulation sand volleyball courts and related infrastructure.
   • Courts can be fenced and gated to control access if deemed necessary by park staff at the time of design.

6 Sun Deck and Concessions
   • Elevated observation and sun deck to provide lounge space for pool visitors and accommodate an expanded concessions area.
   • Concessions facility to be expanded to include advanced services and expanded menu as identified by community input.

7 Renovated Outdoor Swimming
   • At the time of this study it was identified through community input that the existing configuration of the outdoor swimming pool is to remain. However, it is the recommendation of the master plan that the outdoor swimming configuration be revisited at a future date to be determined by the City and alternative layouts should be considered. The current configuration is inefficient from a staffing and diversity of activity perspective and a scalable layout is suggested in order to maximize utilization of the outdoor swimming facility and the efficiency of staffing.

8 Expanded Parking
   • Expanding the existing parking at Centennial Commons will be required to accommodate the influx of use due to additional services and renovated facilities.
   • This parking should be designed using the BMP’s at the time of construction and should strive to achieve net zero stormwater runoff.
   • Parking will be shared use with other park functions.
LEGEND
1 Renovated Bathhouse
2 Indoor Aquatics Center
3 New Indoor Soccer Facility
4 Centennial Commons Expansion
5 Sand Volleyball Courts
6 Sun Deck and Concessions
7 Renovated Outdoor Swimming
8 Expanded Parking
PARK BOUNDARY, ENTRY, AND CORNER IMPROVEMENTS

Establishing a strong identity is vital to reaffirming Heman Park’s status as the University City Community Park. The use of native vegetation along the perimeter of the park creates a strong visual contrast within the urban setting of University City. This will translate into immediate visual identification of the park for both pedestrians and vehicular traffic. In addition to the bold perimeter planting establishing strong corner identification markers and clearly delineated entrances will help to strengthen Heman park’s identity and increase safety at entrances. The use of native plant material adds ecological value to the park through increased biodiversity, permeability, reduced maintenance and increase carbon sequestration.
1 Corner Improvements
   • Iconic signage and landscape improvements that create highly recognizable identity at each corner of Heman Park.
   • Sign design to reflect history and style of University City to highlight Heman Park as the Community Park within University City.
   • Signage may be unique to Heman Park or incorporated into the overall parks system standards.

2 Entry Enhancements
   • Entry enhancements to reflect the architecture of University City and create highly recognizable entry conditions.
   • Entries should be designed to address both pedestrian and vehicular safety. Clear delineation of pedestrian crossings with traffic calming features and signals where appropriate.

3 Native Perimeter Planting
   • Native Missouri plant material with seasonal interest to create bold identity along perimeter of park.
   • Use of native landscape minimizes long term maintenance requirements and eliminates need for irrigation.
   • Native planting provide habitat and promotes biodiversity adding ecological value within the park that serves as an ecological node within the urban fabric of St. Louis.
   • Replacing turf grass with native planting increases permeability and carbon sequestration helping to offset the effects of development within the park.

4 Fountain Renovation
   • Renovation of existing fountain. Fountain style, size, and location to remain.

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**LEGEND**

1. Corner Improvements
2. Entry Enhancements
3. Native Perimeter Planting
4. Fountain Renovation
TRAILS & PARK LANDSCAPE

Upwards of seventy percent of visitors to Heman Park utilize the trails for walking, jogging, and bicycling. Creating a strong trail network within Heman Park is essential to addressing the needs of the University City community. A hierarchical trail system connects all the amenities within the park to adjacent parking and other amenities. This increased connectivity reduces strain on the individual lots within the park by creating convenient connections throughout all areas of Heman Park. A primary loop trail brackets River Des Peres capitalizing on the recreational value of the riparian corridor and strengthening Heman Park as a node within the regional GRG trail system. In addition to the trail system, areas of unprogrammed open space are converted to native planting. Expanding native landscape within the park creates recreational and educational opportunities as well as adding critical habitat along the River Des Peres corridor. Additionally maintenance requirements within the park are reduced with the introduction of native landscape.
1. **Paved Trail System**
   - A hierarchal trail system connecting all areas of the site.
   - Loop trails to promote recreational use
   - Connections between parking and amenities to unify park.
   - Accessible surfacing of asphalt or concrete.
   - Integration of GRG Centennial Trail.

2. **Site Furnishings**
   - High quality site furnishings to provide comfort and convenience to park visitors.
   - Lighting along trails and at structures within park to increase safety and visitor comfort.
   - Waste and recycling receptacles to accommodate visitors and reduce litter.
   - Drinking fountains and dog watering stations should be placed throughout park.

3. **Trail Amenities**
   - Distance markers to enhance recreation opportunities within park.
   - Picnic tables and shade structures located along trail system to accommodate visitors and provide a variety of experiences within the park.

4. **Native Landscape**
   - Native plantings targeted at increasing biodiversity including pollinators, Monarch butterfly and bird habitat.
   - Successional tree planting throughout park to ensure canopy cover into the future.

5. **Educational Opportunities**
   - Informational signage throughout park to highlight ecological functions such as water cycle, soil health, air quality, and wildlife management.
   - Viewing opportunities and informational signage to highlight native flora and fauna.
   - Arboretum with tree tags and informational signage.

6. **Fitness Opportunities**
   - Fitness stations to promote community health and recreation.

7. **Wildlife Improvements**
   - Habitat improvements such as bird houses, duck boxes, and butterfly gardens to increase biodiversity and education throughout park.
TRAILS & PARK LANDSCAPE
**LEGEND**

1. Paved Trail System
2. Site Furnishings
3. Trail Amenities
4. Native Landscape
5. Educational Opportunities
6. Fitness Opportunities
7. Wildlife Improvements
**JACK BUCK FIELD**

Jack Buck Field is a unique athletic field in Heman Park. Lighting Jack Buck Field will expand the hours of use for the field space.
LEGEND

1 Field Lighting
COST OPINION

The following information provides a general opinion of probable construction costs for the implementation of the Heman Park Master Plan. The costs are based on available information obtained by the design team during the master plan phase of work. Costs are based on 2014 construction costs and are subject to fluctuation in the marketplace. This information is to be used in conjunction with the master plan to establish a logical sequence of budgeted projects to be implemented by the City of University City.

Opinion of probable construction costs is found on the following pages.

### Midland Entry & Parking

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Subtotal: $314,600.00

| Entry Dive Parking Lot Improvements - West |          |      |           |          |
| West Parking Lot Paving | 12,000 sf |      | $8.00 | $96,000.00 |
| West Parking Lot Concrete Curb and Gutter | 520 lf |      | $18.00 | $9,360.00 |
| West Parking Lot Security Lighting | 5 ew |      | $7,500.00 | $37,500.00 |
| West Parking Lot BMP | 2,500 sf |      | $15.00 | $37,500.00 |

Subtotal: $156,360.00

| Entry Dive Parking Lot Improvements - East |          |      |           |          |
| East Parking Lot Paving | 12,000 sf |      | $8.00 | $96,000.00 |
| East Parking Lot Concrete Curb and Gutter | 520 lf |      | $18.00 | $9,360.00 |
| East Parking Lot Security Lighting | 5 ew |      | $7,500.00 | $37,500.00 |
| East Parking Lot BMP | 2,500 sf |      | $15.00 | $37,500.00 |

Subtotal: $156,360.00

| New Circular Drive and Parking Lots |          |      |           |          |
| Circular Drive North Parking Lot Paving | 17,000 sf |      | $8.00 | $136,000.00 |
| Circular Drive North Parking Lot Concrete Curb and Gutter | 1,200 lf |      | $18.00 | $21,600.00 |
| Circular Drive North Parking Lot Security Lighting | 8 ew |      | $7,500.00 | $60,000.00 |
| Circular Drive North Parking Lot BMP | 2,500 sf |      | $15.00 | $37,500.00 |
| Circular Drive North Parking Lot Security Lighting | 5 ew |      | $7,500.00 | $37,500.00 |
| Circular Drive South Parking Lot Paving | 17,000 sf |      | $8.00 | $136,000.00 |
| Circular Drive South Parking Lot Concrete Curb and Gutter | 1,200 lf |      | $18.00 | $21,600.00 |
| Circular Drive South Parking Lot Security Lighting | 8 ew |      | $7,500.00 | $60,000.00 |
| Circular Drive South Parking Lot BMP | 2,500 sf |      | $15.00 | $37,500.00 |
| West Picnic Area Shelter | 1 al |      | $65,000.00 | $65,000.00 |
| West Picnic Area Landscape | 1 al |      | $7,500.00 | $7,500.00 |
| West Picnic Area Walks | 300 lf |      | $45.00 | $13,500.00 |
| West Picnic Area Site Furnishings | 1 al |      | $15,000.00 | $15,000.00 |
| Circular Drive Picnic Area Shelter | 1 al |      | $65,000.00 | $65,000.00 |
| Circular Drive Picnic Area Landscape | 1 al |      | $7,500.00 | $7,500.00 |
| Circular Drive Picnic Area Walks | 900 lf |      | $45.00 | $22,500.00 |
| Circular Drive Picnic Area Site Furnishings | 1 al |      | $20,000.00 | $20,000.00 |

Subtotal: $656,200.00

* Park zone cost summary does not include contingency, general conditions, or design fees. These items are included with the overall master plan costs described on the bottom of page 85.
### South Field Improvements

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Improvements</td>
<td>3</td>
<td>ea</td>
<td>$125,000.00</td>
<td>$375,000.00</td>
<td>Grading, striping, backstop fencing, benches</td>
</tr>
<tr>
<td>Field Irrigation</td>
<td>1</td>
<td>ac</td>
<td>$100,000.00</td>
<td>$100,000.00</td>
<td>Irrigation of playing surfaces - upgrades and expansion</td>
</tr>
<tr>
<td>Sod Fields</td>
<td>19,700</td>
<td>sy</td>
<td>$4.50</td>
<td>$88,650.00</td>
<td>Sod playing surfaces</td>
</tr>
<tr>
<td>Seed Lawn</td>
<td>6,900</td>
<td>ac</td>
<td>$1.50</td>
<td>$10,350.00</td>
<td>Seed areas adjacent to playing fields</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td><strong>$375,000.00</strong></td>
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</table>

### South Drainage Improvements

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honeysuckle and Selective Tree Removal</td>
<td>4</td>
<td>ac</td>
<td>$7,500.00</td>
<td>$30,000.00</td>
<td>Honeysuckle removal and native establishment; selective tree removal</td>
</tr>
<tr>
<td>South Drainage Improvements</td>
<td>1,050</td>
<td>ac</td>
<td>$4.25</td>
<td>$4,462.50</td>
<td>Grading and riparian plantings and selected areas along corridor</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td><strong>$34,462.50</strong></td>
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</table>

### Vernon Art Walk (Does not include sculptures or sculpture installation)

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Grading</td>
<td>1</td>
<td>ac</td>
<td>$25,000.00</td>
<td>$25,000.00</td>
<td>Earth forms for sculpture rooms</td>
</tr>
<tr>
<td>Native Landscape</td>
<td>45,000</td>
<td>sf</td>
<td>$4.25</td>
<td>$191,250.00</td>
<td>Native Prairie, Canopy Trees</td>
</tr>
<tr>
<td>Concrete Walk</td>
<td>1,500</td>
<td>if</td>
<td>$80.00</td>
<td>$120,000.00</td>
<td>If Concrete walk</td>
</tr>
<tr>
<td>Site Furnishings</td>
<td>1</td>
<td>ac</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
<td>Benches, trash receptacles, and educational signage</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td><strong>$346,250.00</strong></td>
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### Purdue Art Walk & Parking (Does not include sculptures or sculpture installation)

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Grading</td>
<td>1</td>
<td>ac</td>
<td>$25,000.00</td>
<td>$25,000.00</td>
<td>Earth forms for sculpture rooms</td>
</tr>
<tr>
<td>Shelter with Oversized Pad</td>
<td>1</td>
<td>ac</td>
<td>$65,000.00</td>
<td>$65,000.00</td>
<td>15-20 person shelter with electric and security lighting</td>
</tr>
<tr>
<td>Concrete Walk</td>
<td>455</td>
<td>if</td>
<td>$65.00</td>
<td>$27,087.50</td>
<td>If wide concrete walls</td>
</tr>
<tr>
<td>Parking Lot Paving</td>
<td>2,000</td>
<td>sf</td>
<td>$4.25</td>
<td>$8,500.00</td>
<td>Grading, asphalt surfacing and striping</td>
</tr>
<tr>
<td>Parking Lot Curb and Gutter</td>
<td>100</td>
<td>if</td>
<td>$15.00</td>
<td>$1,500.00</td>
<td>Along the perimeter of the parking lot</td>
</tr>
<tr>
<td>Site Furnishings</td>
<td>1</td>
<td>ac</td>
<td>$20,000.00</td>
<td>$20,000.00</td>
<td>Tables, benches along walk, trash receptacles</td>
</tr>
<tr>
<td>Native Landscape</td>
<td>55,000</td>
<td>sf</td>
<td>$4.50</td>
<td>$247,500.00</td>
<td>Native Wildflower Meadow Landscape</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td><strong>$335,587.50</strong></td>
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### DESTINATION PLAYGROUND

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demolition and Grading</td>
<td>1</td>
<td>al</td>
<td>$25,000.00</td>
<td>$25,000.00</td>
<td>Removal and existing picnic shelters; selective tree removal; general grading</td>
</tr>
<tr>
<td>Destination Playground Equipment and Surfacing</td>
<td>1</td>
<td>al</td>
<td>$500,000.00</td>
<td>$500,000.00</td>
<td>Themed play with resilient surfacing / wood fiber mix</td>
</tr>
<tr>
<td>Family Shelter with Oversized Pad</td>
<td>1</td>
<td>al</td>
<td>$120,000.00</td>
<td>$120,000.00</td>
<td>50-60 person shelter with electric and security lighting</td>
</tr>
<tr>
<td>Single Table Picnic Shelters</td>
<td>2</td>
<td>al</td>
<td>$20,000.00</td>
<td>$40,000.00</td>
<td>Single picnic table shelters around playground</td>
</tr>
<tr>
<td>Concrete Walk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6' Concrete walk</td>
</tr>
<tr>
<td>Site Furnishings</td>
<td>1</td>
<td>al</td>
<td>$25,000.00</td>
<td>$25,000.00</td>
<td>Benches, trash and bike racks</td>
</tr>
<tr>
<td>Landforms and Landscape</td>
<td>1</td>
<td>al</td>
<td>$45,000.00</td>
<td>$45,000.00</td>
<td>Benches for play and landscape enhancements</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$782,000.00</td>
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### EVENT & MULTI-USE FIELDS

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Use Lawn with Ballfield Overlays</td>
<td>87,800</td>
<td>sf</td>
<td>$1.25</td>
<td>$109,500.00</td>
<td>Grading and Turf Improvements with Backstop</td>
</tr>
<tr>
<td>Shelter</td>
<td>Band Stand with Oversized Pad</td>
<td>1</td>
<td>al</td>
<td>$225,000.00</td>
<td>$225,000.00</td>
</tr>
<tr>
<td>Concrete Walk and Shelter Access</td>
<td>250</td>
<td>sf</td>
<td>$60.00</td>
<td>$15,000.00</td>
<td>If wide walk and service drive</td>
</tr>
<tr>
<td>Site Furnishings</td>
<td>1</td>
<td>al</td>
<td>$15,000.00</td>
<td>$15,000.00</td>
<td>Tables, benches, trash receptacles, barbecue, etc.</td>
</tr>
<tr>
<td>Landscape</td>
<td>1</td>
<td>al</td>
<td>$7,500.00</td>
<td>$7,500.00</td>
<td>Canopy and ornamental trees; general landscape</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$372,000.00</td>
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</table>
## River Des Peres Improvements

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Creek Revitalization</td>
<td>2,800</td>
<td>if</td>
<td>$350.00</td>
<td>$980,000.00</td>
<td>Steam bank improvements, boulders, native landscape</td>
</tr>
<tr>
<td>Honeysuckle and Selective Tree Removal</td>
<td>6</td>
<td>ac</td>
<td>$7,500.00</td>
<td>$45,000.00</td>
<td>Honeysuckle removal and native establishment, selective tree removal</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$1,021,250.00</strong></td>
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## Action Park & Parking

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball Courts</td>
<td>3</td>
<td>ea</td>
<td>$65,000.00</td>
<td>$195,000.00</td>
<td>Courts with surfacing, striping and fencing</td>
</tr>
<tr>
<td>Basketball Court Lighting</td>
<td>1</td>
<td>al</td>
<td>$100,000.00</td>
<td>$100,000.00</td>
<td>Lighting for all three courts</td>
</tr>
<tr>
<td>Concrete Walks</td>
<td>22,800</td>
<td>sf</td>
<td>$7.50</td>
<td>$171,000.00</td>
<td>All trail/pavement areas</td>
</tr>
<tr>
<td>Event Shelter</td>
<td>1</td>
<td>al</td>
<td>$85,000.00</td>
<td>$85,000.00</td>
<td>30-50 person shelter with electric and security lighting and drinking fountain</td>
</tr>
<tr>
<td>Event Shelter with Restrooms</td>
<td>1</td>
<td>al</td>
<td>$250,000.00</td>
<td>$250,000.00</td>
<td>Event shelter with the addition of restrooms</td>
</tr>
<tr>
<td>Drop Off Plaza at Trailhead</td>
<td>2,000</td>
<td>sf</td>
<td>$12.00</td>
<td>$24,000.00</td>
<td>Special paving with information kiosk</td>
</tr>
<tr>
<td>Action Park Parking Lot Paving</td>
<td>30,500</td>
<td>sf</td>
<td>$4.25</td>
<td>$129,625.00</td>
<td>Grading, asphalt surfacing and striping</td>
</tr>
<tr>
<td>Action Park Parking Lot Concrete Curb and Gutter</td>
<td>1,800</td>
<td>if</td>
<td>$18.00</td>
<td>$32,400.00</td>
<td>Along the perimeter of the parking lot</td>
</tr>
<tr>
<td>Action Park Parking Lot Security Lighting</td>
<td>15</td>
<td>ea</td>
<td>$7,500.00</td>
<td>$112,500.00</td>
<td>Overhead cobrahead fixtures 100’ o.c.</td>
</tr>
<tr>
<td>Action Park Parking Lot BMP</td>
<td>5,000</td>
<td>sf</td>
<td>$15.00</td>
<td>$75,000.00</td>
<td>Grading, soil, and landscape</td>
</tr>
<tr>
<td>Skate Park</td>
<td>20,500</td>
<td>sf</td>
<td>$45.00</td>
<td>$922,500.00</td>
<td>Average cost for concrete skate parks; no lighting</td>
</tr>
<tr>
<td>Site Furnishings</td>
<td>1</td>
<td>al</td>
<td>$50,000.00</td>
<td>$50,000.00</td>
<td>Tables, benches, trash receptacles, bike racks, etc.</td>
</tr>
<tr>
<td>Landscape</td>
<td>1</td>
<td>al</td>
<td>$25,000.00</td>
<td>$25,000.00</td>
<td>Parking lot entries and general site landscape</td>
</tr>
<tr>
<td>Lawn Area</td>
<td>10,000</td>
<td>sy</td>
<td>$4.00</td>
<td>$40,000.00</td>
<td>Turf / native landscape</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$2,208,425.00</strong></td>
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</table>
**Tennis Court Improvements & Parking**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demo and Site Preparation</td>
<td>1</td>
<td>al</td>
<td>$25,000.00</td>
<td>$25,000.00</td>
<td>Remove existing parking lot and entry drive; regrade</td>
</tr>
<tr>
<td>Tennis Court Repairs</td>
<td>8</td>
<td>ea</td>
<td>$5,000.00</td>
<td>$40,000.00</td>
<td>General repairs to court surfacing, nets, and fencing</td>
</tr>
<tr>
<td>Tennis Courts Lighting Repairs</td>
<td>10</td>
<td>ea</td>
<td>$7,500.00</td>
<td>$75,000.00</td>
<td>Overhead cobrahead fixtures 100' o.c.</td>
</tr>
<tr>
<td>Tennis Courts Parking Lot Grading</td>
<td>1</td>
<td>al</td>
<td>$15.00</td>
<td>$15.00</td>
<td>Grading, soils, and landscape</td>
</tr>
<tr>
<td>Tennis Courts Parking Lot Security Lighting</td>
<td>1</td>
<td>al</td>
<td>$100,000.00</td>
<td>$100,000.00</td>
<td>New 6'-8' wide walks at parking, courts, restroom, and connections to trails</td>
</tr>
<tr>
<td>Existing Restroom Renovation</td>
<td>1</td>
<td>al</td>
<td>$60,000.00</td>
<td>$60,000.00</td>
<td>Upgrades and improvements</td>
</tr>
<tr>
<td>Concrete Walks - Tennis Courts</td>
<td>1</td>
<td>al</td>
<td>$50,000.00</td>
<td>$50,000.00</td>
<td>Upgrades and improvements</td>
</tr>
<tr>
<td>Family Picnic Shelter</td>
<td>1</td>
<td>al</td>
<td>$100,000.00</td>
<td>$100,000.00</td>
<td>60-80 people; electric, security lighting, and water</td>
</tr>
<tr>
<td>Site Furnishings</td>
<td>1</td>
<td>al</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
<td>Tables, benches, trash receptacles, bike racks, etc.</td>
</tr>
<tr>
<td>Landscape</td>
<td>1</td>
<td>al</td>
<td>$25,000.00</td>
<td>$25,000.00</td>
<td>Parking lot and general site landscape</td>
</tr>
<tr>
<td>Lawn Area</td>
<td>7,500</td>
<td>sq</td>
<td>$4.00</td>
<td>$30,000.00</td>
<td>Turf / native landscape</td>
</tr>
</tbody>
</table>

**Subtotal** $555,625.00

---

**North Athletic Field Improvements**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Improvements</td>
<td>1</td>
<td>al</td>
<td>$300,000.00</td>
<td>$300,000.00</td>
<td>Grading, remove three dirt infields, two new dirt infield, new backstop fencing</td>
</tr>
<tr>
<td>Field Sco</td>
<td>17,500</td>
<td>sq</td>
<td>$4.50</td>
<td>$78,750.00</td>
<td>Sod all field areas with exception of two dirt infields</td>
</tr>
<tr>
<td>Event Shelter</td>
<td>1</td>
<td>al</td>
<td>$85,000.00</td>
<td>$85,000.00</td>
<td>30-50 person shelter with electric and security lights and drinking fountain</td>
</tr>
<tr>
<td>Concrete Walks</td>
<td>250</td>
<td>if</td>
<td>$45.00</td>
<td>$11,250.00</td>
<td>New 6'-8' wide connections to field; parking lot and loop trails</td>
</tr>
<tr>
<td>Landscape</td>
<td>1</td>
<td>al</td>
<td>$7,500.00</td>
<td>$7,500.00</td>
<td>New 6'-8' wide connections to field; parking lot and loop trails</td>
</tr>
<tr>
<td>Lawn Area</td>
<td>4,500</td>
<td>sq</td>
<td>$4.00</td>
<td>$18,000.00</td>
<td>Turf areas</td>
</tr>
</tbody>
</table>

**Subtotal** $500,500.00
## Centennial Commons & Aquatic Facility

<table>
<thead>
<tr>
<th>Item</th>
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<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Expansion Paving</td>
<td>44,500</td>
<td>sf</td>
<td>$4.25</td>
<td>$189,125</td>
<td>Grading, asphalt surfacing and striping</td>
</tr>
<tr>
<td>Parking Expansion Concrete Curb and Gutter</td>
<td>2,000</td>
<td>if</td>
<td>$15.00</td>
<td>$30,000</td>
<td></td>
</tr>
<tr>
<td>Parking Expansion Parking Lot Security Lighting</td>
<td>15</td>
<td>ea</td>
<td>$7,500.00</td>
<td>$112,500</td>
<td>Overhead cobrahead fixtures 100' o.c.</td>
</tr>
<tr>
<td>Parking Expansion BMP</td>
<td>10,000</td>
<td>sf</td>
<td>$15.00</td>
<td>$150,000</td>
<td>Grading, soils, and landscape</td>
</tr>
<tr>
<td>Concrete Walks</td>
<td>400</td>
<td>if</td>
<td>$45.00</td>
<td>$18,000</td>
<td>6' wide walk along south side of expanded parking</td>
</tr>
<tr>
<td>Lighted Sand Volleyball Courts</td>
<td>2</td>
<td>ea</td>
<td>$25,000.00</td>
<td>$50,000</td>
<td>New courts with site preparation, sand, nets, and lighting</td>
</tr>
<tr>
<td>Indoor Aquatic Center (Not in Scope)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indoor Soccer (Not In Scope)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Center/Senior Center (Not in Scope)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Building Renovation (Not in Scope)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heman Park Outdoor Pool Improvements (Not in Scope)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$504,825</td>
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## Park Boundary & Entry Improvements

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perimeter Walk</td>
<td>6,750</td>
<td>if</td>
<td>$50.00</td>
<td>$337,500</td>
<td>New 6' wide walk with grading along the perimeter of the park</td>
</tr>
<tr>
<td>Native Landscape Along Park Boundary</td>
<td>12,000</td>
<td>sy</td>
<td>$4.50</td>
<td>$54,000</td>
<td>Native landscape areas on slopes and transitions into park</td>
</tr>
<tr>
<td>Landscape Enhancements</td>
<td>1</td>
<td>al</td>
<td>$25,000.00</td>
<td>$25,000</td>
<td>Trees and understory enhancements in northwest point in park</td>
</tr>
<tr>
<td>Fountain Improvements (NW Point of Park)</td>
<td>1</td>
<td>al</td>
<td>$30,000.00</td>
<td>$30,000</td>
<td>Fountain upgrades and new walk from parking lot</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$514,000</td>
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## Park Corner Improvements

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
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<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park Corner Enhancements</td>
<td>4</td>
<td>sq</td>
<td>$25,000.00</td>
<td>$100,000</td>
<td>Signage and landscape at each corner</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$100,000</td>
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**TRAILS & PARK LANDSCAPE**

<table>
<thead>
<tr>
<th>Item</th>
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<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paved Loop Trails</td>
<td>6.500</td>
<td>ft</td>
<td>$75.00</td>
<td>$487,500.00</td>
<td>10’ wide paved loop trails within the park linking amenities and walk</td>
</tr>
<tr>
<td>Pedestrian Bridge</td>
<td>3</td>
<td>al</td>
<td>$100,000.00</td>
<td>$300,000.00</td>
<td>12’ wide bridges over River Des Peres along loop trails</td>
</tr>
<tr>
<td>River Des Peres Overlooks</td>
<td>2</td>
<td>ea</td>
<td>$50,000.00</td>
<td>$100,000.00</td>
<td>Overlooks for viewing stream corridor</td>
</tr>
<tr>
<td>Site Furnishings</td>
<td>1</td>
<td>al</td>
<td>$25,000.00</td>
<td>$25,000.00</td>
<td>Benches, trash receptacles, bike racks, etc.</td>
</tr>
<tr>
<td>Landscape Enhancements</td>
<td>1</td>
<td>al</td>
<td>$20,000.00</td>
<td>$20,000.00</td>
<td>Trees and understory along loop trails and within park open space</td>
</tr>
<tr>
<td>Lawn and Native Landscape Areas</td>
<td>16,000</td>
<td>sy</td>
<td>$4.50</td>
<td>$72,000.00</td>
<td>Seeded landscape for park open space</td>
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Subtotal: $1,004,500.00

**JACK BUCK FIELD**

<table>
<thead>
<tr>
<th>Item</th>
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<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Lighting</td>
<td>1</td>
<td>al</td>
<td>$150,000.00</td>
<td>$150,000.00</td>
<td>Add lighting for extended use of field</td>
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Subtotal: $150,000.00

**OVERALL COST**

<table>
<thead>
<tr>
<th></th>
<th>Total: $13,591,199.80</th>
<th>KEY</th>
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<tbody>
<tr>
<td>12% General Conditions</td>
<td>$1,635,277.40</td>
<td>ea = each</td>
</tr>
<tr>
<td>12% Construction Contingency</td>
<td>$1,635,277.40</td>
<td>ft = linear foot</td>
</tr>
<tr>
<td>Total:</td>
<td>$13,591,199.80</td>
<td>NIC = not in contract</td>
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<tr>
<td>15% Design and Engineering Fees</td>
<td>$2,038,679.97</td>
<td>ft = height</td>
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Project Grand Total: $15,629,879.77

* Cost Opinion does not include: Community Center and Public Works Demolition; Centennial Commons Expansions; Heman Park Pool Improvements; Art; Art Installations; Art Lighting; Required Utility Upgrades
Following the master planning process implementation priorities were identified to help meet the needs and opportunities as defined in the plan. Input from city staff, the Park Commission and the community was solicited in the establishment of priority projects within the park. It is important to note that the following Implementation priorities are temporal and reflect a snapshot of the community at the time of plan development. Community desires should be evaluated throughout the life of this plan to ensure the goals and desires of the community are being addressed.

Implementation strategies identified in the following chapter are indicative of a series of factors including the community desires, the staff desires, and the realities of implementation such as funding opportunities and the impact of adjacent spaces. After considering these factors a set of goals was established and they are as follows. Goal one should be to broaden the attraction of Heman Park and improve safety. Goal two is to maintain the existing users of Heman Park. Goal three is to implement additive strategies that redefine Heman Park within the community. Following these goals three priority implementation strategies have been defined for Heman Park by the master plan.
**Community Input**

Following the presentation of the Heman Park Master Plan at the third public meeting on August 7, 2014 the community was asked to evaluate the plan and identify their priority project areas with no regard to cost implications. Below is the resultant feedback with dots indicating the priority improvements in the eyes of the community. As shown below the community was highly additive in their priorities selecting improvements that would expand or improve the amenities offered in Heman Park. It was very clearly indicated not only during this exercise but throughout the master planning process that the redefinition of buildings within Heman Park was a high priority within the community. Integrating the functions of the Heman Park Community Center into the Centennial Commons facility, renovating the Heman Park Pool bathhouse and adding an indoor aquatics facility were highly regarded improvements and should be further developed in additional studies. Improvements to the River Des Peres and the addition of a destination playground were highly popular site improvements identified by the community. These areas should be focused on as priority improvements within the larger context of Heman Park as a whole.
FURTHER STUDY

One of the goals of this master planning effort was to identify the need and community desire for improvements to Centennial Commons, the Heman Park Community Center and Heman Park Pool. It is the recommendation of this master plan based on the feedback received from the public, the Park Commission and city staff in addition to the analysis of the existing level of service offered by Heman Park that further study is needed in regards to all three areas identified.

The course of action laid out by this master plan is to demolish the existing Heman Park Community Center and transition the services offered by the Community Center to the Centennial Commons facility. This transition will require significant expansion of the Centennial Commons facility and should be inclusive of a full program analysis and spatial needs assessment. Specific attention should be given to the development of a senior center with Centennial Commons that would address current conflicts of use within Centennial Commons and satisfy the desires of both the senior population utilizing these services and the programming needs of Centennial Commons as a recreation facility. In addition to the integration of the Community Center Centennial Commons is to house an indoor aquatics center as identified on the master plan. This indoor aquatics center should serve several user groups within the community and feature both lap swimming and water park play features. Development of the indoor aquatics facility should be done in conjunction with the renovation or redevelopment of the indoor soccer facility. Currently this facility lacks the necessary HVAC system to function as an all seasons recreation space. Due to its unique recreational potential in the region it is important that Heman Park retain the function of the indoor soccer facility with substantial infrastructure upgrades to allow for maximum utilization of the space. Furthermore it is the recommendation of this plan that the outdoor swimming pool be evaluated at the time of improvements to Centennial Commons. At the time of this report the community has indicated that no improvements to the layout of the pool are desired. However due to inefficiencies in staffing requirements and operational costs it is recommended that the outdoor pool be redesigned to allow for scalable swimming spaces with an increased level of service in the form of diverse swimming amenities including regulation lap lanes and water park features such as a lazy river.

The final suggestion of this plan for further study is to evaluate potential sites to accommodate the relocation of the University City Public Works facilities currently located on the Eastern edge of Heman Park. The final vision of Heman Park includes the reclamation of this space for the development of an action park and related amenities. In order for the vision of Heman to be fully realized it is critical that a viable location be procured for the redevelopment of the Public Works facilities.
IMPLEMENTATION PRIORITIES

It is important that the elements identified for further study in the previous section be pursued concurrently with the implementation of the master plan. The following implementation strategies account for both community priorities within Heman Park and the realities of development. Each element of the master plan presents unique implications in the form of funding and development. A balance of implementation timeline, community vision, and return on investment is reached in the following strategies allowing the gradual implementation of the master plan in an efficient yet impactful manner that will result in the full realization of the master plan vision.

Priority Implementation Area 1 | Broadening the attraction and increasing the safety of Heman Park can be readily achieved with implementation the improvements identified within Priority Implementation area 1. Elements within this are include the development of a main loop entry drive, the redefinition of parking within the heart of the park, the development of a destination playground and related amenities, the development of a clearly defined park entry, and the restoration of the southern stream reach within the park.

Elements within priority area 1 are additive without disrupting the current use of the park. Creation of the destination playground, park shelters, and loop drive do not heavily impact adjacent existing amenities yet they provide drastic amenity upgrades and aesthetic impacts within the park. Development of the southern parking wing can be phased to allow the existing basketball courts to be utilized until new courts can be developed in future phases.

Safety within Heman Park will be increased through the development of priority 1 elements. The creation of a Loop drive eliminates the existing dead end condition and provides safer driving conditions for visitors to the park as well as increasing efficiency for policing of the park. Restoration of the southern stream reach within the park further increases safety by removing the existing visual barrier created by invasives such as Honeysuckle. Opening a viewshed into the park from Vernon will reduce the amount of unsupervised area existing within Heman. Redevelopment of the park entry on Midland avenue increases pedestrian and vehicular safety by clearly delineating the park entry.

Priority area 1 helps to strengthen and define the identity of Heman Park through branding and attraction. Creating a strong entry from Midland Ave. identifies the importance of Heman Park and reinforces its role as the community park within the University City parks system. Furthermore the addition of a marquee and iconic attraction such as a destination playground will begin to change the perception of Heman Park by attracting users that may have not previously utilized Heman Park.

These attributes coupled with the economic viability of the items featured in priority area 1 create a strong argument for the short term development of this area. Funding sources have been identified for the restoration of the southern stream reach and grant writing is currently underway for the implementation of this element. Additional moneys for the development of other priority 1 elements can be found in chapter eight of this document.
Priority Implementation Area 2 | Restoration of River Des Peres and all of the master plan elements south of River Des Peres that were not identified in priority area 1 fall within priority area 2. These elements were selected as the second tier of development within the master plan due to their complimentary nature to priority 1 elements yet they are independent of long term priority 3 elements. Priority 2 elements are a mixture of short and medium term planning items that can be developed concurrently with phase 1 elements but should not be given priority over phase 1 elements in the allocation of funds or phasing. Retention of existing Heman Park users is a primary focus of area 2.

Renovating existing elements including all of the southern athletic fields in addition to restoring River Des Peres and creating a truly flexible community open space elevates the level of service currently offered by Heman Park. Athletic fields are heavily used in Heman Park, restoring the playing surfaces incorporating lighting and upgrading backstops and team benches will allow the park to better serve this group of users. Heman park hosts several community events such as Fair U. City, U. City Class Reunion, and the Starlight Concert Series. A multi-use lawn and appropriately sized structure with the features required to serve as a band shell will elevate Heman Parks ability to serve as the venue for these community scale gatherings. Restoring River Des Peres creates a gem out of a currently existing yet underutilized amenity within the park. River Des Peres as it currently exists creates a barrier between the north and south portions of the site. Restoring this corridor and spanning the river with pedestrian bridges along the trail network unifies the park and creates a very unique recreation opportunity for visitors to Heman Park. University City has an opportunity to stand as an example of environmental stewardship in the region by addressing the existing issues with River Des Peres.

The addition of two art walks to Heman Park works twofold to bolster the parks presence within the community. Upwards of 70% of the visitors to Heman Park use the park for walking and jogging. The proposed art walks offer additional walking trails for these visitors while creating an entirely new amenity within the park. The proposed locations for the art walks are currently underutilized turf areas that will benefit from the introduction of native landscape and public art. Using public art within Heman Park presents an opportunity for the city to engage local artists and the community in acquiring the pieces required for each space. Combining large scale art pieces with the boldness of native landscape within the urban context of the park will further define the identity of Heman Park creating easily recognizable spaces prominently situated on the borders of the park.

In all these improvements go a long way towards retaining the current users of Heman Park and attracting new visitors with improved and unique park amenities.
Priority Implementation Area 3 | Long range developments that fulfill the final vision of Heman Park comprise the priority area 3 improvements. Development of the improvements in area 3 will require coordinated planning and in depth study of the elements involved. Each of the improvements in area 3 has a strategic impact on the rest of area 3 and each piece plays a critical role in the success of the full build out of the Heman Park master plan. Currently the amenities offered in area 3 meet the immediate needs of the public and will function until the long term implementation of this area can come to fruition. The cost impacts of the area 3 development will require strategic long term plan for funding and the implementation of this plan should be studied immediately.

There are four key components of priority implementation area 3 and each fits together to form one complete puzzle. Relocation of the University City Public Works facilities and Heman Park Community Center is one component of Area 3. These facilities currently occupy the space along the eastern edge of the park and must be relocated in order to accommodate the development of the action park portion of the master plan. Another component of area 3 is the action park area. This area is targeted specifically towards active adults and teens. Providing a basketball court complex and the potential for a high intensity amenity such as a skate park or velodrome the action park occupies the entire eastern border of Heman Park along Pennsylvania Ave. The third piece of the area 3 puzzle lies in the redevelopment of the northern athletic fields and redesigning the parking adjacent to the tennis courts. This improvement consolidates the space allocated to these functions and allows the athletic fields and parking to slide southeast towards the tennis courts. Realigning this area allows the number of simultaneously active athletic fields to grow as well as providing valuable real estate for the expansion of Centennial Commons and the additional parking that will accompany that expansion. The expansion of Centennial Commons is the final piece of the area 3 puzzle and must be completed to allow the relocation of the Heman Park Community Center. It should be noted that in the event that relocation of the City Public Works facility is not feasible at the time of area 3 development, other elements within the park such as the Centennial Commons expansion can be developed independently of this area.

Expansion of Centennial Commons to accommodate the functions of the Heman Park Community Center allows the Community Center demolition to proceed. This expansion then triggers the redevelopment of the Heman Park Pool bath houses and the integration of an indoor aquatics center and soccer facility. Centennial Commons should be expanded to accommodate the current use of the Community Center as well as meet the spatial needs of a full time Senior Center. The planning of this space should be conducted holistically with the design of the indoor aquatics facility and renovated or redeveloped indoor soccer field. Creating a unified and well thought out plan for Centennial Commons is critical to the success of the Heman Park Master Plan vision. While the existing outdoor pool area has been identified by the community as an element to remain unchanged, it is the findings of this study that this space should be reevaluated at the time of the Centennial Commons improvements. Redesigning the outdoor pool space will allow the Centennial Commons and Heman Park Pool facilities to function more efficiently and better serve the needs of the community.

It is important to note that none of the 3 implementation areas are exclusive from the others. Elements from each can be implemented as the City develops the park and these areas are simply to guide the development and planning process. Completing the elements in priority implementation area 3 will finalize the Heman Park Master Plan vision and create a unique gem to be enjoyed by the University City Community.
### Priority Implementation Area 1

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>Midland Entry &amp; Parking</td>
<td>1</td>
<td>Is</td>
<td>$1,285,520.00</td>
<td>$1,285,520.00</td>
<td>See Pg 78</td>
</tr>
<tr>
<td>South Drainage Improvements</td>
<td>1</td>
<td>Is</td>
<td>$318,750.00</td>
<td>$318,750.00</td>
<td>See Pg 79</td>
</tr>
<tr>
<td>Destination Playground</td>
<td>1</td>
<td>Is</td>
<td>$782,000.00</td>
<td>$782,000.00</td>
<td>See Pg 80</td>
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**Subtotal** $2,366,270.00

### Priority Implementation Area 2

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<tr>
<td>South Fields</td>
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<td>Is</td>
<td>$741,350.00</td>
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<td>See Pg 79</td>
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<tr>
<td>Vernon &amp; Purdue Art Walks</td>
<td>1</td>
<td>Is</td>
<td>$372,000.00</td>
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<td>See Pg 80</td>
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<tr>
<td>Event &amp; Multi-Use Fields</td>
<td>1</td>
<td>Is</td>
<td>$1,021,250.00</td>
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<td>See Pg 81</td>
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<tr>
<td>River Des Peres Improvements</td>
<td>1</td>
<td>Is</td>
<td>$257,000.00</td>
<td>$257,000.00</td>
<td>See Pg 83</td>
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<tr>
<td>Corner Improvements</td>
<td>1</td>
<td>Is</td>
<td>$50,000.00</td>
<td>$50,000.00</td>
<td>See Pg 83</td>
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<tr>
<td>Trails &amp; Park Landscape</td>
<td>1</td>
<td>Is</td>
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<td>$1,004,500.00</td>
<td>See Pg 84</td>
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<tr>
<td>Jack Buck Field</td>
<td>1</td>
<td>Is</td>
<td>$150,000.00</td>
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<td>See Pg 84</td>
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**Subtotal** $4,170,100.00

### Priority Implementation Area 3

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<tr>
<td>Action Park &amp; Parking</td>
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<td>$2,208,425.00</td>
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<td>Tennis Court Improvements &amp; Parking</td>
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<td>Is</td>
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<td>See Pg 82</td>
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<tr>
<td>North Athletic Field Improvements</td>
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<td>Is</td>
<td>$560,500.00</td>
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<td>See Pg 82</td>
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<tr>
<td>Centcom &amp; Aquatics Improvements &amp; Expansion</td>
<td>1</td>
<td>Is</td>
<td>$555,625.00</td>
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<td>See Pg 83</td>
</tr>
<tr>
<td>Boundary &amp; Entry Improvements</td>
<td>1</td>
<td>Is</td>
<td>$257,000.00</td>
<td>$257,000.00</td>
<td>See Pg 83</td>
</tr>
<tr>
<td>Corner Improvements</td>
<td>1</td>
<td>Is</td>
<td>$50,000.00</td>
<td>$50,000.00</td>
<td>See Pg 83</td>
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**Subtotal** $4,604,275.00

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*Cost Opinion does not include site lighting, site utilities, earthwork, or design fees.*

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**Numbers based upon Revised Site Plan dated June 19, 2014**

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**Revised July 17, 2014**

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**Heman Park Master Plan**

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**Priority Implementation Area 1**

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**Priority Implementation Area 2**

---

**Priority Implementation Area 3**

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**Heman Park**

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**City of University City**

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**Project Grand Total** $15,629,879.77

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**Grand Total** $13,591,199.80

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**Sub total** $10,960,645.00

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**Subtotal** $4,404,275.00
Ballard*King & Associates teamed with SWT, has been tasked with developing the Heman Park Master Plan. B*K was specifically tasked with developing a competitive market analysis that looked at the various components and activities that could take place in Heman Park. That information has been combined with the public input process that has taken place over the course of the project. With that information in hand B*K has been asked to provide an opinion on the operations of the main components of the project:

- Heman Park
- Community Center
- Centennial Commons
- Heman Park Pool

The following pages will outline each of the current components as they stand today, offer opinions on those operations as they relate to industry standards and outline important items that should be considered as the City adopts and implements the Master Plan for Heman Park.
SERVICE AREA REVIEW

In the market analysis portion of the document that B*K developed there were 2 service areas for the project; primary being the City of University City and secondary that uses I-170 as a western boundary and I-70 as a northern boundary. It is the opinion of B*K that the secondary service area could become more of a primary service area depending upon how the City continues to market Heman Park and the programs and services offered at the Community Center, Centennial Commons and Heman Park Pool.

B*K would recommend focusing marketing efforts of recreation programs and services in that geographic area. The reason for that focus is as you move west and south of the secondary area you encounter multiple municipal recreation facilities; St. Ann, Maryland Heights, Clayton, Richmond Heights, Brentwood, etc. The concentration of municipally oriented recreation/community centers will make it difficult for the City to draw individuals to Heman Park. The City would be able to draw from this area if they were to develop a “unique” offering that other municipalities currently do not offer.

One of the main reasons that the City should focus marketing efforts to the secondary service area would be for the purposes of increasing the overall cost recovery level of the facilities and programs within Heman Park. It is not atypical of municipally operated recreation facilities and programs to serve the residents of the community, but those that live outside of the community as well. The general lack of recreation providers in the secondary service area creates an opportunity to market programs and facilities to that population.

If the City wants to make the secondary service area their primary market for offering recreation programs and services from the Heman Park location, B*K would recommend exploring the following options:

- Inventory. Having a full understanding of what is offered in the other communities within the service area as it relates to parks and recreation services. From that inventory the City can determine what gaps exist and what they may be able to address with their current program offerings.

- Core Services. In addition to the inventory of what other communities are doing in the way of parks and recreation services the City needs to identify their core services. As a third party observer B*K would identify the following as core services of parks and recreation within the City; renter of indoor and outdoor recreation/community spaces, indoor recreation/programs in the way of Centennial Commons, seasonal aquatics in the way of Heman Park Pool, and grass roots programs associated with all spaces in Heman Park.

- Marketing Effort. Once an inventory of what others are offering has been complete and core services have been identified and agreed upon, the City can begin a marketing effort to the individuals in other communities. That marketing effort could take the form of; seasonal recreation brochure, other print sources, website presence, social media outlets, website link building, etc. Through these efforts the goal should be to emphasize the core
services that the City offers and that are in close proximity to non-City residents. The availability and proximity need to be focused on for the following reason; typically the top 3 reasons individuals use specific recreation facilities and programs are proximity to home, proximity to work and cost of facilities/programs.

Another opportunity that the City may want to capitalize on based upon their current cost recovery level and future financial goals would be the development of cooperative agreements between the City and communities within the secondary service area. Currently there is a cooperative agreement between the City of Brentwood and the City of Richmond Heights. This cooperative agreement between the 2 communities has been developed so that the City of Brentwood makes an annual payment to the City of Richmond Heights so that Brentwood residents can purchase memberships, participate in programs and rent spaces within The Heights at City of Richmond Heights resident rates.

If the City of University City were to pursue a cooperative agreement like this there would be multiple benefits:

- Additional revenue on an annual basis from those communities so that their residents would receive University City resident rates.
- Additional revenue in that there would potentially be more individuals purchasing memberships and participating in programs that utilize; Centennial Commons, Community Center, Heman Park Pool and Heman Park.
- By negotiating a cooperative agreement like this it discourages the communities to the north from pursuing their own municipal recreation facility. This allows the City to further solidify their position as a recreation service and facility provider within the market

Some potential challenges associated with a cooperative agreement effort:

- Some residents may not be interested in non-University City residents utilizing facilities or participating in programs.
- Based upon the current membership composition (resident v. non-residents) the City could potentially experience an initial decrease in overall revenue.

A final recommendation that B*K would make with regards to the service area is that the City should undertake an annual or bi-annual benchmarking effort. This benchmarking effort should be focused on what other communities are offering in the way of parks and recreation facilities and services along with rates that are associated with those facilities and services. Given the current economic climate and the value of the information there may be communities within the greater St. Louis Metropolitan Area that already perform such a benchmarking exercise. If such a benchmarking exercise is not a current initiative this may be another opportunity for the City to partner with other municipalities and develop this benchmarking document on an annual basis, then sharing the information with other invested parties.
HEMAN PARK OUTDOOR SPACE

Heman Park is the crown jewel of the park system within University City. It is also where there is the greatest concentration of active recreation components including: ball fields (rectangles and diamonds), outdoor basketball and tennis courts, walking trails, Community Center, Centennial Commons and Heman Park Pool. Along with these components Heman Park provides opportunities for passive recreation.

Some of the challenges that the proposed master plan for Heman Park addresses are the following and focus specifically on the active and passive recreation opportunities:

- Connectivity in the park specifically the traversing of River Des Peres.
- Elimination of the current DPW garages and loading station that are on the edge of the park and reclaiming that space for active and passive recreation.
- Trails for both walking and biking.
- The development of a signature playground element that is within close proximity to parking.
- Availability of parking throughout the park.
- Easy access to the interior of the park.
- Elimination and enhancement of some of the natural barriers within the park.
- Re-orientation of fields (diamonds and rectangles) so that the City can achieve maximum playable surfaces depending upon the activity or season.
- Consolidation of the Community Center and Centennial Commons.
- Redevelopment of Heman Park Pool.

As the City begins to implement the master plan for Heman Park there are operational considerations that should be accounted for in staffing and financial planning.

- Staffing. When the City begins to implement the Heman Park master plan there are specific components that will require additional staffing in order to adequately maintain the components. Some of those components are:
  - Signature Playground, both in the annual inspection and in the seasonal maintenance this is going to require additional man hours.
  - Trail system enhancements which require additional man hours in maintaining the trails, but also in cleaning and upkeep of amenities along the trail system. Additional garbage cans to empty, seasonal restrooms to service, etc. will all be associated with an upgrade to the trail system.
  - Based upon the decisions made by the City as it relates to the level of service there could be the potential for more hours...
dedicated to mowing and general upkeep of the park. This level of service needs to be balanced with the need to include environmentally friendly options.

- The inclusion of more tennis courts and more basketball courts will have an impact of the number of staff hours needed to maintain and operate those spaces. This will also have an impact upon the capital improvement budget as it relates to resurfacing both of those amenities.

- Active Components. There are many active components within Heman Park that fall outside of the indoor spaces. The following components need to be evaluated as the master plan is implemented.

- Fields. In most communities there is a debate between the need for additional rectangles and diamonds. Rectangles are typically grass fields that can accommodate soccer, football, lacrosse, field hockey, etc. while diamonds are fields that accommodate baseball and softball programs. As the City moves forward with the implementation of the master plan it will be important to determine the overall needs for those field spaces. Further it will be important for the City to determine what their role should be in offering those spaces and ultimately who uses them. This type of information can help guide the discussion of what type and how many are needed in Heman Park.

- Outdoor Court Space. The master plan calls for relocating all of the DPW operations out of Heman Park. Subsequently the property along Pennsylvania Ave. and at the corner of Pennsylvania and Olive is redeveloped into park space, tennis courts, basketball courts and other active elements (potentially a skate park). B*K would encourage the City to re-examine the need for these spaces when the time comes for further development. According to the NSGA and as is reflected in the market analysis portion of the report, basketball and skateboarding are trending down and tennis is trending up as it relates to total participation. While these are National trends the point of the exercise will be for the City to take a moment and determine if the proposed amenities are the best long term investments for the community.

Heman Park is already a very active park and with the implementation of the master plan there is the distinct possibility that the park will be used even more. With that increased use the City will need to account for the following:

• With increased use of the fields it will be important that the City develops a schedule to take fields (diamonds and rectangles) off-line on a systematic basis to rest the playing surface and perform necessary maintenance to ensure long term viability.
• Increased use of the park will mean a need for increased supervision. Some of the supervision will be passive with the presence of the indoor facilities within the park, but there needs to be a focused effort on supervising what takes place in the park on a daily and weekly basis.

• An often overlooked component with the implementation of a master plan is the need to re-develop the capital improvement budget for the park. It will be important the City determines the lifecycle of various components that are to be included and plan accordingly for their upkeep and subsequent replacement.

The end result for the Heman Park master plan is going to be a more usable park with many active elements. From an operational perspective this will require a significant increase in the man hours dedicated to the park on an annual and seasonal basis. It should also be noted that there may be a significant increase in the overall capital improvement budget associated with the park.

COMMUNITY CENTER

The current Community Center within Heman Park is located at the corner of Pennsylvania Ave. and Vernon Ave. with access to the parking lot off of Pennsylvania. The current facility consists of one large open space that is dividable into 2 separate rooms. Additionally, there are 2 functional kitchens attached to the meeting rooms along with appropriate restroom spaces. The final component of the facility is a large storage room located off of the south end of the building. The main uses of this facility are rentals by community groups, use as meeting space by the City and use for public forums/meetings, etc.

It should be noted that while this facility does not book years in advance or even months in advance in some instances it is typically used more than 40 weekends a year. The primary times that the facility is used is on evening and weekends, sometimes hosting more than one event within the same day. According to the staff two key reasons why the facility is used so frequently by members of the community for rentals is because of the rental rate and the fact that the City allows alcohol in the facility for social gatherings.

This facility as it currently operates should be viewed as an asset to the community and it generates some revenue through rentals and outside groups. The significant challenges for the facility as it currently operates the Community Center are as follows:

• Aged Facility. The reason that the facility does not book months and years in advance is that for many renting the facility it is a last choice. While the space is functional it requires significant upgrades in the fixtures and finishes if it is going to continue to operate as a stand-alone facility. Upgrading the floors, paint, window treatments, technology, restrooms, kitchen and HVAC should be priorities.

• Location. While the location at the intersection of Pennsylvania and
Vernon is a prime location for the facility the challenge of location is as it relates to location within the park. As the facility is currently used it is not in close proximity to Centennial Commons and it does not have dedicated office space within the facility. This creates challenges for set-up and tear-down from rentals, custodial responsibilities along with active and passive supervision of the space.

- **Staffing.** Because of the location and the lack of dedicated office space within the facility any time there is an issue with the space or any associated daily task staff must leave responsibilities at one location to go to the Community Center. This creates a loss in productivity and makes staff less efficient in accomplishing their daily responsibilities.

It would be the opinion of B*K and is reflected in the overall master plan for Heman Park that the Community Center space be combined with Centennial Commons proper. Currently within Centennial Commons there is a lack of meeting room space and some of the meeting space that does exist is being consumed by outside programming. This in turn creates challenges for the staff to expand current program offerings or develop new programs. In moving the space at the Community Center to Centennial Commons there are multiple benefits:

- **Currently high use times for the Community Center are in the evening and weekends.** A time where Centennial Commons is typically busy and staffed appropriately. By having those operations in the same location is allows for easy set-up and tear-down from rentals and other special events.
- **Combination of the Community Center with Centennial Commons allows for more active and passive supervision of the use of the space.**
- **Improved customer service would be a benefit of the combination of the 2 spaces.**
- **Staff efficiency would be another positive bi-product of combining the 2 spaces.**
- **Opportunities to expand day-time programming.**
- **Opportunities to expand day-time facility rentals.**

We would further recommend the following components be included when the square footage associated with the Community Center is added to Centennial Commons:

- **Meeting Room(s).** Based upon usage and need it will be important to maintain the square footage associated with the current Community Center. That should be the minimum that should be added to Centennial Commons. The meeting room should be able to function as 1 large space or 2 smaller spaces.
- **Kitchen.** In adding this square footage to Centennial Commons We would recommend maintaining at least 1 fully functional kitchen. Additional kitchen space should be predicated based upon need and use. If demand warrants additional kitchen space We would recommend adding a warming kitchen. If the City looks to expand beyond that We would recommend
partnering with groups that can fund a portion of the construction or associated equipment costs.

- **Entrance/Egress.** For the day-to-day operations of this space it will be important that the space can be accessed from within Centennial Commons. This is equally important as the City will want to try and maintain a central point of access for the facility. That being said it does make a great deal of sense that during the evening hours and when the facility is being used for rentals that it have a separate point of entrance/egress. The same could be said for access to the kitchen space directly from the outside. If the City does choose to have a separate point of entrance/egress it will be important that they account for part-time staff associated with that space. Those part-time staff will be responsible for supervision and tracking who and what is coming in and out of the building.

- **Technology.** We would recommend incorporating as much technology as possible into the space. Including things like built-in projectors and drop-down screens allows for easy set-up. Being able to operate concurrent or completely independent of one another will be an important feature. Equally important will be building in appropriate sound equipment that like the projectors can operate concurrent with or independent of one another. Along with technology it will be important to include necessary electrical/AV outlets and sound baffling if multiple events are to take place concurrently.

- **Finishes.** The City will need to determine final finishes as it relates to counter tops, walls and flooring. It would be prudent to use a product that is durable and easy to clean and maintain in this scenario.

- **Storage.** A huge asset to the current Community Center is the associated storage off of the south side of the building. While this storage was gained by enclosing an outdoor terrace area it should not be lost. At a minimum the current square footage for storage should also be allocated in the addition to Centennial Commons.

**Centennial Commons**

The current Centennial Commons is located in the northwest corner of Heman Park off of Olive Blvd. The facility has gone through multiple renovations/expansions and in its current state houses the following amenities:

- Recreation Offices
- Community Meeting Rooms
- Child Watch Area
- Youth/Teen Area (under renovation)
- Board Room
- Gymnasium (2 courts)
• Elevated Walking Track
• Cardio Area
• Selectorized Weight Training Area
• Free Weight Area
• Locker Rooms
• Field House (indoor turf)

The bulk of the members at Centennial Commons are University City residents as are individuals that participate in the various programs that take place in the facility. If the facility is going to continue to operate in its current state there are some changes/improvements that would greatly benefit the overall operation.

• Locker Rooms. The locker rooms/changing areas are in need of significant upgrade. These areas should be expanded and enhanced. Equipping the space with adequate showers, counter space and restroom facilities will be important. As was already discussed earlier in this report 2 primary reasons for individuals to use an indoor facility are proximity to home and proximity to work. If the City wants individuals to use the facility prior to going to work and beginning their day they need to update this amenity. A potential new revenue source would be renting a portion of the lockers in both the men’s and women’s locker rooms to members.

• Field House (indoor turf). If asked to identify a component that makes Centennial Commons unique and differentiates it from Clayton, Richmond Heights, Brentwood, etc. B*K would identify the indoor turf space within the facility as that component. It is a growing trend within the recreation industry to include spaces like this in the overall design, because of the regional nature of the component. Individuals are willing to travel a distance to either rent spaces like these or participate in programs that utilize them. The challenge that the City has is that that space is only partially heated in the fall/winter months and there is no air conditioning during the summer months. This lack of appropriate HVAC for this space takes a 12-month operation and reduces it to a 6-8 month operation. In terms of return on investment including an appropriate HVAC system for the indoor turf space would recover the cost in additional program and rental revenue. Beyond rental of the space and appropriate sports the following activities could take place in this space:

  - Birthday Parties
  - After-Grad Parties
  - Inflatable Rock Wall and/or Obstacle Course
  - Youth Summer Camp
  - Batting Cages
  - Pitching Cages
  - Golf Cages
- Dodgeball Tournaments
- Group Exercise Classes
- Boot Camp-like Fitness programs
- Functional Training

The point being that there are a plethora of sport and non-sport uses for this space, however it must have appropriate year-around HVAC to accommodate those activities.

- Free Weight Area. The free weight area is a portion of the building that has been expanded and at one time served as the main entrance to the original facility. The challenge with this space is that it has been repurposed multiple times and because of that the equipment and placement is disjointed and creates challenges for the end user. It would be the recommendation of We that if this space continued to operate as is they engage a weight/cardio equipment company and have them develop a functional room layout. As a side note if Centennial Commons does expand the City may want to make this area a functional boxing training area as the demographics of the surrounding area would suggest such an amenity would be heavily supported.

- Meeting Rooms/Group Exercise. Both of these spaces area at a premium with the current Centennial Commons design. While the meeting room use and rentals is a benefit to the community at large and are a break-even proposition at worst, group exercise is typically a significant money maker for most facilities. That being said anything that the current operation can do to make space for additional group exercise space would be appropriate. In nearby Richmond Heights the facility was built at a time where there was less of a focus on group exercise, but to accommodate the trend ½ of their gymnasium functions as a space for group exercise during daytime hours. There is benefit to the community and financial benefit to the operation to look at improving and expanding that program.

- Custodial/Maintenance. The City is operating a full-service community recreation facility with Centennial Commons and an additional facility with the Community Center. There needs to be a dedicated maintenance and custodial staff to the facility so that appropriately cleaning, preventative maintenance and capital improvement can take place. While the industry standard is vague in regards to the total number of maintenance staff that are necessary it is safe to say that quality maintenance will extend the life of the facility and equipment and in turn make the operation and capital replacement of the facility more predictable. In terms of custodial staff industry standards prescribe 1 full-time staff member for every 20,000-25,000 square feet of facility. It is also important to note that cleaning of a full-service recreation facility is different than that of a City Hall or other facility. Recreation facilities are 7-day a week operations and need to be
staffed as such. In terms of custodial staffing and cleaning responsibilities there also needs to be leadership from the full-time recreation staff that encourages part-time staff to take responsibility for the cleanliness and appearance of the space that they supervise and the building proper.

If the City does implement the master plan for Heman Park it will have significant implications on the operation of Centennial Commons. While it will undoubtedly cost more to operate an expanded Centennial Commons it is reasonable to assume that there would be significantly more revenue generated. Some of the overall impacts on the Centennial Commons operations are as follows:

- Community Center Addition. As was outlined in the previous portion of the report there would be significant advantages to including the meeting room space currently available at the Community Center within Centennial Commons. This is a revenue positive endeavor.

- Field House (indoor turf). Again as was previously mentioned this is one of, if not the most, unique component within Centennial Commons. It should not be removed in an expansion of Centennial Commons, it should be enhanced and marketed to the public at large. This is a revenue positive endeavor but if the operations was enhanced and became a year around operations it would likely require an additional full-time recreation staff member.

- Weight/Cardio/Group Exercise. These spaces need to be enhanced when Centennial Commons is renovated. The current cardio area is adequate, but the free weight and group exercise spaces need to be expanded along with the possible addition of a boxing gym or associated equipment.

- Indoor Aquatics. While the next section of the report focuses solely on aquatics it is important to mention that indoor aquatics would be part of the expansion process of Centennial Commons. It will be important that this amenity not duplicate what is outdoors and that it focuses on all swimmers, not just the avid lap swimmer. This amenity will generate additional program revenue and membership but will not generate enough to offset the cost to operate the amenity. The addition of this amenity would require an additional full-time staff member dedicated to aquatics.

It is important to understand that there are some facility benchmarks or industry standards that the City should keep in mind when looking at their current operations and the future operations.

- Cost Recovery. B+K is a national consulting practice and the total cost recovery for recreation facilities varies. This variance can be dependent upon many factors; income, cost of living, demographics, community expectations, etc. It is not uncommon for community centers in a community like University City to recover between 65-75% of their total operating cost. While there are many factors that can impact cost recovery level there are 2 constants among municipally operated community recreation centers; one is that drop-in use of a recreation facility is a
program and should be a continued practice as part of a membership, two
there are very few (with less and less being the trend) municipally operated
facilities that run at a 100% cost recovery level.

• Staffing Percentage. When analyzing the overall operation of the City’s
indoor facilities there is always an interest in becoming more efficient. Two
of the largest costs centers for recreation facilities are utilities (gas, water,
electric) and staffing (part-time and full-time). When B*K audits various
recreation operations there is a percentage that we keep in mind when
looking at staff. If the total staffing budget, part-time and full-time is greater
than 60% of the total operating budget it requires additional analysis as an
efficiency can typically be gained.

Heman Park Pool

The oldest component within Heman Park is Heman Park Pool. In addition to being
one of the oldest components within the park the facility also has one of the most
vocal user groups for the facility to remain in its current state.

There are some important statistics and industry standards that the City staff and
elected officials need to keep in mind as it relates to the current and future operation
of Heman Park Pool.

• Outdoor pool operations in Missouri typically don’t make organizations
money. These operations are typically subsidized and depending upon the
season up to 50% of the operational cost.

• As illustrated in the market analysis portion of the report of the individuals
that swim, less than 7% participate more than 120 times per year. Those
are your avid lap swimmers that love the size of the pool at Heman Park.
The remaining 93% of those individuals that swim may use the pool for
exercise, but are looking for entertainment and social opportunity out of
their pool experience. In the instance of the 93% the pool at Heman Park
lacks in significant active elements that would attract youth and families with
children.

• The pool schedule is one of the things that has the greatest impact on a
facility’s ability to maximize revenue and minimize cost. Industry
standard for this portion of the country would be for a Memorial Day
Weekend to Labor Day operation. While the facility would be completely
available on Memorial Day Weekend from Memorial Day until school let out
the facility would not open until school was out on weekdays, after 3:00P.
Similarly in mid-August, once school started, the pool would not open until
later in the afternoon on weekdays.

• Typical operating hours of an outdoor aquatic facility; Monday-Sunday from
12:00-8:00P. This allows for maximum time and programs while the
facility is open. It also allows for the facility to run programs during
the morning hours Monday-Friday.
If the City chooses to move outside of any or all of the standards that is their choice, but it is important to understand the economic impact of the decisions and to whom you are catering.

As part of the overall Heman Park master plan there is a recommendation for the addition of indoor aquatics. The addition of indoor aquatics would have a significant impact upon the operation of Centennial Commons and on the operations of the outdoor pool. Prior to expanding upon what indoor aquatics should look like in University City it is important to discuss the future of the outdoor pool.

Outdoor Pool: Clearly there is an interest within the City to continue to operate an outdoor pool at the Heman Park location. There was a very vocal group of individuals through the stakeholder process that insisted the City should merely redevelop the current pool. Irrespective of what they do it is clear that the City is going to need to make a significant investment in the infrastructure and structure of the pool at Heman Park. If the City were to decide to re-develop the facility We would recommend that they look at incorporating the following into the overall design.

- Bath House. The current bath house is in need of significant upgrade. There are questions as to whether the façade of the building can be altered but beyond that the interior needs significant updating. The bath house needs to have new men’s and women’s locker room with an open design and day lockers incorporated. Additionally, as patrons enter the facility they should have immediate access to family changing stations prior to the pool deck. The front desk should be designed so as to be a control point regardless if you are operating 1 or 2 points of sale.

- Bath House – Concessions – Lifeguard Office Proximity. In order to maximize efficiency of staff, respond to emergencies appropriately and maintain open lines of communication these 3 functions should be located as close to one another as possible. The lifeguard office should have a view of the pool deck from the office, at minimum. The front desk should have a line of sight into the parking lot and onto the pool deck. The concession area should have a line of sight onto the pool deck along with adjacent dedicated (fenced-off) seating.

- Mechanical. Currently the pumps, filter, chemicals, etc. are located in the bath house. This is a common practice and industry standard/code will predicate safety measures that need to be in place.

- On Deck – Non-Water. The current pool deck is expansive and We would recommend incorporating as much pool deck into a redesigned facility as possible. In stating pool deck that refers to both pour in place concrete along with adjacent grass area. In addition to maximizing deck space We would also recommend incorporating shade structures such as large fun-brellas and portable patio furniture. A final recommendation that We would make is to have rentable day-lockers/cubbies on the pool deck available to the general public. We would not recommend maintaining the outdoor sand volleyball courts that reside within the current fencing.
surrounding the pool.

- Water Components. If the goal is to maintain a big body of water and serve the needs of the common pool user, We would recommend incorporating the following spaces.

  - 4, 50M lap lanes w/ diving boards. Ultimately this body of water could be an “L” shape pool with the diving off to the side. This maintains the length/size that current vocal users are looking for.

  - Zero Depth Entry. This could be incorporated into a 50M pool that is an “S” shape or it could be a separate body of water. If a separate body of water a zero depth entry into a body of water with maximum depth of 2 feet. Incorporation of a play structure with water sprays and slides would be appropriate.

  - Lazy River. A significant lazy river would be a very popular component for youth and adults. The youth population would use the facility as one can picture in their head, while the adult population would utilize the facility prior to opening for water walking and group exercise purposes. A body of water like this can be incorporated so the entrance to it is connected to the zero depth portion of the pool.

  - Interactive Element. It is difficult to define an interactive element at this time, but it could range from a slide tower with multiple slides and varieties to a FlowRider which is a stationary wave. However, this would be a component that had a broad age group appeal and possibly create some regional draw to the facility.

  - Spray Ground. We would recommend that the City look to incorporate a spray ground that could be available to the general public when the pool was not open and gated so that when the pool was open it was a guarded amenity of the aquatic center.

A facility with components like what is listed above will come with an increased cost to operate the facility. However, by expanding the amenities within the facility and broadening the appeal of the facility to the full spectrum of age groups and swimmers, the facility will potentially have a higher cost recovery rate.

Indoor Pool: As a component of the overall master plan there is the want from the community for there to be incorporation of an indoor pool to Centennial Commons. It should be noted that We would not place the incorporation of an indoor pool as a higher priority than any of the other enhancements that have been previously mentioned. It would further be the opinion of We that an indoor pool not replace any of the current components.

If the City does begin to investigate the incorporation of an indoor pool We would recommend looking at a leisure concept with lap lanes incorporated. While there is typically a higher cost associated with this facility type in comparison to a traditional lap pool, a leisure pool also has greater revenue potential than a traditional lap
pool. Another off-shoot of the incorporation of aquatics to Centennial Commons is attracting more members. The addition of an indoor pool would make Centennial Commons a 1-stop-shop for recreation.

As the City moves forward with all of aquatics adding a full-time staff person dedicated to aquatics would be the best direction.
An evaluation of financing alternatives and methods for development of major improvement plan projects was conducted. This evaluation included:

- Identification and definition of potential funding sources.
- Identification of individual grants available through federal, state, and other sources.
Types and Definitions
Parks and Recreation projects are funded in a multitude of manners. Methods of financing projects used in various Missouri communities are identified for consideration in funding the City of University City programs and projects. These methods and their definitions follow.

Dedication / Development Fees
Dedication of open space or payment of fees for park development or recreation purposes. As open space is consumed, developers may either dedicate a portion of the property for open space or in lieu of land, pay an impact development fee so that alternate open space may be purchased.

Foundations / Grants / Gifts
Tax-exempt, non-profit organizations established with private donations in promotion of specific causes, activities, or issues. Offers a variety of means to fund capital projects including capital campaigns, gift catalogs, fund raisers, endowments, and sales of items. Included in this document is a summary of various grants that are available to parks and recreation agencies and cosponsored organizations.

Activity and / or User Fees
This is a dedicated user fee established by ordinance for the purpose of constructing and maintaining recreation facilities and programs. The fee applies to all organized activities that require a paid registration or reservation of some type. Fees are based on activity level. For example, in sports leagues each participant may be charged $1.45 per scheduled game with $1.00 going to offset operating and maintenance costs (mowing, utilities, field preparation, etc...) and $0.45 used for construction or renovation of facilities. The enticement is that it is the users that pay and the funds are earmarked for the facilities that generate the revenue.

Departments also have the opportunity of developing Resident and Non-Resident Fees. Those who reside within the city limits pay a reduced fee compared to those who live outside of the city limits.

Sales Tax Dedicated to Capital Improvements
In 1995, state-enabling legislation was passed allowing Missouri cities and counties to pass up to a half-cent sales tax for parks and recreation (and/or storm water control). University City has adopted such a tax and generates an average of $1.14 million annually in this manner. Another sales tax option is to seek a half-cent sales tax issue to pay off sales tax bonds. This requires a super majority (four-sevenths) for passage.

Land and Water Conservation Fund (LWCF)
Grants available to cities, counties and school districts to be used for outdoor recreation projects. Projects require a 55 percent match. All funded projects are taken under perpetuity by the National Park Service and must only be used for outdoor recreational purposes. Development and renovation projects must be maintained for a period of 25 years or the life of the manufactured goods. Grant cap has been set at $150,000.

Recreational Trails Program (RTP)
Grants to be used for motorized or non-motorized trail development, renovation, maintenance and/or the development/renovation of trailheads. Projects require a minimum match of 20 percent. All projects must be maintained for a period of 25 years. Grant requests up to $100,000 are eligible. Eligible applicants include cities and counties, schools, and private, non-profit, and for-profit businesses.

Landmark Local Parks Program
In 1996, Governor Carnahan created a matching grant program to fund local parks and recreation projects in Missouri. The funds are available for outdoor recreation projects.
General Obligation Bonds
Bonded indebtedness issued with the approval of the electorate for capital improvements and general public improvements. Approval requires a super majority (four-sevenths) vote for passage during general elections, primary or general elections and a two-thirds majority at all other elections.

Revenue Bonds
Revenue bonds are municipal securities that are secured by the revenues or receipts of a project or special fund rather than the full taxing power of the borrower. Revenue bonds may be issued if approved by a simple majority.

Ad Val Orem Property Tax
Tax levied on the assessed valuation of all non-exempt real and personal property.

Hotel, Motel and Restaurant Tax
Tax based on gross receipts from charges and meal services which may be used to build and operate golf courses, tennis courts and other special park and recreation facilities.

Special Improvement District / Benefit District
Taxing districts established to provide funds for certain types of improvements, which benefit a specific group of affected properties. Improvements may include landscaping, the erection of fountains, the acquisition of art, and supplemental services for improvement and promotion, including recreation and cultural enhancements.

Tax Increment Financing
The concept behind the tax increment financing is that taxes in a designated area are frozen and the redevelopment that occurs in the blighted, conservation or economic development area will increase the assessed valuation of the property and generate new property tax revenues. The increase can be used on an annual basis to retire revenue bonds issued to finance redevelopment costs. A great deal of development is required to generate sufficient revenues to make it work.

Lease Purchased Financing
Facilities for public use financed and built through an entity separate from the municipality – either another public entity, a non-profit corporation set up for that purpose, a bank, a leasing company, or joint powers authority.
There are several types of lease purchase funding mechanisms, including certificates of participation in which investors can purchase tax free investments in the leased facility, and sales leaseback which is a means for public entities to sell an existing facility to a separate entity such as a non-profit organization, an investor, or a group of investors. Improvements can be made by the separate entity who then leases the facility back to public entity for an agreed to period of time and interest rate.

Interlocal Agreement
Contractual relationships entered into between two or more local units of government and/or between a local unit of government and a non-profit organization for the joint usage/development of a program or facility.

Private Concessionaires
Contracts with private business to provide and operate desirable recreational activities financed, constructed and operated by the private sector with additional compensation paid to the City.

Transportation Equity Act for the 21st Century
The Federal Government authorized this funding program, commonly called TEA-21. Funds are distributed through the Missouri Highway and Transportation Commission. There are enhancement dollars available for transportation related projects including bicycle and pedestrian trails, rail depot rehabilitation, landscaping, and beautification programs.
Neighborhood Assistance Program
In 1978 Missouri became the third state in the nation to adopt legislation creating a NAP. Any person, firm, or corporation in the state is eligible to receive NAP credit by making an eligible contribution to an approved NAP in Missouri. The amount of tax credit is generally equal to half of the contribution (70% for projects in some communities under 15,000 population). NAP credits may only be used to offset income tax, franchise tax, financial institution tax, gross premium receipts tax and gross receipts tax. Only 501 (c)(3) organizations, Missouri businesses, and nonprofit organizations authorized to operate in Missouri are eligible applicants.

St. Louis County Municipal Parks Grant
Resulting from the 2004 Clean Water, Safe Parks and Community Trails Initiative of St. Louis, the Municipal Parks Grant provides tax funds annually for parks and recreation development within the St. Louis region. Additional tax allocation in 2013 has doubled the amount of funding available for this grant.

Transportation Alternatives Program
TAP was authorized under Section 1122 of Moving Ahead for Progress in the 21st Century Act (MAP-21). TAP provides funding for transportation alternatives including pedestrian and bicycle trails. Matching funds program distributes roughly $800 million annually. Funds are managed by state DOT and available through competitive application.

FEDERAL GRANTS

Pollution Prevention Grants
Environmental Protection Agency
Michele Amhaz
Pollution Prevention Division (7409M)
Office of Pollution Prevention and Toxics
Environmental Protection Agency
1200 Pennsylvania Ave, NW.
Washington, DC 20460-0001
Telephone: 1-202-564-8857
E-mail amhaz.Michele@epa.gov
http://www.epa.gov/p2/

Recreational Program Grants
CFDA #84.128J
Kerrie Brown
U.S. Department of Education, OSERS
400 Maryland Avenue, SW, Room 3329, MES
Washington, DC 20202-2647
Telephone: 1-202-401-9707
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Land and Water Conservation Fund
Division of State Parks & Historic Preservation
Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 1-573-751-2479
http://www.ncrc.nps.gov/Iwcf

STATE GRANTS

Landmark Local Parks Program
Grant Management Section
P.O. Box 176
Jefferson City, MO 65102
Telephone: 1-573-751-8560
E-mail: moparks@dnr.mo.gov
http://www.mostateparks.com

Recreational Trails Program
Grant Management Section
P.O. Box 176
Jefferson City, MO 65102
Telephone: 1-573-751-0848
E-mail: moparks@dnr.mo.gov
http://www.mostateparks.com/grantinfo.htm

Waste Tire Grants
Missouri Department of Natural Resources
Solid Waste Management Program
P.O. Box 176
Jefferson City, MO 65102
Telephone: 1-573-751-5401
http://www.dnr.state.mo.us/financialopp/solid_waste.htm

Historic Preservation
Department of Natural Resources
Division of State Parks
P.O. Box 176
Jefferson City, MO 65101
Telephone: 1-800-334-6946
E-mail: moparks@dnr.mo.gov

Community Assistance Program
(lake/pond management)
Missouri Department of Conservation
P.O. Box 180
Jefferson City, MO 65102-0180
http://www.conservation.state.mo.us/
TRIM II
(Tree Resource Improvement and Maintenance Program)

Community Forestry Coordinator
Forestry Division
Missouri Department of Conservation
P.O. Box 180
Jefferson City, MO  65102-0180
Telephone: 1-573-522-4115, ext. 3116
http://www.conservation.state.mo.us/

Back to Nature StL Grant
Missouri Conservation Department
Angie Weber
Grant Coordinator
Telephone: 314-301-1506 ex. 4213
E-mail: Angie.Weber@mdc.mo.gov

Community Conservation Grant
Missouri Conservation Department
Erin Shank
Grant Coordinator
Telephone: 314-301-1506 ex. 4207
E-mail: Erin.Shank@mdc.mo.gov

OTHER GRANTS
National Fish & Wildlife Foundation
Five-Star Restoration Challenge Program
(wetland, riparian, or coastal habitat restoration)
Lisa Burban, Group Leader/Urban Forester
USDA Forest Service -- NA S&PF
1992 Folwell Ave.
St. Paul, MN  55108
Phone: 651-649-5245
Fax: 651-649-5238
http://www.nfwf.org/programs/5star-rfp.htm

Partnership Enhancement Monetary Grant
Program
(for organizations whose programs & activities are
managed by volunteers-need to establish a “Tree-Keeper”
Volunteer group to apply)
National Tree Trust
1120 G Street NW, Suite 770
Washington DC 20005
Phone: (202) 628-8733
Fax: (202) 628-8735
http://www.nationaltreetrust.org/

NEXT STEPS
The master plan process is only the first step in the improvements for Heman Park and the City of University City. Following completion of this planning document there are several steps to be taken by the city to continue the park on its path to implementation.

Formal Adoption of the Plan
The first step following completion on the plan is to seek formal adoption of the plan by the City Council. Following adoption of the plan, actions can be taken to begin implementation.

Priority One - Back to Nature StL Grant Application
In September 2014 the City of University City submitted the southern stream improvements for the Back to Nature StL Grant. If approved for funding, the city will receive up to $50,000 towards the development of the stream improvements. Notification of the grant award is scheduled for late 2014 or early 2015.

Continued Support and Communication with Neighbors
Support established during the community meetings and throughout the planning process should be continued and strengthened following adoption of the plan. This support will help to maintain the momentum established within the planning process.

Pursue Funding
A number of funding opportunities have been identified in this document. The City of University City should explore the most viable of these options based on existing situations while remaining open to new opportunities based on future studies and planning.
1. Illustrative Master Plan
2. Online Public Survey
   • Survey
   • Results
3. Public Forum #1
   • April 29, 2014
   • Presentation
   • Sign-in Sheet
   • Feedback Forms
4. Public Forum #2
   • June 17, 2014
   • Presentation
   • Boards
   • Sign-in Sheet
   • Feedback Forms
5. Public Forum #3
   • August 7, 2014
   • Presentation
   • Existing Conditions
   • Final Plan
   • Cost Plan
   • Sign-in Sheet
   • Feedback Forms