A SUMMARY PROGRAM FOR THE COLISEUM PARKING STRUCTURE AT SAM HOUSTON STATE UNIVERSITY

PREPARED BY
FACILITY PROGRAMMING AND CONSULTING
A SUMMARY PROGRAM
for the
COLISEUM
PARKING STRUCTURE
at
SAM HOUSTON STATE UNIVERSITY
FACILITY PROGRAMMING AND CONSULTING was engaged to prepare a summary program of requirements for the Coliseum Parking Structure on the main campus of Sam Houston State University. The summary program is intended to give the design team a workbook from which to design.

The summary program lists all technical requirements along with sizing and adjacencies. The summary program is not intended to stunt the creativity of the design team by advocating any design style or procedure. All diagrams and/or drawings contained herein are intended to illustrate the relationships involved, and are provided as examples to augment the text. The design team should not consider any of the diagrams to be a design directive. The summary program document includes the following:

- **Sign-Offs** contains the required signatures for approval of the summary program
- The **Summary Project Description** provides a brief overview of the entire project, including location, both spatial and non-building related requirements, preliminary cost, and project schedule
- **Project Goals** describes why the project is required and affirms that it is in keeping with the stated mission and direction of the University
- **Site Context** provides an analysis of the proposed site, including compliance with the master plan, initial concepts regarding the site planning for the facility, and infrastructure requirements
- **Project Parameters** describes the parking structure and functional relationships
- **Project Cost** provides a cost estimate for the parking structure based upon the program description and concept sketches
The contents of this document are not for regulatory approval, permitting, or construction.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIGN-OFFS</strong></td>
<td>1-1</td>
</tr>
<tr>
<td><strong>SUMMARY PROJECT DESCRIPTION</strong></td>
<td>2-1</td>
</tr>
<tr>
<td>Project Schedule</td>
<td>2-1</td>
</tr>
<tr>
<td>Project Budget</td>
<td>2-1</td>
</tr>
<tr>
<td><strong>PROJECT GOALS</strong></td>
<td>3-1</td>
</tr>
<tr>
<td>University Mission</td>
<td>3-1</td>
</tr>
<tr>
<td>University Goals</td>
<td>3-1</td>
</tr>
<tr>
<td>Project Goals and Objectives</td>
<td>3-2</td>
</tr>
<tr>
<td><strong>SITE CONTEXT</strong></td>
<td>4-1</td>
</tr>
<tr>
<td>Compliance with the Master Plan</td>
<td>4-2</td>
</tr>
<tr>
<td>Site Overview</td>
<td>4-4</td>
</tr>
<tr>
<td><strong>PROJECT PARAMETERS</strong></td>
<td>5-1</td>
</tr>
<tr>
<td>Garage Space Summary</td>
<td>5-2</td>
</tr>
<tr>
<td>Garage Technical Requirements</td>
<td>5-3</td>
</tr>
<tr>
<td>Electronic Signage and</td>
<td></td>
</tr>
<tr>
<td>Revenue Control Special Requirements</td>
<td>5-6</td>
</tr>
<tr>
<td>Parking Office Technical Requirements</td>
<td>5-7</td>
</tr>
</tbody>
</table>
A SUMMARY PROGRAM FOR THE COLISEUM PARKING STRUCTURE AT SHSU
SIGN-OFFS

COLISEUM PARKING STRUCTURE
Sam Houston State University – Huntsville, TX

RECOMMENDED FOR APPROVAL

Matthew McDaniel
Assistant Director Parking/Transportation
Department of Public Safety Services

Kevin Morris
Director of Public Safety Services
Public Safety Services

Keith Jenkins
Associate Vice President for Student Services
Facilities & Operations, Recreational Sports

Denise Neu
Director of Facilities Planning and Construction
Facilities Management

Date

NOVEMBER 2015 FINAL REPORT PREPARED BY FACILITY PROGRAMMING AND CONSULTING
A SUMMARY PROGRAM FOR THE COLISEUM PARKING STRUCTURE AT SHSU

1-2
The new Coliseum parking structure is to be located to the west of the Bernard G. Johnson Coliseum and south of the College of Humanities & Social Sciences Building. The site is currently occupied by three small housing buildings which are slated to be demolished: Spivey, Vick, and Randel.

The new structure is a stand-alone garage which will serve as visitor parking for the campus, and serve as the primary parking area for events at the Coliseum. The goal of the University is to achieve a net increase of parking spaces of over 500 spaces. Currently on the site, there are approximately 70 spaces are associated with the three housing buildings. The ultimate count of new spaces will be determined by site capacity and the configuration of the garage that optimizes the number of spaces to the cost and geometry. This suggests the new garage should provide a gross increase of roughly 550 spaces. Approximately 1,700 ASF of restroom and office space will be included on the ground level to house the parking office.

**PROJECT SCHEDULE**

The existing structures on the proposed site are to be demolished through a separately funded project which will precede construction of the parking structure. The parking structure is scheduled for project initiation in the spring of 2018 and project completion by the spring of 2019.

**PROJECT BUDGET**

The preliminary Total Project Cost (TPC) is estimated at approximately $10 million with a Construction Cost (CCL) of $8 million. A detailed programming cost estimate is presented in Appendix A.
A SUMMARY PROGRAM FOR THE COLISEUM PARKING STRUCTURE AT SHSU
Project goals related to the new parking structure were discussed during collaborative workshops with the building committee in tandem with discussions about the new North Residential District Housing project. This chapter is organized as follows:

- University Mission and Goals Statements
- Project Goals and Objectives

University Mission
Sam Houston State University is an inclusive institution whose mission is to provide high quality education, scholarship, and service to students and to regional, state, national, and international constituencies.

University Goals
- Promote students’ intellectual, social, ethical, and leadership growth.
- Pursue continuous improvement.
- Recruit and retain qualified, dedicated faculty and staff.
- Recruit, motivate, and retain qualified students.
- Provide the necessary library, technology, and other facilities to support quality instruction, research, and public service.
- Promote scholarly and research activities that contribute to knowledge and understanding.
- Promote and support diversity and provide equitable opportunities for underrepresented groups.
- Offer a wide range of pre-professional, baccalaureate, master’s, and doctoral programs.
- Promote cooperation with educational institutions, government and non-profit agencies, and the private sector.
PROJECT GOALS AND OBJECTIVES

- Support enrollment growth
- Execute Master Plan Goal to balance parking needs with land availability through construction of parking structure
- Expand parking to meet currently unmet demand for parking to support events in the Coliseum
- Functional
- On time and on budget
- Maximize the parking capacity within the available budget
- Affordable to build
- Easy to maintain
- Energy efficient
- Safe and transparent
- Brand with Sam Houston graphics
- Accessible to people with disabilities
- Configured to allow safe and convenient pedestrian connections to the Coliseum to the east, Recreational Sports and Kinesiology to the south, and the proposed pedestrian corridor to the west

SHSU branding at Woodlands garage

Directional signage at the Woodlands

Themed level signage with SHSU branding at the Woodlands
SITE CONTEXT PRESENTS A BRIEF ANALYSIS of the proposed site for the project. It addresses many of the factors acting upon the site that may have an impact on the design and construction of the parking structure as well as how the project follows the campus master plan. Also included in this chapter are preliminary site plan concept diagrams to illustrate how the project elements can work on the site. The chapter is organized as follows:

- Compliance with the Campus Master Plan
- Site Overview

Note: the existing site information presented in this chapter represents the most current data which was available at the time of the publication of this document; the design team should verify the location, condition, and capacity of utilities during the design and construction phases of the project.
COMPLIANCE WITH THE MASTER PLAN

The following text is an excerpt from the 2012 Campus Master Plan Update:

The 2008-2020 Campus Master Plan for Sam Houston State University was approved by the Board of Regents in August 2008. Since that time, the University’s building program has been on course; however, new enrollment and academic trends began emerging shortly after the adoption of the 2008 Campus Master Plan. In 2011, a Strategic Plan was designed and implemented by the University’s new administrative team. Several key factors impacting the assumptions underlying the 2008 Campus Master Plan surfaced, such as the growth of online and transfer students, the need for innovative academic and research partnerships, and changing housing, student life and demographic trends.
One of the primary goals of the 2012 Campus Master Plan Update with regards to parking is the need to balance parking needs with land availability. Due to the growth in student population and ever-increasing demand for parking, structured parking strikes the most appropriate balance between cost, need, and land availability. The master plan envisions placing a new parking structure adjacent to the existing parking structure to the north of the Lowman Student Center (Building 22 on the master plan graphic, page 4-2). However, the southern portion of the campus is currently under-served, especially for events held in the Coliseum. With the land availability provided by the demolition of Vick, Spivey, and Randel (area shown as Building 7 on the master plan graphic, page 4-2), the opportunity to place a new parking structure at that site will help to balance the parking needs of the rapidly expanding south campus with a direct adjacency to the Coliseum. The new Academic Building which was planned for the site by the Master Plan will be relocated.
SITE OVERVIEW
The new parking garage site is located to the west of the Bernard G. Johnson Coliseum and south of the College of Humanities & Social Sciences Building. Bowers Boulevard is directly to the south, and will serve as the primary entry/exit artery to/from the new parking structure. Avenue 1 is located directly west of the site. The Campus Master Plan envisions Avenue 1 closing and being re-routed to create a new primary pedestrian corridor from the center of campus to the south campus replacing Avenue 1.
The graphic below, taken from the *2012 Campus Master Plan Update*, illustrates some of the major circulation changes planned for the areas surrounding the site (shown below as *Academic Building*). As can be seen below, White Hall will be demolished, allowing for Avenue I to be closed and re-routed, and a new pedestrian corridor is to be constructed from the center of campus along the western edge of the site, and continuing south to connect with the new South Residential Hall. The parking structure will have to be designed to work with the site circulation paths as they exist today, and still function properly once the vision below is realized. This likely will require the entry/exit location for the garage to be located off of Bowers Blvd. towards the eastern end of the parking structure approximately across from the proposed Recreational Sports Expansion.
TOPOGRAPHY
The average elevation of the site proposed for the new parking structure is approximately 433 feet with a maximum of 440 feet at the northwest corner to a low of 426 feet along the eastern edge of the site. The overall site slopes predominately from west to east with a total elevation change of 14 feet across a distance of 350 feet.
PROJECT PARAMETERS

PROJECT PARAMETERS DESCRIBES THE NEW Coliseum Parking Structure in physical terms. The information in this chapter will serve as a checklist for the design team as they design and lay out the parking structure. The chapter is organized into the following sections:

- An overview of the project
- The project summary space list
- Technical requirements
PROJECT OVERVIEW
A garage of approximately 550 spaces is required to help service event facilities and central campus. The following issues were identified as focus points for this project:
- Construction budget of $8 million
- Vehicular ingress/egress for the garage
- Pedestrian connection to the Coliseum
- Design to accommodate current and future configuration of streets and sidewalks

GARAGE SPACE SUMMARY
The summary below is based on an earlier design for the original proposed location. These numbers are used to test site capacity and estimate cost during programming. While considered representative of the future structure, the final number of spaces and size will be design dependent to the site.

<table>
<thead>
<tr>
<th>COLISEUM PARKING STRUCTURE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Levels</td>
<td>5</td>
</tr>
<tr>
<td>Number of Parking Spaces*</td>
<td>550</td>
</tr>
<tr>
<td>Garage Square Footage (SF)</td>
<td>184,000</td>
</tr>
<tr>
<td>SF per Parking Space</td>
<td>333</td>
</tr>
<tr>
<td>Space Size</td>
<td>9-feet (90°)</td>
</tr>
</tbody>
</table>

* Reduced by 2%

Included within the garage envelope as delineated in the table above is a small office suite for the parking office and dedicated staff restroom(s). The space list for the suite is as follows:

<table>
<thead>
<tr>
<th>QUANTITY/SIZE</th>
<th>OF SPACE(S)</th>
<th>ASF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waiting Area</td>
<td>1 @ 240 asf</td>
<td>240</td>
</tr>
<tr>
<td>Customer Service Counter</td>
<td>3 @ 75 asf</td>
<td>225</td>
</tr>
<tr>
<td>Administrative Bullpen</td>
<td>2 @ 80 asf</td>
<td>160</td>
</tr>
<tr>
<td>Supervisor Office</td>
<td>2 @ 130 asf</td>
<td>260</td>
</tr>
<tr>
<td>Storage/File Room</td>
<td>1 @ 80 asf</td>
<td>80</td>
</tr>
<tr>
<td>Unisex ADA Restroom</td>
<td>1 @ 80 asf</td>
<td>80</td>
</tr>
<tr>
<td>Break/Work Room</td>
<td>1 @ 200 asf</td>
<td>200</td>
</tr>
<tr>
<td>Enforcement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardware/Storage</td>
<td>1 @ 80 asf</td>
<td>80</td>
</tr>
</tbody>
</table>

| SUBTOTAL                        | 1,325 |
| **TOTAL ASF (with 30% internal circulation)** | 1,723 |
GARAGE TECHNICAL REQUIREMENTS

Programming requirements/criteria for the proposed garage are as follows:

- **User types served**
  - Faculty
  - Staff
  - Students
  - Visitors/event visitors (hourly paid parking should be located on the lower levels)

- **Garage orientation**
  - Garage should be oriented so that pedestrians can walk to the final destination or elevators without crossing between parked vehicles
  - Allow vehicles to enter/exit from southeastern face of the garage

- **Additional uses within the garage**
  - Parking Operator’s Office (1,700 ASF office suite)
  - Employee-only restroom(s)
  - Pedestrian drop-off area
  - Storage where possible—ideally to be located under ramps or in other areas unsuitable for parking
  - Electrical/mechanical/communications rooms

- **Parking Functionality**
  - Standard spaces (±550 spaces)
  - Space size: 9-feet wide by 18-feet long
  - Clear height: 7′–2” minimum is recommended (code requires a minimum clear height of 7-feet)
  - Aisle width: 26-feet
  - End bay dimensions: 45-feet
  - Parking ramp slope: 5 to 6% maximum recommended (code maximum is 6.67%)
  - Express ramp: average grade of 12% (maximum grade of 15%)

- **Accessible spaces**
  - Accessible spaces parked on a slope shall not exceed 2% in any direction
  - Spaces shall be 8-feet wide with an additional 5-foot wide access aisle directly adjacent
  - Van accessible spaces shall be 8-feet wide with an additional 8-foot wide access aisle directly adjacent
  - Van clear height: 8′–4” is recommended to and from all van accessible spaces (minimum of 8′–2” per code)
  - One out of six accessible spaces shall be van accessible
  - Accessible spaces shall be located on the shortest accessible route of travel to an accessible entrance/exit
  - A sign displaying the accessibility symbol shall be provided at each handicapped stall
  - Accessible spaces required:
<table>
<thead>
<tr>
<th>TOTAL SPACES IN FACILITY</th>
<th>MINIMUM NUMBER OF ACCESSIBLE SPACES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 25</td>
<td>1</td>
</tr>
<tr>
<td>26 to 50</td>
<td>2</td>
</tr>
<tr>
<td>51 to 75</td>
<td>3</td>
</tr>
<tr>
<td>76 to 100</td>
<td>4</td>
</tr>
<tr>
<td>101 to 150</td>
<td>5</td>
</tr>
<tr>
<td>151 to 200</td>
<td>6</td>
</tr>
<tr>
<td>201 to 300</td>
<td>7</td>
</tr>
<tr>
<td>301 to 400</td>
<td>8</td>
</tr>
<tr>
<td>401 to 500</td>
<td>9</td>
</tr>
<tr>
<td>501 to 1000</td>
<td>2% of total</td>
</tr>
<tr>
<td>1001 and over</td>
<td>20 plus 1 for each 100 over 1000</td>
</tr>
</tbody>
</table>

- Curbs: to prevent tripping and falling hazards, all curbs shall be omitted.
- Mechanical/maintenance issues
  - Flat floors to have minimal slope to reduce ponding (2% slope preferred; 1% minimum); slope at accessible spaces to be 2% or less
  - Roof drains and floor drains will be installed to drain rainwater from the building (minimum of two per floor)
  - Drains should also be provided at the bottom of/adjacent to stairwells to facilitate cleaning
  - Weatherproof pipes
  - Avoid u-traps that can freeze and break pipes
  - Two hose bibbs are required at a minimum per parking level (one for every 150-foot radius); a cold weather cutoff drain valve shall be provided for all hose bibbs
  - Elevator pits and equipment rooms shall be adequately protected with sump pumps, etc.
  - Provide as much storage space for material as the final layout allows
  - Air conditioning for the garage is limited to the following rooms/areas: the parking office suite, the data/telecom room, and the elevator machine room
  - Canopies (at a minimum) to be provided for protection against the elements over elevator and stair cores
  - Electrical vehicle charging stations: conduit only for future spaces
  - Emergency call stations shall be located at each elevator lobby
  - Elevator lobby shall have clear lines of sight from the interior and the exterior; one MRL elevator shall be provided
  - All lighting shall be LED; lighting on the roof shall have a hinging mechanism to allow for easier maintenance (alternate lighting options: vapor tight fluorescent; occupancy sensors for each light fixture)
  - Sidewalk connections to the east, west, and south
- Provisions to be made for the future installation of solar panels on the roof level
- Motorcycle spaces: no requirement
- Bicycle: outside only
- White pavement markings for striping (single line striping)
- Parking access and revenue control equipment
  - Vehicular ingress/egress points to have conduit and parking control equipment including payment system (see Electronic Signage and Revenue Control Special Requirements below)
- Garage shall be an open parking structure; all fire protection and mechanical ventilation per code
- Structural system
  - Precast system
  - Precast manufacturer shall be PCI certified
- Architectural skin shall complement existing adjacent architecture; enhancement to the pedestrian vertical cores (elevators and stairs) are recommended
- Allowances
  - Landscaping
  - Pedestrian connection/accessible ramp to Coliseum plaza from the ground level of the parking structure
  - Signage and wayfinding: themed per The Woodlands Campus Garage
  - FF&E
ELECTRONIC SIGNAGE AND REVENUE CONTROL SPECIAL REQUIREMENTS

The SHSU Parking and Transportation Office is currently planning to transition to new systems for parking structure payment collection and signage/traffic flow control, and would like to implement these systems in the new parking structure. The new systems would likely be implemented into the existing parking structure as well; however, this would be under a separate project and funding source. The following outlines the new system requirements as proposed by the Parking and Transportation Office. The specifics and design considerations required by these systems should be further explored and developed during the design phase.

ELECTRONIC SIGNAGE

- Provide master occupancy/space availability sign at primary garage entrance; consider providing specific level availability signs at entry to each level at the top of each ramp
- Occupancy monitoring would only be required for timed parking levels; not permitted resident levels
- Provide lane flow indicators at the top and bottom of each ramp, and other appropriate locations for active traffic flow control (green ↑/red ×)
- Typical traffic flow in the garage will likely be two lane, opposing direction (much like a two-lane highway); however, during large events, the Parking and Transportation Office would like to have the ability to temporarily provide a contraflow option to enable more efficient ingress/egress
- Each of the electronic signs would require appropriate power and data connection at the install location with wires routed back to the electrical/communication closet, and controls provided in the Parking Office on the ground level

LICENSE PLATE TRACKING AND REVENUE CONTROL

- Cameras (with appropriate power and data) should be installed at entry/exit and other key locations to allow for license plate tracking to aid in accurate time-tracking by vehicle
- Pay stations should be provided at/near elevators in tandem with a pay-by-phone system to eliminate the bottleneck that is created by entry/exit pay systems
PARKING OFFICE TECHNICAL REQUIREMENTS

The Parking Office suite should be located on the ground level of the parking facility with a storefront style entrance with a window for ease of visual access to and from the garage while maintaining secure access to all other areas except the main waiting area. The following is a list of criteria for the individual areas within the suite:

- The waiting area should include soft seating, a flat panel display mounted on the wall (for announcements and other parking-related information), and a parking map for the campus
- A customer service counter with three stations (one of which is ADA accessible) should be provided directly adjacent to the waiting area separated by a glass partition
- Mounted tablets for data entry should be provided on the customer side of the counter
- Power and data to each service station
- Closed circuit cameras should be installed to monitor the transaction counter and waiting space
- An administrative bullpen including two staff workstations should be provided behind the service counter area
- The remaining areas (two supervisor offices, a storage/file room, a break/work room, a unisex restroom, and enforcement hardware/storage area) should be located within the suite
- The break/work room should include a small kitchenette with a counter/sink, a refrigerator, a coffee maker, a table with 4 chairs, and space for office equipment
- The enforcement hardware/storage area is currently in an alcove, but it is preferable to enclose this in a lockable closet; it requires multiple electrical outlets to charge the hand-held devices which are used by the staff (verify power requirements for this space during design)
- Other general requirement for the suite include:
  - Power and data to all staff and equipment locations
  - WiFi access is required throughout the suite to support the hand-held devices
  - A signal booster will be required to enable radios, and may require a conduit connection to the roof if the concrete structure prevents signal transmission
Coliseum Parking Structure at Sam Houston State University
Revised Performance Criteria and Technical Requirements

The following performance criteria and technical requirements amend the “Summary Program for the Coliseum Parking Structure at Sam Houston University” prepared by Facility Programming and Consulting, issued November 2015 and approved by the University in December of 2015. The Summary Program is amended as follows:

2 - Summary Project Description: Disregard the stated approximate area for office space and restrooms; project schedule, and project budget in favor of the information included in the Request for Qualifications.

5 – Project Parameters:

5-2 Project Overview: Revise construction budget to $10 million

5-2 Garage Space Summary:
- The required office space may or may not be situated within the garage envelope.
- Additional functions and spaces are contemplated for the office suite, including:
  - 6 standard offices separated by door and wall from open lobby area
  - One office for future transportation communications with room for 2 desks, radio equipment, and digital signage for each desk
  - Open lobby area to include room for 4 staff desks, 2 separate customer service counters
  - Breakroom to include: sink, purified water dispenser, surface counter, cabinets, and refrigerator/freezer
  - Open workroom area to include a multifunction copier, counter space, and cabinets for office supplies
  - Storage room with room for file drawers, uniform storage and staff lockers
  - One small conference room with seating for 10, including digital signage, PC, and teleconferencing abilities
  - Separate public and staff entrance
  - Separate exterior room for event parking equipment and ancillary tools, equipment, signage and parts needed for operations
  - The office could be used as a secondary location for the University Police Department during emergencies or large events that would require approximately 400 SF space for long operational periods of use, including sleeping quarters
  - Evaluate different alternatives for offices configuration such as east-facing exterior public storefront while back half of the office may be located inside the garage
  - Dispatch office with possible raised floors to allow for better cooling and for accessing cables for radio equipment, data network, and power

5-3 Garage Technical Requirements:
- Additional uses within the garage office space will increase the noted ASF
• Parking functionality:
  o A desired 9’ floor to ceiling height should allow adequate clearances for transit, ADA accessible vans, and emergency vehicles to access and park at any level
  o Provide an internal transit drop-off location on level 1 of the parking garage
  o Provide appropriate separation between all pedestrian and vehicular entrances and exits to assure pedestrian safety, including designated pedestrian pathways
  o Vehicular entrances should include removable bollards or built-in barricades to allow parking garage to close prior to special events for dedicated parking
  o Create parking for motorcycles within dead spaces of garage
  o Provide covered bicycle parking
  o Provide covered seating areas for bus pick up located either inside or outside the parking garage footprint

• Curbs
  o Use of bollards instead of raised curbs near pedestrian footpaths, stairwells, and near building rooms
  o Use raised curbs near islands identifying the entry and exit lanes of the garage

• Mechanical/Plumbing – provide:
  o lockable freeze proof hose bibs at each level - adjacent to each stairwell
  o a trench drain located within 18” of the leading edge at all elevator openings

• Electrical
  o SHSU prefers multi-level lighting systems with automated controls for energy conservation and security
  o Lighting levels should meet a minimum of 15-footcandles at the driving surface
  o Provide zoned dedicated electrical circuiting for ease of maintenance
  o Consider a natural gas generator for emergency operations at office
  o Provide redundant data and power rough-ins at each entry and exit point
  o Use LED lighting as an accent for security and design at the garage

• Security – provide:
  o rough-in for full coverage of surveillance cameras at all levels and elevator lobbies
  o rough-in for license plate recognition cameras at all vehicle entries/exits - current agreement with NuPark
  o recessed talk-a-phone call boxes adjacent to the elevator call buttons on each level
  o access control with proximity cards at office staff entries
  o surveillance cameras near main entry points, lobby area, and staff area of office
  o bi-directional amplifiers for public safety radios
• Data
  o Provide for full saturation of wireless access to SHSU network
  o Main data closet and secondary data closets should be provided with HVAC systems capable of maintaining 68 degrees at all times
  o SHSU will consider wall mounted, climate-controlled enclosures on each level instead of dedicated networking closets
• Parking revenue system – provide:
  o (2) kiosks per level with designated pay by hour options - current agreement with Flowbird (recently known as Parkeon)
  o guidance system with web reporting and separate digital signage that displays occupancy levels at each level
• Structural system
  o SHSU has a strong desire to maximize the use of cast in place concrete in the structure, however, in light of assuring the project is completed in a timely and cost-effective manner with limited disruption to the continued operation on the campus; precast and hybrid alternatives will be considered
  o D/B to evaluate long-term structural member cracking concerns while selecting constructability method
  o Provide ample pathways for conduits and pipes, including sleeves in the concrete, to allow room for growth over time
  o Minimize use of walls near parking and stairwells in lieu of high tension steel cables
• Architectural
  o Use graffiti resistant paint at all pedestrian accessible painted interior vertical surfaces
  o All handrails and guardrails shall be stainless steel with cored horizontal surface installations
  o Provide metal screen systems or other devices to prevent birds roosting at pedestrian and vehicle openings of the façade
  o All elevators and stairwells should be fully enclosed shafts - no glass front shafts
  o All exposed horizontal surfaces should properly drain to prevent inundation of the lower levels, stairwells and elevator shafts
  o Exterior finishes and colors should blend with the fabric of the adjacent buildings
  o Secure areas used for storage by latch or a locking mechanism
  o Provide anti-split surface coating on the upper deck and ramps
  o SHSU encourages the use metal screening to close off areas not open to pedestrian traffic and to allow for natural light to enter the garage
  o Install aids for the blind and visually impaired near stand pipes in stairwells and equipment that protrudes from the walls near common areas and walkways
  o Consider Sheets / panels of mesh metal with painted graphics / appealing design element
- **Signage** – provide:
  - typical campus digital signage in all elevator and stair lobbies
  - exterior signage to indicate the number of available spaces
  - digital signage in office lobby area
  - wayfinding and code required signage, including a monument sign, in conformance with SHSU sign guidelines
  - LED design element lights at the corners of the garage, entry/exit points, and at roof and floor levels; capable of changing colors and programmable to emit school colors at night time
  - wayfinding to include welcome messaging for the university with campus policy notifications such as no tobacco use

- **Sitework**
  - All geotechnical investigations shall be performed by the D/B team
  - SHSU will be responsible for the abatement of all ACM and hazardous materials present in and on Randel, Vick & Spivey residence halls and the site
  - D/B will be responsible for all demolition and disposal of waste related to Randel, Vick & Spivey residence halls
  - D/B will be responsible for final design and construction of the storm sewer system along the western section of Bowers Boulevard and the south portion of former Avenue I
  - D/B will be responsible for the installation of a new 12” sanitary main from the intersection of Bowers Boulevard and Avenue I, east to the grand stair on the south side of the Coliseum
  - D/B will be responsible for the installation of a new 4X4” ductbank from the southeast corner of the project site to southeast corner of Bowers Boulevard and Avenue I
  - The Coliseum plaza should extend to the east façade of the parking garage to allow appropriate queing area for major events

- **General**
  - D/B shall comply with all SHSU A/E Design Guidelines, unless a formal variance request is approved by the ODSR
  - D/B team will include a well-qualified and experienced parking consultant to prepare the construction documents