UNIVERSITY OF TENNESSEE

NEYLAND STADIUM RENOVATION / STADIUM PROGRAM

12 SEPTEMBER 2017

University of Tennessee

Neyland Stadium Renovation / Stadium Program September 2017

POPULOUS







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EXECUTIVE SUMMARY

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INTRODUCTION

INTRODUCTION

programming project regarding Neyland Stadium at the University of Tennessee, SBC No. 540/009-02-2017.

The goal of this program is as follows:

- 1. Define the interior and exterior areas of Neyland Stadium and its immediate surroundings that were identified for development by the Neyland Stadium Facility Assessment, Renovation Plan and Feasibility Study (RFP 10051069) of 2016 and refined by Thursday, 13 July: the subsequent review.
- 2. Provide sufficient information for the University to describe the project to potential designers and agencies from which conceptual or capital approval is sought.

This document is the result of an approved User Group Meetings were held July 12th - 13th 2017 on the University of Tennessee's campus. Meetings covered the following topics:

Wednesday, 12 July:

Project Kick-off Development **Premium Spaces** Concessions/Catering Sales/Fan Experience Marketing/Video Production Broadcasting/Technology

Ticketing Security

Operations/Maintenance

Retail Operations Utilities/Infrastructure Facilities

Additional communication, including conference or video calls, telephone calls, and emails, also occurred as clarification was sought or more information became available.

PROJECT OVERVIEW

PROJECT OVERVIEW

Neyland Stadium is one of the most iconic collegiate football destinations in the country, but it is necessary to separate the perceptions of Volunteer fans from concrete and steel to fairly assess the conditions, amenities, and safety actually present. If ever a stadium was more than the sum of its parts, capitalizing on shared joy, it is Neyland. There's great affection for this building at least in part because the architecture of the bowl allows fans to dramatically effect a game's outcome. Part of the allure is that it hasn't changed: morphed by addition but always recognizable.

A marketing study conducted in 2016 by the Athletics Department as part of the Neyland Stadium Facility Assessment, Renovation Plan and Feasibility Study confirmed that patrons are most satisfied with the stadium's location. the game day atmosphere, and the sightline to the field from their seat. The stadium's capacity should remain above 100,000. As such, changes to the existing bowl are to be minimal to maintain the seating bowl's intimacy.

If the view of the interior of the bowl is to remain largely unchanged, supporting elements on the other side of the vomitories are due attention. Concourses need improvement for fan comfort. accessibility and game day operation, but the project described also presents an opportunity to improve the prominence of the Tennessee brand. Additional toilets and concessions will improve the fan experience by reducing wait-times, providing improved dining options, and more easily accommodating a diverse group of users. Wider and more accessible concourses are necessary to improve fan comfort and to ensure exiting is prompt and convenient.

Concourse 01 expansion and renovation in the South will improve safety, functionality, and fan comfort by replacing narrow, crowded, poorlylit corridors with an open promenade of modern amenities, including additional restrooms and improved concessions.

Currently, there are at least 30 access points to the stadium that vary greatly in appearance, brand identification. and wavfinding communication. Consolidation of entry points will enhance the ingress and egress experience for fans while improving security.

Service functions of the stadium are inadequate in comparison to other peer institutions. There is currently no kitchen on-site and service circulation is problematic. In addition to a new kitchen, this program describes improved service and utilitarian functions.

Storage, maintenance, engineering, and operational spaces are carved out of a dormitory structure that ignores stadium datums, are undersized, and are made to fit between columns under the bowl.

Enclosed clubs, suites, and other elements have met the demands of the era in which they were built, but it's important to note that today's standards have not guided most of Neyland Stadium's history. The science of sport facility design has lagged behind almost all stadiums of prolonged use but the discrepancy is exacerbated by this facility's capacity, one of the highest in the country for much of its existence.

1.2 PROJECT OVERVIEW

PROJECT OVERVIEW

The stadium and its associated activities are an important driver for the local and state economies and critical to the financial health of the Athletics Department. The economic impact report prepared in 2016 by Tripp Umbach showed the enormous amount of revenue football and other athletic events bring to Knoxville. Knox County, and the entire state. Nevland Stadium needs an intervention that guarantees the well-being of fans, increases their comfort, expands their options, enhances the overall gameday experience, and maximizes benefit to the University of Tennessee while continuing to positively impact play on the field. The necessities of the stadium warrant significant investment to ensure continued financial and economic benefits.

The Program outlined herein provides a plan for Neyland Stadium to return to its fans the support they gave to Volunteer Football while maintaining Neyland's in-bowl character. The expansion and renovation of concourses, except those impacted by the renovation completed in 2010, are the primary focus of the project described.

Neyland Stadium is the most visible building on campus. Concourse expansion also provides an opportunity to continue the exterior architecture of the West, itself the culmination of the the 2004 Stadium Masterplan, while simultaneously improving security and stadium operations.

Neyland Stadium is the heart of the University of Tennessee and is the first impression for many future alumni. The project described will facilitate a safer environment for all Volunteers that enhances the gameday experience by improving amenities, providing diverse experiences, increasing movement, and maximizing revenues. These changes will ensure Neyland's continued place among the nations' best venues.

1.3 PROJECT GOALS

PROJECT GOALS

comprehensive approach originates from opportunity exists now in improving Neyland being, together, one of the most revered institutions in collegiate football. Effort and improvements are required to maintain that standing. Accepting a happenstance of concrete is contrary to a history of continually

Now is the time for improvements to be striving for exceptionalism. The Maxims of made to Neyland Stadium. Though there Football outlined by General Neyland describe are safety and compliance concerns to be a method of excellence that capitalizes on addressed, the animating rationale for a opportunities as they are presented. An Neyland Stadium and Tennessee Football Stadium that will benefit Tennessee Football, the University. Knoxville, and the entire Volunteer State for generations to come.

PROJECT GOALS

- Improve player safety by ensuring the field of play is compliant with NCAA guidelines.
- A stadium exterior integrated into the campus fabric that embraces the objectives of the Campus Masterplan and the established architectural language of the University.
- New entry plazas in the Southwest and Southeast will create a cohesive exterior architecture, while consolidating stadium entry for easier access, improved security, and operational control.
- Concourses in the East, South, and North will be expanded to improve safety, functionality, and fan comfort.
- Restrooms will be improved to comply with modern standards for the number of fixtures, their accessibility, and the ease of use by patrons.
- The quantity of concession stands will be increased along with improvements to the food quality, selection, and availability.
- Provide an on-site Kitchen and Commissary able to cater food to points throughout the stadium.
- Create new, diverse premium amenities such as open air suites, ledge seating, and a field-level club.
- Upgrade technology infrastructure and capabilities throughout the stadium; specifically addressing sound quality along with audio/visual technologies.

1.4 PROJECT PHASING

Execution of the Neyland Stadium Program will be one of the largest construction projects in the Knoxville area since the 1982 World's Fair. Football games in Neyland Stadium have a major economic impact on Knox County and the surrounding region. Therefore, the schedule of the project is of paramount importance and completing the renovations in time for the 100th Anniversary of Neyland Stadium in 2021 is a desired project goal.

The preferred schedule and scope of the project will require that the project be broken into multiple phases. The Neyland Stadium Facility Assessment, Renovation Plan and Feasibility Study performed by Populous in 2016 outlined a three-phase project with completion dates prior to the football seasons in 2019, 2020 and 2021. The programming team recommends changing the phasing approach from three phases to two with projected completion dates prior to the 2020 and 2021 football seasons. While a two-phase approach carries a natural perphase increase in cost, this direction will allow the University, the designers, and the contractors to be more efficient in planning the project while reducing overall total project costs. This two-phase plan would concentrate resources on the south area of the stadium which has the greatest need of improvement for stadium patrons.

In October 2016, the University of Tennessee Board of Trustees approved an initial phase one renovation in the amount of \$106 million. This budget and associated scope was based upon the original three phase plan. It is anticipated that the Board of Trustees will be presented a revised plan that will modify the phases of the project. However, at this time the program will reflect the three phase approach as approved.

The following is a list of program elements included in the original phase one approach:

- Demolition of South Stadium Hall
- Widening of Concourse 01 in the South with associated restrooms and concessions
- Vertical circulation elements and structure of the entry tower at the southeast fan plaza
- Relocation of Visiting Locker Room
- Upper Bowl Handrails

Stadium utilities, mechanical, electrical, and plumbing improvements, along with hazardous materials abatement will be made as required to support development of elements for each phase.

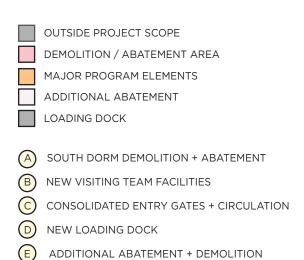
Should the Board of Trustees and the State Building Commission modify their approval to a two-phase project, the program for phase one would add the following elements (otherwise the following elements would be in a future phase):

- Southwest fan plaza and entry tower
- Southwest stadium ramp
- Southeast fan plaza and building exterior
- Widening of Concourses 02 and 03 with associated restrooms and concessions
- Premium Kitchen and Main Commissary
- Retail Sales Team Store
- Southwest Suites
- Field Level Club
- Officials and Auxiliary locker room relocation
- Service and Operations Facilities relocation

The remainder of the program elements will be in phase two of a two-phase project.

1.4 PROJECT PHASING

LEVEL 00 PHASE 1



1.4 PROJECT PHASING

CONCOURSE LEVEL 01 PHASE 1

OUTSIDE PROJECT SCOPE

POTENTIAL CONCOURSE EXPANSION

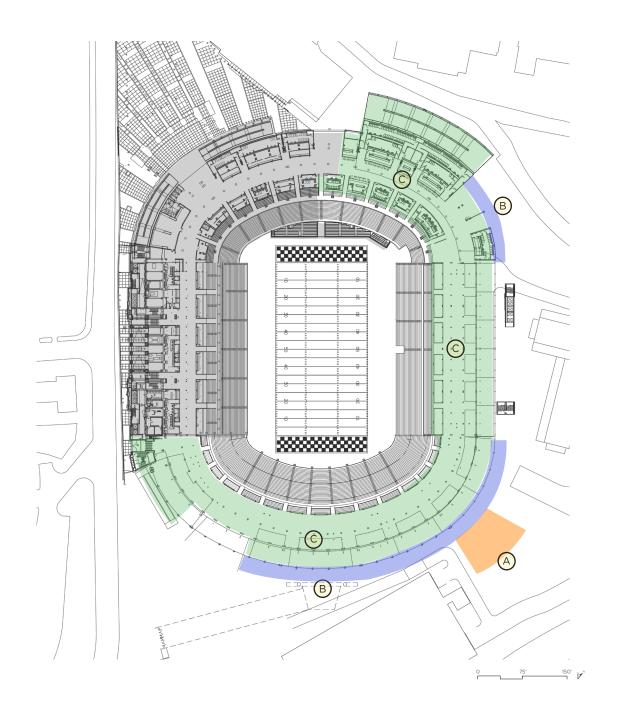
MAJOR PROGRAM ELEMENTS

DEMOLITION / ABATEMENT + RECONSTRUCTION

A NEW VERTICAL CIRCULATION TOWER

B EXPANDED CONCOURSE

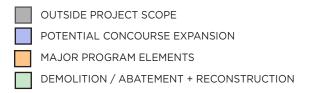
NEW RESTROOMS / CONCESSIONS / CONCOURSE AMENITIES



B **B**

1.4 PROJECT PHASING

CONCOURSE LEVEL 02 PHASE 1



- NEW VERTICAL CIRCULATION TOWER
- EXPANDED CONCOURSE
- NEW RESTROOMS / CONCESSIONS / **CONCOURSE AMENITIES**

NOTE

CONCOURSE LEVEL 03 IS NOT SHOWN DUE TO THE LIMITED SCOPE OF PHASE 1 ON THIS LEVEL.







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2.1 CAMPUS MASTER PLAN RELATIONSHIPS

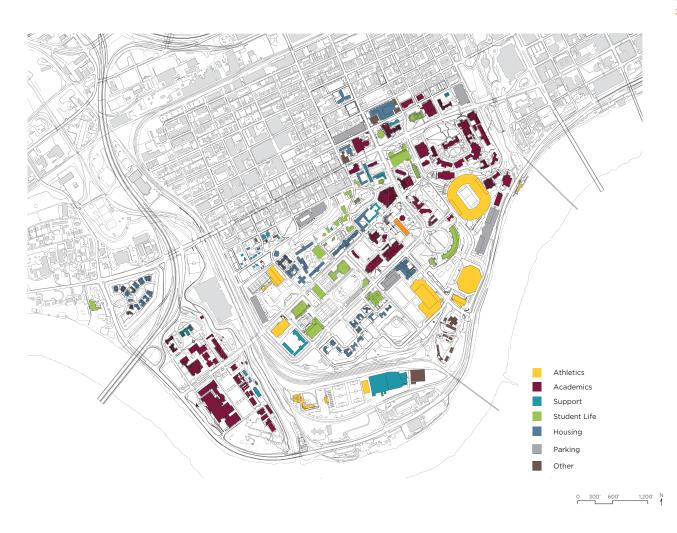
CAMPUS MASTER PLAN

The University of Tennessee updated the Long Range Master Plan in 2016. This Program explicitly embraces the following governing principles as they apply to development specifically of Neyland Stadium:

- Align campus improvements to support UT Knoxville's Strategic Plan.
- Continue to develop a safe, more accessible and pedestrian friendly campus.
- Optimize limited space on campus.
- Expand and improve the east-west spine with better linkages north-south.
- Accommodate vehicles at the periphery of campus and reinforce the pedestrian core.
- Continue to develop the campus transit system.
- Encourage preservation of historic and cultural resources.
- Maximize connections to surrounding communities.

2.1 CAMPUS MASTER PLAN RELATIONSHIPS

*DIAGRAMS FROM 2016 CAMPUS MASTER PLAN UPDATE



2.2 CAMPUS MASTER PLAN PRINCIPLES

PLANNING PRINCIPLES

There is no other stadium of Neyland's capacity so intertwined with it's campus. It is imperative that Neyland is woven into its surroundings so that the experience of students on foot or bike, traditions like the Vol Walk, and banal things such as storm water lines are improved by actions that result from the issuance of this Program.

The density of the Knoxville campus requires sensitivity for any expansive intervention. The Alumni Gym in the north falls under the drip line of Neyland's Upper Bowl. The G10 parking garage completes a north-south bracket, shielding the stadium from the opportunity to fully engage the Tennessee River. The balconies of the West Skybox protrude over Phillip Fulmer Way. Currently, Estabrook and Berry Halls ensure there is no ground available on the East. Were there space available to the East and South, dramatic elevation changes would remain a significant planning obstacle.

The renovation to Neyland Stadium described herein should adhere to the following principles:

- 1. Engage campus through the use of flexible, open-air plazas.
- 2. Improve circuitous navigation around the stadium.
- 3. Clarify the ingress path into the stadium on gameday.
- 4. Provide a connection to the river walk.
- 5. Recognize the architectural heritage of the existing campus buildings.
- 6. Provide innovative spaces that allow for non-gameday use.
- 7. Promote the University of Tennessee's brand.
- 8. Integrate improved utility services.

An extension of Neyland's footprint through associated plazas carries with it an implication of the loss of some parking spots. The Campus has plans to add parking in conjunction with efforts to make the University increasingly pedestrian-friendly. The benefit of developed exterior spaces on gamedays and non-gamedays alike to the campus fabric outweighs the limited convenience the noted spaces provide.

2.2 CAMPUS MASTER PLAN PRINCIPLES

*DIAGRAMS FROM 2016 CAMPUS MASTER PLAN UPDATE







EXISTING FACILITY ANALYSIS

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3.1 SITE OVERVIEW / CONTEXT

THE UNIVERSITY OF TENNESSEE'S MISSION

The primary mission of UT is to move forward the frontiers of human knowledge and enrich and elevate the citizens of the state of Tennessee, the nation, and the world. As the preeminent research-based, land-grant university in the state, UT embodies the spirit of excellence in teaching, research, scholarship, creative activity, outreach, and engagement attained by the nation's finest public research institutions.

CONTEXT

The University of Tennessee is the flagship university of the state of Tennessee with an enrollment at the Knoxville campus of 28,000. The Volunteers play in Division 1 of the NCAA and is a member of the Southeastern Conference (SEC). Tennessee supports 20 male and female intercollegiate athletics programs and routinely has multiple teams highly ranked against their competition. In particular, the football team and women's basketball team have featured celebrated coaches.

Neyland Stadium at the University of Tennessee has long been one of the preeminent collegiate football experiences in the country. The majesty of Tennessee Football is entwined with the history of Neyland Stadium. Neyland holds the all-time record for most home-field wins of any football venue in the country and was the vessel for 16 SEC titles and six national titles.

UNIVERSITY OF TENNESSEE ATHLETICS DEPARTMENT FACILITIES



3.2 EXISTING FACILITY DOCUMENTATION

FACILITY DOCUMENTATION

When fans make an orange and white checkerboard of the stadium, deficiencies are hidden. The growth of Neyland as a building has outpaced the evolution of stadium-specific building codes.

Concession stands and restrooms are undersized. Congested concourses are prohibitively narrow, restricting the flow of people and stadium assets. Alert systems are ineffective. Ramps are too steep, handrails are missing, aisles are too small, steps are uneven, and wheelchair spaces are too few. The depth of seating rows, while contributing to the seating bowl's overall effect, makes sitting difficult and travel problematic. Bench seat-widths as marked do not consistently achieve accepted minimum standards. The field of play should fully adhere to NCAA guidelines.

In addition, premium amenities are inferior to peer insitutions:

- Food options are limited and prepared off-site.
- Alcohol is not available or self-served.
- Patrons share elevators with trash.
- Experiences are limited and far from the field.
- Inoperable glass disconnects play from suite holders.
- Arriving at the stadium involves difficult changes in elevation.

3.2 **EXISTING** FACILITY PHOTOS / 2010 RENOVATION



2010 RENOVATION / STADIUM AERIAL FROM THE SW



2010 RENOVATION / GATE 21 ENTRANCE LOOKING SE



2010 RENOVATION / GATE 21



2010 RENOVATION / GAMEDAY CONCOURSE 01 - NW



2010 RENOVATION / GAMEDAY CONCOURSE 01 - NW



2010 RENOVATION / GAMEDAY CONCOURSE 01 - NW

3.2 EXISTING FACILITY PHOTOS / SOUTH + EAST



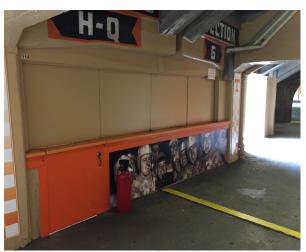




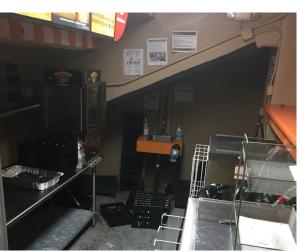








CONCOURSE 01 SOUTH CONCESSION STAND



CONCOURSE 01 SOUTH CONCESSION STAND

3.2 EXISTING FACILITY PHOTOS / SOUTH + EAST



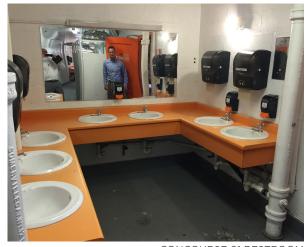
GAMEDAY CONDITION CONCOURSE 01



GAMEDAY CONDITION CONCOURSE 01



VISITING TEAM LOCKER ROOM



CONCOURSE 01 RESTROOM



CONCOURSE 01 RESTROOM



CONCOURSE 01 RESTROOM

3.3 EXISTING FACILITY PLANS

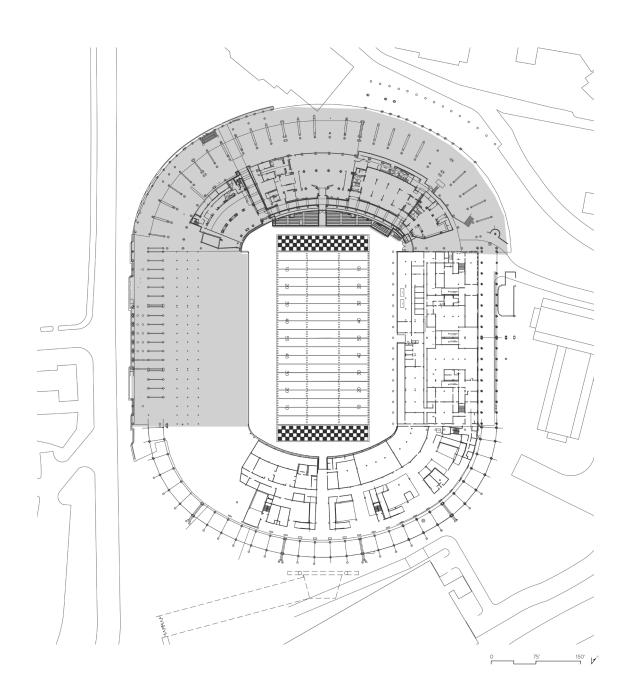
EXISTING CONCOURSES

Neyland Stadium is unique in its seating bowl configuration in that there are only two seating decks, an Upper and Lower, that ring the field of play. This implication of clean lines gives a false impression of orderly exiting along the supporting concourses.

This Program document has divided the restroom and concession calculations as follows: Concourse 01 will serve the Lower Bowl except for half the number of patrons, by seating manifest, sitting above the cross-aisle accessible from vomitories off of Concourse 01. Concourse 02 accounts for the upper half of those sitting above the cross-aisle in the Lower Bowl. Concourse 03 will serve all patrons cheering from the Upper Bowl.

Whenever possible the calculations should be further divided by cardinal direction: North, East and South. The West side was recently renovated and, with the exception of ledge seating off of concourse O2, is omitted from the work described herein. The same renovation included the northeast portion of Concourse O1, stopping on the stadium's north orientation, and converted the area that would be the west side of Concourse O3 into the Tennessee Terrace.

A targeted intervention of limited scope to the existing concourse spaces would do little to mitigate the disparity between the current standards and conditions. There is, however, opportunity within the current drip line of the stadium to create the conditions for a safe and enjoyable fan experience.

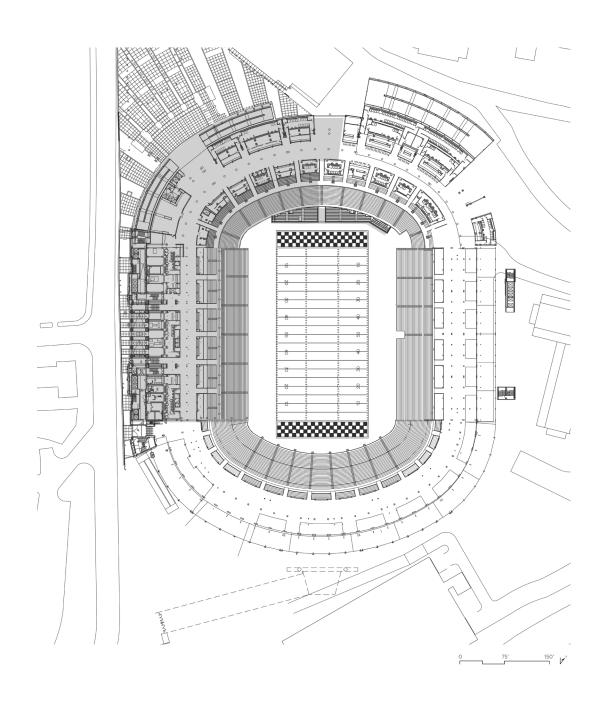


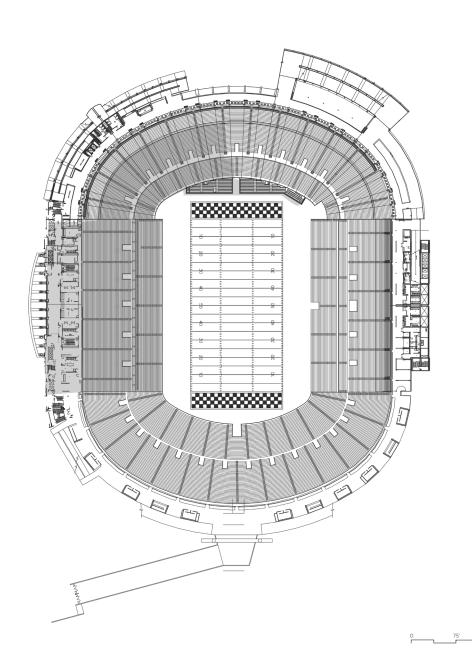
3.3 **EXISTING FACILITY** PLANS

LEVEL 00

3.3 EXISTING FACILITY PLANS

CONCOURSE LEVEL 01



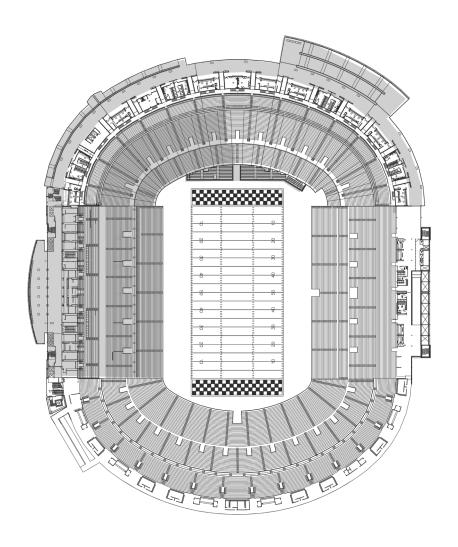


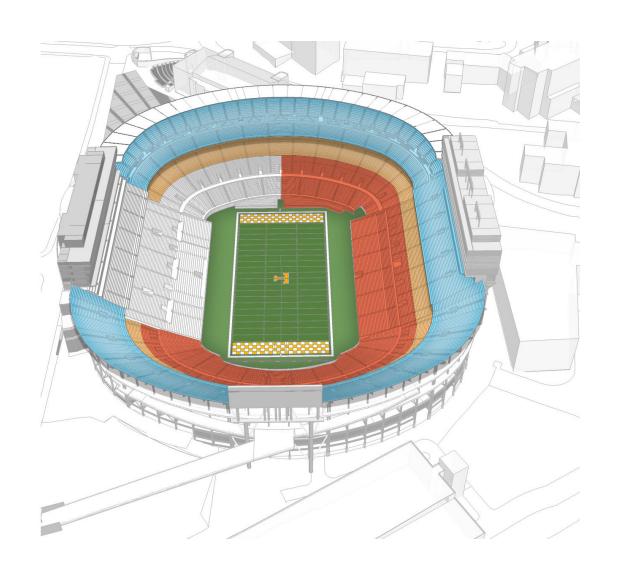
3.3 **EXISTING FACILITY PLANS**

CONCOURSE LEVEL 02

3.3 EXISTING FACILITY PLANS

CONCOURSE LEVEL 03





3.4 **SEATING BOWL** CONCOURSE DISTRIBUTION

OVERALL

CONCOURSE 1 LOADING

CONCOURSE 2 LOADING

CONCOURSE 3 LOADING





SITE ANALYSIS

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4.1 SITE ANALYSIS

CURRENT SITE CONDITIONS

Neyland Stadium's prominence on the University of Tennessee's campus is a large part of its allure, walkable from the Student Union and prominent in the Knoxville skyline. Said critically, Neyland lies on a hilly, confined site in middle of campus that limits growth of the stadium's footprint, and access by fans and staff. Specific site conditions must be accounted for by any construction activities.

Access by fans, including those with disabilities, can be problematic and will always require some independent (foot, non-car, non-bus) travel. The majority of convenient parking is west of the stadium. Bus routes are more common to the north and west, from the heart of campus.

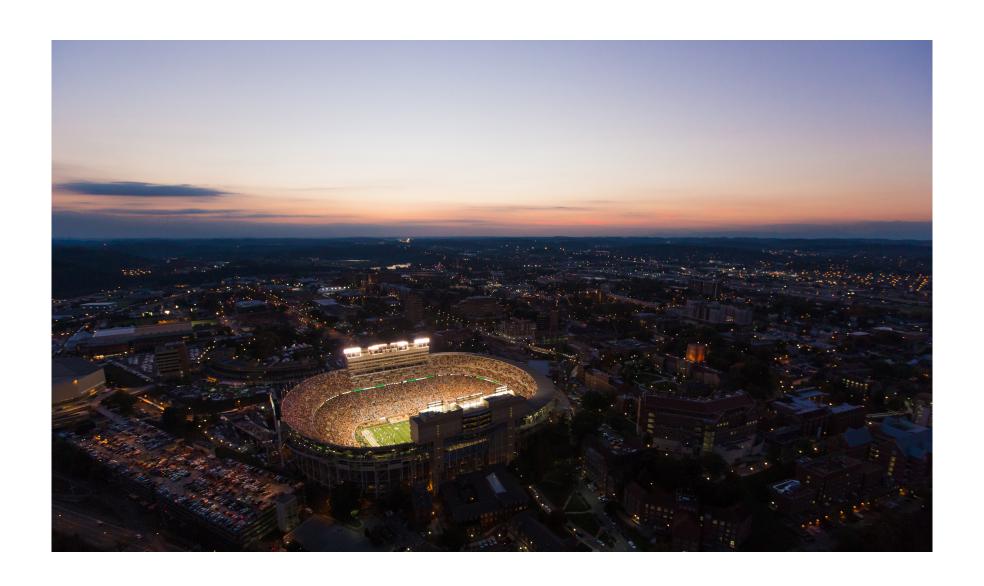
Staff typically enter at Gate 25 which is less accessible than the majority of other gates, though it reduces traffic for fans elsewhere.

Apart from the west, the south end of the stadium has the most potential for access by construction activities which bodes well for the project, as addressing deficiencies in the south and east are primary concerns. Despite being comparatively better, many challenges remain. There is a grade change of more than 60'-0" from the terminus of the west's recent renovation to the current Biology Annex in the southeast. A host of utilities follow Tee Martin Drive, funneled between the G10 parking garage and the stadium's Service drive. In addition to following the decrease in elevation as the stadium sweeps from the west to the east, grade falls off precipitously perpendicular to the G10 garage. At its closest point, the garage is approximately 45'-0" from the stadium perimeter.

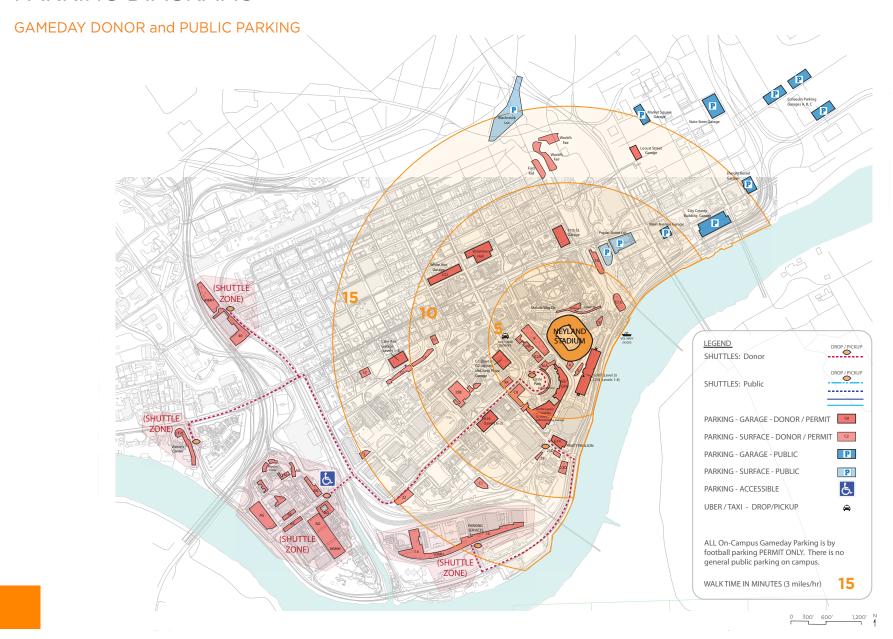
To the southeast of the stadium's orientation lies the Biology Annex building which is presumed to be demolished for the purposes of this project. It is a metal-framed building on concrete slab.

A new Engineering building is planned to be constructed to the east of the stadium. There is virtually no access to Neyland's east perimeter with the current buildings in place. It's anticipated that the new Engineering Building will account in some way for the 150'-0" minimum clear distance mandated by the Department of Homeland Security. The grade falls approximately 20'-0" from Estabrook Road to the area of the Biology Annex.

The north side of the stadium includes, moving from west to east, a plaza extending from Gate 21 to the Student Union, the Alumni Gym building, and the ramp and associated grade change at Gate 22/23. Inboard of the stadium behind the plaza, wrapping to the east, is the location of a number of utilities. The Alumni Gym, built in 1932, is an important example of collegiate gothic architecture and was identified as a contributing structure to the Hill historic district in the Campus Heritage Plan. It is rotated approximately 45 degrees from the stadium's orientation. Any supports for the north videoboard will need to address the Gym's presence. The street elevation at Gates 22/23 is closer to that of Concourse 02 than Concourse 01. There is no access to Concourse 01 from the northeast. There is a dramatic elevation change from Gate 22/23 to the south: Estabrook Road meets the Service drive whereas Concourse 02 is approximately 70'-0" higher in elevation.

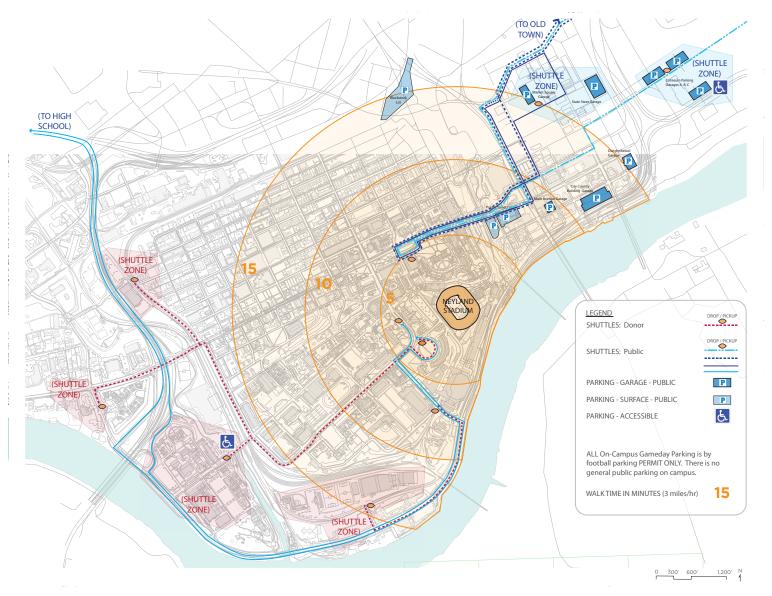


4.1.1 PARKING DIAGRAMS



4.1.2 TRANSIT DIAGRAMS

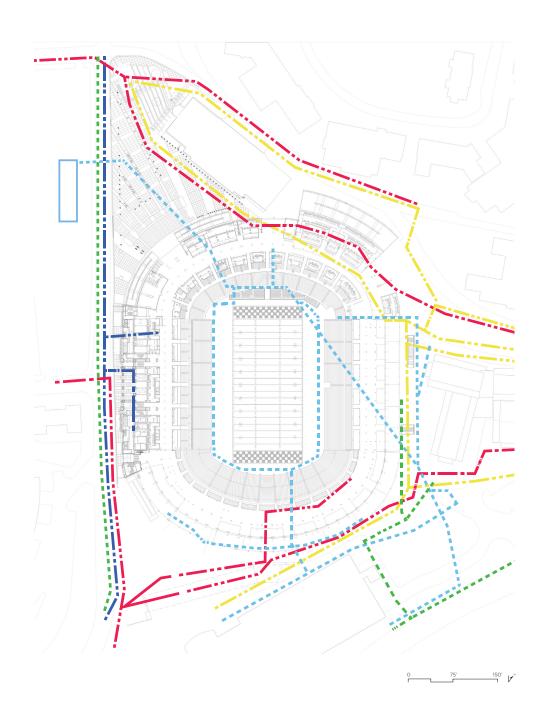
GAMEDAY SHUTTLE ROUTES



4.1.2 TRANSIT DIAGRAMS

CAMPUS BUS ROUTES





4.1.3 UTILITY DIAGRAMS

IMMEDIATE STADIUM SITE



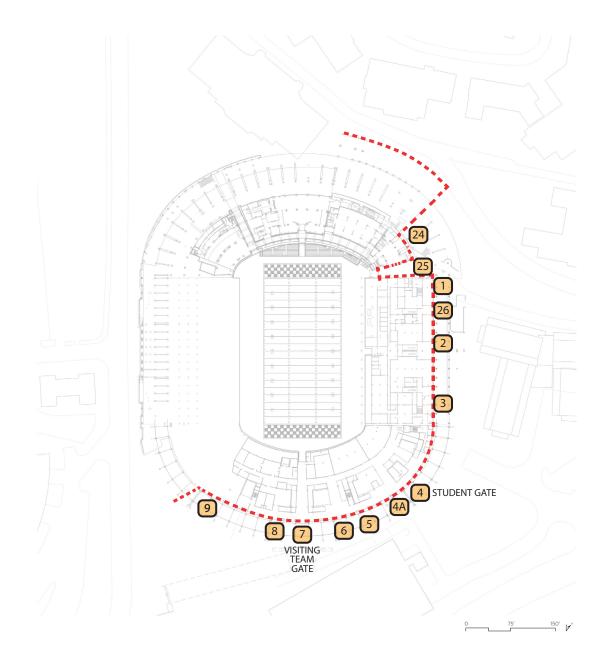
4.1.4 GAMEDAY ACCESS

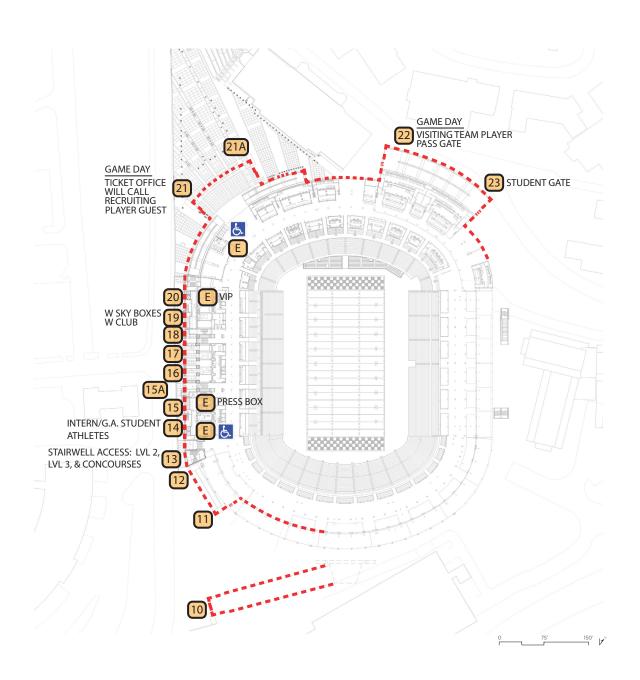
SECURE LINE and GATES

LEVEL 00

SECURE PERIMETER - EXISTING = ENTRY / EXIT GATE & NUMBER







4.1.4 **GAMEDAY ACCESS**

SECURE LINE and GATES

CONCOURSE LEVEL 01

SECURE PERIMETER - EXISTING 9 **ENTRY / EXIT GATE & NUMBER**

4.1.4 GAMEDAY ACCESS

VEHICULAR ACCESS and ROAD CLOSURES

STREET CLOSURE:

3 HR PRIOR TO KICKOFF

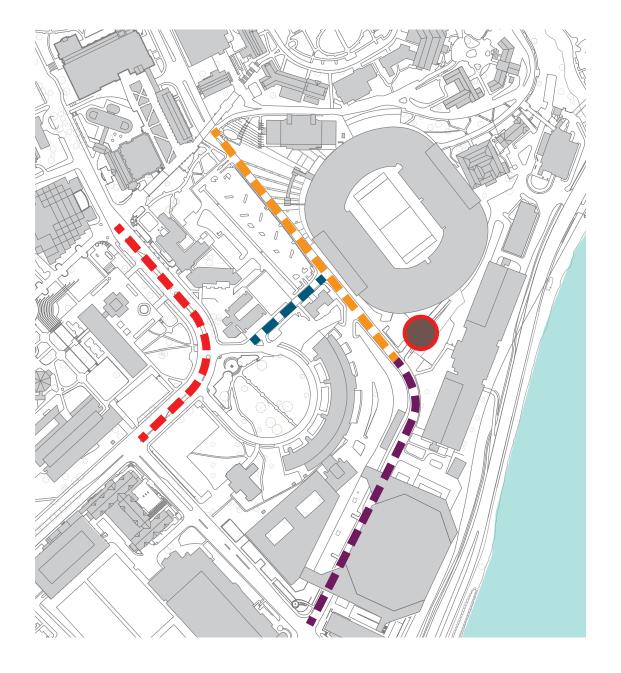
2.5 HR PRIOR TO KICKOFF

30 MIN PRIOR TO KICKOFF

30 MIN; 5 MIN PRIOR TO VOL WALK

TEAM BUS PARKING





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BUILDING PROGRAM + CONCEPTUAL DIAGRAMS

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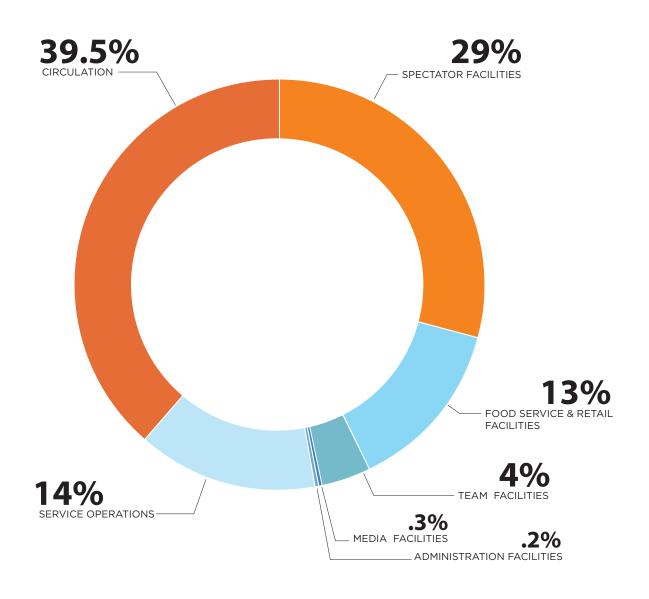
5.1 PROGRAM SUMMARY

PROGRAM SUMMARY

Neyland Stadium has had numerous additions and renovations since its inception. The first seating area, the West Stands, was built by students and faculty at the behest of MacGregor Smith in 1921. It was conceived and built as a utilitarian structure for University of Tennessee football fans to watch and cheer the Volunteers.

Over the years the goals of Athletic Departments and Universities and the expectations of fans have evolved significantly. Neyland has seen a number of renovations and additions that have focused primarily on expanding the bowl. Skyboxes on the west and east sides were added in 1987 and 2006, respectively. The most recent major renovation primarily affected the west side of the stadium and was completed in 2010.

This Program's primary focus are those elements that can be enjoyed by all fans; wider concourses, increased restroom facilities, improved concessions, and exterior plazas that enhance the appearance and function of Neyland's exterior. Addi'tional spaces bring to Neyland the support elements that are too easily afterthoughts when bowls are expanded opportunistically. Premium amenities constitute a fraction of the overall project, bring diversity to the stadium's seating options and are included only where opportunities of compounding benefit are anticipated.



5.1 PROGRAM SUMMARY and DIAGRAMS

GROSS SQUARE FOOTAGE BREAKDOWN

SPECTATOR FACILITIES	148,758
FOOD SERVICE and RETAIL	67,487
TEAM FACILITIES	20,893
MEDIA FACILITIES	1,750
ADMINISTRATION FACILITIES	1,000
SERVICE and OPERATIONS	59,788
CIRCULATION	199,057
OVERALL GROSS SQUARE FOOTAGE	498,734

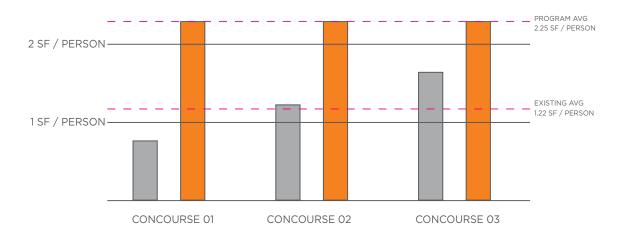
5.1 PROGRAM SUMMARY and DIAGRAMS

CONCOURSE DENSITY ANALYSIS

EXISTING SF / PERSON AVERAGE

PROGRAM SF / PERSON AVERAGE

4 SF / PERSON—



A	В	С	D	E	F	G
				: SPECTATO		S
						commended Program
расе Туре	Room Description	Units	SF	Total NSF	Total GSF (*1.25)	Comments
pectator Seating		20.254	0.0	0	,,	Existing Bench seating; for reference only. And only in areas where concomprovement is occuring
	Bleacher Seating - Concourse 01	28,351	0.0	U		Existing Bench seating; for reference only. And only in areas where conce
	Bleacher Seating - Concourse 02	17,711	0.0	0		improvement is occuring Existing Bench seating; for reference only. And only in areas where conce
	Bleacher Seating - Concourse 03	20,613	0.0	0		improvement is occuring
	Suite seating	180	8.0	1,440		15 suites x 12 seats
	Ledge Seating SUB-TOTAL - SPECTATOR SEATING	600 67,455	15.0	9,000 10,440	10,440	Seating along Drink Rail Concourse 2
Suites	OOD-TOTAL - OF ESTATOR SEATING	07,455		10,440	10,440	16 Total Occupants - 4 @ Drink Rail. Induction warmers, refrigerators, T
	Private suites - 12 person	15	350	5,250		charging stations, preferred audio, WIFI.
	Lobby at ground level	1	500 5,500	500		Lobby at Concourse 01 Across from SW Suites on Concourse 02
	02 Lounge (Alternate) Pantry	2	350	5,500 700		Across from SW Suites on Concourse U2
	Men's toilets	4	55	220		w.c. ratio 1/90, urinal ratio 1/40, lav ratio 1/90
	Women's toilets	4	55	220		w.c. ratio 1/25, lav ratio 1/90
	Janitor's Closet	1	60	60		
	Storage Trash Holding Room	2	200	400 200		
	SUB-TOTAL - SUITES	<u> </u>	200	13,050	16,313	
ield Level Club	Field Club	1,950	10	19,500		Mix of stand-up and sit down seating.
	Club Lobby	2	500	1,000		At Concourse 01 and Field Level (Level 00)
	Field Level Club Patio	1	3,000	3,000		Awning above sections of patio, potentially LED Board incorporated into
				4.050		awning. Capacity of 300. Ticketed VIP Area within the Field Club. Direct Access to Patio and Priva
	Field Club VIP Area	50	25	1,250		Restrooms
	Field Club VIP Restrooms	1	200	200		Dedicated restroom for VIP Area
	Show Cooking Bars	2	350 400	700 800		
	Holding Food Area	1	400	400		
	Food Service points of sale	16	100	1,560		1:125 for club only; Provide display type cooking stands
	Men's toilets	36	55	1,980		w.c. ratio 1/90, urinal ratio 1/40, lav ratio 1/90
	Women's toilets	25	55	1,375		w.c. ratio 1/40, lav ratio 1/90
	Family Toilet	1	75	75		
	Janitor's Closet Club Storage	1	60 250	60 250		
	SUB-TOTAL - FIELD LEVEL CLUB	'	230	32,150	40,188	
SE Sky Garden	Sky Garden	250	7	1,750	10,100	Concourse 03_SE
Alternate)	Main Bar	1	500	500		
	Holding Food Area	1	400	400		
	Food Service points of sale	1	100	100		1:125 for club only; Provide display type cooking stands
	Sky Garden Storage SUB-TOTAL - SE SKY GARDEN (ALTERNATE)	1	250	250 3,000	3,750	
SW Sky Garden	Sky Garden	250	7	1,750	3,730	Concourse 03_SW
Alternate)	Main Bar	1	500	500		001000130 00_011
,	Holding Food Area	1	400	400		
	Food Service points of sale	1	100	100		1:125 for club only; Provide display type cooking stands
	Sky Garden Storage	1	250	250	0.750	
an Zone	SUB-TOTAL - SW SKY GARDEN (ALTERNATE) Fan Zone	1	3,000	3,000 3,000	3,750	Concourse 02_SE, Extended concourse area with eating areas.
Alternate)	SUB-TOTAL - FAN ZONE (ALTERNATE)	'	3,000	3,000	3,750	Concourse 02_3E, Extended concourse area with eating areas.
Public Restrooms	Public restroom facilities will be provided based on					
Concourse	67,455 (excludes club and suite seats) permanent seats					
	and an assumed ratio of 50:50 male-female attendance. Note: the following ratios are based Populous					
	recommendations.					
	Concourse 01_Men's Toilet	167	50	8,350		w.c. ratio 1/300, urinal ratio 1/120, lav ratio 1/200
	Concourse 01_Women's Toilet	249	55	13,695		w.c. ratio 1/40(first 1520)+1/60 remaining, lav ratio 1/150
	Concourse 02_Men's Toilet	108	50	5,400		w.c. ratio 1/300, urinal ratio 1/120, lav ratio 1/200
	Concourse 02_Women's Toilet	153	55	8,415		w.c. ratio 1/40(first 1520)+1/60 remaining, lav ratio 1/150
	Concourse 03_Men's Toilet Concourse 03_Women's Toilet	121	50	6,050		w.c. ratio 1/300, urinal ratio 1/120, lav ratio 1/200
	Family Toilet	172 9	55 75	9,460 675		w.c. ratio 1/40(first 1520)+1/60 remaining, lav ratio 1/150 3 Each Concourse Level
	,				05.0=0	
irst Aid	SUB-TOTAL - PUBLIC RESTROOMS - CONCOURSE Main First Aid Room	1	750	52,045 750	65,056	Includes waiting/reception, triage, treatment, unisex restroom, lockable
	Exam Rooms	3	120	360		Located in Main First Aid Room
	Men's Toilets	4	75	300		1 toilet each first aid room
	Women's Toilets	4	75	300		1 toilet each first aid room
	Offices	2	200	400		Located in Main First Aid Room
	Main First Aid Storage	1	150	150		One each conscurred level
	Satellite First Aid Rooms	3	450	1,350		One each concourse level
	Mother's Poom	4	200	000		One each concourse level, connected to first aid stations; should include
	Mother's Room SUB-TOTAL - FIRST AID	4	200	800 4,410	5,513	chair, sink, tv, coat hook, changing table
	ASSIFICATION 1: SPECTATOR FACILITIES			121,095	148,758	

FIELD CLUB CAPACITY*



*CAPACITY INCLUDES FIELD CLUB VIP AREA

SUITE DATA



143



PROPOSED SUITES 158 (15 NEW)

TOILET ROOMS DATA



EXISTING TOILET ROOM SF 46,055 SF

PROPOSED TOILET ROOM SF 67,520 SF

Recommended Program Security Security	A	B CLAS	C SIEICATIO	D N 2: FOO	E D SERVICE 8	F RETAIL FAC	G CILITIES	
Persist Niches		SENS	CLASSIFICATION 2: FOOD SERVICE & RETAIL FACILITIES Recommended Program					
Space Type				1				
Man Commessary	Space Type	Room Description	Units	SF	Total NSF		Comments	
Viereweating	ood Service	Premium Kitchen	1	5,000	5,000	, ,		
Offices		Main Commissary	1	10,000	10,000			
Vivo Space and Open Area		Warewashing	1	350	350			
Strage		Offices	4	120	480			
Staff Restroom and Locker rooms			1	500	500			
Money Courting Room		Storage	1	400	400			
Food Service Custodial support 1 300 300 Food Service Custodial support 1 200 50		Staff Restroom and Locker rooms	2		1,200			
Food Service Personnel Locker Room		Money Counting Room	1				Include vault	
SUB-TOTAL - FOOD SERVICE 19.130 23.913								
Concession Stands will be distributed at regular inference on the Concession Stands of the Counter space is allowed per point of-cale, with 20' degit to accommodate strongs in each stand.			2	250				
Intervals on the Concourse(s), Five Minear feet of counter grace is allowed per point of-cale, with 20' degith to accommodule storage in each stand.		SUB-TOTAL - FOOD SERVICE			19,130	23,913		
Concession Stands		Concession Stands will be distributed at regular						
Agent to accommodate storage in each stand.	Stands	intervals on the Concourse(s). Five linear feet of						
April Decommodate storage in each stand.		counter space is allowed per point-of-sale, with 20'						
Concession Stands, Concourse 01								
Concession Stands							POS ratio 1:250 spectators; Portable concessions will also be provided.	
Concession Stands		Concession Stands_Concourse 01	114	100	11,400			
Concession Stands, Concourse 03 8.3 100 8.300 PROS ratio 1:250 spectators; Portable concessions will also be proximate of the proxim							POS ratio 1:250 spectators; Portable concessions will also be provided.	
Concession Stands Concourse 03 83 100 8,300 Permanent Concessions to have TVs. Digital Menu Boards Vendor Commissary/Vending - Concourse 01 95 10 950 ratio 120 speciators; distributed around concourse Vendor Commissary/Vending - Concourse 02 62 10 620 ratio 1200 speciators; distributed around concourse Vendor Commissary/Vending - Concourse 03 69 10 620 ratio 1200 speciators; distributed around concourse Vendor Commissary/Vending - Concourse 03 69 10 620 ratio 1200 speciators; distributed around concourse Vendor Commissary/Vending - Concourse 03 69 10 620 ratio 1200 speciators; distributed around concourse Vendor Commissary/Vending - Concourse 04 Vendor Concourse 14 Vendor Concourse 14 Vendor 1,500 Vendor Vendor 1,5		Concession Stands_Concourse 02	74	100	7,400		Permanent Concessions to have TV's, Digital Menu Boards	
Vendor Commissary/Vending - Concourse 01 95 10 950 ratio 1:200 specifators; distributed around concourse Vendor Commissary/Vending - Concourse 0:3 69 10 650 ratio 1:200 specifators; distributed around concourse Vendor Commissary/Vending - Concourse 0:3 69 10 650 ratio 1:200 specifators; distributed around concourse Vendor Commissary/Vending - Concourse 0:3 69 10 650 ratio 1:200 specifators; distributed around concourse Vendor Commissary/Vending - Concourse 0:3 69 10 650 ratio 1:200 specifators; distributed around concourse Vendor Commissary/Vending - Concourse 0:4 400 1,500 Vendor Concourse level Vendor Concourse Vendor Concour								
Vendor Commissary/Vending - Concourse 02 62 10 620 ratio 1:200 spectators, distributed around concourse various of concession Storage 3 500 1,500 Concession Storage 5 5 5 5 5 5 5 5 5								
Vendor Commissary/Vending - Concourse 03 69 10 690								
Concession Storage 3 500 1,500 Concession Storage SUB-TOTAL - CONCESSION STANDS 38,869 38,575 Retail Sales Team Store 1 2,000 2,000 New Team store in SW Conc level 01 Walk-in Stores 4 400 1,600 Walk-in Stores distributed on Concourse Levels 01 / 03 Walk-in Stores 4 400 1,600 Walk-in Stores distributed on Concourse Levels 01 / 03 SUB-TOTAL - RETAIL SALES 4,000 5,000 SUB-TOTAL - RETAIL SALES 5,390 5,7487 SUB-TOTAL - CLASSIFICATION 2: FOOD SERVICE & RETAIL 53,990 67,487 CLASSIFICATION 3: TEAM FACILITIES Recommended Program								
SUB-TOTAL - CONCESSION STANDS 30.860 30.575								
Team Store			3	500			One each concourse level	
Walk-In Stores A						38,575		
Merchandise Storage 1	Retail Sales							
SUB-TOTAL - RETAIL SALES 4,000 5,000			4					
Sub-Total - CLASSIFICATION 2: FOOD SERVICE & RETAIL S3,990 67,487			1	400			Adjacent to Team Store_SW	
Note Care Commendation Comme								
Visiting Team Facility Visiting Entry 2 120 240 Visiting Entry 2 120 240 Visiting Entry Visiting Entry 80 45 3,600 2 separate lockers rooms with 40 lockers in each separated by an 45 450 450 2 taping; 2 treatment tables Visiting Facility Visiting Team Visiting Team	SUB-TOTAL - C	LASSIFICATION 2: FOOD SERVICE & RETAIL						
Nom Description Units SF Total NSF Total NSF Total CSF (*1.25) Comments		_	CLAS	SIFICATIO	N 3: TEAM F			
Visiting Team Visiting Entry 2 120 240							ecommended Program	
Visiting Team	Space Type	Room Description	Units	SF	Total NSF		Comments	
Visiting Showers / Toilets	/isiting Team	Visiting Entry	2	120	240	, ,		
Visiting Showers / Toilets	acility	Visiting Locker Room	80	45	3,600		2 separate lockers rooms with 40 lockers in each separated by an overhea	
Visiting Training Room	-						door	
Visiting Equipment Room								
Visiting Media Interview Room 1 800 800 50 seats, plus 10-12 photographers, plus 3-4 cameras on platform Visiting Coaches Locker Room / Showers 2 650 1,300 8,410 10,513 1,300							2 taping; 2 treatment tables	
Visiting Coaches Locker Room / Showers 2 650 1,300								
SUB-TOTAL - VISITING TEAM FACILITY 8,410 10,513							50 seats, plus 10-12 photographers, plus 3-4 cameras on platform	
Aux Entry 2 100 200			2	650				
Aux Locker Room						10,513		
Aux Showers / Toilets								
Aux Training Room	Room / Aux	Aux Locker Room	80		2,960		2 separate locker rooms within facility, separated by OHD;	
Aux Equipment Room 1 120 120 Smokey's Lounge 1 100 100 Dedicated room for Smokey and trainer. Pet Releif Area. Minimal storage. Band Storage 1 400 400 Storage for supplies, SE corner. Aux Coaches Locker Room / Showers 2 650 1,300 Storage for supplies, SE corner. SUB-TOTAL - BAND LOCKER ROOM / AUX LOCKER ROOM 7,080 8,850 Officials Chain Crew 1 300 300 6 lockers Male Officials Lockers / Shower 1 450 450 10 lockers Female Officials Lockers / Shower 1 300 300 6 lockers Officials Meeting room 1 175 175 Include official time clock in all rooms SUB-TOTAL - OFFICIALS 1,231 1,531	ocker Room		2					
Smokey's Lounge							2 taping; 2 treatment	
Storage								
Band Storage		Smokey's Lounge	1	100	100		Dedicated room for Smokey and trainer. Pet Releif Area. Minimal cubby	
Aux Coaches Locker Room / Showers 2 650 1,300 8,850 ROOM 9 8,850 ROOM 9 1 300 8,850 ROOM 9 1 300 6 lockers 1 300 300 6 lockers 1 450 450 10 lockers 1 1 450 450 10 lockers 1 1 300 300 6 lockers 300 300 300 6 lockers 300 300 6 lockers 300 300 300 300 300 300 300 300 6 lockers 300 300 300 300 300 300 300 300 300 30							storage.	
SUB-TOTAL - BAND LOCKER ROOM / AUX LOCKER ROOM 7,080 8,850		Band Storage	1	400	400		Storage for supplies, SE corner.	
SUB-TOTAL - BAND LOCKER ROOM / AUX LOCKER ROOM 1 300 300 6 lockers		Aux Coaches Locker Room / Showers	2	650	1,300			
ROOM				300		8.850		
Male Officials Lockers / Shower 1 450 450 10 lockers Female Officials Lockers / Shower 1 300 300 6 lockers Officials Meeting room 1 175 175 Include official time clock in all rooms SUB-TOTAL - OFFICIALS 1,225 1,531					. ,000	2,000		
Male Officials Lockers / Shower 1 450 450 10 lockers Female Officials Lockers / Shower 1 300 300 6 lockers Officials Meeting room 1 175 Include official time clock in all rooms SUB-TOTAL - OFFICIALS 1,225 1,531	Officials		-	200	200		6 lookora	
Female Officials Lockers / Shower 1 300 300 6 lockers 6 lockers 7 7 7 7 7 7 7 7 7	Officials							
Officials Meeting room 1 175 175 Include official time clock in all rooms SUB-TOTAL - OFFICIALS 1,225 1,531								
SUB-TOTAL - ÖFFICIALS 1,225 1,531								
1,220 1,001 1,		SUB-TOTAL - OFFICIALS		1/5		1 524	Include official unite Clock III all Tooms	
SUB-TOTAL - CLASSIFICATION 3: TEAM FACILITIES 16,715 20,893	SUB-TOTAL O	ASSISTATION 2. TEAM SACILITIES		!			 	

Α	В	C	D	E	F	G
		CLASS	SIFICATIO	N 4: MEDIA I	ACILITIES	
					Re	commended Program
Space Type	Room Description	Units	SF	Total NSF	Total GSF (*1.25)	Comments
Media and Press	Videoboard / Scoreboard Operations	1	700	700		6 front; 10 total; 20 LF; Includes server room, Renovate existing space in West Side Press
	SUB-TOTAL - MEDIA AND PRESS	- '	700	700	875	West slide Fless
Video & Ribbon	North Video Board	1	N/A	0	0/3	New Video Board on North Side of Stadium
Boards	South Video Board	1	N/A	0		Replace Existing South Video Board
Doards	Ribbon Board	1	N/A	0		At Fascia of Upper Bowl - 360 Board.
	SUB-TOTAL - VIDEO & RIBBON BOARDS			0	0	
Media/Press	Camera Locations	2	100	200		Other cameras are included in the seating bowl square footage
Support in the	Covered Camera Deck	1	500	500		10 cameras, 5' o.c. per camera. 50LF; includes team video; South End Zon
Stadium	SUB-TOTAL - MEDIA/PRESS SUPPORT IN THE			700	875	
SUB-TOTAL - CL	ASSIFICATION 4: MEDIA FACILITIES			1,400	1,750	
		CLASSIFIC/	ATION 5: A	ADMINISTRA		
						commended Program
Space Type	Room Description	Units	SF	Total NSF	Total GSF (*1.25)	Comments
Guest Ticketing	Ticket Resolution	5	120	600		Access from outside the main gates to resolve ticket issues
	SUB-TOTAL - GUEST TICKETING			600	750	
MG Learfield	Program Storage / Distribution	1	200	200		
	SUB-TOTAL - IMG LEARFIELD			200	250	
SUB-TOTAL -	CLASSIFICATION 5: ADMINISTRATION FACILITIES	COLLIGATIO	M.C. CED	800	1,000	NI ITIEC
	CLA	SSIFICATIO	N 6: SER	VICE & OPER		ecommended Program
					Total GSF	commended Program
Space Type	Room Description	Units	SF	Total NSF	(*1.25)	Comments
lock/Staging	Cardboard Bailer and Recycling	1	1,000	1,000		
	Trash Compactors	1	1,000	1,000		At Loading Dock; proximity to commissary
	Loading Dock Platform	1	2,000	2,000		
	Truck Parking / Loading	1	4,500	4,500		3 truck bays (visiting team equip, home team equip, additional)
	Marshalling Area	1	4,500 80	4,500		1 Unisex
	Restrooms SUB-TOTAL - DOCK/STAGING	1	80	80 13,080	16,350	1 Unisex
Security	Processing Center	- 1	200	200	16,330	
Security	Restroom	1	75	75		
	Security Check-In	1	200	200		Check in/out for radios & Jackets; Near Gate 7
	SUB-TOTAL - SECURITY	· ·	200	475	594	onest in each in the second of
Maintenance &	Facilities Services Mainitenance	1	2,600	2,600		Facilties Services Office and storage. Attick Stock Stored here.
Storage			,,	,,,,,		2 offices, break room, toilet, storage. Access via service road (could use for
	Facilties Services Zone Maintenance (non stadium)	1	5,000	5,000		dining on game day)
	General Building Storage	1	7,500	7,500		With shelving for materials via fork lift
	Field Equipment and Grounds	1	4,000	4,000		Paint and graphics Shop @ 1,500SF Included
	Maintenance Shop	1	1,500	1,500		Includes 1 office plus open office area; emergency shower, trucks, gators.
	Maintenance Lounge	1	150	150		Shared with Grounds
	Maintenance Concourse Lounges	3	100	300		One each concourse level
	SUB-TOTAL - MAINTENANCE & STORAGE			21,050	26,313	
MEP	Emergency Generator Room	2	800	1,600		generator plus fuel tank - to be outside adjacent to chillers
	Electrical Closets	8	225	1,800		3 at Serv (350sf), 5 each at main/upcon (200sf), 2 each at suite/press (200s
	Main Tele/data Room	1	1,000	1,000		
	DAS room	1	1,000	1,000		adjacent to Main Tele/data room
	Comm Rooms	10	100	1,000		
	Tele/data Closets	8	100	800		10'x10' preferred, 5 at Serv, 5 each at main/upcon, 2 each at suite/press
	Fire Pump Water Pump	1	700 700	700 700		on exterior wall adjacent to water pump rm
	Water Pump Chilled Water Pumping Room	· ·				on exterior wall adjacent to fire pump rm
	Domestic Water Heater / Booster Pump	1	1,500 800	1,500 800		Locate near the exterior location for the air cooled chillers
	Elevator Equipment Room(s)	6	120	720		adjacent to water pump room - flues and intake to roof
	Sprinkler Valve Room	1	200	200		one room or several smaller rms scattered throughout
	Fire Command Center	1	175	175		Located near or in Security Command ctr
	SUB-TOTAL - MEP	1 '	110	11,995	14,994	
Janitorial	Distributed Janitor Closets	12	40	480	,004	
	Trash Collection/Recycling Room on Concourse	3	250	750		5' x 8' tilt bins (4); adjacent to trash chute; 1 per Concourse Level
	SUB-TOTAL - JANITORIAL ASSIFICATION 6: SERVICE & OPERATIONS			1,230 47,830	1,538 59,788	

PROPOSED **CONCESSION STAND** POINTS OF SALE





UNIVERSITY OF TENNESSEE

	B B	С			_	G	
A	В		D TACIEIRS	E ION 7: CIRCI	II ATION	G	
		CLASSIFICATION 7: CIRCULATION Recommended Program					
Space Type	Room Description	Units	SF	Total NSF	Total GSF (*1.25)	Comments	
Concourse	Concourse 01	28,351	2.25	63,790			
	Concourse 02	17,711	2.25	39,850			
	Concourse 03	20,613	2.25	46,379			
	SUB-TOTAL - CONCOURSE			150,019	150,019		
Vertical	Ramps	2	6,000	12,000			
Circulation	Stairs	4	800	3,200			
	Passenger Elevators	5	150	750		Larger size passenger elevator to serve as backup freight.	
	Freight Elevator	1	220	220			
	SUB-TOTAL - VERTICAL CIRCULATION			16,170	20,213		
Service Corridor	Service Corridor	1	22,500	22,500		16' wide corridor, Level 00, Renovation to Existing	
	Field Tunnel	1	400	400		Access to field	
	Unisex Restrooms	2	80	160		Place along the service corridor accessible by press and staff	
OUD TOTAL OF	SUB-TOTAL - SERVICE CORRIDOR			23,060	28,825		
SUB-TOTAL - CL	ASSIFICATION 7: CIRCULATION	CLASSI	FICATION	189,249	199,057		
		CLASSI	FICATION	8: SITE REQ			
						commended Program	
Space Type	Room Description	Units	SF	Total NSF	Total GSF (*1.25)	Comments	
Plaza & Entry						New Plaza; provide electrical connections, lighting, stairs and ramps where	
Gates	SW Fan Entry Plaza	1	N/A	0		necessary	
						New Plaza; provide electrical connections, lighting, stairs and ramps where	
	SE Fan Entry Plaza	1	N/A	0		necessary	
						Provide Premium Entry Gate and General Admission Gates. Design to meet	
	SE Entry Gates	1	N/A	0		UT Security requirements	
				_		Provide Premium Entry Gate and General Admission Gates. Design to meet	
	SW Entry Gates	1	N/A	0		UT Security requirements	
	F + B + B					New Plaza for Premium Access to East SkyBoxes; provide electrical	
	East Premium Plaza	1	N/A	0		connections, lighting, stairs and ramps where necessary Provide Service Vehicle Ramp and Necessary Pedestrian Access between	
	O		A1/A	0			
	Service Vehcile Ramp	- 1	N/A			SE and SW Plazas	
OL 111	SUB-TOTAL - PLAZA & ENTRY GATES		4.000	0	0		
Chillers	Air Cooled Chillers	2	1,000	2,000		Locate in close proximity to the stadium and the chilled water pump room 2- 50' x 10' chillers plus clearance	
	Transformers	2	150	300		2 - 8'x7' tranformers plus clearance; one SE side and one SW side	
	SUB-TOTAL - CHILLERS			2,300	2,300		
SUB-TOTAL - CL	ASSIFICATION 8: SITE REQUIREMENTS			2,300	2,300		
			S	UMMARY	Re	ecommended Program	
Casas Turas	Deem Decembries	Units	SF	Total NSF	Total GSF	Comments	
Space Type	Room Description	Units	ər	Total NSF	(*1.25)	Comments	
SUB-TOTAL CLASSIFICATION 1: SPECTATOR FACILITIES				121,095	148,758		
CLID TOTAL OLA	COLEICATION 2: EOOD CEDVICE & DETAIL FACILITIES			53.990	67.487		
SUB-TOTAL CLASSIFICATION 2: FOOD SERVICE & RETAIL FACILITIES SUB-TOTAL CLASSIFICATION 3: TEAM FACILITIES				16,715	20.893		
SUB-TOTAL CLASSIFICATION 3: TEAM FACILITIES SUB-TOTAL CLASSIFICATION 4: MEDIA FACILITIES				1,400	1,750		
	SSIFICATION 5: ADMINISTRATION FACILITIES			800	1,730		
	SSIFICATION 6: SERVICE & OPERATIONS FACILITIES			47.830	59,788		
	SSIFICATION 6: SERVICE & OPERATIONS FACILITIES SSIFICATION 7: CIRCULATION			189,249	199,057		
				100,240	100,001		
TOTAL NET SQUARE FOOTAGE (NSF)				431,079			
+ NET-TO-GROSS MULTIPLIER (25%)				67,655	<u> </u>		
TOTAL GROSS SQUARE FOOTAGE (GSF)				498,734	498,734		
0110 70711 7: :							
SUB-TOTAL CLASSIFICATION 8: SITE REQUIREMENTS				2,300			

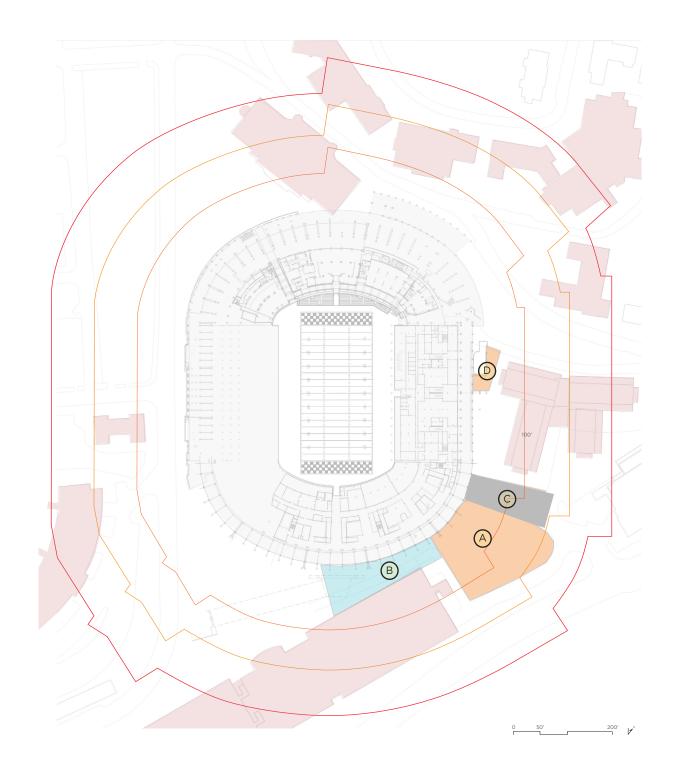
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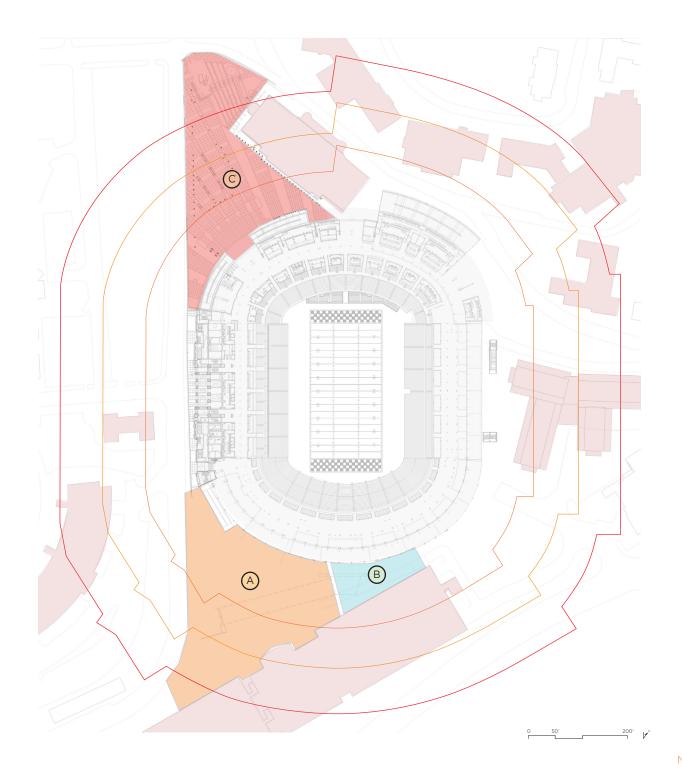
5.2 MAJOR PROGRAM ELEMENTS - SITE

LEVEL 00



- 300' OPTIMAL SECURE LINE
- 200' SECURE LINE
- 100' SECURE LINE
- A SOUTHEAST PLAZA AREA
- B TRANSITION TO SW PLAZA AREA
- C LOADING DOCK AREA
- EAST SKYBOX PLAZA





MAJOR PROGRAM **ELEMENTS - SITE**

CONCOURSE LEVEL 01

- NEW PLAZA **ELEVATION TRANSITION** CAMPUS BUILDINGS IMPACTED BY **GAMEDAY SECURITY** EXISTING PLAZA EXISTING STADIUM FOOTPRINT
- 300' OPTIMAL SECURE LINE
- 200' SECURE LINE
- 100' SECURE LINE
- A SOUTHWEST PLAZA AREA
- B TRANSITION TO SE PLAZA AREA
- EXISTING NW PLAZA

5.2 MAJOR PROGRAM ELEMENTS - EXTERIOR

EXTERIOR FACADE AREAS OF ENHANCEMENT

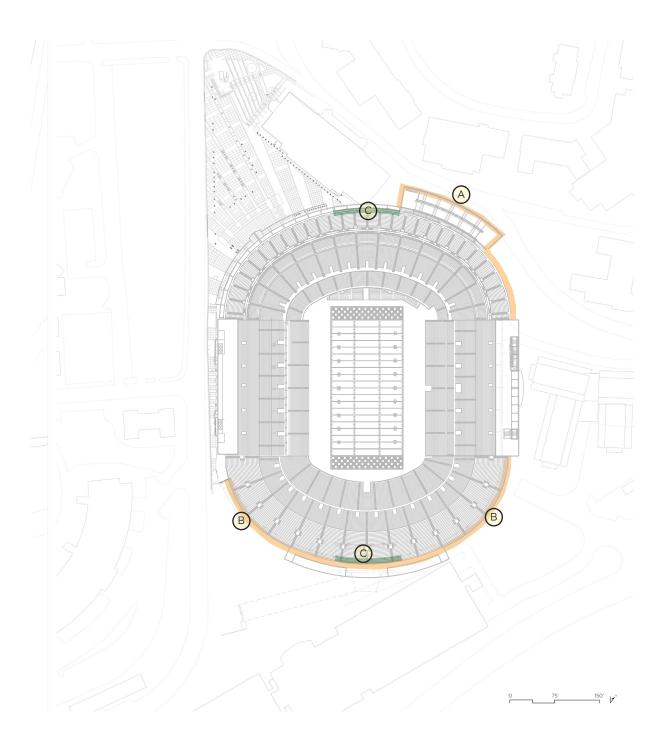
EXTERIOR FACADE ENHANCEMENT

NEW VIDEOBOARD

A FULL FACADE ENHANCEMENT

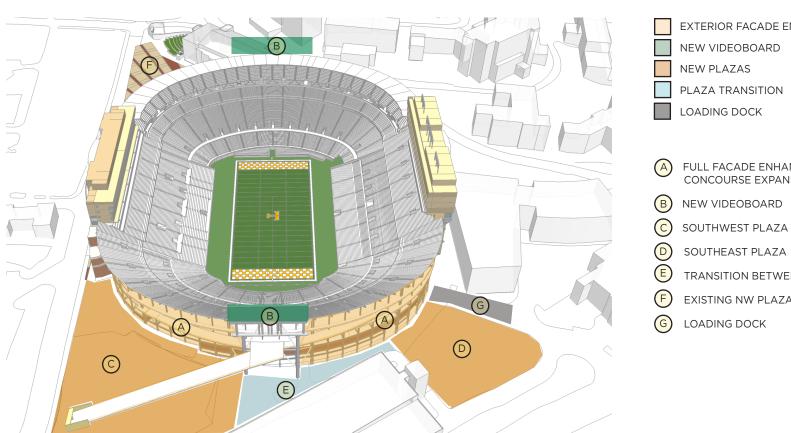
B NEW FACADE

C VIDEOBOARD FACADE



MAJOR PROGRAM **ELEMENTS - EXTERIOR**

AERIAL FROM SOUTH



- EXTERIOR FACADE ENHANCEMENT **NEW VIDEOBOARD** PLAZA TRANSITION
- FULL FACADE ENHANCEMENT + CONCOURSE EXPANSION

- D SOUTHEAST PLAZA
- TRANSITION BETWEEN PLAZAS
- EXISTING NW PLAZA

5.2 MAJOR PROGRAM ELEMENTS

LEVEL 00



RENOVATED AREA

MAJOR PROGRAM ELEMENTS

NEW VERTICAL CIRCULATION

PRIMARY SCOPE AREAS

A FIELD CLUB

B) FIELD PATIO

C COMMISSARY / KITCHEN

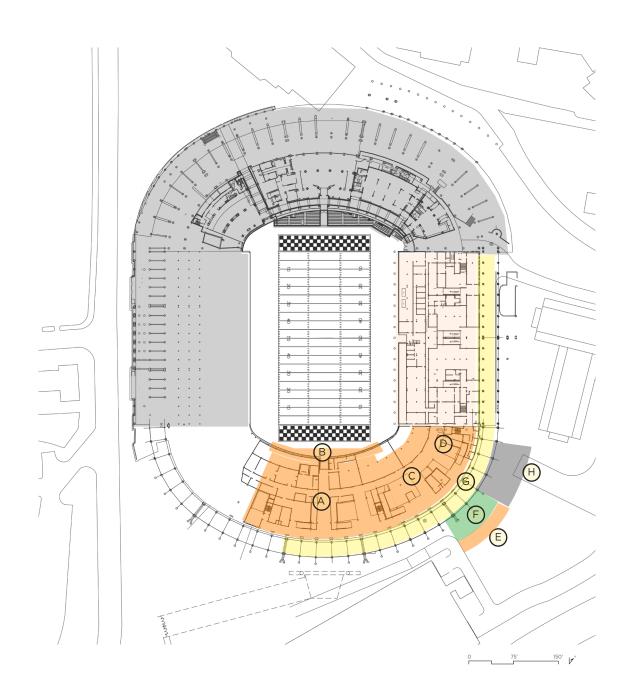
D VISITING TEAM FACILITIES

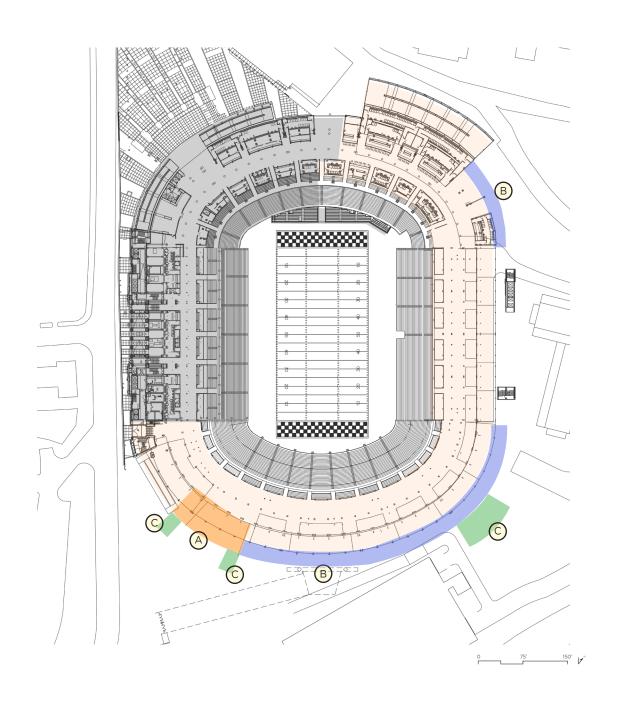
E CONSOLIDATED ENTRY GATES

F VERTICAL CIRCULATION TOWER

G SERVICE DRIVE

H LOADING DOCK





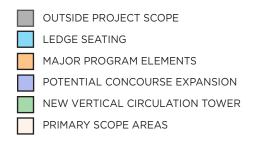
MAJOR PROGRAM **ELEMENTS**

CONCOURSE LEVEL 01

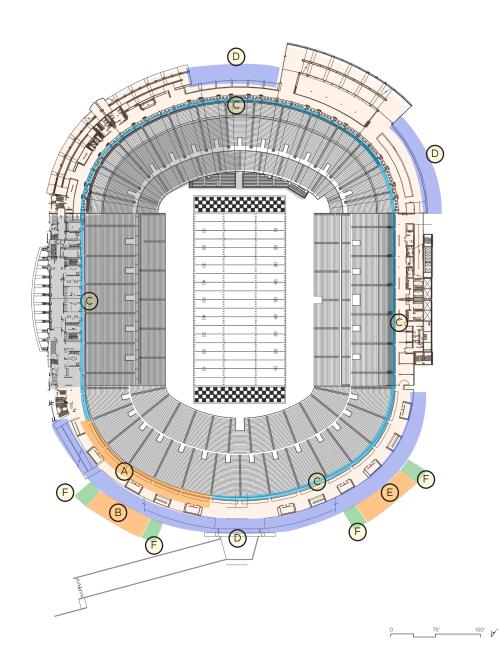
- OUTSIDE PROJECT SCOPE POTENTIAL CONCOURSE EXPANSION MAJOR PROGRAM ELEMENTS NEW VERTICAL CIRCULATION PRIMARY SCOPE AREAS
- CONSOLIDATED ENTRY GATES EXPANDED CONCOURSE
- VERTICAL CIRCULATION TOWER

5.2 MAJOR PROGRAM ELEMENTS

CONCOURSE LEVEL 02



- A NEW SUITES
- B NEW SUITE LOBBY (ALTERNATE)
- C LEDGE SEATING
- D EXPANDED CONCOURSE
- E FAN ZONE (ALTERNATE)
- F VERTICAL CIRCULATION TOWERS



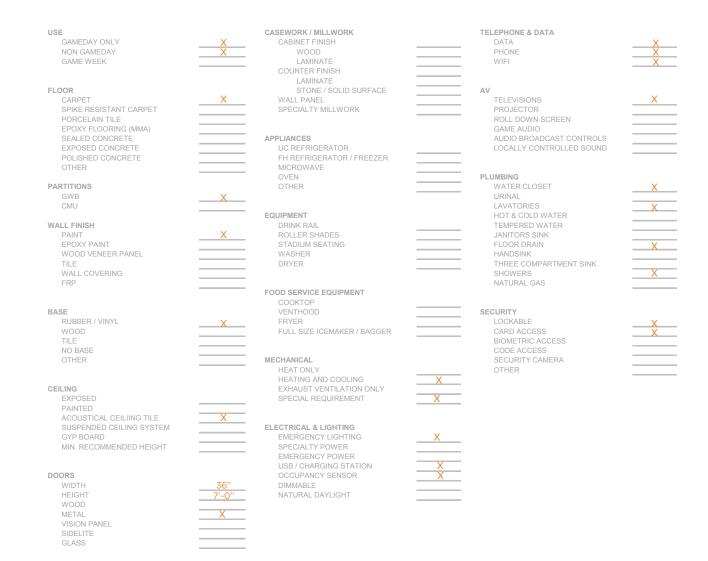
MAJOR PROGRAM **ELEMENTS**

CONCOURSE LEVEL 03



AUXILIARY COACHES LOCKER ROOM / SHOWERS 650 SF FINISH LEVEL / FL-14

NOTES



AUXILIARY EQUIPMENT ROOM 120 SF

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NOTES

Additional Requirements and Equipment

COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI X
LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	X TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO
APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAYE	AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES
EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY LOCKABLE X CARD ACCESS X BIOMETRIC ACCESS

CODE ACCESS

OTHER

SECURITY CAMERA

EXPOSED ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT

GAMEDAY ONLY

PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE

EXPOSED CONCRETE POLISHED CONCRETE

WOOD VENEER PANEL

WALL COVERING FRP

RUBBER / VINYL

SPIKE RESISTANT CARPET

NON GAMEDAY

GAME WEEK

CARPET

OTHER

PARTITIONS

GWB CMU

WALL FINISH

PAINT **EPOXY PAINT**

TILE

WOOD

NO BASE

OTHER

CEILING

BASE

FLOOR

DOORS	
WIDTH	
HEIGHT	
WOOD	
METAL	
VISION PANEL	
0.00.00	

GLASS

HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT

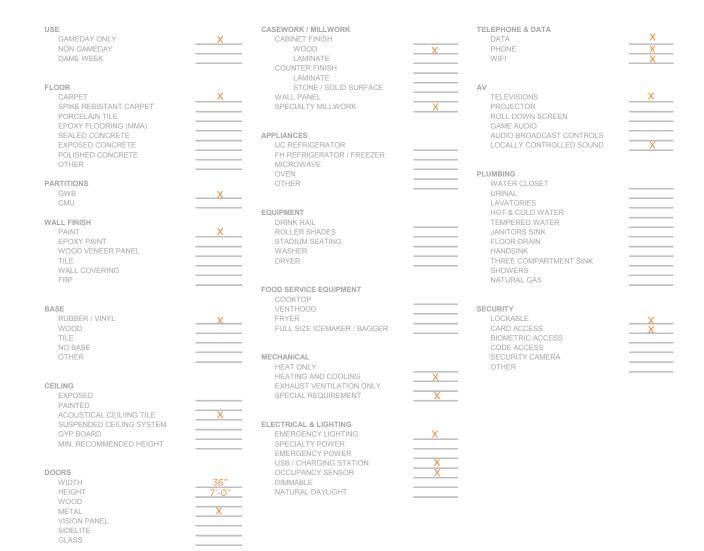
MECHANICAL

ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER **EMERGENCY POWER** USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT

AUXILIARY LOCKER ROOM 2.960 SF

FINISH LEVEL / FL-14

NOTES



AUXILIARY SHOWERS and TOILETS 800 SF

FINISH LEVEL /	FL-15
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NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
PARTITIONS GWB CMU	OVEN OTHER	PLUMBING
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL WOOD TILE NO BASE OTHER	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER MECHANICAL HEAT ONLY	SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER
CEILING EXPOSED PAINTED	HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	X
ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT	X ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER	X

USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

DOORS

WIDTH

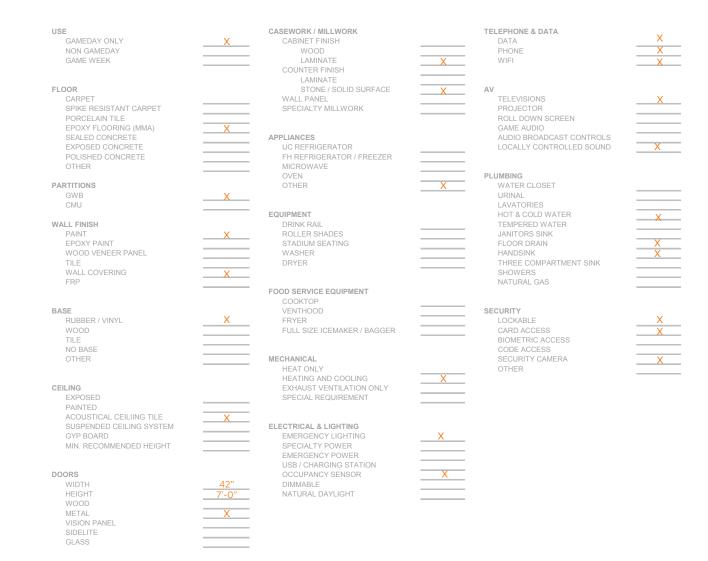
HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

AUXILIARY TRAINING ROOM 400 SF

FINISH LEVEL / FL-16

NOTES



GENERAL BUILDING STORAGE 7,500 SF

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NOTES

Additional Requirements and Equipment

TELEPHONE & DATA DATA	
PHONE	
WIFI	
AV	
TELEVISIONS	
PROJECTOR ROLL DOWN SCREEN	
GAME AUDIO	
AUDIO BROADCAST CONTROLS	
LOCALLY CONTROLLED SOUND	
PLUMBING	
WATER CLOSET	
URINAL	
LAVATORIES HOT & COLD WATER	
TEMPERED WATER	
JANITORS SINK	
FLOOR DRAIN	X
HANDSINK	
THREE COMPARTMENT SINK	

SECURITY

LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER



GAMEDAY ONLY NON GAMEDAY GAME WEEK

FLOOR

CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER

PARTITIONS

GWB CMU

WALL FINISH

PAINT **EPOXY PAINT** WOOD VENEER PANEL TILE WALL COVERING FRP

BASE

RUBBER / VINYL WOOD NO BASE OTHER

CEILING

PAINTED ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT

DOORS

WIDTH HEIGHT WOOD METAL VISION PANEL

CASEWORK / MILLWORK

CABINET FINISH WOOD LAMINATE COUNTER FINISH LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK

APPLIANCES

UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE OVEN OTHER

EQUIPMENT

DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER

FOOD SERVICE EQUIPMENT

COOKTOP

VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER

MECHANICAL

HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT

ELECTRICAL & LIGHTING

EMERGENCY LIGHTING SPECIALTY POWER **EMERGENCY POWER** USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT

SHOWERS NATURAL GAS



SMOKEY'S LOUNGE 100 SF

FINISH LEVEL / FL-17

NOTES



CONCESSION STAND - COOKING OVERALL SF VARIES 5 LINEAR FEET PER POINT OF SALE

FINISH LEVEL / FL-12

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE X WIFI
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	X PROJECTOR ROLL DOWN SCREEN GAME AUDIO X
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
PARTITIONS GWB CMU	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES HOT & COLD WATER X
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	DRINK RAIL ROLLER SHADES X STADIUM SEATING WASHER DRYER	TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD	X X SECURITY
RUBBER / VINYL WOOD TILE NO BASE	FRYER FULL SIZE ICEMAKER / BAGGER	X LOCKABLE X CARD ACCESS X BIOMETRIC ACCESS
OTHER	X MECHANICAL HEAT ONLY	SECURITY CAMERA X OTHER

WOOD

DOORS

WIDTH

HEIGHT

CEILING

EXPOSED PAINTED

GYP BOARD

ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

METAL VISION PANEL SIDELITE GLASS

HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT

ELECTRICAL & LIGHTING

EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT



CONCESSION STAND - NON-COOKING

OVERALL SF VARIES
5 LINEAR FEET PER POINT OF SALE

FINISH LEVEL / FL-12

NOTES



CONCOURSE CIRCULATION SF VARIES

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NOTES

Additional Requirements and Equipment

GAMEDAY ONLY NON GAMEDAY GAME WEEK X	LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	TELEVISIONS PROJECTOR ROLL DOWN SCREEN
EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
PARTITIONS GWB CMU	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL WOOD TILE	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS
NO BASE X OTHER	MECHANICAL HEAT ONLY HEATING AND COOLING	CODE ACCESS CODE ACCESS SECURITY CAMERA OTHER
EXPOSED X PAINTED	EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	

ELECTRICAL & LIGHTING

EMERGENCY LIGHTING

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

GYP BOARD

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

CONCOURSE RESTROOMS SF VARIES

FINISH LEVEL / FL-08

NOTES



ELEVATOR LOBBY 500 SF

FINISH LEVEL / FL-22 NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	CASEWORK / MILLWORK CABINET FINISH WOOD AMINATE COUNTER FINISH LAMINATE	TELEPHONE & DATA DATA PHONE WIFI X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	AV TELEVISIONS X PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND X
PARTITIONS GWB CMU	OVEN OTHER X EQUIPMENT	PLUMBING WATER CLOSET URINAL LAVATORIES HOT & COLD WATER
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER FOOD SERVICE EQUIPMENT	TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL WOOD TILE NO BASE OTHER	COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER MECHANICAL HEAT ONLY	SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER

DOORS

CEILING

EXPOSED PAINTED

GYP BOARD

ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE GLASS



ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE

NATURAL DAYLIGHT

HEATING AND COOLING

EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT



FAMILY TOILET ROOM 75 SF

FINISH LEVEL / FL-08

NOTES



SKY GARDEN (ALTERNATE) 3,888 SF

GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CABINET FINISH WOOD LAMINATE COUNTER FINISH		DATA PHONE WIFI	X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE		LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	X	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN	X
EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	X	GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	X X X
PARTITIONS GWB CMU	X	OVEN OTHER		PLUMBING WATER CLOSET URINAL LAVATORIES	
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X 	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	X	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	X
BASE RUBBER / VINYL WOOD TILE	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER		SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS	
NO BASE OTHER CEILING EXPOSED		MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	X	CODE ACCESS SECURITY CAMERA OTHER	X
PAINTED ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM GYP BOARD	X	ELECTRICAL & LIGHTING EMERGENCY LIGHTING	X		
MIN. RECOMMENDED HEIGHT DOORS WIDTH HEIGHT WOOD METAL VISION PANEL	36" 7'-0"	SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	X		

SIDELITE GLASS

FINISH LEVEL / FL-06

NOTES

FEMALE OFFICIALS LOCKER ROOM / SHOWER 300 SF

FINISH LEVEL / FL-14

NOTES



FIELD CLUB 19,500 SF

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X X X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	X	TELEPHONE & DATA DATA PHONE WIFI	×
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)	X	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	X	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO	X X X
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE		AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	X
PARTITIONS GWB CMU	X	OVEN OTHER EQUIPMENT	X	PLUMBING WATER CLOSET URINAL LAVATORIES HOT & COLD WATER	
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X X	DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	X	TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	
BASE RUBBER / VINYL WOOD TILE NO BASE	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER		SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS	X
OTHER CEILING EXPOSED PAINTED		MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	X	SECURITY CAMERA OTHER	X
ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT	X	ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER	X		
DOORS WIDTH HEIGHT	36" 7'-0"	USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	X		

WOOD METAL VISION PANEL SIDELITE GLASS

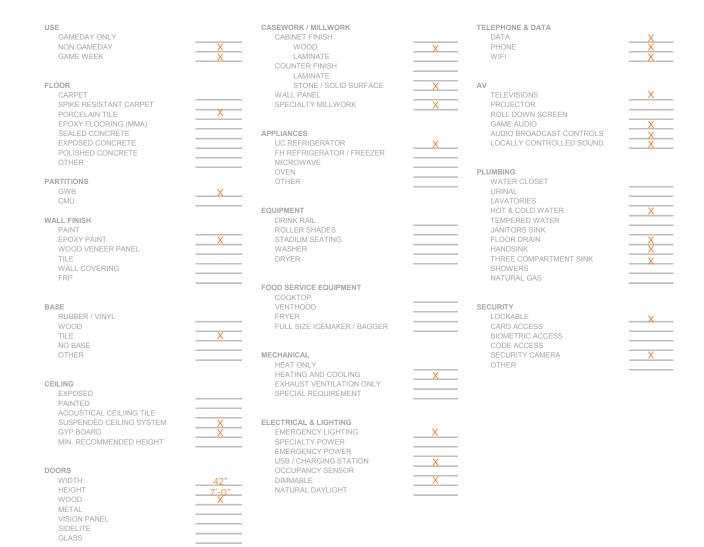
FINISH LEVEL / FL-03

NOTES

FIELD CLUB BAR 400 SF

FINISH LEVEL / FL-03

NOTES



FIELD CLUB LOBBY 500 SF

FINISH LEVEL / FL-22

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI	X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE	X WALL PANEL SPECIALTY MILLWORK X APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZ	TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	X X
OTHER PARTITIONS GWB CMU WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	MICROWAVE OVEN OTHER X EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	PLUMBING WATER CLOSET URINAL LAVATORIES HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	
BASE RUBBER / VINYL WOOD TILE NO BASE OTHER	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGG MECHANICAL HEAT ONLY	SECURITY LOCKABLE	X

HEATING AND COOLING

ELECTRICAL & LIGHTING

EMERGENCY LIGHTING

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT

CEILING

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL

EXPOSED PAINTED

GYP BOARD

ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

FIELD CLUB PATIO 3,000 SF

FINISH LEVEL / N/A

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH		TELEPHONE & DATA DATA PHONE WIFI	X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)		LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK		AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO	X
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE		AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	
PARTITIONS GWB CMU		OVEN OTHER EQUIPMENT		PLUMBING WATER CLOSET URINAL LAVATORIES HOT & COLD WATER	
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	X	TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	X
BASE RUBBER / VINYL WOOD TILE		FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER		SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS	
NO BASE OTHER CEILING EXPOSED	X	MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	X X	CODE ACCESS SECURITY CAMERA OTHER	
PAINTED ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT	X	ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER	X		
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE	36" 7'-0"	USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	<u>X</u>		

GLASS

FIELD CLUB TOILETS SF VARIES

FINISH LEVEL / FL-05

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH LAMINATE	TELEPHONE & DATA DATA PHONE WIFI X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	X AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
PARTITIONS	OVEN OTHER X EQUIPMENT	PLUMBING X
WOOD VENEER PANEL	DRINK RAIL ROLLER SHADES X STADIUM SEATING WASHER DRYER	TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL WOOD	X POD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY LOCKABLE CARD ACCESS
TILE NO BASE OTHER CEILING	MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY	BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER
EXPOSED PAINTED ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM	X X ELECTRICAL & LIGHTING	

EMERGENCY LIGHTING

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

GYP BOARD

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

MIN. RECOMMENDED HEIGHT

FIELD CLUB VIP AREA 625 SF

FINISH LEVEL / FL-03

NOTES



FIELD CLUB VIP AREA TOILETS 200 SF

FINISH LEVEL / FL-05

NOTES

Additional Requirements and Equipment

GAMEDAY ONLY NON GAMEDAY		CASEWORK / MILLWORK CABINET FINISH WOOD		TELEPHONE & DATA DATA PHONE	
GAME WEEK	X	LAMINATE COUNTER FINISH LAMINATE		WIFI	X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE	X	STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK APPLIANCES UC REFRIGERATOR	X	TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	X
POLISHED CONCRETE OTHER		FH REFRIGERATOR / FREEZER MICROWAVE OVEN		PLUMBING	
PARTITIONS GWB CMU	X	OTHER		WATER CLOSET URINAL LAVATORIES HOT & COLD WATER	X X X
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER		TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	X
		FOOD SERVICE EQUIPMENT COOKTOP		101101012 070	
BASE RUBBER / VINYL WOOD TILE NO BASE	X	VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER		SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS	
OTHER		MECHANICAL HEAT ONLY HEATING AND COOLING	X	SECURITY CAMERA OTHER	
CEILING EXPOSED PAINTED ACOUSTICAL CEILIING TILE	X	EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT			

CASEWORK / MILL WORK

ELECTRICAL & LIGHTING EMERGENCY LIGHTING

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

Her

SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

GYP BOARD

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

TELEBHONE & DATA

NEYLAND STADIUM RENOVATION / STADIUM PROGRAM | 99

FIELD EQUIPMENT and GROUNDS STORAGE 4,000 SF

FINISH LEVEL / FL-24

NOTES

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X X	ORK / MILLWORK INET FINISH WOOD LAMINATE INTER FINISH		TELEPHONE & DATA DATA PHONE WIFI	_
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE	X APPLIAN			TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS	
EXPOSED CONCRETE POLISHED CONCRETE OTHER	FH F MICF	REFRIGERATOR REFRIGERATOR / FREEZER ROWAVE		LOCALLY CONTROLLED SOUND	_
PARTITIONS GWB CMU	OVE OTH	ER		PLUMBING WATER CLOSET URINAL LAVATORIES	_
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X ROL	NK RAIL LER SHADES DIUM SEATING SHER		HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	
BASE RUBBER / VINYL WOOD TILE	COC VEN FRYI FULI	ERVICE EQUIPMENT IKTOP THOOD ER L SIZE ICEMAKER / BAGGER		SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS	
NO BASE OTHER	HEA	T ONLY TING AND COOLING	X	CODE ACCESS SECURITY CAMERA OTHER	_
CEILING EXPOSED PAINTED ACOUSTICAL CEILIING TILE		AUST VENTILATION ONLY CIAL REQUIREMENT			
SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT	EME SPE EME	ICAL & LIGHTING RGENCY LIGHTING CIALTY POWER RGENCY POWER	X		
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE GLASS	OCC	/ CHARGING STATION PUPANCY SENSOR MABLE URAL DAYLIGHT	X		

FIELD TUNNEL - VISITING TEAM 400 SF

FINISH LEVEL / N/A	١
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NOTES

Additional Requirements and Equipment

GAMEDAY ONLY X NON GAMEDAY GAME WEEK X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH LAMINATE	DATA DATA PHONE WIFI	X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)	STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	ROLL DOWN SCREEN GAME AUDIO	
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	LOCALLY CONTROLLED SOUND	
PARTITIONS	OVEN OTHER	PLUMBING WATER CLOSET	
GWB CMU X		URINAL LAVATORIES	
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	X
BASE	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD	SECURITY	
RUBBER / VINYL WOOD TILE	FRYER FULL SIZE ICEMAKER / BAGGER	LOCKABLE CARD ACCESS	
NO BASE X	MECHANICAL HEAT ONLY HEATING AND COOLING	CODE ACCESS SECURITY CAMERA OTHER	X
CEILING EXPOSED PAINTED ACOUSTICAL CEILING TILE	EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	X	

ELECTRICAL & LIGHTING

EMERGENCY LIGHTING SPECIALTY POWER

EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

METAL VISION PANEL SIDELITE GLASS

SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

GYP BOARD

DOORS

WIDTH

HEIGHT

WOOD

FOOD SERVICE PERSONNEL LOCKER 250 SF

FINISH LEVEL / FL-14

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE		EPHONE & DATA DATA PHONE WIFI	X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE	X X	COUNTER FINISH LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK		TELEVISIONS PROJECTOR ROLL DOWN SCREEN	X
EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER		APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE		GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	
PARTITIONS GWB CMU	X	OVEN OTHER EQUIPMENT		JMBING WATER CLOSET URINAL LAVATORIES HOT & COLD WATER	X X X
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	X X	TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	X
BASE RUBBER / VINYL WOOD TILE NO BASE OTHER	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER MECHANICAL HEAT ONLY	SEC	CURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER	X
CEILING EXPOSED PAINTED ACOUSTICAL CEILIING TILE		HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	X		
SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT		ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION	X		
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE	36" 7'-0" X	OCCUPANCING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	X		

GLASS

CHAIN CREW LOCKER 300 SF

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NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE		TELEPHONE & DATA DATA PHONE WIFI	X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE	X	COUNTER FINISH LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	X	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN	
EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER		APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	X	GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	
PARTITIONS GWB CMU	X	OVEN OTHER		PLUMBING WATER CLOSET URINAL LAVATORIES	
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER		HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	
BASE RUBBER / VINYL WOOD TILE NO BASE	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER MECHANICAL		SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS	X
OTHER		MECHANICAL HEAT ONLY HEATING AND COOLING	X	SECURITY CAMERA OTHER	

EXHAUST VENTILATION ONLY

SPECIAL REQUIREMENT

ELECTRICAL & LIGHTING EMERGENCY LIGHTING

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

CEILING

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

EXPOSED

PAINTED

GYP BOARD

ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

NEYLAND STADIUM RENOVATION / STADIUM PROGRAM | 103

JANITOR'S CLOSET 40 SF

FINISH LEVEL / FL-23

NOTES



KITCHEN OFFICES 120 SF

FINISH LEVEL / FL-10

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE	X WALL PANEL SPECIALTY MILLWORK APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
OTHER PARTITIONS GWB CMU	MICROWAVE OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL WOOD TILE NO BASE OTHER	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER MECHANICAL HEAT ONLY	SECURITY LOCKABLE X CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER
	HEATING AND COOLING	X

EXHAUST VENTILATION ONLY

SPECIAL REQUIREMENT

ELECTRICAL & LIGHTING EMERGENCY LIGHTING

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

CEILING

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

EXPOSED

PAINTED

GYP BOARD

ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

NEYLAND STADIUM RENOVATION / STADIUM PROGRAM | 105

LOADING DOCK PLATFORM 2,000 SF

FINISH LEVEL / FL-25

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DA' DATA PHONE WIFI	TA
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)		LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	AV TELEVISIONS PROJECTOR ROLL DOWN S GAME AUDIO	
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE		CAST CONTROLS TROLLED SOUND
PARTITIONS GWB CMU	X	OVEN OTHER	PLUMBING WATER CLOSE URINAL LAVATORIES	
WALL FINISH PAINT	X	EQUIPMENT DRINK RAIL ROLLER SHADES	HOT & COLD W TEMPERED W/ JANITORS SINI	ATER
EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP		STADIUM SEATING WASHER DRYER	FLOOR DRAIN HANDSINK THREE COMPA SHOWERS NATURAL GAS	ARTMENT SINK
		FOOD SERVICE EQUIPMENT COOKTOP		
BASE RUBBER / VINYL WOOD TILE	X	VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY LOCKABLE CARD ACCESS BIOMETRIC AC	
NO BASE OTHER	X	MECHANICAL HEAT ONLY HEATING AND COOLING	CODE ACCESS SECURITY CAN OTHER	
CEILING EXPOSED PAINTED ACOUSTICAL CEILIING TILE	X	EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT		
SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT		ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION	X	
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE	42" 7'-0" X X	OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT		

GLASS

LOADING DOCK RESTROOM 80 SF

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NOTES

Additional Requirements and Equipment

USE	CASEWORK / MILLWORK	TELEPHONE & DATA	
GAMEDAY ONLY	CABINET FINISH	DATA	
NON GAMEDAY	X WOOD	PHONE	
GAME WEEK	X LAMINATE	WIFI	
- O/ WILL WELLT	COUNTER FINISH		
	LAMINATE		
FLOOD			
FLOOR	STONE / SOLID SURFACE	AV	
CARPET	WALL PANEL	TELEVISIONS	
SPIKE RESISTANT CARPET	SPECIALTY MILLWORK	PROJECTOR	
PORCELAIN TILE	X	ROLL DOWN SCREEN	
EPOXY FLOORING (MMA)		GAME AUDIO	
SEALED CONCRETE	APPLIANCES	AUDIO BROADCAST CONTROLS	
EXPOSED CONCRETE	UC REFRIGERATOR	LOCALLY CONTROLLED SOUND	
POLISHED CONCRETE	FH REFRIGERATOR / FREEZER		
OTHER	MICROWAVE		
	OVEN	PLUMBING	
PARTITIONS	OTHER	WATER CLOSET	Y
	OTTER		X
GWB		URINAL	X
CMU	X	LAVATORIES	X
	EQUIPMENT	HOT & COLD WATER	X
WALL FINISH	DRINK RAIL	TEMPERED WATER	
PAINT	ROLLER SHADES	JANITORS SINK	
EPOXY PAINT	X STADIUM SEATING	FLOOR DRAIN	X
WOOD VENEER PANEL	WASHER	HANDSINK	
TILE	X DRYER	THREE COMPARTMENT SINK	
WALL COVERING	X	SHOWERS	
FRP		NATURAL GAS	
	FOOD SERVICE EQUIPMENT	TVTTOTOTE ONCO	
	COOKTOP		
BASE	VENTHOOD	OFCUBITY	
		SECURITY	X
RUBBER / VINYL	FRYER	LOCKABLE	
WOOD	FULL SIZE ICEMAKER / BAGGER	CARD ACCESS	
	X	BIOMETRIC ACCESS	
NO BASE		CODE ACCESS	
OTHER	MECHANICAL	SECURITY CAMERA	
_	HEAT ONLY	X OTHER	
	HEATING AND COOLING		

EXHAUST VENTILATION ONLY

SPECIAL REQUIREMENT

EMERGENCY LIGHTING

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

ELECTRICAL & LIGHTING

TELEBUONE & DATA

CASEWORK / MILL WORK

VISION PANEL SIDELITE GLASS

HOE

CEILING

DOORS

WIDTH

HEIGHT

WOOD METAL

EXPOSED

PAINTED

GYP BOARD

ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

MAIN COMMISSARY 10.000 SF

FINISH LEVEL / FL-11

NOTES



MAIN ELECTRICAL ROOM 1,500 SF

ΞIN	ISH	LEV	'EL /	′ FL	-25
			,		

NOTES

Additional Requirements and Equipment

GAMEDAY ONLY NON GAMEDAY GAME WEEK	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
PARTITIONS GWB CMU X	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL WOOD TILE	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS
NO BASE X	MECHANICAL HEAT ONLY HEATING AND COOLING	CODE ACCESS SECURITY CAMERA OTHER
EXPOSED X PAINTED	EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	

ELECTRICAL & LIGHTING EMERGENCY LIGHTING

SPECIALTY POWER

EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

GYP BOARD

DOORS

WIDTH

HEIGHT

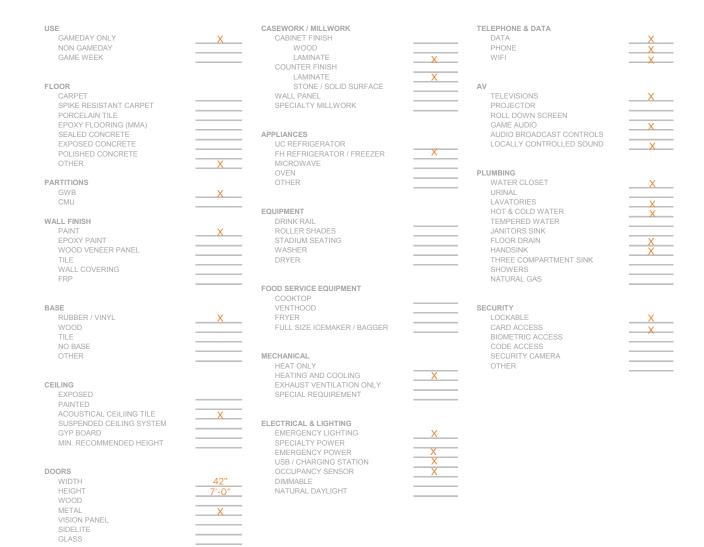
WOOD METAL VISION PANEL SIDELITE GLASS

NEYLAND STADIUM RENOVATION / STADIUM PROGRAM | 109

MAIN FIRST AID ROOM 750 SF

FINISH LEVEL / FL-09

NOTES



FACILITIES SERVICES MAINTENANCE 2,600 SF

FINISH LEVEL / FL-24

NOTES

Additional Requirements and Equipment

Facilities Services Office and storage. Attic Stock Stored here.

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH LAMINATE	TELEPHONE & DATA DATA PHONE WIFI	X X X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)		STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	AV TELEVISIONS PROJECTOR ROLL DOWN SCREE GAME AUDIO	N
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	IPPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE OVEN	AUDIO BROADCAST LOCALLY CONTROLI PLUMBING	
PARTITIONS GWB		OTHER	WATER CLOSET URINAL	
CMU	X	QUIPMENT	LAVATORIES HOT & COLD WATER	X
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTME SHOWERS NATURAL GAS	X X
	F	COOKTOP		
BASE RUBBER / VINYL WOOD TILE NO BASE	X	VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS	X
OTHER		IECHANICAL	SECURITY CAMERA	

OTHER

HEAT ONLY

CEILING

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

EXPOSED

PAINTED

GYP BOARD

ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

HEATING AND COOLING

SPECIAL REQUIREMENT

EMERGENCY LIGHTING

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

ELECTRICAL & LIGHTING

EXHAUST VENTILATION ONLY

MAINTENANCE LOUNGE 150 SF

FINISH LEVEL / FL-24

NOTES



MALE OFFICIALS LOCKER ROOM / SHOWER 450 SF

FINISH LEVEL / FL-14

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH LAMINATE	X	TELEPHONE & DATA DATA PHONE WIFI	X X X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE	X	STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER	X	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	
OTHER		MICROWAVE OVEN		PLUMBING	
PARTITIONS GWB CMU	X	OTHER		WATER CLOSET URINAL LAVATORIES	X X
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER		HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	X
BASE RUBBER / VINYL WOOD TILE	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER		SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS	X
NO BASE OTHER		MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY	X	CODE ACCESS SECURITY CAMERA OTHER	
EXPOSED PAINTED		SPECIAL REQUIREMENT	X		

ELECTRICAL & LIGHTING EMERGENCY LIGHTING

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

GYP BOARD

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

MERCHANDISE STORAGE 400 SF

FINISH LEVEL / FL-24

NOTES

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE		LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN
EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
PARTITIONS GWB CMU	X	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL		FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER	SECURITY LOCKABLE X CARD ACCESS X
WOOD TILE NO BASE OTHER	X	FULL SIZE ICEMAKER / BAGGER MECHANICAL HEAT ONLY	CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER
CEILING EXPOSED PAINTED ACOUSTICAL CEILIING TILE	X	HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	X
SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT		ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER	X
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE	42" / 48" 7'-0" X	USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	<u>X</u>

GLASS

MONEY COUNTING ROOM 400 SF

FIN	ISH	LEV	EL /	/ FL·	-10

NOTES

Additional Requirements and Equipment

OOL		OAGEWORK / MILLWORK	TELEFITORE & DATA	V
GAMEDAY ONLY	X	CABINET FINISH	DATA	X
NON GAMEDAY		WOOD	PHONE	Χ
GAME WEEK		LAMINATE	WIFI	X
		COUNTER FINISH		
		LAMINATE		
FLOOR		STONE / SOLID SURFACE	AV	
CARPET	X	WALL PANEL	TELEVISIONS	
SPIKE RESISTANT CARPET		SPECIALTY MILLWORK	PROJECTOR	
PORCELAIN TILE		SPECIALI I WILLWORK		
			ROLL DOWN SCREEN	
EPOXY FLOORING (MMA)			GAME AUDIO	
SEALED CONCRETE		APPLIANCES	AUDIO BROADCAST CONTROLS	
EXPOSED CONCRETE		UC REFRIGERATOR	LOCALLY CONTROLLED SOUND	
POLISHED CONCRETE		FH REFRIGERATOR / FREEZER		
OTHER		MICROWAVE		
		OVEN	PLUMBING	
PARTITIONS		OTHER	WATER CLOSET	
GWB	X		URINAL	
CMU			LAVATORIES	
		EQUIPMENT	HOT & COLD WATER	
WALL FINISH		DRINK RAIL	TEMPERED WATER	
PAINT	V	ROLLER SHADES	JANITORS SINK	
EPOXY PAINT	X	STADIUM SEATING	FLOOR DRAIN	
WOOD VENEER PANEL		WASHER	HANDSINK —	
TILE		DRYER	THREE COMPARTMENT SINK	
WALL COVERING			SHOWERS	
FRP			NATURAL GAS	
		FOOD SERVICE EQUIPMENT		
		COOKTOP		
BASE		VENTHOOD	SECURITY	
RUBBER / VINYL	X	FRYER	LOCKABLE	X
WOOD		FULL SIZE ICEMAKER / BAGGER		X
TILE			BIOMETRIC ACCESS	
NO BASE			CODE ACCESS	
OTHER		MECHANICAL	SECURITY CAMERA	X
0111211		HEAT ONLY	OTHER	
			X	_X
		HEATING AND COOLING	^	

METAL VISION PANEL SIDELITE GLASS

WIDTH

HEIGHT

WOOD

CEILING

DOORS

EXPOSED PAINTED

GYP BOARD

ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

USE

ELECTRICAL & LIGHTING

CASEWORK / MILLWORK

EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT

EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT

TELEPHONE & DATA

MOTHER'S ROOM 200 SF

FINISH LEVEL / FL-09

NOTES

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	X	TELEPHONE & DATA DATA PHONE WIFI	X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)		LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	X	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO	X
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	X	AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	X
PARTITIONS GWB CMU	X	OVEN OTHER		PLUMBING WATER CLOSET URINAL LAVATORIES	
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER		HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	X
BASE RUBBER / VINYL WOOD TILE	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER		SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS	X
NO BASE OTHER CEILING EXPOSED		MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	X	CODE ACCESS SECURITY CAMERA OTHER	
PAINTED ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT	X	ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER	X		
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE GLASS	36" 7'-0" X	USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	X		

OFFICIALS MEETING ROOM

X	I
X	
	<u>.</u>
X	

5.3 **ROOM DATA SHEETS**

175 SF

FINISH LEVEL / FL-17

NOTES

Additional Requirements and Equipment

USE		CASEWORK / MILLWORK	TELEPHONE & DATA	
GAMEDAY ONLY	X	CABINET FINISH		X
NON GAMEDAY		WOOD	PHONE	X
GAME WEEK		LAMINATE	WIFI	×
		COUNTER FINISH		
		LAMINATE		
FLOOR		STONE / SOLID SURFACE	AV	
CARPET		WALL PANEL	TELEVISIONS	
SPIKE RESISTANT CARPET	X	SPECIALTY MILLWORK	PROJECTOR	
PORCELAIN TILE		OI LOIALTT WILLWORK	ROLL DOWN SCREEN	
EPOXY FLOORING (MMA)			GAME AUDIO	
SEALED CONCRETE		APPLIANCES	AUDIO BROADCAST CONTROLS	
EXPOSED CONCRETE				
		UC REFRIGERATOR	LOCALLY CONTROLLED SOUND	
POLISHED CONCRETE		FH REFRIGERATOR / FREEZER		
OTHER		MICROWAVE		
		OVEN	PLUMBING	
PARTITIONS		OTHER	WATER CLOSET	
GWB			URINAL	
CMU	X		LAVATORIES	
		EQUIPMENT	HOT & COLD WATER	
WALL FINISH		DRINK RAIL	TEMPERED WATER	
PAINT	X	ROLLER SHADES	JANITORS SINK	
EPOXY PAINT		STADIUM SEATING	FLOOR DRAIN	
WOOD VENEER PANEL		WASHER	HANDSINK	
TILE		DRYER	THREE COMPARTMENT SINK	
WALL COVERING			SHOWERS	
FRP			NATURAL GAS	
		FOOD SERVICE EQUIPMENT		
		COOKTOP		
BASE		VENTHOOD	SECURITY	
RUBBER / VINYL	X	FRYER	LOCKABLE	X
WOOD		FULL SIZE ICEMAKER / BAGGER	CARD ACCESS	
TILE			BIOMETRIC ACCESS	
NO BASE			CODE ACCESS	
OTHER		MECHANICAL	SECURITY CAMERA	
J		HEAT ONLY	OTHER	
		IILAI VIILI	OTTEN	

HEATING AND COOLING

SPECIAL REQUIREMENT

ELECTRICAL & LIGHTING EMERGENCY LIGHTING

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

EXHAUST VENTILATION ONLY

CEILING

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

EXPOSED

PAINTED

GYP BOARD

ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

NEYLAND STADIUM RENOVATION / STADIUM PROGRAM | 117

PREMIUM KITCHEN 5,000 SF

FINISH LEVEL / FL-11

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	CASEWORK / MILLWORK CABINET FINISH WOOD X LAMINATE COUNTER FINISH	TELEPHONE & DATA
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK X APPLIANCES	X TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS
EXPOSED CONCRETE POLISHED CONCRETE OTHER	UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	LOCALLY CONTROLLED SOUND
PARTITIONS GWB CMU	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER
BASE RUBBER / VINYL WOOD TILE NO BASE OTHER	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER X MECHANICAL	SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA X
CEILING EXPOSED PAINTED ACOUSTICAL CEILIING TILE	HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	OTHER X
SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT	ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER	<u>X</u>
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE	USB / CHARGING STATION OCCUPANCY SENSOR 42" DIMMABLE 7'-0" NATURAL DAYLIGHT	

GLASS

SATELLITE FIRST AID ROOMS 450 SF

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	X	TELEPHONE & DATA DATA PHONE WIFI	X X X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)		LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	X	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO	
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	X	AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	
PARTITIONS GWB CMU	X	OVEN OTHER EQUIPMENT		PLUMBING WATER CLOSET URINAL LAVATORIES HOT & COLD WATER	X
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER		TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	X
BASE RUBBER / VINYL WOOD	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER		SECURITY LOCKABLE CARD ACCESS	X
TILE NO BASE OTHER CEILING		MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY	X	BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER	
EXPOSED PAINTED ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM	X	SPECIAL REQUIREMENT ELECTRICAL & LIGHTING			
GYP BOARD MIN. RECOMMENDED HEIGHT		EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION	X		
DOORS WIDTH HEIGHT	<u>36"</u> 7'-0"	OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	X		

WOOD METAL VISION PANEL SIDELITE GLASS

FINISH LEVEL / FL-09 **NOTES**

SECURITY RESTROOM 75 sf

FINISH LEVEL / FL-21

NOTES



SECURITY CHECK-IN 200 SF

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI	X X X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE	X	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK APPLIANCES UC REFRIGERATOR	X AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	
POLISHED CONCRETE OTHER		FH REFRIGERATOR / FREEZER MICROWAVE OVEN	PLUMBING	
PARTITIONS GWB CMU	X	OTHER	WATER CLOSET URINAL LAVATORIES HOT & COLD WATER	
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	
BASE RUBBER / VINYL WOOD	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY	X
TILE NO BASE OTHER		MECHANICAL HEAT ONLY HEATING AND COOLING	BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER	X X
CEILING EXPOSED PAINTED ACOUSTICAL CEILIING TILE	X	EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT		
SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT		ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION	X 	
DOORS WIDTH HEIGHT	36" 7'-0"	OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	X	

WOOD METAL VISION PANEL SIDELITE GLASS

FINISH LEVEL / FL-24

NOTES

FACILITIES SERVICES ZONE MAINTENANCE (NON STADIUM) 5,000 SF

FINISH LEVEL / FL-10

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE		LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO
EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
PARTITIONS GWB CMU	X	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	LAVATORIES HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL	×	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER	SECURITY
WOOD TILE NO BASE		FULL SIZE ICEMAKER / BAGGER	CARD ACCESS X BIOMETRIC ACCESS CODE ACCESS
OTHER CEILING EXPOSED PAINTED	X	MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	SECURITY CAMERA OTHER X
ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT		ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION	
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE	42" 7'-0" X	OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	X

GLASS

SECURITY PROCESSING CENTER 200 SF

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE	X	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
OTHER PARTITIONS GWB CMU	X	MICROWAVE OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL WOOD TILE NO BASE	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY LOCKABLE X CARD ACCESS X BIOMETRIC ACCESS
OTHER CEILING EXPOSED PAINTED	X	MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	CODE ACCESS SECURITY CAMERA OTHER X
ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT DOORS		ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION OCCUPANCY SENSOR	X
WIDTH	36"	DIMMABLE	

NATURAL DAYLIGHT

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

FINISH LEVEL / FL-24

NOTES

FIELD EQUIPMENT and GROUNDS 4,000 SF

FINISH LEVEL / FL-24

NOTES

Additional Requirements and Equip

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI	X X X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)		LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO	
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	
PARTITIONS GWB CMU	X	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES	
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	X X
BASE RUBBER / VINYL		FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER	SECURITY LOCKABLE	X
WOOD TILE NO BASE OTHER	X	FULL SIZE ICEMAKER / BAGGER MECHANICAL HEAT ONLY	CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER	X
CEILING EXPOSED PAINTED ACOUSTICAL CEILING TILE	X X	HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	X	
SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT		ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER	X X	
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE	42" 7'-0" X	USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	X	

GLASS

MAINTENANCE SHOP 1,500 SF

USE	CASEWORK / MILLWORK	TELEPHONE & DATA
GAMEDAY ONLY	CABINET FINISH	DATA
NON GAMEDAY X	WOOD	PHONE
GAME WEEK	LAMINATE	WIFI
	COUNTER FINISH	
	LAMINATE	
FLOOR	STONE / SOLID SURFACE	AV
CARPET	WALL PANEL	TELEVISIONS
SPIKE RESISTANT CARPET	SPECIALTY MILLWORK	PROJECTOR
PORCELAIN TILE		ROLL DOWN SCREEN
EPOXY FLOORING (MMA)		GAME AUDIO
SEALED CONCRETE X	APPLIANCES	AUDIO BROADCAST CONTROLS
EXPOSED CONCRETE	UC REFRIGERATOR	LOCALLY CONTROLLED SOUND
POLISHED CONCRETE	FH REFRIGERATOR / FREEZER	
OTHER	MICROWAVE	
	OVEN	PLUMBING
PARTITIONS	OTHER	WATER CLOSET
GWB	OTTER	URINAL
CMU X		LAVATORIES
	EQUIPMENT	HOT & COLD WATER X
WALL FINISH	DRINK RAIL	TEMPERED WATER X
PAINT X	ROLLER SHADES	JANITORS SINK
EPOXY PAINT	STADIUM SEATING	FLOOR DRAIN X
WOOD VENEER PANEL	WASHER	HANDSINK
TILE	DRYER	HANDSINK THREE COMPARTMENT SINK
WALL COVERING		SHOWERS
FRP		NATURAL GAS
	FOOD SERVICE EQUIPMENT	101101012 0710
	COOKTOP	
BASE	VENTHOOD	SECURITY
RUBBER / VINYL	FRYER	LOCKABLE X CARD ACCESS X
WOOD	FULL SIZE ICEMAKER / BAGGER	CARD ACCESS X
TILE		BIOMETRIC ACCESS
NO BASE X		CODE ACCESS
OTHER	MECHANICAL	BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA X
	HEAT ONLY	OTHER
	HEATING AND COOLING	X
CEILING	EXHAUST VENTILATION ONLY	
EXPOSED Y	SPECIAL REQUIREMENT	X
PAINTED		
ACOUSTICAL CEILING TILE		
SUSPENDED CEILING SYSTEM	ELECTRICAL & LIGHTING	
GYP BOARD		
	EMERGENCY LIGHTING	X X
MIN. RECOMMENDED HEIGHT	SPECIALTY POWER	
	EMERGENCY POWER	X
	USB / CHARGING STATION	
DOORS	OCCUPANCY SENSOR	X
WIDTH <u>42"</u>	DIMMABLE	
HEIGHT 7'-0"	NATURAL DAYLIGHT	
WOOD		
METAL		

VISION PANEL SIDELITE GLASS

FINISH LEVEL / FL-24

NOTES

SERVICE CORRIDOR 22,500 SF

FINISH LEVEL / FL-24

NOTES



FIELD LEVEL CLUB - SHOW COOKING 700 SF

USE	CASEWORK /			HONE & DATA	V
GAMEDAY ONLY	CABINET		DA		X
NON GAMEDAY	X	DD		ONE	
GAME WEEK		INATE	WII	FI	X
	COUNTER				
		INATE			
FLOOR			X AV		
CARPET	WALL PAI	_		LEVISIONS	X
SPIKE RESISTANT CARPET		Y MILLWORK	- / /	OJECTOR	
PORCELAIN TILE	X			LL DOWN SCREEN	
EPOXY FLOORING (MMA)				ME AUDIO	X
SEALED CONCRETE	APPLIANCES			DIO BROADCAST CONTROLS	
EXPOSED CONCRETE		GERATOR	LO	CALLY CONTROLLED SOUND	
POLISHED CONCRETE		GERATOR / FREEZER			
OTHER	MICROWA	4VE			
	OVEN	_	PLUMB		
PARTITIONS	OTHER	_		ATER CLOSET	
GWB	X			INAL	
CMU				VATORIES	
	EQUIPMENT			T & COLD WATER	X
WALL FINISH	DRINK RA	.IL	TEI	MPERED WATER	
PAINT	ROLLER S	HADES	JAN	NITORS SINK	
EPOXY PAINT	X STADIUM			OOR DRAIN	X
WOOD VENEER PANEL	WASHER		HA	NDSINK	X
TILE	X DRYER		THI	REE COMPARTMENT SINK	
WALL COVERING				OWERS	
FRP			NA	TURAL GAS	X
	FOOD SERVIO	CE EQUIPMENT			
	COOKTOR	_	X		
BASE	VENTHOO)D	X SECUR	RITY	
RUBBER / VINYL	FRYER		LO	CKABLE	
WOOD		ICEMAKER / BAGGER	CA	RD ACCESS	
TILE	X		BIC	DMETRIC ACCESS	
NO BASE			CO	DE ACCESS	X
OTHER	MECHANICAL		SE	CURITY CAMERA	X
	HEAT ON	_Y	OT	HER	
	HEATING	AND COOLING	X		
CEILING	EXHAUST	VENTILATION ONLY			
EXPOSED	SPECIAL	REQUIREMENT	X		
PAINTED		_			
ACOUSTICAL CEILIING TILE					
SUSPENDED CEILING SYSTEM	X ELECTRICAL	& LIGHTING			
GYP BOARD		NCY LIGHTING	X		
MIN. RECOMMENDED HEIGHT	SPECIALT	Y POWER			
	EMERGEN	NCY POWER			
	USB / CHA	ARGING STATION			
DOORS	OCCUPAN	NCY SENSOR			
WIDTH	DIMMABL	=			
HEIGHT	NATURAL	DAYLIGHT			
WOOD		_			
METAL					

SIDELITE GLASS

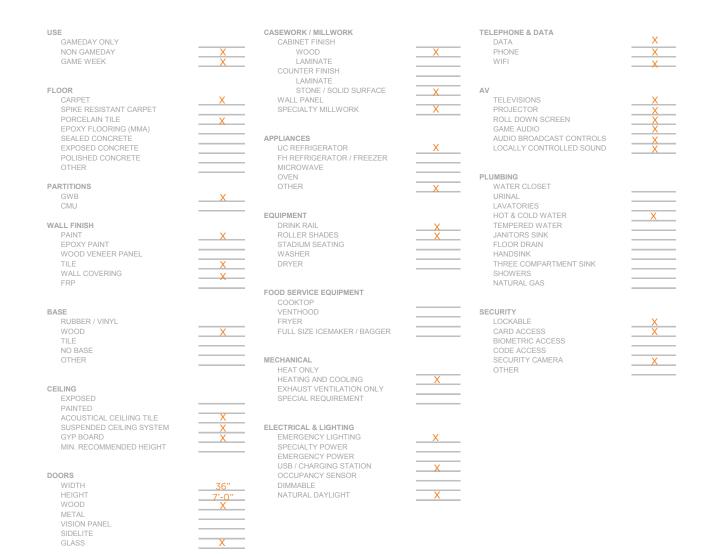
FINISH LEVEL / FL-03

NOTES

02 LOUNGE (ALTERNATE) (CONCOURSE 02 SUITE LOBBY / LOUNGE) 5.500 SF

FINISH LEVEL / FL-04

NOTES



KITCHEN STAFF **RESTROOMS AND LOCKERS** 600 SF

FINISH LEVEL / FL-21
NOTES
Additional Requirements and Equipment

ISE GAMEDAY ONLY NON GAMEDAY GAME WEEK	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI	X X X
CLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	X TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO	
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	
PARTITIONS GWB CMU	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES	X X X
VALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK	X
RASE RUBBER / VINYL WOOD TILE NO BASE	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY LOCKABLE	X X
OTHER	MECHANICAL HEAT ONLY	SECURITY CAMERA OTHER	

HEATING AND COOLING

SPECIAL REQUIREMENT

EMERGENCY LIGHTING SPECIALTY POWER

EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

ELECTRICAL & LIGHTING

EXHAUST VENTILATION ONLY

USE

FLOOR CARPET

OTHER **PARTITIONS** GWB CMU WALL FINISH PAINT

BASE

CEILING

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

EXPOSED

PAINTED

GYP BOARD

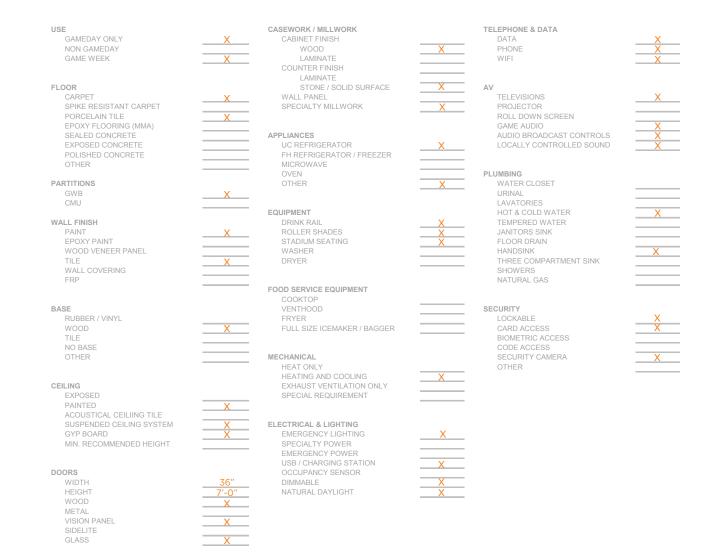
ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

SUITE 350 SF

FINISH LEVEL / FL-01

NOTES



SUITE LOBBY (GROUND LEVEL) 500 SF

USE	CASEWORK / MILLWORK	TELEPHONE & DATA	
GAMEDAY ONLY	CABINET FINISH	DATA	X
NON GAMEDAY	X WOOD	PHONE	
GAME WEEK	X LAMINATE	WIFI	X
	COUNTER FINISH		
	LAMINATE		
FLOOR	STONE / SOLID SURFACE	AV	
CARPET	X WALL PANEL	TELEVISIONS	X
SPIKE RESISTANT CARPET	SPECIALTY MILLWORK	PROJECTOR	
PORCELAIN TILE	SPECIALTY MILLWORK	ROLL DOWN SCREEN	
EPOXY FLOORING (MMA)		GAME AUDIO	X
SEALED CONCRETE	APPLIANCES	AUDIO BROADCAST CONTROLS	
EXPOSED CONCRETE		LOCALLY CONTROLLED SOUND	X
POLISHED CONCRETE	UC REFRIGERATOR FH REFRIGERATOR / FREEZER	LOCALLY CONTROLLED SOUND	X
OTHER	MICROWAVE		
OTHER	OVEN	PLUMBING	
PARTITIONS	OTHER	WATER CLOSET	
GWB	X	URINAL	
CMU		LAVATORIES	
	EQUIPMENT	HOT & COLD WATER	
WALL FINISH	DRINK RAIL	TEMPERED WATER	
PAINT	X ROLLER SHADES	X JANITORS SINK	
EPOXY PAINT	STADIUM SEATING	FLOOR DRAIN	
WOOD VENEER PANEL	WASHER	HANDSINK	
TILE	X DRYER	THREE COMPARTMENT SINK	
WALL COVERING	X	SHOWERS	
FRP		NATURAL GAS	
	FOOD SERVICE EQUIPMENT		
	COOKTOP		
BASE	VENTHOOD	SECURITY	
RUBBER / VINYL	FRYER	LOCKABLE	
WOOD	X FULL SIZE ICEMAKER / BAGGER	CARD ACCESS	X
TILE		BIOMETRIC ACCESS	
NO BASE		CODE ACCESS	X
OTHER	MECHANICAL	SECURITY CAMERA	X
	HEAT ONLY	OTHER	
	HEATING AND COOLING	X	
CEILING	EXHAUST VENTILATION ONLY		
EXPOSED	SPECIAL REQUIREMENT		
PAINTED			
ACOUSTICAL CEILIING TILE			
SUSPENDED CEILING SYSTEM	X ELECTRICAL & LIGHTING		
GYP BOARD	X EMERGENCY LIGHTING	X	
MIN. RECOMMENDED HEIGHT	SPECIALTY POWER		
WIIIV. NECOWINIENDED HEIGHT	EMERGENCY POWER	X	
	USB / CHARGING STATION		
DOORS	OCCUPANCY SENSOR		
WIDTH		X	
WIDTH HEIGHT	7'-0" DIMMABLE NATURAL DAYLIGHT		
HEIGH I	NATURAL DAYLIGHT		

METAL VISION PANEL SIDELITE GLASS

FINISH LEVEL / FL-02

NOTES

SUITE PANTRY 350 SF

FINISH LEVEL / FL-07

NOTES



SUITE TOILETS 220 SF

FINISH LEVEL / FL-05

NOTES

Additional Requirements and Equipment

USE	CASEWORK / MILLWORK	TELEPHONE & DATA
GAMEDAY ONLY	CABINET FINISH	DATA
NON GAMEDAY	Y WOOD	X PHONE
GAME WEEK	X LAMINATE	X PHONE WIFI X
	COUNTER FINISH	
	LAMINATE	
FLOOR		X AV
CARPET	WALL PANEL	TELEVISIONS
SPIKE RESISTANT CARPET	SPECIALTY MILLWORK	
PORCELAIN TILE	X	ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS
EPOXY FLOORING (MMA)		GAME AUDIO X
SEALED CONCRETE	APPLIANCES	AUDIO BROADCAST CONTROLS
EXPOSED CONCRETE	UC REFRIGERATOR	LOCALLY CONTROLLED SOUND
POLISHED CONCRETE	FH REFRIGERATOR / FREEZER	
OTHER	MICROWAVE	
	OVEN	PLUMBING
PARTITIONS	OTHER	WATER CLOSET Y
GWB	X	URINAL
CMU		LAVATORIES
_	EQUIPMENT	HOT & COLD WATER
WALL FINISH	DRINK RAIL	WATER CLOSET URINAL LAVATORIES HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDENNY
PAINT	ROLLER SHADES	JANITORS SINK
EPOXY PAINT	STADIUM SEATING	FLOOR DRAIN X
WOOD VENEER PANEL	WASHER	HANDSINK
TILE	X DRYER	THREE COMPARTMENT SINK
WALL COVERING	A DIVIEN	SHOWERS
FRP		NATURAL GAS
-	FOOD SERVICE EQUIPMENT	NATONAL GAG
	COOKTOP	
BASE	VENTHOOD	SECURITY
RUBBER / VINYL	FRYER	LOCKABLE
WOOD	FULL SIZE ICEMAKER / BAGGER	CARD ACCESS
	X	BIOMETRIC ACCESS
NO BASE		CODE ACCESS
OTHER	MECHANICAL MECHANICAL	SECURITY CAMERA
	HEAT ONLY	OTHER
	HEATING AND COOLING	X
CEILING	EXHAUST VENTILATION ONLY	
EXPOSED	SPECIAL REQUIREMENT	
PAINTED		
ACOUSTICAL CEILIING TILE	X	
SUSPENDED CEILING SYSTEM	ELECTRICAL & LIGHTING	

EMERGENCY LIGHTING

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

GYP BOARD

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

MIN. RECOMMENDED HEIGHT

TEAM STORE 2,000 SF

FINISH LEVEL / FL-13

NOTES



TICKET RESOLUTION 120 SF

FINISH LEVEL / FL-18

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	CASEWORK / MILLWORK CABINET FINISH X WOOD X LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE X WIFI
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER	X AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
OTHER PARTITIONS GWB CMU	MICROWAVE OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL WOOD TILE NO BASE OTHER	X FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER MECHANICAL HEAT ONLY	SECURITY LOCKABLE X CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA X OTHER

WOOD METAL

WIDTH

HEIGHT

CEILING

DOORS

EXPOSED PAINTED

GYP BOARD

ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

VISION PANEL SIDELITE GLASS

HEATING AND COOLING

EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT

EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT

CARDBOARD BAILER / RECYCLING 1,000 SF

FINISH LEVEL / FL-25

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI	_
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)		LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO	_
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	
PARTITIONS GWB CMU	X	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES	
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER X TEMPERED WATER JANITORS SINK FLOOR DRAIN X HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	
BASE RUBBER / VINYL WOOD TILE NO BASE		FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS	
OTHER CEILING EXPOSED PAINTED ACOUSTICAL CEILING TILE	X	MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	SECURITY CAMERA X OTHER	
SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT		ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION	X	
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE	42" 7'-0" X	OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	X	

GLASS

TRUCK PARKING / LOADING 2,000 SF

FINISH LEVEL / N/A

NOTES

Additional Requirements and Equipment

GAMEDAY ONLY	CABINET FINISH	DATA	
NON GAMEDAY	X WOOD	PHONE	_
GAME WEEK	X LAMINATE	WIFI	_
	COUNTER FINISH		_
	LAMINATE		
FLOOR	STONE / SOLID SURFACE	AV	
CARPET	WALL PANEL	TELEVISIONS	
SPIKE RESISTANT CARPET	SPECIALTY MILLWORK	PROJECTOR	_
PORCELAIN TILE		ROLL DOWN SCREEN	_
EPOXY FLOORING (MMA)		GAME AUDIO	
SEALED CONCRETE	X APPLIANCES	AUDIO BROADCAST CONTROLS	
EXPOSED CONCRETE	UC REFRIGERATOR	LOCALLY CONTROLLED SOUND	_
POLISHED CONCRETE	FH REFRIGERATOR / FREEZER		_
OTHER	MICROWAVE		
	OVEN	PLUMBING	
PARTITIONS	OTHER	WATER CLOSET	_
GWB		URINAL	
CMU	X		
	EQUIPMENT	HOT & COLD WATER X	
WALL FINISH	DRINK RAIL	TEMPERED WATER	_
PAINT	X ROLLER SHADES		
EPOXY PAINT	STADIUM SEATING	JANITORS SINK FLOOR DRAIN X	_
WOOD VENEER PANEL	WASHER	HANDSINK	
TILE	DRYER	THREE COMPARTMENT SINK	
WALL COVERING		SHOWERS	_
FRP		NATURAL GAS	_
	FOOD SERVICE EQUIPMENT		
	COOKTOP		
BASE	VENTHOOD	SECURITY	
RUBBER / VINYL	FRYER	LOCKABLE X CARD ACCESS X	_
WOOD	FULL SIZE ICEMAKER / BAGGER	CARD ACCESS X	_
TILE		BIOMETRIC ACCESS	_
NO BASE	X	CODE ACCESS	_
OTHER	MECHANICAL	SECURITY CAMERA X	_
	HEAT ONLY	X OTHER	_
	HEATING AND COOLING		

EXHAUST VENTILATION ONLY

SPECIAL REQUIREMENT

EMERGENCY LIGHTING

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

ELECTRICAL & LIGHTING

TELEPHONE & DATA

CASEWORK / MILLWORK

USE

CEILING

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

EXPOSED

PAINTED

GYP BOARD

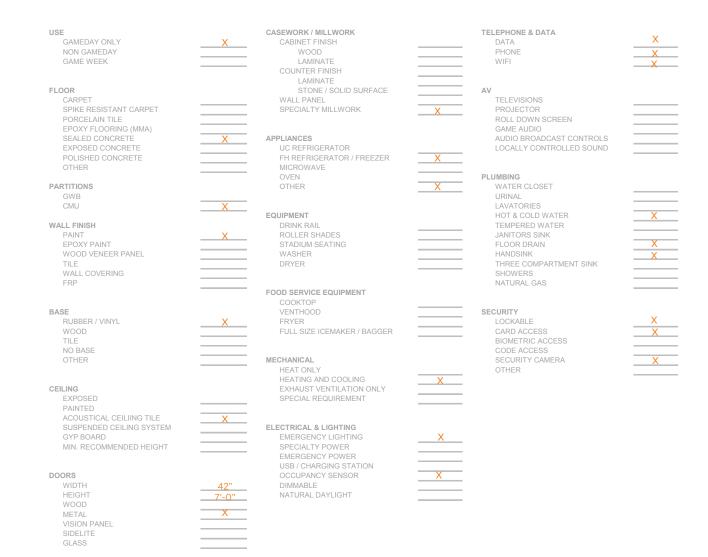
ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

VENDOR COMMISSARY 2,260 TOTAL SF

FINISH LEVEL / FL-07

NOTES



VISITING COACHES LOCKER ROOM / SHOWERS 650 SF

	FINISH	LEVEL .	/ FL-14
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NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	X TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
PARTITIONS GWB CMU	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES HOT & COLD WATER X
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL WOOD	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY LOCKABLE CARD ACCESS
TILE NO BASE OTHER	MECHANICAL HEAT ONLY	BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER
CEILING	HEATING AND COOLING EXHAUST VENTILATION ONLY	X

SPECIAL REQUIREMENT

EMERGENCY LIGHTING

SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

ELECTRICAL & LIGHTING

EXPOSED

PAINTED

GYP BOARD

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

VISITING EQUIPMENT ROOM 120 SF

FINISH LEVEL / FL-16

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE		LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK APPLIANCES	TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS
EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE OVEN	LOCALLY CONTROLLED SOUND PLUMBING
PARTITIONS GWB CMU	X	OTHER	WATER CLOSET URINAL LAVATORIES
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
		FOOD SERVICE EQUIPMENT COOKTOP	
BASE RUBBER / VINYL WOOD TILE NO BASE	X	VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS
OTHER CEILING EXPOSED PAINTED		MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	SECURITY CAMERA X OTHER
ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT	X	ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER	X
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE	42" 7'-0" X	USB / CHARGING STATION OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	X

GLASS

VISITING MEDIA INTERVIEW ROOM 800 SF

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	PHONE	X X X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA)	X	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK	PROJECTOR ROLL DOWN SCREEN GAME AUDIO	X
SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER		APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	X
PARTITIONS GWB CMU	X	OVEN OTHER EQUIPMENT	LICT & COLD WATER	
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X	DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK	
BASE RUBBER / VINYL WOOD	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER	CARD ACCESS	X X
TILE NO BASE OTHER		MECHANICAL HEAT ONLY HEATING AND COOLING	BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER	X
CEILING EXPOSED PAINTED		EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT		

ELECTRICAL & LIGHTING EMERGENCY LIGHTING

SPECIALTY POWER

EMERGENCY POWER USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

ACOUSTICAL CEILIING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

GYP BOARD

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

FINISH LEVEL / FL-17

NOTES

VISITING TEAM LOCKER ROOM 3.600 SF

FINISH LEVEL / FL-14

NOTES



VISITING TEAM SHOWERS / TOILETS 1,900 SF

FINISH LEVEL / FL-15

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER		X AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND
PARTITIONS GWB CMU	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES X
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	LAVATORIES HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL WOOD	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER MECHANICAL HEAT ONLY	SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY SECURITY AMERA OTHER
CEILING EXPOSED PAINTED	HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	X
ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT	ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER	X

USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

VISITING TRAINING ROOM 450 SF

FINISH LEVEL / FL-16

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI	X
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE OTHER	X	LAMINATE STONE / SOLID SURFACE WALL PANEL SPECIALTY MILLWORK APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER MICROWAVE	X TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND	X
PARTITIONS GWB CMU	X	OVEN OTHER	PLUMBING WATER CLOSET URINAL LAVATORIES	
WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X 	EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS	X X X
BASE RUBBER / VINYL	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER	SECURITY LOCKABLE	X
WOOD TILE NO BASE OTHER		FULL SIZE ICEMAKER / BAGGER MECHANICAL HEAT ONLY	CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER	X
CEILING EXPOSED PAINTED ACOUSTICAL CEILIING TILE	X	HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	X	
SUSPENDED CEILING SYSTEM GYP BOARD MIN. RECOMMENDED HEIGHT		ELECTRICAL & LIGHTING EMERGENCY LIGHTING SPECIALTY POWER EMERGENCY POWER USB / CHARGING STATION	X 	
DOORS WIDTH HEIGHT WOOD METAL VISION PANEL SIDELITE	42" 7'-0" X	OCCUPANCY SENSOR DIMMABLE NATURAL DAYLIGHT	X	

GLASS

5.3 **ROOM DATA SHEETS**

WALK-IN RETAIL STORES 400 SF

FINISH LEVEL / FL-13

NOTES

Additional Requirements and Equipment

USE GAMEDAY ONLY NON GAMEDAY GAME WEEK	X	CASEWORK / MILLWORK CABINET FINISH WOOD LAMINATE COUNTER FINISH	TELEPHONE & DATA DATA PHONE WIFI
FLOOR CARPET SPIKE RESISTANT CARPET PORCELAIN TILE EPOXY FLOORING (MMA) SEALED CONCRETE EXPOSED CONCRETE POLISHED CONCRETE	X	WALL PANEL SPECIALTY MILLWORK APPLIANCES UC REFRIGERATOR FH REFRIGERATOR / FREEZER	AV TELEVISIONS PROJECTOR ROLL DOWN SCREEN GAME AUDIO AUDIO BROADCAST CONTROLS LOCALLY CONTROLLED SOUND Y
OTHER PARTITIONS GWB CMU WALL FINISH PAINT EPOXY PAINT WOOD VENEER PANEL TILE WALL COVERING FRP	X X	MICROWAVE OVEN OTHER EQUIPMENT DRINK RAIL ROLLER SHADES STADIUM SEATING WASHER DRYER	PLUMBING WATER CLOSET URINAL LAVATORIES HOT & COLD WATER TEMPERED WATER JANITORS SINK FLOOR DRAIN HANDSINK THREE COMPARTMENT SINK SHOWERS NATURAL GAS
BASE RUBBER / VINYL WOOD TILE NO BASE OTHER CEILING EXPOSED	X	FOOD SERVICE EQUIPMENT COOKTOP VENTHOOD FRYER FULL SIZE ICEMAKER / BAGGER MECHANICAL HEAT ONLY HEATING AND COOLING EXHAUST VENTILATION ONLY SPECIAL REQUIREMENT	SECURITY LOCKABLE CARD ACCESS BIOMETRIC ACCESS CODE ACCESS SECURITY CAMERA OTHER

ELECTRICAL & LIGHTING EMERGENCY LIGHTING

SPECIALTY POWER **EMERGENCY POWER** USB / CHARGING STATION

OCCUPANCY SENSOR

NATURAL DAYLIGHT

DIMMABLE

EXPOSED PAINTED

GYP BOARD

DOORS

WIDTH

HEIGHT

WOOD METAL VISION PANEL SIDELITE GLASS

ACOUSTICAL CEILING TILE SUSPENDED CEILING SYSTEM

MIN. RECOMMENDED HEIGHT

5.3 ROOM DATA SHEETS

WAREWASHING AREA 350 SF

FINISH LEVEL / FL-11

NOTES

Additional Requirements and Equipment



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5.4 ROOM FINISH LEGENDS

UNIVERSITY OF TENNESSEE

FL-01 / SUITES

FINISH LEVEL: FL-01 LOCATION(S): Suites

FLOORING: 25% broadloom carpet

75% wood-look porcelain tile

BASE: 6" stained walnut wood base

WALLS: 75% painted gyp. board

25% glass and aluminum operable wall

10% porcelain tile

CEILING: 40% wood-look metal ceiling panels with torsion spring grid system

60 % painted gyp. board

MILLWORK: Stained walnut base cabinets, Stained walnut coat closet.

COUNTERS: Granite

DRINK RAILS: 12"D granite counter on stainless steel posts with 24"H frosted glass modesty panel

ADDITIONAL

FEATURES: (2) Glass front undercounter refrigerators, equal to Perlick.

(1) Drink Bin.

(2) Drop-in Induction Burners.

DOORS/ FRAMES: Wood doors with anodized aluminum frames.

FINISH LEVEL: FL-02

LOCATION(S): Lobby, Club Lobby

FLOORING: 40% broadloom carpet

60% large format porcelain tile

BASE: 6" stained walnut wood base with molded profile.

WALLS: 40% painted gyp. board

25% glass and aluminum storefront

25% stone tile 10% wallcovering

CEILING: 40% wood-look metal ceiling panels with torsion spring grid system

> 40% painted gyp. board 20% acoustical ceiling tile

CEILING

FEATURE: Large pendant light fixture.

MILLWORK: Moveable walnut reception desk with granite countertop.

DOORS/ FRAMES: Walnut wood flat paneled doors with painted hollow metal frames.

5.4 **ROOM FINISH LEGENDS**

FL-02 / LOBBY / CLUB LOBBY

5.4 ROOM FINISH LEGENDS

UNIVERSITY OF TENNESSEE

FL-03 / FIELD CLUB

FINISH LEVEL: FL-03

LOCATION(S): Field Club , Field Club VIP

FLOORING: 60% carpet tile

40% stained concrete

BASE: 6" resilient base with molded profile

WALLS: 40% wallcovering

40% painted gyp. board

20% porcelain tile

CEILING: 20% painted gyp. board

30% wood-look metal ceiling panels with torsion spring grid system

50% acoustical ceiling tile

MILLWORK: 30 linear feet of built in banquettes.

50 linear feet of built-in buffet counter in walnut base cabinet with induction warmers.

BAR:

FLOORING: Porcelain tile

COUNTER: Quartz equal to Cambria, Fieldstone.

BAR FRONT: Mosaic glass tile

BACK BAR: Porcelain tile

DOOR FRAMES: Painted hollow metal doors and frames.

FINISH LEVEL: FL-04

LOCATION(S): 02 Lounge

FLOORING: 60% carpet tile

40% porcelain tile

BASE: 6" stained walnut wood base with molded profile

WALLS: 50% painted gyp. board

20% porcelain 30% wallcovering.

CEILING: 40% painted gyp. board.

60% acoustical ceiling

MILLWORK: 50 linear feet of buffet counter in walnut base cabinet with induction warmers.

BAR:

FLOORING: Porcelain tile

COUNTER: Quartz surface

BAR FRONT: LED backlit acrylic with custom graphic

BAR BACK: 40% porcelain tile

60% mirror glass with clear glass shelving

DOORS/ FRAMES: Walnut wood flat paneled doors with hollow metal frame with wood casing.

5.4 ROOM FINISH LEGENDS

FL-04 / LOUNGE

5.4 ROOM FINISH LEGENDS

FL-05 / PREMIUM TOILETS

FINISH LEVEL: FL-05

LOCATION(S): Premium Toilets

FLOORING: Porcelain tile

BASE: Porcelain tile (coordinate to floor tile).

WALLS: 45% porcelain tile

45% painted gyp. Board (epoxy paint).

10% mosaic accent tile

CEILING: 30% painted gyp. board

70% acoustical ceiling tile

TOILET PARTITIONS:

Stainless steel partitions.

COUNTER: Quartz surface

ADDITIONAL

FEATURES: Walnut wood framed mirrors.

Walnut plumbing shield.



FINISH LEVEL: FL-06

LOCATION(S): Fan Zone, Sky Garden

FLOORING: Integral Color Cast in Place Concrete

BASE: Resilient base

WALLS: 90% painted gyp. Board/CMU

10% Graphic element with printed metal panels

CEILING: 40% open aluminum grid system

30% painted gyp. board

30% exposed

DRINK RAIL: Granite

MILLWORK: BAR/CONESSION:

> FLOORING: Porcelain tile

COUNTER: Polished concrete

BAR FRONT: Porcelain tile

BACK BAR: Porcelain tile

5.4 **ROOM FINISH LEGENDS**

FL - 06 / FAN ZONE / SKY GARDEN

5.4 ROOM FINISH LEGENDS

FL-07 / STORAGE, COMMISSARY VENDING

UNIVERSITY OF TENNESSEE

FL-08 / PUBLIC CONCOURSE RESTROOMS

FINISH LEVEL: FL-07

LOCATION(S): Club Storage, Fan Zone Storage, Merchandise Storage, Commissary Vending, Concession Storage

FLOORING: Sealed Concrete

BASE: Resilient base

Note: No base necessary at CMU walls

WALLS: Painted gyp. board

CEILING: Acoustical ceiling tile

DOOR FRAMES: Painted hollow metal doors and frames

FINISH LEVEL: FL-08

LOCATION(S): Public Concourse Restrooms, Concourse Family Toilets

FLOORING: Sealed concrete

WALLS: Painted CMU (epoxy paint)

BASE: Resilient base

CEILING: Acoustic ceiling tile

PARTITIONS: Stainless Steel

NOTES: Provide Wall Hung Fixtures.

DOORS/ FRAMES: Aluminum storefront or painted hollow metal doors and frames depending on location.

FINISH LEVEL: FL-09

LOCATION(S): First Aid, Exam Room, Mother's Room

FLOORING: Vinyl composite tile

BASE: Resilient base

WALLS: Painted gyp. board or CMU.

CEILING: Acoustical ceiling tile

DOORS/ FRAMES: Painted hollow metal doors and frames

MILLWORK: Plastic laminate upper/base cabinets.

COUNTERS: Solid surface

FINISH LEVEL FL-10

LOCATION(S): Offices

FLOORING: Broadloom carpet

BASE: Resilient base

WALLS: Painted gyp. board

CEILING: Acoustical ceiling tile

DOORS/ FRAMES: Painted hollow metal doors with hollow metal frame.

5.4 ROOM FINISH LEGENDS

FL-09 / FIRST AID ROOM / MOTHER'S ROOM

FL-10 / OFFICES

5.4 ROOM FINISH LEGENDS

FL-11 / PREMIUM KITCHEN / COMMISSARY / PANTRY

FL-12 / CONCESSION STAND

UNIVERSITY OF TENNESSEE

FINISH LEVEL: FL-11

LOCATION(S) Premium Kitchen, Main Commissary, Pantry, Warewashing Area

FLOORING: Epoxy flake flooring system

BASE: Integral poured epoxy cove base

WALLS: 70% Epoxy painted CMU or gyp. board

20% FRP, full height (not in view of public).

CEILING: Washable ceiling tile (Clean room ceiling)

COUNTERS: Stainless steel

DOORS/ FRAMES: Painted hollow metal doors and frames or match doors of adjacent spaces

FINISH LEVEL: FL-12

LOCATION(S): Concession Stand

FLOORING: Epoxy flake flooring system

BASE: Integral poured epoxy cove base

WALLS: Painted CMU or gyp. board

Note: Wall in view of public to have ceramic tile

CEILING: Washable ceiling tile (Clean room ceiling)

COUNTERS: Stainless Steel Countertop across the entire width of opening

DOORS/ FRAMES: Painted hollow metal doors and frames or match doors of adjacent spaces

NOTES: Provide overhead coiling door for security

FINISH LEVEL: FL-13

LOCATION(S): Team Store, Walk-in Store

FLOORING: 75% carpet tile

25% porcelain tile

BASE: Resilient base

WALLS: 80% painted gyp. board

20% wallcovering

Note: provide slat wall on 80% of wall surfaces

CEILING: 70% acoustical ceiling tile

30% painted gyp. board

FINISH LEVEL: FL-14

LOCATION(S): Visitor Locker Room, Visiting Coaches Locker Room, Aux Locker Room, Male Officials Lockers,

Female Officials Lockers, Chain Crew, Food Service Personnel Locker

FLOORING: Spike resistant carpet tile

BASE: Resilient base

WALLS: Painted CMU or gyp. board

CEILING: Acoustical ceiling tile

DOORS/FRAMES: Painted hollow metal doors and frames

NOTE: Provide 24" wide metal lockers

5.4 ROOM FINISH LEGENDS

FL-13 / TEAM STORE / WALK-IN STORE

FL-14 / VISITING TEAM LOCKER ROOM / AUXILIARY LOCKER ROOM / OFFICIALS LOCKER ROOMS

5.4 ROOM FINISH LEGENDS

FL-15 / VISITOR SHOWER+TOILET /
AUXILIARY SHOWER + TOILET /
OFFICIALS SHOWERS

FL-16 / VISITOR TRAINING ROOM / VISITOR EQUIPMENT ROOM

UNIVERSITY OF TENNESSEE

FINISH LEVEL: FL-15

LOCATION(S): Visitor Shower/Toilets, Aux Shower/Toilets, Official Showers

FLOORING: Epoxy flake flooring system

WALLS: 60% porcelain tile

40% painted gyp. board (epoxy paint)

CEILING: Epoxy painted waterproof GMMU substrate.

MILLWORK: Storage shelves and/or cubbies shall be solid surface with wall mounted solid surface drying

benches

COUNTERS: Solid surface

PLUMBING

SHIELD: Below counter individual removable covers at sink plumbing. Finish shall be metal laminate.

TOILET

PARTITION: Phenolic

DOORS/

FRAMES: Painted hollow metal doors and frames

FINISH LEVEL: FL-16

LOCATION(S): Visitor Training Room, Visitor Equipment Room, Auxiliary Equipment Room, Auxiliary Training

Room

FLOORING: Spike resistant rubber flooring

BASE: Resilient base

WALLS: Painted CMU or gyp. board

CEILING: Acoustic ceiling tile

MILLWORK: Plastic laminate base and upper cabinets with plastic laminate countertop

DOORS/ FRAMES: Painted hollow metal doors and frames

FINISH LEVEL: FL-17

LOCATION(S): Visiting Entry, Visiting Media Interview Room, Officials Meeting Room. Smokey's Lounge

FLOORING: Spike resistant carpet tile

BASE: Resilient base

WALLS: Painted gyp. board

Acoustical ceiling tile CEILING:

DOORS/FRAMES: Painted hollow metal doors and frames.

FINISH LEVEL: FL-18

LOCATION(S): Ticketing, Guest Ticketing

FLOORING: Vinyl composition tile

BASE: Resilient base

WALLS: Painted gyp. board or CMU

CEILING: Acoustical ceiling tile

DOORS/ FRAMES: Painted hollow metal doors and frames.

MILLWORK: Provide plastic laminate upper/base cabinets at break rooms or copy/workroom the solid surface

Provide ticketing windows and counter at Ticket office

5.4 **ROOM FINISH LEGENDS**

FL-17 / VISITOR ENTRY / VISITOR MEDIA / OFFICIALS MEETING ROOM / SMOKEY'S LOUNGE

FL-18 / TICKETING / GUEST TICKETING

5.4 ROOM FINISH LEGENDS

FL-19 / LOBBY / RECEPTION

FL-20 / BREAK ROOM / COPY ROOM

UNIVERSITY OF TENNESSEE

FINISH LEVEL: FL-19

LOCATION(S): Ticketing Lobby/ Reception

FLOORING: Porcelain tile

BASE: Porcelain tile (coordinate to floor tile)

WALLS: 45% porcelain tile

45% painted gyp. (epoxy paint)

10% accent tile

CEILING: Acoustical ceiling tile

NOTE: Existing Toilet and lavatory fixtures to remain.

FINISH LEVEL: FL-20

LOCATION(S): Breakroom, Copy Room

FLOORING: Vinyl composition tile

BASE: Resilient base

WALLS: Painted gyp. board or CMU

CEILING: Acoustical ceiling tile

DOORS/ FRAMES: Painted hollow metal doors and frames.

MILLWORK: Provide plastic laminate upper/base cabinets with plastic laminate counters

FINISH LEVEL: FL-21

LOCATION(S): Office/Back of house Restrooms

FLOORING: Porcelain tile

BASE: Porcelain tile (coordinate to floor tile).

WALLS: 45% porcelain tile

45% painted gyp. (epoxy paint).

10% accent tile

CEILING: Acoustical ceiling tile

NOTE: All single toilets to have acoustical ceiling tile equal to Armstrong, Dune Tegular, with

Prelude grid system.

TOILET PARTITIONS: Phenolic

DOORS/ FRAMES: Painted hollow metal doors and frames or match doors of adjacent spaces.

FINISH LEVEL: FL-22

LOCATION(S): Elevator Lobbies, Misc. Lobbies

FLOORING: Porcelain tile

BASE: Porcelain tile (coordinate to floor tile).

WALLS: Painted gyp. board

CEILING: 20% painted gyp. board.

80% acoustical ceiling tile

DOORS/ FRAMES: Wood or Painted hollow metal doors and frames.

5.4 ROOM FINISH LEGENDS

FL-21 / OFFICE SUITE RESTROOMS

FL-22 / ELEVATOR LOBBIES / MISC LOBBIES

5.4 ROOM FINISH LEGENDS

FL-23 / JANITOR'S CLOSETS

FL-24 / STORAGE / GENERAL

FL-25 / MECHANICAL / ELECTRICAL / DATA / TRASH ROOMS

FINISH LEVEL: FL-23

LOCATION(S): Janitors Closets

FLOORING: Sealed concrete

BASE: Resilient base

Note: No base necessary at CMU walls.

WALLS: Epoxy paint

Note: Provide FRP panels at mop sink wall.

CEILING: Exposed

DOORS/ FRAMES: Painted hollow metal doors and frames or match doors of adjacent spaces.

FINISH LEVEL: FL-24

LOCATION(S): General Storage, Security

FLOORING: Sealed concrete

BASE: Resilient base

Note: No base necessary at CMU walls.

WALLS: Painted gyp. board or CMU

CEILING: Exposed

DOORS/ FRAMES: Painted hollow metal doors and frames or match doors of adjacent spaces.

FINISH LEVEL: FL-25

LOCATION(S): Mechanical Rooms, Electrical Rooms, Telecommunications Rooms, Fan Rooms, AUH,

Trash/Recycling

FLOORING: Sealed concrete

BASE: No base

WALLS: Painted gyp. board or CMU

CEILING: Open to structure above.

DOORS/ FRAMES: Painted hollow metal doors and frames.

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FF+E SCHEDULE

	Space Classification	Number	Item	Qty.	Extended Qty.
_	,	Number	Rem	Qiy.	Extended Qty.
	Spectator Facilities Spectator Seating:	_		1	
	Ledge Seating:	1	Side Chair	600	600
	Leage Seating	'	Olde Oriali	000	000
В	Southwest Suites:				
	Private suites	15	Barstools at Drinkrail	4	60
-	Trivate duties		Barstools at Table	6	
			Bar Height Table (30" x 72")	1	1:
			Accessories, rugs, trash cans, mirrors,etc.	1	15
			Under Counter Refrigerators	2	
			Induction Warmer	2	31
			maddidii framci	_	
	Lobby	1	Lounge chairs	4	4
			Sofa	1	
			Coffee table	1	
			Side table	2	
			Bench	1	
	O2 Lounge	1	Lounge chairs	8	8
	3.		Sofa	4	4
			Coffee table	4	
			Side table	8	
			Bench	3	
			Bar Height Table (36" round)	20	
			Barstool	80	
	Mens/Womens Toilets	2	Accessories, trash cans, mirrors,etc.	1	2
C.	Field Level Club				
	Field Club	1	Barstool	72	72
			Bar Height Large Table (30" x 72")	20	21
			Bar Height Small Table (24" round)	40	41
			Dining Table (48" round)	20	21
			Dining Chair	80	81
			2 Seat Sofa with Drink Shelf	6	
			Lounge Chair	12	13
			Side Table	6	
			Bench	4	
			Accessories, rugs, trash cans, mirrors,etc.	1	
			Artwork	2	
	Private Lounge (Game day)	1	2 Seat Sofa with Drink Shelf	12	1:
	Trivate Lourige (Gaine day)	·		24	
			Lounge Chair		
	***************************************		Coffee Table	12	1:
			Side Table	24	24
			Bench	4	
			Barstool	36	3
			Bar Height Large Table (30" x 72")	6	(
	Private Lounge (Non-Game day)	1	Work Table, Nesting (22" x 48")	25	
			Stack Chairs	50	5
			Lecturn	1	
				1	
	Club Lobby	1	Lounge chairs Sofa	4	

FFE MASTER LIST - Allowance Distribution Page 1 of 5

D. S	Field Club Patio		Side table Bench	1	2
D. S	Field Club Patio		Bench	1	4
D. S	Field Club Patio				1
D. S	Field Club Patio				
D. \$		1	Bar Height Table (30" round)	24	24
D. \$					
	Mens/Womens Toilets	4	Accessories, trash cans, mirrors,etc.	1	4
	SE Fan Zone:				
	Fan Zone	1	Bar Height Table (30" x 72")	6	6
			Bar Height Table (24" round)	30	30
			Barstool	60	60
	Sky Garden	1	Bar Height Table (30" x 72")	8	8
			Bar Height Table (24" round)	30	30
			Barstool	60	60
	SW Fan Zone:				
	Sky Garden	1	Bar Height Table (30" x 72")	8	8
- 1	ony Gardell	· ·	Bar Height Table (30 × 72)	30	30
+		-	Barstool	60	60
-			Duistooi	00	00
E. 1	Public Restrooms-Concourse:	1			
(Concourse 01	16	Accessories, trash cans, mirrors,etc.	1	16
(Concourse 02	18	Accessories, trash cans, mirrors,etc.	1	18
(Concourse 03	16	Accessories, trash cans, mirrors,etc.	1	16
-		_			_
- 1	Family Restroom	6	Accessories, trash cans, mirrors,etc.	1	6
F (Guest Service Areas:				
	Main First Aid Room	1	Side Chair	6	6
			Exam Table	3	3
			Medical Stool	1	1
			Accessories, trash cans, mirrors,etc.	1	1
1	Mens/Womens Toilets	2	Accessories, trash cans, mirrors,etc.	1	2
(Office	2	Desk	1	2
_			Task Chair	1	2
			Side Chair	2	4
-			Accessories, trash cans, mirrors, etc.	1	2
	Satilite First Aid Room	3	Side Chair	2	6
	Saunte i iist Ald Noom		Exam Table	1	3
			Medical Stool	1	3
-			Accessories, trash cans, mirrors, etc.	1	3
-			recessories, trasificans, minors, etc.	·······	
ı	Mothers Room	3			
			Lounge Chair	2	6
_	F				
_	Food Service and Retail Fa	acilities			
	Food Service	ļ			
- 0	Offices	1	Desk	1	1
		-	Task Chair	1	1
				1 2	2
		-	Side Chair Accessories, trash cans, mirrors, etc.	1	1
-		-	rioccoonico, iraon cano, minuto, etc.		
_	Team Facilities			_	

FFE MASTER LIST - Allowance Distribution Page 2 of 5

5.5 FURNISHING, FIXTURE AND **EQUIPMENT DEVELOPMENT**

FF+E SCHEDULE

FF+E SCHEDULE

	Space Classification	Vumber	ltem	Qty.	Extended Qty.
A.	Visiting Team Facility				
	Visiting Locker Room	2	Lockers	40	80
			Folding Chair	40	80
	Visiting Training Room	1	Taping Table	2	2
			Treament Table	1	1
	Visiting Media Interview Room	1	Chairs	50	50
	Visiting Coach Locker room	2	Lockers Folding Chair	40 40	80
	Misc.	1	Accessories, trash cans, mirrors, etc.	1	1
_			Accessories, trasti cans, minors, etc.		
В.	Band Locker Room /Aux Locker R Aux Locker Room		Lockers	40	80
	Aux Locker (Voil)		Folding Chair	40	80
	Aux Training Room	1	Taping Table Treament Table	2	2
			Treament Table		
	Aux Coach Locker room	1	Lockers	10	10
			Folding Chair	10	10
	Misc.	1	Accessories, trash cans, mirrors, etc.	1	1
C.	Cheer Locker Room				
	Cheerleader Halftime Room	1	Lockers/ Cubbies	18	18
			Folding Chair	36	36
	Smokey's Lounge	1	Lounge Chair	1	1
			Under counter Refrigerator	2	2
			Cubbies Grass Pad	1	1
	Misc.	1	Accessories, trash cans, mirrors, etc.	1	1
_	047-1-1-				
υ.	Officials Chain Crew	1	Lockers/ Cubbies	18	18
	Onain oron	<u>·</u>	Folding Chair	40	40
	Male Officials Locker/Shower		Laster (O. bbiss	6	
	Male Officials Locker/Snower	1	Lockers/ Cubbies Folding Chair	6	6
	5				
	Female Officials Locker/Shower	1	Lockers/ Cubbies Folding Chair	6	6
	Officials Mosting Doom		Table	1	
	Officials Meeting Room	<u>'</u>	Task Chair	6	6
			Marker Board	1	1
	Misc.	1	Accessories, trash cans, mirrors, etc.	1	1
IV	Media Facilities				
	Media and Press				
В.	Media/Press Support				
	Administrative Facilities				
Α.	Ticketing		Panah		
	Ticketing Lobby	1	Bench	1	1
			Marker Board	9	9

FFE MASTER LIST - Allowance Distribution Page 3 of 5

	Space Classification	Number	Item	Qty.	Extended Qty.
			Art, accessories, trash cans, mirrors, etc.	1	1
	Ticket Window	3	Task Chair	2	6
	Work Area (General Office)	1	Workstation	6	6
	(-	Task Chair	6	
			Pedestal File	6	
			Marker Board	1	1
				ļ.,	
	Office Type 1 (large)	1	U-shape Desk	1	1
			Task Chair	1	1
			Credenza	1	1 1
			Table (48" round) Side Chair	4	
			Lateral File	4	
			Marker Board	1	1
	Office Type 2 (small)	2	Desk	1	2
			Task Chair	1	2
			Credenza	1	2
			Side Chair	2	
			Marker Board	1	2
	Guest Relations Conference Room	1	Table	1	1
	Guest Relations Conference Room		Task Chair	8	
			Credenza	1	1
			Marker Board	1	1
	N			1	1
	Misc.	- '	Accessories, trash cans, mirrors, etc.		'
В.	Guest Ticketing	1	Task Chairs	2	2
C.	Shared Services				
	Break Room	1	Dining Table (48" round)	2	2
			Dining Chair	8	
			Marker Board	1	
			Refrigerator	2	
			Dishwasher	1	1
			Microwave	2	
			Coffee Maker	2	2
	Copy Room	1	Storage shelving	2	2
		·	Mail Sorter	2	
	Misc.	1	Accessories, trash cans, mirrors, etc.	1	1
	Service and Operations Fa	cilities	_		
Α.	Offices/Operations				
	Open Office	1	Workstation	4	4
		-	Task Chair	4	
			Pedestal File Marker Board	4	
			manor Bodiu		
	Misc.	1	Accessories, trash cans, mirrors, etc.	1	1
	Conference Room	1	Table	1	1
		İ	Task Chair	8	
			Credenza	1	1
			Marker Board	1	1
	Misc.	1	Accessories, trash cans, mirrors, etc.	1	1
	process		,,,,	<u> </u>	

FFE MASTER LIST - Allowance Distribution Page 4 of 5

FF+E SCHEDULE

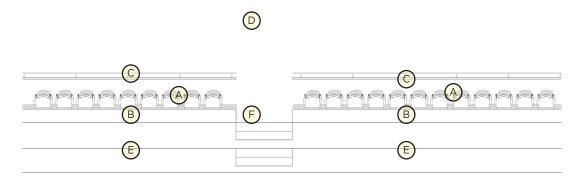
FF+E SCHEDULE

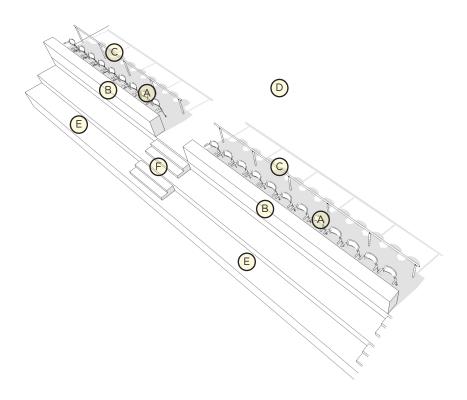
	Space Classification	Number	Item	Qty.	Extended Qty.
В.	Docking/Staging	1	Recycling Containers	2	2
			Marker Board	1	1
c	Security				
	Office Type 2 (small)	2	Desk	1	2
	Cinico Typo 2 (cinicin)	-	Task Chair	1	2
			Credenza	1	2 2 2 4
			Side Chair	2	4
			Marker Board	1	2
	Misc.	1	Accessories, trash cans, mirrors, etc.	1	1
D.	Storage				
	Office Type 2 (small)	2	Desk	1	2
			Task Chair	1	2 2 2 4 2
			Credenza	1	2
			Side Chair	2	4
			Marker Board	1	2
	Misc.	1	Accessories, trash cans, mirrors, etc.	1	1
VII.	Circulation			0 0 0 0 0 0 0 0	
Α.	Concourse				
	Concourse 01	1	Accessories, trash cans, planters, etc.	1	1
	Concourse 02	1	Accessories, trash cans, planters, etc.	1	1
	Concourse 03	1	Accessories, trash cans, planters, etc.	1	1
/III.	Site Requirements				
			Subtotal :	_	
			Installation (15%):		
			Contingency (5%):		
			TOTAL (w/o taxes):		
	1		(MO taxoo).		

FFE MASTER LIST - Allowance Distribution Page 5 of 5 THIS PAGE INTENTIONALLY LEFT BLANK

LEDGE SEATING

- (A) LEDGE SEAT
- B DRINK RAIL
- C RAILING
- D CONCOURSE LEVEL 02
- E SEATING BOWL
- F SEATING BOWL AISLE



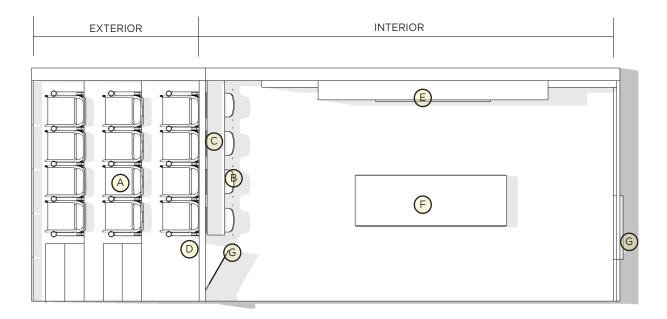


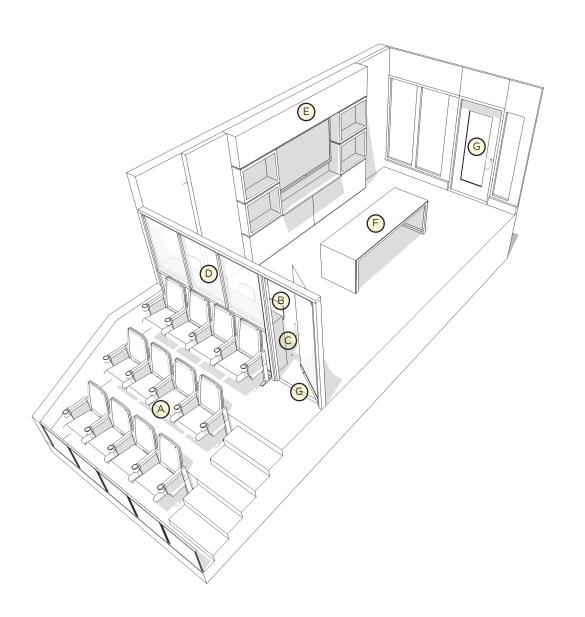
LEDGE SEATING

- A LEDGE SEAT
- B DRINK RAIL
- C RAILING
- D CONCOURSE LEVEL 02
- SEATING BOWL
- SEATING BOWL AISLE

TYPICAL SUITE

- (A) OUTDOOR SUITE SEATING (12 SEATS)
- B INTERIOR SUITE SEATING (4 SEATS)
- C DRINK RAIL
- D SUITE FRONT (GLASS)
- E SUITE AMENITY WALL (TVS, FOOD PREP)
- F ISLAND TABLE
- G DOORS





TYPICAL SUITE

- A OUTDOOR SUITE SEATING (12 SEATS)
- B INTERIOR SUITE SEATING (4 SEATS)
- C DRINK RAIL
- D SUITE FRONT (GLASS)
- E SUITE AMENITY WALL (TVS, FOOD PREP)
- F ISLAND TABLE
- G DOORS

TYPICAL ENTRY GATE SECURITY SEQUENCE PLAN

A CHUTE

(B) MAGNETOMETER

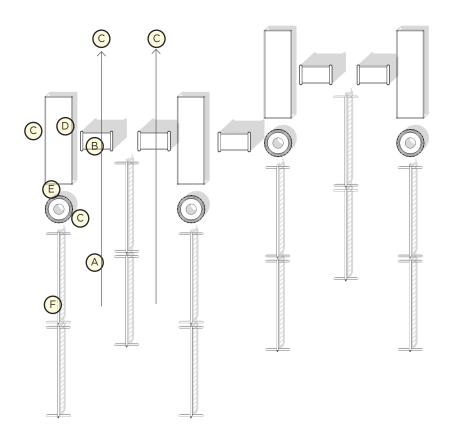
SECURITY PERSONNEL POSITION

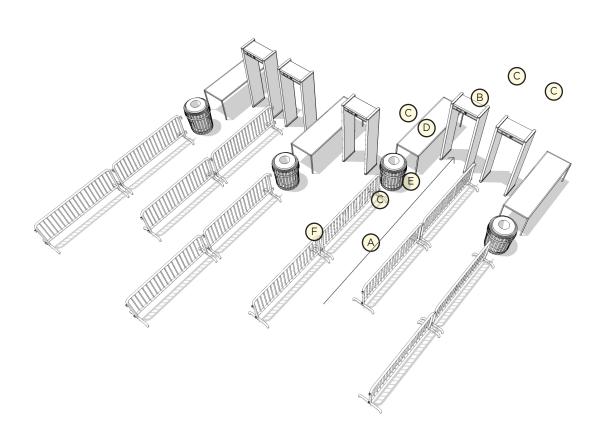
D PASS-THRU TABLE

E TRASH CAN

F BIKE RACK

*SCHEMATIC SECURITY LAYOUT COURTESY OF VENUE SOLUTIONS GROUP





TYPICAL ENTRY GATE SECURITY SEQUENCE PLAN

CHUTE

B MAGNETOMETER

SECURITY PERSONNEL POSITION

PASS-THRU TABLE

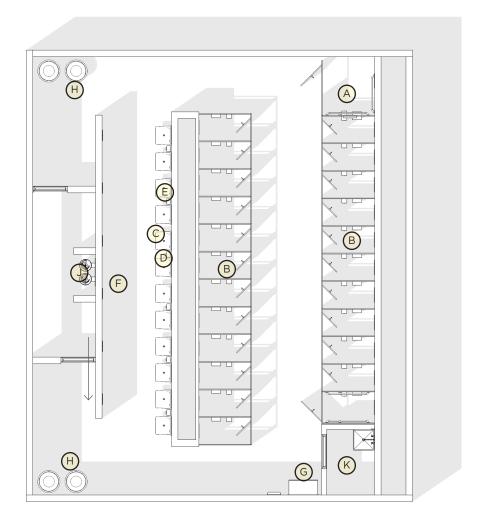
TRASH CAN

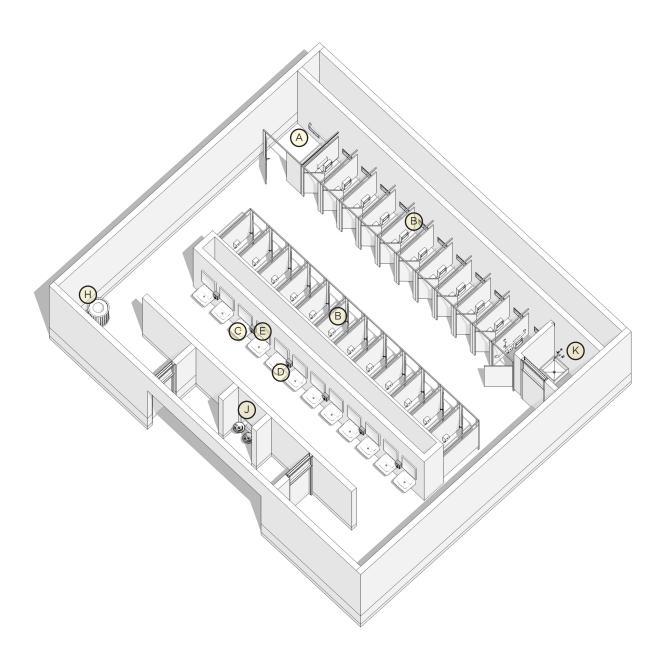
BIKE RACK

*SCHEMATIC SECURITY LAYOUT COURTESY OF VENUE SOLUTIONS GROUP

TYPICAL CONCOURSE TOILET ROOM

- A ACCESSIBLE WATER CLOSET
- B TYPICAL WATER CLOSET
- C LAVATORY
- D SOAP DISPENSER
- E MIRROR
- F PAPER TOWEL DISPENSER
- G BABY CHANGING STATION
- (H) TRASH CANS
- DRINKING FOUNTAIN
- (K) JANITORS CLOSET



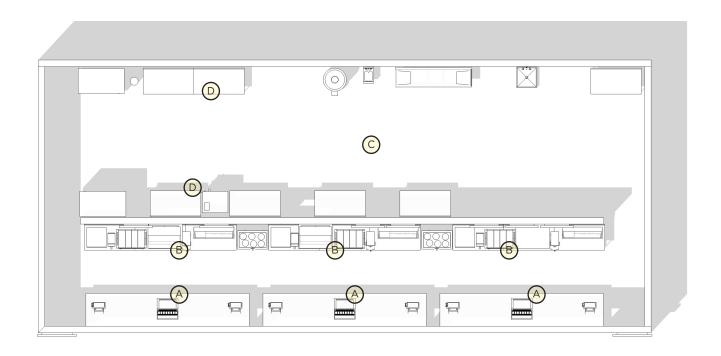


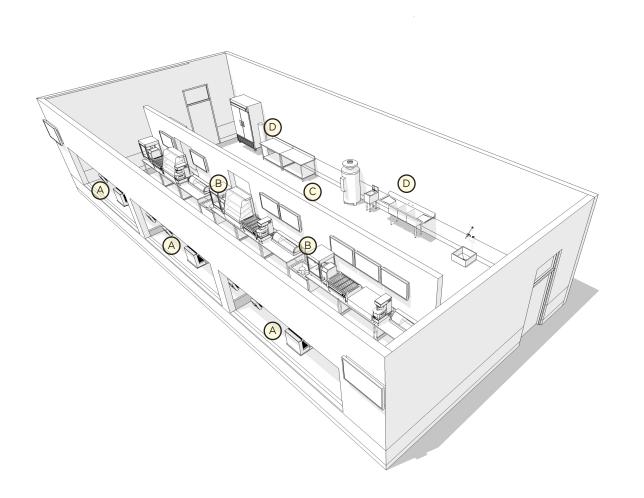
TYPICAL CONCOURSE TOILET ROOM

- A ACCESSIBLE WATER CLOSET
- TYPICAL WATER CLOSET
- LAVATORY
- D SOAP DISPENSER
- MIRROR
- H TRASH CANS
- DRINKING FOUNTAIN
- JANITORS CLOSET

TYPICAL CONCESSION STAND

- A POINTS OF SALE COUNTERS
- B FOH CONCESSION EQUIPMENT
- BOH CONCESSION AREA
- D BOH CONCESSION EQUIPMENT





TYPICAL CONCESSION STAND

A POINTS OF SALE COUNTERS

FOH CONCESSION EQUIPMENT

BOH CONCESSION AREA

BOH CONCESSION EQUIPMENT

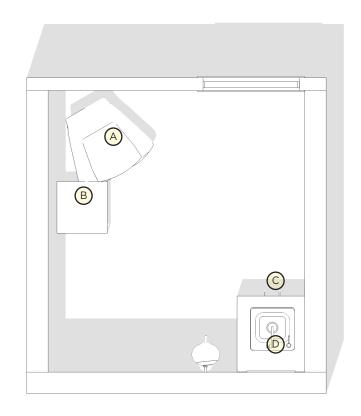
MOTHER'S ROOM

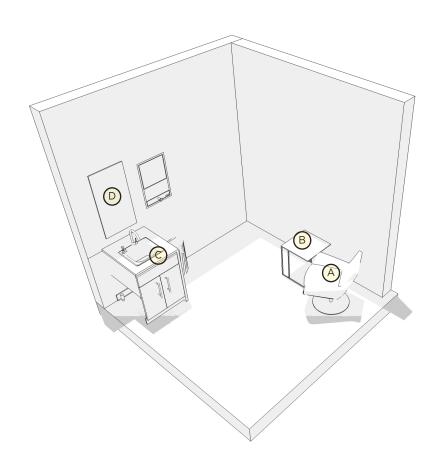
A CHAIR

B TABLE

C SINK AND STORAGE

MIRROR





MOTHER'S ROOM

A CHAIR





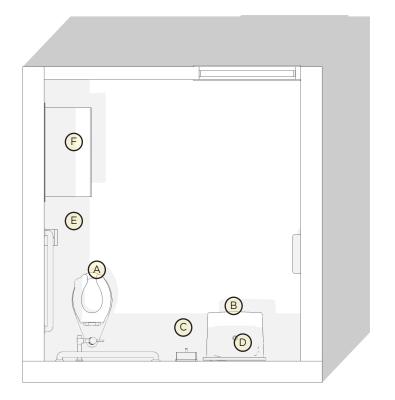
C SINK AND STORAGE

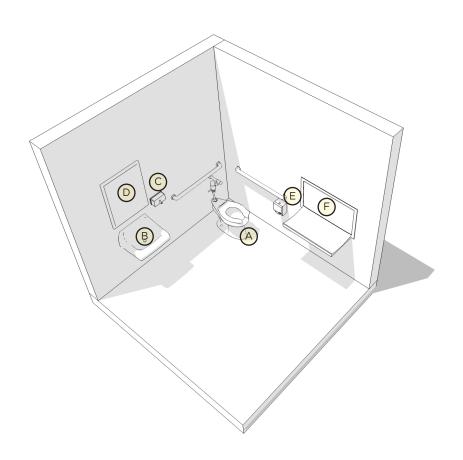


D MIRROR

FAMILY TOILET ROOM

- (A) TOILET
- B LAVATORY
- C SOAP DISPENSER
- MIRROR
- E TOILET PAPER DISPENSER
- F BABY CHANGING STATION



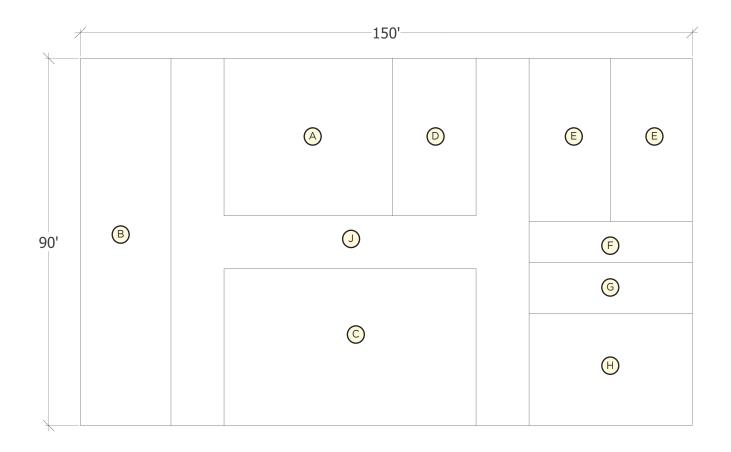


FAMILY TOILET ROOM

- A TOILET
- B LAVATORY
- © SOAP DISPENSER
- D MIRROR
- E TOILET PAPER DISPENSER
- BABY CHANGING STATION

ADJACENCY DIAGRAM - COMMISSARY

- (A) CATERING KITCHEN
- BULK STORAGE, REFRIG and FREEZ-
- EF
- © BULK DRY STORAGE
- D ISSUE REFRIGERATOR
- E TOILETS + LOCKERS
- (F) WAREWASHING
- G SECURE STORAGE
- (H) OFFICES
- J CIRCULATION / CART PARKING



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BUILDING SYSTEMS NARRATIVES

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6.1 GENERAL + APPLICABLE CODES

CONCEPTUAL DESIGN DESCRIPTIVE NARRATIVE

- A. The University of Tennessee located in Knoxville, TN desires to make renovations and additions to Neyland Stadium. This project includes new and renovated spaces including visitor's locker rooms, maintenance areas, concourses, concessions, restrooms, clubs, commissary/kitchen, suites, ledge seating, retail, and a new stadium videoboard.
- B. This section describes the general expectations of the Heating, Ventilating, Air Conditioning (HVAC), Electrical, Plumbing, Telecommunication, Fire Protection, Audio/Visual, and Architectural systems necessary to support this type of project.
- C. All references to equipment sizing are based upon preliminary design estimates and are subject to adjustment as the design progresses.
- D. In addition to the requirements listed in this narrative, the proposed renovations and additions to the stadium shall comply with the current University of Tennessee Designers' Manual (including all appendices), Guidelines, and Standard Specifications.

APPLICABLE CODES

The following codes, regulations, and standards shall be used in the design of this project:

- 2012 International Energy Conservation Code
- 2012 International Building Code
- 2012 International Fuel Gas Code
- 2012 International Mechanical Code
- 2012 International Plumbing Code
- 2011 National Electrical Code
- 2012 International Fire Code with Local Amendments
- ASHRAE 90.1, 2010
- ASHRAE 62.1, 2010
- ASHRAE 55, latest version
- National Fire Protection Association (NFPA)
 - 1. NFPA 13, "Installation of Sprinkler Systems"
 - 2. NFPA 14, "Installation of Standpipes, Private Hydrants and Hose Systems"
 - 3. NFPA 20, "Installation of Stationary Fire Pumps for Fire Protection"
 - 4. NFPA 24, "Private Fire Service Mains and their Appurtenances"
 - 5. NFPA 54, "National Fuel Gas Code"
 - 6. NFPA 72, "National Fire Alarm Code"
 - 7. NFPA 101, "Safety to Life from Fire in Buildings and Structures"
- ADA Americans with Disabilities Act Accessibility Guidelines (ADAAG), U.S. Architectural and Transportation Barriers Compliance Board
- ANSI/CABO A117.1 Access and Usable Buildings and Facilities
- Sheet Metal and Air Conditioning Contractors' National Association (SMACNA), HVAC Duct Construction Standards, 1995.
- American National Standards Institute (ANSI).
- Underwriters Laboratories (UL)
- American Society for Testing and Materials (ASTM)
- American Gas Association (AGA)
- American Society of Mechanical Engineers (ASME)

- American Society of Sanitary Engineers (ASSE)
- American Water Works Association (AWWA)
- National Electrical Manufacturers Association (NEMA)
- National Standards Foundation (NSF)
- Plumbing and Drainage Institute (PDI)
- American Conference of Governmental Industrial Hygienists, Manual of Recommended Practice.
- University of Tennessee, Office of Information Technology Communications Group's (OIT) Telecommunications Design and Installation Standards Revised June 2015 (or current edition)
- BICSI ITSIMM (Information Technology Systems Installation Methods Manual) current edition
- BICSI TDMM (Telecommunications Distribution Methods Manual) current edition
- ANSI/NECA/BICSI 568-C.O. Standard for Installing Commercial Building Telecommunications Cabling
- TIA/EIA-568B Commercial Building Telecommunications Cabling Standard
- TIA/EIA-569B Commercial Building Standards for Telecommunication Pathways and Spaces
- · J-STD-607-A Commercial Building Grounding (Earthing) and Bonding Requirements for **Telecommunications**
- IEEE 802.3x CSMA/CD Standard
- TIA/EIA-606- Administration Standard for Commercial Telecommunications Infrastructure (current edition)
- TIA/EIA-758- Customer Owned Outside Plant Telecommunications Cabling Standard (current edition)
- TIA/EIA-526, 7 and 14- Telecommunications Measurements of Optical Fiber Single and Multi Mode Power Loss (current edition)
- ANSI/EIA 310- Cabinets, Racks, Panels and associated Equipment (current edition)
- ANSI/SCTE 15 2001- Specifications for Trunk, Feeder and Distribution Coaxial (current edition)
- ANSI/SCTE 74- Specification for braided 75 ohm Flexible Coaxial Cable
- ANSI/TIA/EIA 862- Building Automation Systems Cabling Standard For Commercial **Buildings**
- ANSI/INFOCOMM 1M-2009, 2M-2010, 3M-2011 Audiovisual Systems Design
- FCC Part 68- Connection of Terminal Equipment to the Telephone Network
- FCC Part 76- Cable Television Service
- Telecommunications Act of 1996, Physically Impaired and Accessibility
- IEEE 802- Standard for Local and Metropolitan Area Networks: Overview and Architecture (current edition)
- IEEE 802.3.XX- Physical and Data Link Layer standards for LAN's. Includes Ethernet, Fast Ethernet, Gigabit Ethernet and 10 Gigabit Ethernet (current edition)
- IEEE 802.1.xx Wireless LANs (current edition)
- IEEE 802.16 Broadband Wireless Metropolitan Area Networks (current edition)
- NFPA-76 Recommended Practice for Fire Protection of Telecommunications Facilities
- All Municipal and Campus codes, standards and Statutes
- All Applicable State and Local Codes.

6.1 GENERAL + APPLICABLE CODES

6.2 CIVIL + UTILITIES

UTILITY SERVICES, GENERAL

- A. The design of the utility services beyond five feet from the building shall be by the civil engineer. The Project's engineers will work in conjunction with the University and Civil Engineer to develop the utility entrance(s) into the building.
- B. For all new utility connections to the stadium existing utilities may shall be employed for tie-in, provided adequate capacity and the system is readily available for tie-in connection. If the existing system is not appropriately sized, it shall be replaced with an adequate system, back to the point in the system where adequate capacity is available. All site utility design is covered under the Civil Engineer scope of work and site utility connection and/or replacement should be coordinated with the Civil Engineer.
- C. There shall be a continuity of utility services to the Stadium and surrounding buildings between the phases of the project.
- D. All manholes, storm drain covers, etc. shall be provided with a locking device to prevent unauthorized access.

DOMESTIC WATER SERVICE

- A. No residual pressure or flow tests have been performed at this time. Pressure and flow test information will be required to verify booster pump and/or pressure reducing valve requirements.
- B. The existing stadium is served by multiple domestic water services and domestic water meters. Each domestic water service is served by (2) backflow preventers piped in parallel. The existing domestic water services and meters are as follows:

Domestic Water Entry Locations

South East Corner	4"
East Skybox	3"
West Skybox	2-4
South End Zone	4"
UT Locker Room	6"
Maintenance Shop	6"

Domestic Water Meters

West Skybox Volunteer Shop
West Skybox Sidewalk
Tickle on Neyland
Student Union

6" (Exclusive to the stadium)
6" (Exclusive to the stadium)
2-8" (Feeds 6" line from the hill)
10" (At Perkins to Tee Martin)

Student Union 6" (Feeds Hill)
Cumberland at Dabney Slope 6" (Feeds Hill)
Cumberland at Min Kao 6" (Feeds Hill)

- C. It is anticipated that the existing domestic water services are adequate to serve the renovation's new and added spaces. New domestic cold water mains will tap-off the existing piping downstream of the water entry backflow preventers.
 - 1. Alternate One new 8-inch ductile iron domestic water main shall be installed from a point 5 feet outside the east side of the building. The new water service shall serve the new and renovated spaces as well as back feed of any adjacent spaces. A water meter shall be installed on the service line exterior to the building and designed by the Civil Engineer. Two reduced pressure zone backflow preventers will be installed in parallel on the service line when it enters into the building. Domestic water booster pumps may be needed to insure a working pressure of 35 psi at the most remote flush valve, pending the water pressure test. Water service to the building will be designed by the Civil Engineer.
- D. The existing stadium is served by 6" and 8" domestic water lines along the south and east sides of the stadium. Many of these lines are approaching the end of their useful life. The existing domestic water mains along the south and east side of the stadium shall be replaced/upsized. The domestic water mains shall also be extended along the west side of the stadium to provide a complete 8" domestic water loop around the entirety of the stadium.

IRRIGATION WATER SERVICE

There are no anticipated changes required to the existing irrigation water service(s).

FIRE WATER SERVICE

- A. There are multiple 6" and 8" fire entrances to the stadium. The existing water entrances are served by two backflow preventers on each water entrance.
- B. It is not anticipated that an additional fire service will be required to serve the south side of the stadium at this time. Further evaluation will be required to verify if a new service is required to serve this area. The existing fire water entrances are adequate to serve all other renovation and new addition areas.

6.2 CIVIL + UTILITIES

SANITARY SEWER SERVICE

- A. A sewage ejector is not anticipated to be required at this time. However, if portions of the sanitary waste system cannot flow by gravity into the site system, then a duplex sewage ejector shall be provided.
- B. The existing stadium is served by (3) sanitary sewer exits. While it is anticipated that the existing sanitary sewer exits have the capacity to handle the added and renovated sanitary sewer load, additional review of the sanitary sewer mains will be required due to the increased number of toilet facilities and food service waste. It is expected that additional grease traps will be required in areas where they are easily accessible.
 - 1. An 8" sanitary sewer main runs to the north along the west side of the stadium below Phillip Fulmer Drive.
 - 2. A 24" sanitary sewer main runs from the north side of the stadium, down along the east side of the stadium and exits at the south east corner of the stadium.
 - 3. A 12" sanitary sewer main runs along the south side of the stadium and exits at the south east corner of the stadium. It combines with the 24" sanitary sewer main outside of the stadium.
- C. The existing sanitary sewer piping and below grade and associated structures on-site to the south of the stadium shall be relocated as part of this project to the extent necessary to avoid new structural and utility elements required for the proposed renovations.

STORM SEWER SERVICE

- A. Per current utility maps the stadium is served by two main storm sewer exits. A 36" storm sewer line that exits the stadium to the south. A 48" storm sewer and 30" storm sewer exit at the south east corner of the stadium and combine to a 6" storm sewer outside of the stadium. The 48" storm sewer line is old reinforced concrete pipe (RCP) and is approaching the end of its useful life. Replacement of this existing storm sewer line or addition of a new storm sewer exit shall be analyzed and designed by the Civil Engineer.
- B. The existing storm sewer piping and below grade and associated structures on-site to the south of the stadium shall be relocated as part of this project to the extent necessary to avoid new structural and utility elements required for the proposed renovations.
- C. The University is currently evaluating rehabilitation options to the existing storm sewer component that runs primarily underneath the east side of the stadium.

NATURAL GAS SERVICE

A. There is a single existing natural gas service that serves an existing natural gas-fired generator. The Knoxville Utilities Board (KUB) acknowledges the potential for a new station at the existing campus steam plant and extending a 4" distribution line to the stadium to appropriately serve new stadium demands.



- B. Natural gas piping shall be extended to a new gas meter/regulator assembly which shall be provided by the local gas company in a location coordinated with the Architect. The downstream pressure of the gas meter/regulator assembly shall be 2 psi with point use pressure reducing valves vented to the exterior of the building installed where required. A natural gas service of approximately 120,000 CFH is anticipated to serve the new natural gas loads as follows:
 - 1. Food Service = 43,500 CFH
 - 2. Laundry = 2,000 CFH
 - 3. Domestic Water Heating = 2,000 CFH (Note: The majority of the domestic water heating shall be performed by steam to domestic water heaters. Gas-fired domestic water heaters would only be provided in remote spaces.)
 - 4. Emergency Generators = 72,500 CFH
- C. The natural gas systems shall be provided with seismic protections per the 2012 International Building Code and ASCE 7-2010.

ELECTRICAL SERVICE

- A. Neyland Stadium electrical primary distribution is fed by two (2) primary circuits and one (1) primary backup circuit via four (4) vista primary switch locations. There are 15 service transformers located throughout the stadium:
 - 1. North side: four (4) 13.2 kV to 480Y/277V transformers.
 - 2. East side: two (2) 13.2 kV to 480V/277V transformers and three (3) 13.2 kV to 208Y/120V transformers located in either rooms or on platforms.
 - 3. South side: two (2) 13.2 kV to 480Y/277V transformers and on (1) 13.2 kV to 208Y/120V transformer.
 - 4. West side: one (1) 13.2 kV to 480Y/277V transformers, one (1) 13.2 kV to 480 transformer, and one (1) 13.2 kV to 208Y/120V transformer.
- B. Documentation of electrical distribution are not available for the areas of the stadium that have not been a part of a stadium improvement project. The existing system is thought to serve both the Biology Annex and half of the Parking Garage G10. It is our recommendation that a full site observation is done in order to complete an existing electrical distribution services one-line and determine the extent of the consolidation and modification of the electrical services on the east and south sides of the building.
- C. Final electrical service distribution will be coordinated with campus facilities. Paramount to that effort is coordination of any activities required with respect to phasing of service.
- D. The electrical services and duct bank and associated structures on-site to the south of the stadium shall be relocated as part of this project to the extent necessary to avoid new structural and utility elements required for the proposed renovations.

6.2 CIVIL + UTILITIES

TELECOMMUNICATIONS SERVICE

Neyland Stadium distributes copper and fiber feeds to multiple buildings beyond the stadium itself. Some existing pathways located in the Stadium perimeter are currently installed within the stadium structural beams or areas of demolition. Both Stadium connections and other campus buildings connections will need to be relocated into new pathways designed for telecommunications such as duct banks, manholes or hand holes. A list of relocations is below:

- a. Main Distribution Facility Room 157C contains network electronics and entrance utility feeds for Telephone, Cable, Campus Fiber and the Distributed Antenna System (DAS). The cables would be difficult to relocate and would need to be protected if not relocated during construction.
- b. Stadium copper connection from the North side to the TV truck compound and the Amphitheater.
- c. Stadium copper and fiber from the North side to the East Skyboxes and two East Side Academic Buildings.
- d. Stadium fiber from West side of the stadium to the East side Room 407.
- e. Stadium Telephone cable (copper) from Humanities on the West side of the stadium to the East side, Estabrook Building then on to Pasqua Building.
- f. Stadium aerial copper cable from the West side of the Stadium to the Ped at Gate 10 ramp to Life Safety devices in G10 Garage

STEAM SERVICE

Based upon preliminary load information, it is anticipated that a new 8" steam condensate line and 4" condensate line will be required to be routed to the new heat converter room located on level 00. These new service lines will serve the heating water and domestic hot water loads throughout the renovated areas. If it is determined that other areas will be back-fed from these new systems, this will need to be re-evaluated.

The existing steam line runs close to the stadium and will likely conflict with plazas to the south of the stadium. Project planning shall address coordination of activities associated with the Engineering building anticipated to the immediate east of Neyland.

CIVIL + UTILITIES

EARTHWORK

Based on the final solution developed by the design team the amount of earthwork can vary greatly therefore no assumptions have been made on the amount of earth work or condition of the site.

SEISMIC PROTECTION:

- A. Seismic protection shall be designed per the 2012 International Building Code as modified and ASCE 7-2010.
- B. Refer to structural documents for seismic requirements.

6.3 SUSTAINABILITY

ARCHITECTURAL CONSIDERATIONS

The University's commitment to sustainability is evident in ongoing UT Athletics and UT Recycling programs that include diversion of game-day waste from landfills, multi-modal campus transit options, and a nationally recognized composting program that supplies the UT Organic Farm. Events at Neyland Stadium also hold great potential for outreach and education of objectives that support sustainable goals, in conjunction with general awareness-building. Stadium renovations shall utilize the methods listed below to conserve energy and control cost in support of UT's sustainability goals while also adhering to the State of Tennessee's High Performance Building Requirements.

ENERGY CONSERVATION AND SUSTAINABLE DESIGN

- A. The project shall incoporate, to the greatest extent possible, the State of Tennessee Sustainable Design Guidelines, noted as Appendix 2 of the University of Tennessee Design Guidelines, referenced by the High Performance Building Requirements.
- B. The building envelope materials and mechanical equipment shall be provided in compliance with ASHRAE Standard 90.1-2010 for Climate Zone 4 for demonstrating compliance with the energy code. The building HVAC and lighting systems will be designed to be as energy efficient as possible while keeping maintenance, cost, and layout in mind.
- C. The goal of the project shall be a significant reduction in building energy consumption, from historic data, through the innovative use of "on-demand" control technology, high efficiency mechanical equipment, and other energy saving methods. The noted mechanisms leverage current technology to exceed industry standards. This system represents the balance point between controlling both operating and construction costs.

Energy Saving Methods Utilized

- a. Natural Ventilation, eliminates the need for energy intensive mechanical ventilating.
- Enthalpy Airside Economizer Cycle allows for reduced mechanical cooling requirements by utilizing cooler outdoor air temperatures when available.
 Based on project location mechanical cooling can be reduced over 80% of the year utilizing airside economizer.
- c. Demand Control Ventilation (DCV) reduces system outside air ventilation requirements during low occupancy periods while still maintain acceptable indoor air quality.
- d. Variable speed pumping for hot water and chilled water systems provides for reduced system energy usage during off-peak periods.
- e. Variable Speed Chillers, allows for turndown/load matching to maximize system efficiency and reduce system energy usage.
- f. Variable Speed Fan Motors, reduces fan power during off-peak periods.
- g. Duct static pressure reset and supply air temperature reset, reduces system energy usage during off-peak periods.

6.3 SUSTAINABILITY

REFERENCES

State of Tennessee's High Performance Building Requirements Manual http://tn.gov/assets/entities/generalservices/stream/attachments/HPBr_Documents.pdf

State of Tennessee's current adoption of Energy Code http://www.energycodes.gov/adoption/states/tennessee

University of Tennessee's Landscape Vision and Site Standards http://fs.utk.edu/Site%20Design.pdf

HISTORIC CONSIDERATIONS

The UT Campus Heritage plan acknowledges Neyland Stadium as a valuable part of the campus setting, but cites multiple later additions as preventing inclusion in The Hill Historic area. This area demonstrates potential as a National Register District, and has the highest concentration of collegiate gothic structures on campus. The stadium is immediately to the south and its expression must engage the campus with respect to heritage sites and the established architectural culture of campus.

ARCHITECTURAL NARRATIVE

All new construction will meet the current International Building Code and all other applicable state and campus requirements. As the selected project team develops a final design they will work in conjunction with the University to ensure adherence to all University guidelines. This project will utilize 2004 CSI Specification Division numbers. Not all sections that will be issued are outlined below. The following sections outline a basis-of-design to advise designers of the standard of care of this project. They may be altered by approval of the final design:

Division 1 General Requirements

01 74 19 Construction Waste Management

Construction Waste Management at 75% diversion is required independently of LEED.

Division 2 Existing Conditions

02 41 16 Structural Demolition

Contractor to follow Site Protection Plan during demolition activities including dust management protocols, see section 01 81 13 for additional information.

Remove all demolished materials according to the Contractor's Waste Management Plan, see section 01 74 19 for additional information.

02 41 19 Selective Demolition

Remove all demolished materials according to the Contractor's Waste Management Plan, see section 01 74 19 for additional information.

Do not initiate any selective demolition that will void any existing warranties without prior approval of the Architect.

Division 3 Concrete

03 30 00 Cast in Place Concrete Construction

Standard slabs on grade: Standard weight concrete with saw cut joints on a 10 foot grid.

Concrete slab at the bowl shall have a broom finish and steel trowel finish at all other concrete floor locations.

Concrete walls exposed to public and athletic team users shall have a rubbed finish.

Concrete walls not exposed to use shall have standard finish.

Floor Construction Vapor Retarders and Insulation: Insulate underside of concrete slabs and install a sheet vapor retarder with taped joints.

Fly ash may be incorporated into the concrete mixes.

Stairs in project to be cast in place.

Materials shall be regionally sourced from within 500 miles.

03 35 43 Polished Concrete Finishing

Concrete to be ground, stained and sealed with wet polished process. Stains to be Bomanite or Scofield. Grind concrete in 5 steps, applying densifying liquid at each step. In final grind, apply dye. Grind should expose the aggregate seed installed in the top of the slab in 03 30 00.

03 45 00 Precast Architectural Concrete

Exterior precast surfaces shall be washed with muriatic acid at the manufacturing location.

Back of precast wall panels will be insulated with FSK faced mineral wool pinned to the back with joints taped.

03 54 16 Hydraulic Cement Underlayment

Cement based floor leveling products similar to Ardex K 15 at interior installations. Use Ardex K301 at exterior locations.

Use Ardex Feather finish to skim coat minor differences in height between floor finishes that do not use a transition strip.

Use underlayment whenever individual tiles are over 18 inches in any one direction.

Division 4 Masonry

04 20 00 Unit Masonry

All face brick will be severe weathering quality.

All Concrete Masonry Units shall be made with integral water-repellant.

Grout cores below lintels and structural steel a minimum of 24".

Two colors of burnished block will be used.

Both burnished block face shells will be intermixed with limestone block (see Exterior Stone) to form exterior wall construction which is mechanically anchored to masonry back up.

04 42 00 Exterior Stone

Exterior stone wall cladding to be mechanically anchored to masonry back up.

Stone above water table to be limestone per ASTM C 568 and approximate stone size is 8" x 48".

Exterior stone wall to be subject to freestanding, on-site mock ups for quality assurance purposes. Sealant and adhesion testing will also be required.

All anchors and dowels to be stainless steel.

Exterior stone to be sealed.

Division 5 Metals

05 31 12 Metal SubRoof

05 40 00 Cold Formed Metal Framing

The design of steel framing in this section is a delegated design. Shop drawings must be signed and sealed by a structural engineer licensed in the State of Tennessee.

6.4 **ARCHITECTURAL** DESIGN

05 50 00 Metal Fabrications

Provide steel framing and supports for operable partitions/walls, overhead doors, and MEP equipment.

Provide steel ladder with non slip rails for access to roof at west side. Provide ladder cabinet to lock access to wall mounted ladder.

05 51 13 Metal Pan Stairs

Stairs shall arrive at the site preassembled and primed for the final finish. Two inches of concrete will be added on-site with specified nosings applied as required.

The design of stairs in this section is a delegated design. Shop drawings must be signed and sealed by a structural engineer licensed in the State of Tennessee.

05 51 16 Metal Floor Plate Stairs

Stairs shall arrive at the site preassembled and primed for the final finish.

The design of stairs in this section is a delegated design. Shop drawings must be signed and sealed by a structural engineer licensed in the State of Tennessee.

05 51 19 Metal Grating Stairs

Provide metal grating stairs leading from concourse to Scoreboard for maintenance and game day filming.

05 52 13 Pipe and Tube Railings

Top of rail shall be at 42 inch. This section is a delegated design. Shop drawings must be signed and sealed by a structural engineer licensed in the State of Tennessee.

Railings in this section will be anodized aluminum with wire infill panel forming a horizontal design.

Railings shall be anchored to concrete floor slab by anchoring a steel plate to the slab.

ADA: All railing to be compliant with current version of ADAAG.

All parts of railings to be from the same alloy and then anodized.

05 58 13 Column Covers

All column covers used to be 0.125" rolled aluminum prepped for joint compound and to receive custom finish.

05 70 00 Decorative Metal

Large scale expanded metal mesh. Metal thickness is 1/8". Openness Factor is 46%. Largest panel size is 84" x 120". Provide fasteners recommended by manufacturer.

Any stainless steel wire mesh interwoven with LED lights to be connected to the building's AV system.

Provide heavy duty floor grate installed as a room divider. Grate to be 1" \times 2" \times 1/8" thick. Do not apply non slip grit at vertical grate applications.

05 73 13 Glazed Decorative Railings

Top of rail shall be at 42 inch. This section is a delegated design. Shop drawings must be signed and sealed by a structural engineer licensed in the State of Tennessee. Railings in this section will be installed on the exterior of the building.

Basis of Design is CR Laurence SRS Standoff Glass Railing system with 5/8" ultra clear glazing.

ADA: All railing to be compliant with current version of ADAAG.

Division 6 Wood, Plastics and Composites

06 10 53 Rough Carpentry

Exterior wood items to be pressure treated (UC3b and UC4a) with no exceptions unless it is required to be fire rated. Do not use wood treated with arsenic or chromium.

Utility shelving to be rated at 48 psf minimum with 15% maximum moisture content.

Use fire rated wood for all concealed, interior wood blocking.

Plywood backing panels to be fire rated.

Furring strips for exterior wall construction will not be wood.

06 16 00 Sheathing

Glass mat gypsum sheathing to be used at soffits. Cover soffits with DAFS.

06 20 23 Finish Carpentry Sections

Use fire retardant wood materials as necessary to meet building code requirements. All concealed wood to be fire retardant.

Cabinetry shop to hold current AWI certificates. Typical grade is Custom. Cabinetry shop to be fabricator and installer.

06 41 xx Architectural Cabinetry Sections

Cabinetry shop to hold current AWI certificates. Typical grade is Custom.

Door hardware to be premium.

Plastic laminate cabinets to also be Custom grade. Provide flush overlay doors and full extension drawers.

Wood cabinet doors to be bookmatched.

All wood specified in these sections shall comply with LEED requirements for FSC sourcing and low emitting resins.

Cabinetry shop to hold current AWI certificates and FSC chain of custody certificates.

06 42 16 Flush Wood Panel

All wood specified in these sections shall comply with LEED requirements for FSC sourcing and low emitting resins.

06 44 00 Ornamental Woodwork

Wood in this section to be evaluated for FSC sourcing. FSC sourcing is only necessary in this section if the project will not meet the 50% threshold for certified wood.

All wood specified in these sections shall comply with LEED requirements for low emitting resins.

06 46 00 Wood Trim

Assume wood to be used for trim to be Walnut, rift sawn for pricing only.

06 64 00 Plastic Paneling

FRP panels to be integrated into Janitor's Closets, Kitchen areas and Concessions.

Division 7 Thermal and Moisture Protection

Air barriers will be tested in mock ups for air leakage and adhesion.

07 13 26 Self-adhering Sheet Waterproofing

56 mil modified bituminous sheet waterproofing, basis of design is Carlisle CCW MiraDRI 860/861.

Attach top of vertical waterproofing with termination bar.

07 14 16 Cold Fluid-Applied Waterproofing

Plaza deck waterproofing to be a two component reinforced latex rubber system.

Vertical Damproofing: Fluid-applied waterproofing with protection board.

Tunnel Waterproofing: Sheet membrane waterproofing with protection board on roof, sealed joints on sides and bottom.

07 17 00 Bentonite Waterproofing

Blind side waterproofing locations to be a composite system of reinforced geotextile bonded to bentonite with a nonwoven facing.

Contaminant membranes are not anticipated at this time.

07 18 11 Acrylic Traffic Coatings

Exterior resin (methyl-methacrylate) waterproofing and topping system.

07 21 00 Thermal Insulation

Vapor Retarder and Insulation: Exterior wall construction will have continuous insulation detailed.

All exterior insulation at curtainwall is to be FSK faced or equal.

Interior insulation is unfaced fiberglass or mineral wool. Interior sound batt insulation is also unfaced fiberglass or mineral wool.

07 26 16 Below-Grade Vapor Retarder

Install Class A retarder below concrete slab on grade. Tape all seams.

07 27 26 Fluid-Applied Membrane Air Barriers

Provide a vapor permeable membrane air barrier.

Basis of Design to be Henry Air Bloc.

Air barrier assembly leakage to be a maximum of 0.04 cfm/square foot at 1.57 lbf per square foot.

07 41 13.16 Standing Seam Metal Roof Panels

Zinc roof panels with standing seams field rolled with concealed mounting clips with staggered snow clips mounted to roof panel (not standing seams).

07 42 13.19 Insulated Metal Panels

Wall panel to have steel face and liner with foamed in place insulation. Panels to be pressure equalized, vented and dry-sealed joints.

07 54 23 Thermoplastic Polyolefin Roofing

Membrane Roofing: 60 mil reinforced TPO fully adhered to roof assembly over insulation with metal terminations. Roofs to be white.

Provide R 30 insulated roofs as a baseline and then add tapered insulation. (Insulation at roof drains to be 5 inches.)

07 62 00 Sheet Metal Flashing and Trim (Meet FM Global requirements at roof locations) Stainless Steel type 304 sheet metal flashing and trim assemblies shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction.

Sheet Metal Standard for flashing and trim shall comply with SMACNA's "Architectural Sheet Metal Manual"

Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.

07 72 00 Roof Accessories

Stainless steel finished exposed rain drainage systems. At TPO roof provide roof drains and large gutter. Overflow drains are piped separately.

Metal roof hatches with integral insulated curb and ladder extension arm. Basis of design to be Bilco Type E Roof Hatch - ladder access.

Provide roof hatch with ship's stair for access to roof. Basis of design to be Bilco Typ NB Roof Hatch - Ship Stair Access in galvanized steel.

Kynar finished exposed rain drainage systems. At flat roofs provide roof drain and overflow drain piped separately.

Kynar finished exposed rain drainage systems. At flat roofs provide roof drain and overflow drain piped separately.

Metal roof hatches with integral insulated curb and ladder extension arm.

07 84 43 Joint Firestopping

Basis of Design to be Hilti firestop systems.

07 91 00 Preformed Joint Sealants

Install joint sealants at all CMU joints and horizontal and vertical concrete joints between seating units, concrete walls, floors, steps.

Emseal preformed joints only will be installed in stadia bowl locations. No substitutions.

07 92 00 Joint Sealants

Interior joints to be based on Pecora joint systems and will be a combination of urethane and latex sealants. Use urethane sealants (Dynatrol) at horizontal locations over 10'-0". Use sanitary latex at plumbing fixtures. Use Pecora texture joint systems at soft joints in tile walls. Exterior joint systems to be Pecora silicone products. Provide closed cell backer rods.

6.4 **ARCHITECTURAL DESIGN**

07 95 00 Expansion Control

Exterior wall expansion control systems to be extra heavy duty.

Interior floor expansion joints to be metal at high use, back of house, rolling load locations. Parking deck expansion joints to be extra heavy duty.

Interior floor expansion joints to be metal at high use, back of house, rolling load locations

Division 8 Openings

Window and panel wall systems will be tested for water intrusion through on-site mock ups of permanently placed construction.

08 11 13 Hollow Metal Doors and Frames:

Entrance Doors: Galvanized, primed and insulated hollow metal doors and frames to be primed, 0.067" thickness. Field paint for final finish.

Interior Windows: Borrowed lites to be primed 0.053" thick hollow metal frames. Field paint for final finish.

Interior Swing Doors: Internally stiffened, 0.053" hollow metal frames, field painted.

08 14 16 Flush Wood Doors

All wood doors specified in these sections shall comply with AWI Quality Certification.

08 14 33 Stile and Rail Wood Doors

Guestroom and bathroom doors to be specified in this section.

08 31 13 Access Doors and Frames

All access doors to be lockable.

08 33 23 Overhead Coiling Doors

Overhead Service Doors: Anodized aluminum coiling doors, custom color at Loading Dock. Doors to be electrically operated and lockable.

Exterior Overhead Service doors to be prefinished, insulated and electrically operated.

Exterior Overhead Service doors to be prefinished, insulated and electrically operated.

Overhead Counter Doors: Anodized coiling doors in custom to be lockable and operated manually by a crank.

08 44 13 Storefront

Exterior, clear anodized aluminum storefront system. Basis of design to be Kawneer Trifab VersaGlaze 451T with 260 Insuclad Thermal Entrance.

Door hardware to be COM and specified in Division 8.

08 44 13 Glazed Aluminum Curtainwalls

Curtain Walls: Extruded aluminum with kynar finish in custom color with 1" tinted insulated, low-e glazing units installed.

08 56 53 Security Windows

Ticket Windows: Bullet resistant, level 3, laminated glass with speak hole and deal tray.

08 71 00 Door Hardware

Door hardware will be heavy duty institutional use for maintenance items and cores. Door hardware to be mortise set.

Door hardware at Broadcast Rooms to have sound gaskets at the door frame and drop seals for acoustical privacy.

08 80 00 Glazing

Exterior glazing inner and outer lites to be 6 mm min with argon filled airspace with upgraded spacer bar. Low-e sputter coat on #2 surface.

Interior glazing to be 6 mm float and tempered clear glazing, typical.

All railings in bowl that require glazing will be laminated, ultra clear. Additional restrictions on wave distortion will be enforced.

Glazed railings installed at the bowl to be non-reflective.

08 88 13 Fire Resistant Glazing

Exterior fire resistant glazing to be insulated and low-e.

08 88 53 Security glazing

Interior security glazing in doors to be polycarbonate.

08 91 19 Louvers:

Formed aluminum, kynar finish in custom color. Louvers to be drainable. Provide Insulated blank off panels. Provide full bird screens behind all open louvers.

All louvers and vents between 0" and 8'-0" to be extra heavy duty.

Louvers and vents installed over 8'-0" a.f.f. to be mill finished.

Division 9 Finishes

Interior partitions, general

Interior fixed partitions: Metal stud partitions with 5/8" gypsum board on both sides except in wet areas. Wet areas shall be cement board construction. Offices and Conference rooms to have regular gypsum wall board. All other areas to receive high impact, abuse resistant gypsum board to 4'-0".

Demising walls around Broadcast rooms to be gypsum board on staggered studs with sound insulation woven between study to product a wall with an STC level of 55.

Other walls to be a minimum of STC 45 unless noted otherwise on acoustical report.

Plumbing demising walls between hotel sleep rooms to have an STC rating of 60 or areater.

Demising wall between hotel sleep rooms to have an STC rating of 55 or greater.

Ceilings, general

Exposed Concrete Ceilings: Unfinished.

Interior Ceiling Painted: Epoxy finish in showers, painted architectural finish other locations as indicated.

09 29 00 Gypsum Board

Gypsum Wall Finishes: Level 4 finish in all areas.

Level 5 finishes in Premium spaces including the Lobby, Premium Suites and Club spaces.

Locations of large wall graphics will utilize a high build primer to achieve a Level 5 finish.

09 30 00 Tile

Porcelain tile will be used throughout the project, see Interior Narrative for pricing direction.

Tile up to 16" in any direction will use a thin set application.

Tiles that exceed 16" in any direction will use a medium bed set application.

Tiles over 18" in any direction will be laid over a cement based floor underlayment to ensue floor levelness. Large, thin tile panels to be 99% adhered to wall and ceiling surfaces.

09 51 13 Acoustical Ceiling Panels

For 2' x 2' and 2'x 4' ceiling areas where indicated.

Basis of Design to be Armstrong Optima unless noted otherwise.

Wet Areas and Kitchens to be Armstrong Clean Room VL.

Storage areas to be Armstrong Healthzone.

Grid to be 9/16" Silhouette unless noted otherwise.

Floating fiberglass ceiling clouds to be approximately 4' x 12' with irregular shapes. Clouds to have 4" high self edge.

09 54 23 Linear Metal Ceilings

Metal ceilings will be used in the project, see Interior Finish Legend for pricing direction. Basis of Design to be Hunter Douglass Linear Metal open with open reveals backed with 1" acoustical backing.

09 65 13 Resilient Base and Accessories

All resilient base to be rubber. Base will be straight at carpeting and coved at resilient floors.

09 67 23 Resinous Flooring

Interior showers poured epoxy quartz flooring, sloping to drain with a 6" integral base. Overall thickness of product will vary from 1/8" up to 3/8". Integrate waterproofing into drain assembly.

Decorative resinous floors to be poured epoxy floor with metallic system to produce a liquid metal design effect on floor.

09 72 00 Wall Coverings

Wall coverings will be used in the project, see Interior Finish Legend for pricing direction. Wall coverings used will be Type II.

Wall coverings used on exterior walls will also be perforated.

09 84 33 Sound Absorbing Wall Units

Arc-tura felt panels on carved mdf shapes, clipped to wall with z-clips.

09 91 13 Exterior Painting

Provide 1 coat of high build polyamine epoxy primer under 2 coats of high performance acrylic paint.

Basis of design to be Sherwin Williams Recoatable Epoxy Primer under Sher-Cryl High Performance Acrylic.

All Exposed structures to be painted.

09 91 23 Interior Painting

Provide 2 coats of low-emitting quality commercial acrylic latex paint at interior wall locations. All walls to receive 1 coat of quality commercial block filler (for CMU and concrete walls) and 1 coat of primer compatible with substrate prior to application of paint or wallcoverings.

Basis of Design: Sherwin Williams Promar 200 zero VOC.

Provide 2 coats of low-emitting quality commercial epoxy paint over block filler (if required) and primer at all rooms that contain a Shower.

Basis of Design is Sherwin Williams Pro Industrial water based Catalyzed Epoxy paint. Provide High Performance Coatings at the Loading Dock for exposed steel. 09 96 00 **High Performance Coatings**

All exposed steel will be primed with Tnemec Series 27 and top coated with a two part Tnemec Series 1070 Fluoronar.

Provide High Performance Coatings for exposed steel.

Division 10 Specialties

10 12 00 Display Cases

Display cases to have internal LED lighting, adjustable glass shelves and locking glass front sliding doors.

Display cases to have adjustable glass shelves and locking glass front swinging doors.

10 14 00 Signage

Exterior wayfinding to be determined.

10 21 13 Toilet Partitions

Stainless steel partitions, overhead braced at Team Locker Room.

Solid plastic partitions at public and non-Team Locker Rooms.

10 26 00 Wall and Door Protection

Stainless Steel sheet door kick plate protection 12 inch for all wood doors.

Provide wall mounted bumper rail at 6" A.F.F. continuously around Loading Dock, Basis of design is InPro JOS-DOCK 075 Wall Guard.

Provide surface mounted stainless steel corner guards that are 1 1/2" x 1 1/2" x 8'-0" at all publicly accessible outside corners.

Basis of design is InPro Corp, surface mount stainless steel corner guard.

10 28 00 Toilet and Bath Accessories

ADA: All accessories for compliant stalls to be compliant with current version of ADAAG. Mounting heights for compliant stalls to meet current version of ADAAG requirements. Provide accessories as noted below. The basis of design to be Bobrick Classic Series, recessed where applicable. Owner will not provide any fixtures through other contracts.

10 44 16 Fire Extinguishers

Install multipurpose Dry-Chemical type per latest Tennessee State Code Requirements. Provide K type extinguishers at all food service areas.

10 51 00 Lockers

Provide custom grade wood lockers at Visiting Team locker rooms. Basis of design to be Southwest Solutions Group.

Provide expanded metal lockers at staff areas, similar to Republic's Heavy Duty Ventilated Lockers.

6.4 **ARCHITECTURAL DESIGN**

TOILET ACCESSORIES

No.	Product Description	Quantity Criteria
T1	Paper Towel Dispenser w/ Waste Receptacle	1 per restroom and as indicated.
T2	Paper Towel Dispenser	1 per restroom or as indicated
T4	Waste Receptacle	1 per restroom or as indicated
T5	Seat Cover Dispenser	1 per individual water closet
Т6	Toilet Paper Dispenser	1 per water closet
Т9	Grab Bars	1 set per accessible ambulatory toilet stall. 1 set per accessible urinal
T10	Grab Bars, Shower	1 set per accessible shower stall
T11	Soap Dispenser	1 per lavatory
T13	Mirrors	1 per lavatory
T29	Full Length Mirrors	1 per Family Restroom No less than 1 per restroom
T16	Sanitary Napkin Disposal	1 per water closet & individual toilet
T18	Mop & Broom Holder	1 per Janitor's Closet
T19	Utility Hook	3 per Janitor's Closet
T21	Shelf, Utility	1 per Janitor's Closet
T23	ADA Shower Seat	1 per accessible shower stall
T24	Soap and Shampoo Dispenser	1 per individual shower stall 1 per accessible shower stall
T25	Shower Curtain Rod	1 set per individual shower stall
T26	Shower Curtain and hooks	1 per individual shower stall
T27	Lit Mirrors with TVs	1 Large Vanishing TV in Premium Suites.
T28	Lit Mirrors with TVs	1 Mirror with small TV in Premium Suite Bathrooms

Staff, 12" \times 12" heavy duty metal with sloped tops z base, fixed bench. ADA lockers and benches per ADAAG. Auxiliary Team Locker rooms: 36" \times 36" extra heavy duty metal football lockers with sloped tops Wand fixed benches. Division 11 Equipment

Sport equipment to be in Furniture Fixtures and Equipment budget.

11 11 13 Loading Dock Bumpers

Recessed dock levelers, 4 feet deep.

Bumpers to be Steel-faced, laminated dock bumpers made from rubber tires.

11 21 73 Commercial Laundry Equipment

Provide commercial quality washers and dryers by Unimac, Continental Girbau or Pllerin Milnor on 4 inch concrete pads. Capacity of washer to be 120 pounds and dryer to be 75 pounds and gas powered.

Provide dry lint filtering system by Clean Cycle Systems or Consolidated Laundry Machinery. Provide higher airflow at 115% CFM of dryer.

11 31 00 Residential Appliances

Provide stainless steel appliances where indicated:

Undercounter Ice Maker by Hoyazaki.

Stainless steel full size Refrigerator with freezer on the bottom: Samsung 28 cu. ft. minimum with ice maker.

Wall mounted microwave: 30" wide, Samsung to match refrigerator.

11 47 00 Ice Machines

Provide commercial ice machines for therapeutic uses and consumption.

Units to be freestanding, air-cooled units capable of making flakes at physical therapy. Unit should be capable of making over 400 pounds of ice a day.

Division 12 Furnishings

12 24 13 Roller Window Shades

Provide manual Mechoshade roller shades PVC free woven material with 10% openness factor at all exterior windows.

12 36 16 Metal Countertops

Stainless steel countertops at bar top locations.

Stainless steel counters at food service locations to be incorporated into Food Service scope.

12 36 23.13 Plastic Laminate Countertops

High pressure laminate counters will have eased pencil edges as well as back and side splashes.

Provide Rakks Counter brackets EH-1818 at open countertops every 3'-0" on center.

12 36 61.16 Solid Surfacing Countertops

Countertops include solid surface and quartz materials, See interior narrative. All countertops to have back and side splashes. Transaction tops will not have splashes. Provide solid surface countertops at all sink locations.

Provide Rakks Counter brackets EH-1818 at open countertops every 3'-0" on center. Provide (1) Doug Mockett grommet per work area. Grommets in guartz counters to be metal. Provide stainless steel, 18 gauge single basin undermounted sinks in Breakrooms. **Division 13 Special Construction**

13 17 00 Hydrotherapy Equipment Tubs

Single, freestanding hot and cold hydrotherapy consoles. Provide individual controls for each basin unit.

Basis of Design: Grimm Pools model #4942.

Division 14 Conveying Equipment

14 21 00 Elevators

Basis of Design: Otis Gen 2 machine room less traction elevators at 4,000 lb. passenger elevator. Elevator speed to be 325 fpm. Hall fixtures and car call buttons to light when activated. Fixtures are recessed flush with adjacent wall finishes.

Freight elevators to also be Otis Gen 2 machine room less traction elevators rated for 10,000 pounds. Elevator speed to be 150 fpm.

See Interior Narrative for finish allowance. Floors prepped for tile or stone finish.

14 24 00 Hydraulic Elevators

At indicated locations: Capacity is 3500#. Speed is 100 fpm.

14 91 82 Trash Chutes

Trash chutes to end in rated trash room.

Division 21 Fire Suppression

Sprinkler system to be designed to FM Global data sheets. This requires additional sprinkler heads over Code.

Division 22 Plumbing - See Plumbing Narrative

Fixtures to be low flow.

Drinking Fountains to have water bottle filling feature similar to Elkay EXH20 Drinking Fountain.

Division 23 Heating, Ventilating, and Air Conditioning - See Mechanical Narrative New mechanical systems to be Tested, Adjusted, Balanced and Commissioned.

Division 26 Electrical - See Electrical Narrative

Electrical systems to be Commissioned.

Daylight sensors to be Commissioned.

Division 27Communications - See IT Narrative

Communications systems to be Commissioned.

6.5 AUDIO / VISUAL

The purpose of this narrative is to identify the audio and visual systems, including sound, video and brodcast systems, both new and renovated, that are expected to be part of the stadium renovation project. The systems are described for each space, except where the system is throughout the stadium and not limited to a particular architectural space, notably for the broadcast cabling and distributed TV systems. The systems described are based on requests made by the University and the expected uses of the new architectural spaces.

SEATING BOWL LED DISPLAYS/SCOREBOARDS

End Zone Displays - The existing south end zone display was installed in 2009. The intent of the renovation project is to replace this display with one that is approximately 32 ft. tall by 123 ft. wide, with a pixel resolution at or better than 16 mm or equivalent pixel density for a "virtual" pixel product.

The design of the south end zone enclosure should consider:

- Locating an LED display or other effective UT branding signage on the back of any new south end zone display
- Adding a TV/coaching camera platform to any new end zone display assemblies

A new north end zone display is proposed, at 32 ft. tall by 123 ft. wide, with a pixel resolution at or better than 16 mm or equivalent pixel density for a "virtual" pixel product.

Production staff has requested that the displays at each end of the stadium have the same aspect ratio (Height: Width) if not the same size, so that the same images and information can be shown on both display with no modifications.

While the addition of a new north display will appreciably increase the number of spectators with a good view to a scoreboard display (especially for sound end seating), it will not solve viewing for obstructed seat locations, such as those under the seating overhangs (approximately rows 54-60). These seats may need to be supplemented with a combination of fixed digital displays and TV sets if access to the information shown on the new displays is important for those seats.

Both end zone displays are intended to be in an overall architectural enclosure that will include primary AC power service and ventilation, active or passive, as required by the technology and manufacturer selected to install the system.

A new 360° fascia display is also part of the project. This display is scheduled to be between 42 to 58 in. tall, with an overall length of 1900 ft. The anticipated resolution is 20 mm or equivalent pixel density for a "virtual" pixel product.

AUDIO / VISUAL

The new fascia display is intended to replace the existing ribbon displays. Athletics would like to explore the possibilities for signage in the lower bowl with good TV camera exposure.

The seating bowl displays (as well as other displays throughout the stadium) are to be controlled from a dedicated content management/control system that would reside in the stadium along with the LED display processing and support electronics. Live video images would be provided by the existing Athletics video production system housed outboard of the stadium. The computer workstations for the dedicated display content management system are to be located on the press level of the stadium.

The fiber optic cabling shall be housed outboard of the stadium. The computer workstations for the dedicated display content management system are to be located on the press level of the stadium.

The fiber optic cabling between the video production system and the stadium is existing and expected to be reused.

SEATING BOWL SOUND SYSTEM

The existing system is considered by the University to be inadequate and is to be replaced as part of the renovation project. The desire is to eliminate the requirement for portable on-field speakers to provide sound to seating sections that are blocked by seating levels above from the main array. Portable systems may still be used for team, on field warm up. In some stadiums, the warm up speakers are permanently installed and Athletics has expressed an interest in this option.

There are two primary sound system configurations used in football stadiums. The first is a single point cluster, typically located in an end zone, but occasionally on one sideline, as is seen at Neyland. The other common configuration is a distributed loudspeaker system where many more small loudspeakers are distributed throughout the seating bowl, essentially one or more speakers per seating section.

These speakers are usually attached to stadium structures such as the face of pre-cast seating sections, under those sections, roofs, light standards and roof canopies. In some cases, dedicated structure must be provided for the system to work properly. When appropriate structure is not possible, a successful distributed system cannot be implemented.

In reality, most point source or end zone systems are hybrids, requiring distributed fill speakers in areas that are blocked or shadowed from the speaker arrays by overhangs, etc.. This will be true for Neyland, as well.

6.5 AUDIO / VISUAL

There are pros and cons to each system approach. A point source system is:

- Less expensive, due to a smaller parts count and less cabling infrastructure (conduit, wire, etc.).
- Can provide more impactful bass sound, as the speakers are concentrated in one location and work together at low frequencies.
- Is more affected by wind, due to the long "throw" distances, often as much as 800 ft. in large stadium such as Neyland.
- Does not synchronize well with video images on the scoreboard. This is due to the fact that light travels faster than sound, so the sound lags the image, leading to poor lip synchronization. This can be partially mitigated by adding a delay to the video signal, but good synchronization is only possible for a portion of the stadium seating.
- Echoes off stadium vertical surfaces (scoreboards, suite glass, walls between seating levels, etc.)

The distributed system:

- Is usually more expensive due to requiring more overall equipment and infrastructure to get to many more locations.
- Is not as affected by wind due to shorter loudspeaker to listener distances.
- Can provide better synchronization with video images for a much greater number of seats.
- Can provide better sound quality as the speakers are typically closer to the seating.
- Does not require a large space/area on the end zone scoreboard or sideline.
- Is more expensive to maintain, due to its additional complexity and parts count.
- Is less tolerant of going out of adjustment or "tune" than a distributed system as balance among the speakers is more critical to intelligibility.
- Requires attachment points, above and behind seating sections.

For any sound system, the location of a loudspeaker array or individual loudspeakers is important, so that they are not so close to the nearest listeners to be too loud or too far away so that the sound is too faint and unintelligible. For an end zone cluster, this is handled by making sure the clusters are not too close to seating directly in front of and below the clusters, and by including speakers dedicated to directing sound at the most distant portions of the stadium that can be turned up more loudly to compensate for the distance without affecting the nearest listeners. The most common problems with point source cluster design are:

- Speakers too close to near end listeners.
- Speakers not capable of playing loudly enough to provide sufficient intelligibility at the far end.
- Not enough speakers to properly cover the entire seating area.

AUDIO / VISUAL

For a distributed loudspeaker system, this near-to-far listener ratio is also important and often more difficult to achieve due to what is typically a variety of mounting locations throughout the stadium. To achieve an acceptable uniformity of loudness in the zone covered by any speaker, the ratio of nearest to most distant seat in the coverage zone should not be much more than about 4:1. If the ratio of near to far seating is greater than that, the near seats will be too loud, the far seats too quiet or in severe cases, both. Neyland Stadium has complicated seating bowl geometry and it is not possible without substantial design studies to determine what the best approach for the seating bowl loudspeaker configuration might be.

It is unknown at this point if an end cluster (perhaps associated with a new north end zone display structure) or a full distributed speaker system will provide the best combination of performance, cost and architectural integration into the stadium. In either case, the primary design question is finding a suitable location or locations to mount loudspeakers.

On Field/In Bowl Mix Position:

The use of an on-field, portable sound system has included a mixing position near the 50 yd. line that also mixes the UT band. While the existing sound control room is on the 5th level of the Press Box and is considered to have adequate space and be in a good location, the listening conditions are not ideal.

Athletics would like to explore, as part of a renovation, a location for a permanent in-bowl mix and DJ position with the latter being part of the visible game day fan presentation. The current distribution of audio system signals from the control room to the SEC booth, broadcasters and other in-house system is considered adequate and appropriate.

BROADCAST PROVISIONS AND CABLING

TV Production Truck Parking:

TV truck parking spaces is considered to be adequate. While no changes are anticipated to the parking location, the University requests that, if any grade/paving changes were to occur in this area, that the grade be limited to 2% so that a more flat spot is provided.

6.5 AUDIO / VISUAL

Cabling and Camera Locations:

The existing camera locations are considered to be appropriate, however some changes will be required with the proposed architectural revisions and due to requests by the broadcaster and Athletics.

- ESPN has requested the ability to place cameras for the Vol Walk, at the south east corner and cabling/space for one additional main follow camera at the 50 yard line.
- The addition of the field club requires a reconfiguration of the low end zone cameras at the Club. New cabling junction boxes are requested to be at the corners of the field wall rather than at the camera locations in front of the Club glazing. New junction boxes on the north east corner are also requested.
- The new junction boxes need to have power and space within the boxes for temporary mounting of fiber converter equipment to support the in-house video production system.
- New cabling for sideline broadcast functions should come from the field corners as well.
- Permanent cabling from pedestal to two north end zone junction boxes ("JBT") are desired.
- Additional cabling is required for the visitors' interview room.

The existing broadcast cabling is reported to be in good shape and extends to the locations with cable types and quantities as needed except for the items listed below:

- Additional SMPTE camera cabling and single mode fiber optic cabling.
- Cabling from TV truck cabling termination pedestal to field level needs to be replaced.
- Permanent cabling from pedestal to two north end zone junction boxes ("JBT") are desired.
- Additional cabling is required for the visitors' interview room.

The existing aerial camera ("skycam") provisions are adequate and are not expected to be impacted by any of the renovation projects.

Broadcast Booths:

The current are considered to be adequate in number, size and cable, power, etc. infrastructure. No changes or upgrades are currently included in the renovation project.

- The existing north end zone camera location for broadcast and coaching video is under an awning and Athletics wishes to explore if a similar condition can be created for the south at a similar elevation. Each platform should have room for one network and 2-3 coaching cameras.
- The south end zone platform needs additional fiber optic cabling and cabling for coaching video systems.

Radio Pre-Game Show Location:

A new location at the north end of the stadium is desired to be part of the renovation where the show can be part of the crowd activity.

- Lighting control (lighting control equipment provided in lighting package, only software control and signals as part of the AV system, if desired by UT.
- · Motorized shade control, if required.
- Wireless microphones and loose microphones.



AUDIO / VISUAL

DISTRIBUTED TV SYSTEM

The existing stadium distributed TV system provides game and commercial TV programming to TV sets throughout the building. The distribution plant bandwidth is 1 gHz, however signal levels are low in some locations, especially the east side of the stadium.

A fiber trunk cable system is to be provided. It will start at the Communications Building and create nodes in the existing "bunker" head end location, with fiber distribution from the bunker to a IT closet at both ends and the east side of the stadium. Coax and CAT6 cabling, pending UT review, from each existing and new, or relocated, TV set location would then home run to the nearest fiber node location/IT closet. In some cases, it will be more efficient for the existing copper cabling to remain in some locations, such as clubs, to minimize the of cost of any needed new cable pathways.

Two of the four existing in-house channels are to be upgraded to HD QAM.

As noted below, in club areas, the ability to allow a local video source (player, computer, table, etc.) to display images on the TV sets in that area is desired. There are two ways to achieve this without a complete rewiring of the distributed TV system cabling in those areas:

- Create an HDMI distribution system so that the TV sets in the area are switched to an HDMI input with the remote control and the local video device is connected to an HDMI panel. This requires an overlay of HDMI cabling to the area TV set.
- The lower cost option is to have a portable RF modulator system/cart that allows the local device to connect to the modulator. This then creates a channel on the stadium wide TV system. The TV sets in the zone of interest would be switched to the newly created channel to show the local images. While less expensive, this option allows what is being shown locally to be seen on any TV set in the stadium, tuned to that channel, which may not be desirable.

Menu boards and digital wayfinding signage are not expected to be part of the upgraded TV distribution system but rather be handled by a separate digital signage system, with signals carried over the stadium data network.

COACHING VIDEO INFRASTRUCTURE

Athletics has already installed fiber optic cabling to accommodate expected new SEC and NCAA rules on use of coaching video during games. No additional new cabling for this purpose is currently anticipated.

6.5 AUDIO / VISUAL

SOUND AND AV SYSTEMS BY SPACE

Existing Clubs:

Athletics request that these be upgraded to allow for easier local input of portable devices (computer, table, phone) and microphones.

Southwest Suites:

No dedicated AV or sound systems are planned for the interior portion of the suite. TV sets with sound bars will be provided. The sound bars are intended to improve audio quality for these premium areas in comparison with the TV sets' built-in speakers.

Field Club:

This area will have a dedicated AV system that is interfaced to the overall stadium AV, sound and broadcast systems. The intent that these can be used both during events and for "dark day" events using only the club.

The club system will include the following features:

- Touch screen control panel providing control of:
 - » Ceiling speaker based sound system, program, zoning, and input and loudness.
 - » Sources to include area and broadcast TV/radio audio, phone/table/computer, other portable devices, etc.
 - » TV set control, including on/off and channel selection.
 - » Local video (portable device, tablet, computer, etc.) inputs.
 - » Lighting control (lighting control equipment provided in lighting package, only software control and signals as part of the AV system, if desired by UT.
 - » Motorized shade control, if required.
- Wireless microphones and loose microphones.

If the clubs are expected to be used extensively for "dark day" events such as corporate meetings and social events, additional AV features, (esp. large displays) may be desired.

The primary difference between dark day and game day use of clubs is the ability to display large images for PowerPoint and other presentations. There are several ways to provide this capability, both built-in and portable. These include video projection, very large (80"-100") LCD/Plasma displays and LED displays. Which of these is most appropriate is based on how re-configurable the seating and head table/podium locations are, and if such displays are also used for seating bowl events.

When the room is to be flexible and/or the displays used infrequently for non-seating bowl events, it often makes sense for the displays to be portable screens with cart-mounted video projectors. These may also be rental gear, if it is a more appropriate cost model for the facility.

AUDIO / VISUAL

When the space will be routinely used for presentations and the seating configurations are known, building in the large screens may make sense. Regardless of the room and display configuration. when rooms allow natural light, control of daylight will be required for good viewing, by window shades, black-out curtains, etc..

Existing Clubs:

The sound and AV systems currently installed in the clubs (Wolf-Kaplan, East, Skybox Commons, Tennessee Terrace) are considered adequate on game day, however they do not work as well for "dark day" events held independently of a seating bowl event and some upgrades have been requested. Major upgrades are not desired as Athletics has indicated that the revenue potential of these spaces does not justify a large expenditure. The project should allow for the following desired improvements:

- Local control of loudness in each separate space (for example, the two zones in the Skybox
- · Ability to plug in local devices (phones, tablets, laptops, disc players etc.) and have images and audio seen and heard in the room
- Ability to deploy portable/rental screens and projectors for a event requiring large video or Power Point-type presentation.
- Permanent wireless microphones in spaces that can accommodate 100-200 persons.

SE and SW Sky Gardens/SW Lounge/SE Fan Zone (Alternates):

These areas are to include TV sets (size and location TBD) and sound systems. The sound systems will have location control of loudness and program selection as well as input for wired microphone. This input can also be used for portable wireless microphone system.

Concourse Restrooms:

These are to have ceiling speakers, controlled from the press level audio control room. Speakers are not recommended for family toilet rooms. The University requests that this feature be provided for both existing and new toilet rooms in effected areas.

First Aid Rooms:

These are recommended to include TV sets so staff can keep in touch with the game.

6.5 AUDIO / VISUAL

Concession Stands:

The food service stands are to include TV sets on the distributed TV system to show game action as well as video monitors on a digital signage system for menu boards. Loudspeakers are to be located such that those standing in line can monitor the game. The speakers should be located away from the point of sale location, so as to not interfere with communication. Program and loudness are controlled from the audio control room. The University requests that these features be provided for both new and existing concession stands.

Retail/Team Store:

The walk-in stores are to include TV sets on the distributed TV system and simple audio systems that allow control of loudness and program (ie; PA, radio or TV game broadcast) from within the store. Ceiling speakers are anticipated.

Visiting Team Areas:

New visiting team areas are to include TV sets and a game ("locker room") wall clock and any SEC required fiber connections. No other AV systems have been requested.

Auxiliary Locker Room:

A wall mounted game clock is to be provided. Any other equipment is assumed to be provided by the band program.

Visiting Team Interview Room:

The visiting team interview room should include a portable or permanent riser for head-table talent. An input panel in a permanent riser or wall behind the head table is required for microphone and other device inputs along with AC power at the head table. There shall also be an ability to hang a temporary backdrop behind the table. TV-suitable lighting for the head table is to be built into the ceiling or on a grid/bar system. A portable or removable riser should be placed in the rear of the room for TV cameras along with a cabling junction box for SEC network, UT in-house, etc., and Radio. In addition, an audio out "multi-box" (can be permanent on wall or in cable junction box, or a loose equipment item connected to the J-box) should be provided to allow broadcasters direct connection to the microphone feed from the head table. The junction box should include a video feed of the game TV signal or as inserted by UT. This space should also have internet/ data connections, WiFi, and DAS (if needed). A dedicated sound system is recommended, with wireless microphones for picking up audience questions. Room finishes should include: ACT (or similar acoustical performance) ceiling, acoustical wall panels on rear wall (opposite head table) and on one side wall (if asymmetry of treatment is a problem, it may be on both side walls, or at a minimum, back half of both walls, above chair rail height to the ceiling). The wall treatment is intended to facilitate good sound for broadcasters.

Officials Locker Rooms:

These rooms are to have TV sets and a game ("locker room") wall clock. No other AV systems have been requested.

Plaza and Entrances:

The existing speaker system is considered to be working well. Any new architectural gate reconfigurations would also require modification of the exterior speaker system in that area, and may require local control of loudness and program, to suit the nature of the space being created and how it will be used on game day and for other events. Where new outdoor gathering/plaza areas are created, the University requests audio, video and broadcast system connectivity to allow activities and events in the plaza to be facilitated and promoted. The requests for such a plaza area include:

- Permanent sound system with wireless microphone capability.
- Junction box with broadcast cabling, stadium data network and AV systems connectivity. This allows for camera shots, pre-game shows, bands, etc. to be connected to the rest of the stadium, in-house video production and broadcasters.
- LED display in primary gathering location.

Recruiting Systems:

Currently rental equipment is used in the home team locker room to provide high level sound in the locker room for non-game day recruiting events. The cost for these rental systems is high enough for Athletics to consider installing permanent systems. The systems include:

- LED or ceiling mounted, roll down projection screen for recruiting presentations.
- DJ podium.
- Small club style audio system, capable of high sound levels with subwoofers.
- Control system for the video and audio equipment.

6.5 AUDIO / VISUAL

MECHANICAL / HEATING WATER SYSTEM

- A. Space heating will be provided by a water based system distributed to air handlers, fan coil units, terminal units, and other heat transfer devices.
- B. Heating for the renovated stadium will be provided by multiple new steam-to-hot water heat exchangers located in a new mechanical room on level 00 along the east sideline.
- C. The approximate heating demand for the heat exchangers will be 9,000 MBH to serve renovated and NE level 00 spaces along with the upper floor restrooms, concessions, ancillary spaces, and the (alternate) Sky Garden areas.
- D. Final heat exchanger size and configuration will be determined upon finalization of building load calculations and system diversity study. A modular design approach will allow for accuracy in matching the load profiles associated with the varying event size and provides a level of redundancy.
- E. Heating water will be distributed at 180 F with a 30 F drop across heating coils.
- F. The heating water system will utilize BAS system heating water system demand feedback to allow the hot water supply differential pressure set point to be reset to maximize the energy efficiency of the system.
- G. The pumping system for the hot water distribution will be a variable primary arrangement. The system will consist of multiple heating water pumps (HWPs) to provide redundancy for the pumping system. Primary heating water pumps will be provided with variable frequency drives.
- H. Final pump quantity and flow characteristics will be determined based on desired level of redundancy and maximization of system efficiency.
- I. The system will include valves, air/dirt separator, expansion tank, variable frequency drives, condensate return units, modulating control valves, and fully automated controls.
- J. Heating coils will be provided with 2-way valves for accurate control and assist with the ongoing commissioning and balancing of the system. VAV boxes and Fan Coil Units at the end of each long branch pipe will be provided with 3-way valves to allow for flow to be maintained through the piping mains at all times.

MECHANICAL / AIR HANDLING SYSTEMS

A. Air handling systems will consist of packaged roof-top equipment as listed in the RTU Schedule below. Roof-top units shall be high efficiency type with heating hot-water coils.

RTU Schedule					
Designation	Area Served	Tonnage	Unit Type		
RTU 0-1	U 0-1 Aux Locker / Cheer / Officials		MZ VAV - PH, CC		
RTU 0-2	0-2 Maintenance		MZ VAV - PH, CC		
RTU 0-3	RTU 0-3 Visitor Locker Room		MZ VAV - 100% OSA ERV, PH, CC		
RTU 0-4	Food Service	40	SZ VAV - PH, CC, RH		
RTU 0-5	Food Service	40	SZ VAV - PH, CC, RH		
RTU 0-6	SEZ Club	60	SZ VAV - CC, RH		
RTU 0-7	SEZ Club	60	SZ VAV - CC, RH		
RTU 0-8 SEZ Club		60	SZ VAV - CC, RH		
RTU 1-1	Retail	15	SZ VAV - CC, RH		
RTU 2-1	O2 Lounge	30	SZ VAV - CC, RH		
RTU 3-1	Sky Gardens (If Enclosed)	30	SZ VAV - CC, RH		
RTU 3-2	Sky Gardens (If Enclosed)	30	SZ VAV - CC, RH		

Notes: PH - Preheat Coil, CC - Cooling Coil, RH - Reheat Coil - ERV - Energy Recovery Wheel, 100% OSA - 100% Outside Air.

- B. Low pressure supply ductwork (downstream of terminal units) and return ductwork will be sized at 0.08 inch wg/100' of duct, unless noted otherwise.
- C. Medium pressure supply ductwork (between AHU discharge and terminal unit inlet) will be sized at 0.15 inch wg/100' of duct or maximum of 2000 FPM, unless noted otherwise.
- D. General exhaust, return and outside air ductwork will be sized at 0.08 inch wg/100' of duct, unless noted otherwise.
- E. Flexible ductwork will be used to connect branch ducts to supply diffusers. Flex duct lengths will be limited to 5'-0" with maximum of one 90 degree bend.
- F. Exhaust ductwork from wet areas and equipment (e.g. hydrotherapy, lockers, showers, etc.) will be aluminum from inlet grille/device to termination (fan, louver, etc.) and will be sloped back to inlet at 1/4" per foot.
- G. Ventilation air will be provided in accordance with the most stringent of the IMC 2012, ASHRAE 62.1-2010, and the UT Design Criteria.
- H. Fan coil units serving occupied spaces will be provided with MERV 13 filters. Fan coil units serving unoccupied spaces will be provided with MERV 8 filters.
- I. Air handling units serving occupied spaces will be provided with MERV 8 pre-filters, upstream of MERV 13 filters. Air handling units serving only unoccupied spaces (storage, elec, IT/AV, etc.) will be provided with MERV 8 filters.
- J. Casing of all air-handling units shall be minimum 18-gauge, 2-inch double-wall construction and shall have inspection access upstream and downstream of unit components: fans, cooling coil, and filters. If chilled water is explored as an option, chilled water coils shall be selected for a 16 degree differential with 42 degree F entering water temperature.
- K. A fire damper will be provided at all duct penetrations of fire rated wall and floor assemblies.
- L. A smoke damper will be provided at all duct penetration of smoke rated wall and floor assemblies.
- M. A fire/smoke damper will be provided at all duct penetrations of shaft walls, shaft floors, egress corridors, elevator hoistways, and other locations as required by code.
- N. Economizer relief will be at exterior louvers, located at the west face of the west stadium complex. Alternately, for the upper floors, relief may occur at roof-mounted ventilation hoods. Louvers will be provided with modulating control dampers to maintain space pressure set points.
- O. All outdoor air, exhaust (not including grease exhaust), and relief air ducts will be provided with a motorized control damper for positive shutoff from the outdoors.
- P. Air Devices Diffusers, Grilles, and Registers
 - 1. Devices to be selected for a maximum pressure drop of 0.1" and maximum NC of 30.
 - Air devices mounted in hard ceilings or other similar assemblies without permanent access will be provided with cable operated dampers in the branch duct. Cable operated dampers will be provided with adjustment from face of device via cable operator mounted to device.
 - 3. Air distribution in low finish areas will be accomplished by 24x24 diffusers and grilles. Supply diffusers shall be equal to Titus OMNI and return grilles shall be equal to Titus 50FA.

- 4. Air distribution in high-finish areas (as indicated by the architect) will utilize linear slot diffusers for supply and return equal to Titus model FL with high-throw diffusers utilized for interior spaces and jet-throw diffusers utilized at exterior glass conditions. Where gypsum board ceilings are provided, diffusers shall be provided with border type 22, taped and floated into the ceiling construction.
- 5. Air distribution in kitchens and concessions shall be accomplished with perforated diffusers equal to Titus model PAR when located within 8 feet of a grease exhaust hood. Perforated diffuser for this application shall be provided with 22x22 neck and without directional face pattern.
- 6. No single supply diffuser shall exceed 500 CFM.
- Q. Volume dampers and equalizing grids will not be integral with diffusers or grilles. Dampers will be located at the take-off of the trunk or main, and at least 10 lineal-feet of lined ductwork and one 90-degree lined elbow will occur between dampers and diffusers.
- R. All return air systems shall be fully ducted. Plenum return will not be acceptable.

MECHANICAL / CHILLED WATER SYSTEM - ALTERNATE TO DX ROOF-TOPS

- A. If enough of the level 00 spaces will be constructed simultaneously, a chilled water system should be evaluated to serve the building loads. The following paragraphs describe this alternate system.
- B. Space cooling would be provided by a water based system distributed to air handlers, fan coil units, and other heat transfer devices.
- C. Cooling for the stadium would be provided by a new central water-cooled chiller system located in a level 00 mechanical room with cooling towers located in an adjacent utility yard, possibly replacing existing cooling tower structures.
- D. The estimated cooling demand for level 00, level 01 retail, level 02 suites/lounge, retail, and the sky gardens would be approximately 600 tons, accounting for simultaneous events in the spaces served.
- E. The chiller plant would consist of two (2) 400 Ton high efficiency, variable speed drive watercooled chillers. The associated cooling towers would be designed to have one cell per chiller with each cell matching the tonnage of one chiller. Should more of the building be put on this chilled water system in the future, the chiller sizing, or future planning for additional chillers should be re-evaluated at that time.
- F. Final chiller sizes and configurations will be determined upon completion of building load calculations and system diversity study.

- G. Chilled water will be distributed within the building at a 42°F supply temperature. Air Handlers should be designed for 16°F temperature rise across the coils.
- H. Inline electromagnetic flow meter will be provided in the chilled water system loop to ensure minimum chillers water flows are maintained at all times and for BTU metering.
- I. The chiller system would utilize BAS system chilled water system demand feedback (system delta T, cooling valve positions, etc.) that will allow the chilled water supply temperature and pressure to be reset to maximize the energy efficiency of the system.
- J. The pumping system for the chilled water distribution would be a variable primary arrangement. The system would include multiple primary chilled water pumps to provide redundancy for the pumping system. Primary chilled water pumps will be provided with variable frequency drives.
- K. The pumping system for the condenser water would likewise include multiple condenser pumps to provide redundancy for the pumping system. Condenser pumps would be provided with variable frequency drives for balancing and load matching purposes.
- L. Final pump quantities and flow characteristics will be determined based on desired level of redundancy and maximization of system efficiency.
- M. The system will include valves, air/dirt separator, expansion tank, buffer tank, glycol system, variable frequency drives, modulating control valves, and fully automated controls.
- N. The condenser system would include a chemical treatment feed and blow down system and tower basin sweep and separator system.
- O. Cooling coils will be provided with 2-way valves for accurate control and assist with the ongoing commissioning and balancing of the system. A minimum flow bypass and buffer tank will be provided to ensure continuous operation of the chillers.

MECHANICAL / MISCELLANEOUS HVAC SYSTEMS

- A. Food Service Condensers shall be air-cooled with condensers located on the roof above the area served.
- B. Video Room(s) in the building shall be conditioned by a floor mounted computer room air conditioner with chilled water coils. If redundancy is required dual coils can be utilized. The second set of coils will be DX and utilize a remote air cooled condensing unit.
- C. Any equipment sensitive to heat will be served by a separate fan coil unit. This could include, but is not limited to telecommunication rooms, electrical closets, server rooms, or video equipment. Requirements for such rooms will be evaluated based on equipment heat generation and sensitivity to climate.
- D. Specific space requirements can be found in the Area Specific MEPF Requirements below.

MECHANICAL / GENERAL DESIGN CRITERIA

A. ASHRAE Outside Design Conditions (Knoxville Municipal Airport):

95.0 F dry-bulb / 78.0 F wet-bulb (ASHRAE 0.4% Cooling DB/MWB) Summer:

O F dry-bulb (ASHRAE 99.6% Heating Dry Bulb) Winter:

B. Inside Design Conditions:

All space temperatures will be controlled to + 2°F of setpoint in table below

Space Type	Space Temp Summer (Deg °F)	Space Temp Winter (Deg °F)	Space Humidity (%RH)
Club/Lounge	75	70	60% max
Commissary/Vendor	80	65	60% max
Concession	80	65	
Conference/Meeting	75	70	60% max
Elec	85	60	
Housekeeping	80	65	
IT/AV	75	65	
Kitchen	80	65	60% max
Locker/Training	72	70	60% max
Office	75	70	60% max
Retail	72	70	60% max
Storage/MEP/Corridor	80	65	
Suite	75	70	60% max
Unconditioned	N/A	N/A	N/A
Weight/Workout	72	70	60% max
Seating Bowl	Not Conditioned	Not Conditioned	

C. Sound Control: The systems will be designed for the following sound levels:

Area	NC
Suites	30-35
Clubs	30-35
Lounges	35-40
Press	40
Broadcast	35

D. The ventilation design assumes that all indoor heated, ventilated and conditioned spaces are non-smoking areas. There are no provisions for smoking indoors.

MECHANICAL / NOISE CONTROL

- A. All silencer sizing and recommendations will be based on Vibro-Acoustics. VAW, Ruskin (formerly Rink), and other approved manufacturer's equivalent product(s) are acceptable. Silencers should be located about three equivalent duct diameters away from fan discharges or inlets, duct fittings or other air-flow discontinuities. Duct silencers will be utilized in areas with critical noise requirements. The use of silencers shall be limited to areas where other means of sound attenuation (liner, additional elbows, etc.) cannot be feasibly provided.
- B. In general ductwork will be sized in accordance with Table 1 for sensitive areas such as the Auditorium, Offices, Meeting Rooms, Club and Suite level spaces.

 NC rating
 Main duct air-flow (fpm)
 Branch duct airflow (fpm)

 NC-30 to 35
 840 - 1020
 460 - 540

 NC-35 to 40
 1020 - 1200
 540 - 640

Table 1 – Noise Criteria

Airflow velocities above introduce the potential for turbulence noise and duct breakout. All efforts should be made to size ductwork appropriately to attain these velocities.

- C. All ducts, pipe, and conduit penetrations will be sealed air-tight to limit sound leakage.
- D. All fluid-carrying pipe (liquid or gas) connecting to mechanical equipment should use commercially-available resilient connectors (selected as suitable for pipe contents).

MECHANICAL / BASIC MATERIALS

6.6 MEP + FIRE PROTECTION

A. Piping:

- 1. Chilled/heating water: 2 1/2" and smaller: ASTM B88 Hard Drawn, Type L copper tube with cast brass or solder wrought copper fittings and lead free solder. 3" and larger: Schedule 40, Black steel with threaded, welded, or grooved-end coupling joints
- 2. Steam and Condensate: 2" and smaller: Schedule 80, Black steel with threaded joints 2-1/2" and larger: Schedule 40, Black steel with welded joints for steam, Schedule 80 with welded joints for condensate.
- 3. Steam and Cond. Below Grade: Direct buried piping shall be conduit style with HDPE exterior casing and schedule 80 steel piping with welded joints.

B. Valves:

- 1. Ball, gate, globe, check and butterfly valves will conform to MSS standards.
- 2. Ball and butterfly valves will be used for shut off.
- 3. Butterfly valves will be used for balancing in piping larger than 2-in.
- 4. Griswold Automatic Flow Control type balancing valves to be provided at all hydronic cooling and heating coils and major pieces of hydronic equipment.

C. Piping Specialties

- 1. Air vents, expansion loops, strainers and unions will be in compliance with ASTM and ASME standards.
- 2. Install air vents at all high points of circulating water systems.
- 3. Install expansion loops as needed.
- 4. Install strainers upstream of control valves, backflow preventers, pumps, and PRV's.
- 5. Install unions at all pieces of equipment.

D. Meters and Gauges

- 1. Provide water meters, pressure gauges, and thermometers for control and monitoring of system performance.
- 2. All meters shall be liquid filled.

E. Hangers, Supports, Anchors, and Sleeves

1. Provide hangers, supports, anchors, and guides to install piping in accordance with MSS standards.

F. Electric Motors

- 1. Provide single and three phase motors in compliance with NEMA design B.
- 2. Motors smaller than 3/4 hp: 120 / 1 / 60.
- 3. Motors 3/4 hp and larger: 480 / 3 / 60.
- 4. For motors 1 hp and above, provide "premium high efficiency" motors.

G. Identification

- 1. Piping:
 - a) Identify piping systems with color-coded labels in accordance with ANSI A13.1.
- H. Vibration Isolation Mechanical equipment will not be located above meeting rooms
 - 1. Springs or neoprene mounts for rotating equipment or factory installed isolation if package type equipment is provided.
 - 2. Vibration isolation will be provided for the following equipment:

Service	Application
Fans:	Ductwork and fans
Pumps:	In-line (internal), Base (none)
AHU's:	Ductwork and fans (ductwork as required and isolate all units)
Exhaust Fans:	PRV's (internal to unit), Prop. Fans (internal to unit),In-line fans (spring)
Ductwork:	Flexible connections at air handling equipment
Piping:	Spring hangers on chilled water, condenser water, and heating water piping from pump connection to a horizontal distance of 15'-0".

Insulation

- 1. Insulation types will comply with ASTM and UL standards, meeting UL flame spread and smoke developed ratings.
- 2. Thickness of insulation will comply with the energy code and the fire code.
- 3. Externally insulate concealed ductwork with foil backed fiberglass.
- 4. Provide double-wall ductwork where exposed to public view and for concealed ductwork where specifically noted on plans for sound attenuating purposes in sound-sensitive spaces.
- 5. Provide aluminum jacket on piping and double wall ductwork that is insulated and exposed to the outdoors.
- 6. Piping Insulation Schedule:

Service	Materials
Chilled Water:	1/2" thick for up to 1 1/4" pipe.
	1" thick for 1 1/2" and larger.
	Provide with vapor barrier. Insulate valves,
	piping accessories, expansion tanks, and
	chilled water nump bodies

Heating Water: 1-1/2" thick for up to 11/4" and larger. 2" thick for 11/2" and

larger. Insulate valves, piping accessories, expansion tanks, and chilled water pump bodies. Exterior piping shall be provided with an additional 1/2" above

listed values.

7. Ductwork Insulation Schedule:

Service Materials 1-1/2" thick blanket insulation or 1-in. duct lining insulation, Supply Air Ducts as required, minimum R-5.3. Outside Air Ducts: 2" thick blanket insulation, minimum R-7.

Mixed Air Ducts: 2" thick blanket insulation

Kitchen/Laundry Exhaust/Flue Vent:

3-in, 2-hour rated (UL) fire-rated wrap insulation

- 8. All exposed supply and return (return depends on sound requirements) ductwork in finished spaces will be double wall with internal insulation or lined with insulation in lieu of external wrap.
- 9. Fiberglass blanket (3 lb. Density) used on all concealed ductwork in unfinished spaces.
- J. Bases and supports
 - 1. Concrete housekeeping pads will be provided for all floor mounted mechanical equipment. Minimum depth will be 4".

MECHANICAL / PUMPS

- A. In-line Pumps: Internally isolated (acceptable for fractional HP applications)
- B. Base Mounted Pumps: Flat head curves.
- C. Generally vertical split-coupled to 800 gpm.

MECHANICAL / VARIABLE SPEED CONTROLLERS

- A. Individually mounted, combination disconnect and adjustable frequency drives will be provided for all air handling units and selected pumps.
- B. 3-phase full wave diode bridge converter.
- C. IGBT transistor to provide pulse width modulate (PWM) output wave form.
- D. Manual electric bypass.
- E. Unit will incorporate solid state or thermal overloads, drive protection, and speed protection.

MECHANICAL / BUILDING MANAGEMENT SYSTEM

- A. The building will be provided with a fully automated Building Management System (BMS) with Direct Digital Controls System (DDC) for all HVAC equipment. The DDC system will be based on the campus standard system, and will tie into the campus wide loop.
- B. All actuators will be electric.
- C. The BMS system will be adjusted/monitored through a web based application. The system will be password protected but can be adjusted from any computer with an internet connection. The system shall be graphical in nature and represent the as-built building floor plan.
- D. The BMS system components that serve the smoke control system equipment and components shall be UL 864 listed.

MECHANICAL / TEST AND BALANCE

- A. Air and water balance will be provided by an independent contractor that is AABC or NEBB certified.
- B. Air systems will be tested to a maximum of 5% leakage at normal operating pressures.
- C. Smoke exhaust ductwork will be leak tested in accordance with the IBC section 909.
- D. Grease exhaust ductwork will be leak tested per section 506 of the IMC.

PLUMBING / GENERAL

- A. Isolation valves shall be provided throughout the facility to enable servicing of any part of the facility without interruption of plumbing services to adjacent spaces.
 - 1. Valves will conform to MSS standards.
 - 2. Valves 2 inches and smaller shall be two or three piece, full port ball valves with stainless steel balls and stems.
 - 3. Valves 2 1/2 inches and larger shall be lug type, butterfly valves.
- B. Water hammer arresters shall installed on all domestic water piping in accordance with PDI (Plumbing and Drainage Institute) Standards.
- C. Heat tracing shall be provided on portions of the potable water system, sanitary waste p-traps and condensate drain piping which will be in use year round and subject to freezing.
- D. Heat tracing shall be provided for aboveground grease waste systems with line lengths over 100 feet to prevent grease coagulation and clogging in the piping system.
- E. Domestic water systems which will not be in use year rounds shall be installed to be drained down.
- F. All piping shall be identified in accordance ASME A13.1 with preprinted self adhesive or self banding markers spaced at a maximum of 50 feet or 25 feet in congested areas.
- G. All interior exposed insulated piping and fittings shall be aluminum jacketed.
- H. All exposed ferrous metal pipes shall be prepped, primed, and finish coat painted.
- I. All floor mounted equipment shall be installed on 3-1/2" high housekeeping pads.

J. All domestic hot, cold and hot water return piping shall be insulated with 1" thick "all service jacket" fiberglass insulation.

K. Piping Specialties

- 1. Air vents, expansion loops, strainers and unions will be in compliance with ASTM and ASME standards.
- 2. Install expansion and seismic joints as needed.
- 3. Install strainers upstream of control valves, backflow preventers, pumps, and PRV's.
- 4. Install unions at all pieces of equipment.

L. Meters and Gauges

1. Provide water meters, pressure gauges, and thermometers for control and monitoring

of system performance.

2. All gauges will be liquid filled.

M. Hangers, Supports, Anchors, and Sleeves

1. Provide hangers, supports, anchors, and guides to install piping in accordance with MSS standards.

N. Electric Motors

- 1. Provide single and three phase motors in compliance with NEMA design B.
- 2. Motors smaller than 3/4 hp: 120 / 1 / 60.
- 3. Motors 3/4 hp and larger: 480/3/60.
- 4. For motors 1 hp and above, provide "premium high efficiency" motors.

O. Pumps

- 1. Inline Pumps: Internally isolated (acceptable for fractional HP applications)
- 2. Base Mounted Pumps: Flat head curves.
- 3. End Suction up to 4,000 gpm.
- 4. Elevator Sump Pumps, simplex.

P. Insulation

- 1. Insulation types will comply with ASTM and UL standards, meeting UL flame spread and smoke developed ratings.
- 2. Thickness of insulation will comply with the energy code and the fire code.
- 3. Provide aluminum jacket on piping that is insulated and exposed to the outdoors.
- 4. All interior exposed insulated piping and fittings shall be PVC jacketed.
- 5. Piping Insulation Schedule:

6.	Service	Materials	
	Domestic Cold Water:	1" thick	
	Domestic Hot Water:	Same as domestic cold water	
	Recirculation Hot Water:	Same as domestic cold water	
	Storm Water:	1" thick at all horizontal runs, including 2'	
		above and below horizontal offsets (use no	
		staples). 1" thick insulation for exposed vertical	
		risers. 2" thick insulation for roof drain bodies	
	Cold Indirect Drains:	Same as domestic cold water	

PLUMBING / DOMESTIC WATER (POTABLE):

- A. Domestic hot and cold water shall be provided for all toilet domestic plumbing fixtures and devices that require potable water.
- B. The cold water distribution piping shall be sized for a maximum velocity of 8 FPS.
- C. The water distribution piping shall be size to handle "Super Flush" conditions.

PLUMBING / DOMESTIC HOT WATER:

- A. Domestic hot water shall be provided primarily by new central steam-fired instantaneous water heaters. It is proposed to locate the new steam-fired water heaters within a new MEP room along the east side of the stadium on Level 00.
- B. Small point of use electric instantaneous or tank type water heaters will be provided for small remote spaces. Tank type natural gas fired water heaters will be provided for larger remote spaces.
- C. The hot water distribution piping shall be sized for a maximum velocity of 5 FPS.
- D. Domestic hot water will to be heated to and distributed at 140 degrees. Thermostatic mixing valves shall be installed for showers, lavatories and hand sinks.
- E. The hot water systems will be recirculated.

PLUMBING / SANITARY, WASTE AND VENT SYSTEM:

- A. Multiple sanitary, waste and vent stacks shall serve the restrooms, locker rooms, mechanical rooms, etc.
- B. Where required by the authority having jurisdiction, floor drains shall be provided with trap primers.
- C. The sanitary, waste and vent piping shall be sized to handle "Super Flush" conditions.
- D. The sanitary system shall be sized based on a uniform 1/4 inch per foot (2 percent) slope for piping 3 inch and smaller, and uniform 1/8 inch per foot (1 percent) slope for piping 4 inch and larger.
- E. Where possible the grease waste system piping shall be sized based on a uniform 1/4 inch per foot (2 percent) slope for all piping sizes. Where required due to invert elevations the grease waste system piping shall be sized based on a uniform 1/8 inch per foot (1 percent) slope.
- F. If portions of the sanitary waste system cannot flow by gravity into the site system, then a duplex sewage ejector shall be provided. Sewage ejectors shall be provided on standby power.
- G. Install vent piping pitched to drain back by gravity to the sanitary drainage piping system.
- H. H. Plumbing vents within six lineal feet of the roof outlet shall be insulated with 1-inch thick "all service jacket" fiberglass insulation.

PLUMBING / GREASE WASTE SYSTEM:

- A. Grease waste piping shall be provided to serve all fixtures and drains that receive grease including but not limited to three compartment sinks, janitor's sinks (in food service drains), pre-scrapper sinks, dishwashers, and floor drains (in cooking areas) and at all other locations as required by local AHJ.
- B. Where possible the grease waste system piping shall be sized based on a uniform 1/4 inch per foot (2 percent) slope for all piping sizes. Where required due to invert elevations the grease waste system piping shall be sized based on a uniform 1/8 inch per foot (1 percent) slope.
- C. Small steel, flow through, point of use grease traps shall be provided on the floor at all three compartment sinks in non-cooking food service spaces (i.e. Concessions and Pantries).
- D. An in-ground concrete or plastic, retention type grease interceptor shall be provided to serve the Main Kitchen and Commissary as well as any other cooking food service spaces. The grease interceptor shall have a minimum capacity of 1000 gallons. Final sizing shall be based on food service equipment and local AHJ sizing requirements.

PLUMBING / STORM WATER DRAINAGE SYSTEM:

- A. A gravity storm drainage system shall be provided for the facility. The system shall connect to each roof drain, area drain, and trench drain. The storm drainage system shall be sized based upon the local rainfall rates and a 1/8-inch per foot horizontal slope. Secondary roof drains will discharge separate from the primary system grade or onto roofs below. To allow for flexibility to install horizontal offsets in vertical stacks, lines shall be sized using the horizontal sizing criteria.
- B. The under slab foundation drainage system (if required) shall be designed by others. The connection between the foundation drainage system and the storm system shall be provided within the plumbing drawings.
- C. Storm piping in enclosed areas shall be insulated on all horizontal runs and at the connection to the roof drain insulated with 1-inch thick "all service jacket" fiberglass insulation.

PLUMBING / NATURAL GAS SYSTEM:

- A. Natural gas shall be distributed throughout the facility at 2 PSI and area or equipment specific natural gas regulators shall be provided. The distribution system shall include all regulators, valves, vents, piping and fitting that are required for the facility.
- B. Natural gas shall be provided for all pieces of cooking equipment located in food service spaces including but not limited to Main Kitchen, Commissary, Concessions, and Pantries.
- C. Natural gas shall be provided to laundry spaces to serve natural gas fired dryers.
- D. Natural gas shall be provided to all natural gas fired domestic water heaters.
- E. Natural gas shall be provided to all natural gas fired emergency generators. Dedicated run(s) of natural gas piping shall be provided from the new natural gas entry to the emergency generators.
- F. The natural gas systems shall be provided with seismic protections per the 2012 International Building Code and ASCE 7-2010.

PLUMBING / PIPE MATERIALS:

A. Piping:

Systems	Materials
Natural Gas Underground:	High Density, SDR-11 iron pipe size polyethylene pipe
Natural Gas Aboveground:	Schedule 40 Black Steel, All 2 psig piping to be welded, screwed fittings or welded for lines less than 2 psig
Waste/Vent Underground:	Coated Hub and Spigot Cast Iron pipe with neoprene compression gaskets.
Waste/Vent Aboveground:	No-Hub Cast Iron with approved stainless steel couplings (6" and smaller) or Coated Hub and Spigot Cast Iron pipe with neoprene compression gaskets (8" and larger).
Storm Water Underground:	Coated Hub and Spigot Cast Iron pipe with neoprene compression gaskets.
Storm Water Aboveground:	No-Hub Cast Iron with approved stainless steel couplings (6" and smaller) or Coated Hub and Spigot Cast Iron pipe with neoprene compression gaskets (8" and larger).
Indirect Waste:	DWV Copper (3" or smaller)
Domestic Water Undergrour	
	Cement-lined, ductile iron pipe (3" and larger) or Type K Copper (2-1/2" and smaller)
Domestic Water Abovegroun	nd:
· ·	304 Stainless steel pipe (4" and larger) or Type L Hard

Copper (3" and smaller).

PLUMBING / FIXTURES:

A. Plumbing fixtures shall maintain the following water consumption values:

Water Closet 1.28 GPF 0.125 GPF Urinal Lavatory 0.5 GPM Sinks 1.5 GPM Showers 1.75 GPM

- B. Water closets shall be wall hung vitreous china with sensor operated battery powered, diaphragm flush valves. Where shown on architectural plan, fixtures shall be mounted at ADA accessible elevation.
- C. Urinals shall be wall hung vitreous china with sensor operated battery powered, diaphragm flush valves. Where shown on architectural plan, fixtures shall be mounted at ADA accessible elevation.
- D. Lavatories shall be wall mounted, counter mount or under counter mount as shown on architectural plan. Where shown on architectural plan, fixtures shall be mounted at ADA accessible elevation.
 - 1. Lavatories in locker facilities and family toilets shall be vitreous china type with ADA compliant single lever manual faucets having flow restrictors and insulation kits.
 - 1. Lavatories in all other toilets shall be vitreous china type with ADA compliant sensor operated battery powered faucets having flow restrictors and insulation kits.
- B. Showers shall have a pressure balance mixing valve. Shower valves in ADA stalls will have hand held shower, hose and vacuum breakers. All shower heads will be installed 8'-0" above floor.
- C. Sinks in break rooms shall be stainless steel single or double compartment type with ADA compliant faucets. Where shown on architectural plan, fixture shall be mounted at ADA Accessible elevation.
- D. Water coolers and drinking fountains shall be dual height, wall hung, push button operated and stainless steel construction. One fountain shall be mounted at ADA Accessible elevation.
 - 1. Units located in premium spaces shall be water coolers and provided with integral chiller units. All other locations shall be provided with drinking fountains.
 - 2. Where shown on architectural plan, fixtures will be provided with integral bottle filler
 - 3. Where fixtures are mounted on the exterior of the building and subject to freezing, freeze resistant fixtures will be provided.
- H. Janitor's mop sinks shall be 24" x 24" x 12" terrazzo floor mounted type.
- I. General-purpose floor drains shall be in each toilet room, including toilet rooms with one water closet and lavatory. Each public toilet shall have approximately one floor drain for every four water closets.
- J. There shall be recessed box type freeze-proof wall hydrants on the exterior of the building near each entrance or at a maximum of every 200 feet.

- K. Fixtures shall be provided with chromium plated brass trim and individual stop valves.
- L. Appropriate 'barrier free' fixtures shall be provided in accordance with the "Americans with Disabilities Act" (A.D.A.).
- M. Emergency drench showers and eye washers shall be provided as required. All stations shall be provided with floor drains and protected with trap primer valves.
- N. Exterior area drains shall be provided with heavy duty bronze vandal resistant removable gratings.
 - 1. Area drains installed in split slabs shall be specifically designed for such application and provided with perforated extensions.
- O. Floor drains for general use shall be provided with removable

FIRE PROTECTION / GENERAL

- A. The fire protection systems will be designed and installed in accordance with the requirements of the NFPA 13, NFPA 14 and NFPA 20. Renovated areas and new spaces will be provided with a sprinkler system that comply with the state building code and local amendments.
- B. The fire sprinkler system is served by existing fire pumps serving wet and dry sprinkler systems. The fire pumps will require further evaluation to determine if they are adequate to supply the new renovated areas and new spaces.
- C. All fire protection system water supply control valves on the system side of the fireservice entry will be equipped with electronically supervised control valves. The wet sprinkler system(s) shall be equipped with a waterflow switch. Wet sprinkler systems protecting unheated areas shall be provided with heat trace to prevent freezing.
- D. A wet type sprinkler system will be provided in all areas that will maintain 40 degrees Fahrenheit. A dry sprinkler system will be provided in all unconditioned areas and areas that will not maintain 40 degrees Fahrenheit year round.
- E. Sprinkler spacing and pipe sizing will be designed for Light Hazard occupancy, 0.10 gpm/ft2 over the remote 1500 ft2 area in all clubs, suites, offices, restrooms and other light hazard areas as outlined in NFPA 13, with pipe sizing based on contractor provided hydraulic calculations. Sprinkler Spacing and piping sizes will be designed for Ordinary Light Hazard Group 1, 0.15gpm/ ft2 over the remote 1500 ft2 area in all kitchens, concessions, storage, locker rooms and other ordinary hazard group 1 areas as outlined in NFPA 13, with pipe sizing based on contractor provided hydraulic calculations.
- F. Concourses 50% open or more are not anticipated to be protected with a sprinkler system.
- G. Clubs, suites, locker rooms and other similar areas will be provided with concealed sprinklers. Concourse restrooms, concessions, storage, utility rooms and other similar areas will be provided with recessed pendents and upright sprinklers.
- H. Standpipes and hose valves will be provided as required.

FIRE PROTECTION / ALARM SYSTEM

- A. The stadium is served by a Simplex 4100U voice fire alarm system located in the fire command center. The existing fire alarm control panel is 2nd generation panel that is fully code compliant and does not need to be replaced.
- B. Two (2) new Simplex Truesite workstations are to be provided. One (1) workstation is to be located in the fire command center and one (1) workstation is to be located on the fifth floor at a location approved by the owner.
 - 1. The new Truesite workstations will monitor and control the existing and new fire alarm equipment.
 - 2. The workstation systems shall include software, services for software data input, and all services and support required to control and monitor all new and existing fire alarm equipment.
 - 3. If necessary to support the installation of the Truesite workstations the existing fire alarm control panel can have a software upgrade to a 4100ES, the current 3rd generation panel, which will give the fire alarm control panel the capabilities of the most current Simplex fire alarm control panels.
- C. Audible and visual appliances will be provided throughout all the renovated and new spaces in accordance with NFPA 72. Additional speakers will be added to provide audibility throughout as required by NFPA 72.
- D. The system shall provide fire detection and alarm, complete with manual pull station (if required), ceiling mounted detectors (if required), air handling unit shut down and sprinkler monitoring.
- E. Automatic fire detection shall be provided for elevator recall in each lobby, elevator shaft and in the elevator machine room (if applicable), all air handling units as required by code, electrical rooms and at each fire control panel location in accordance with NFPA and ASME A17.1 along with State requirements.
- F. The fire alarm system will be evaluated for connections to the stadium public address system and ribbon boards to supplement evacuation in the event of an alarm.
- G. Sequence of operation shall match university standards.
- H. Further evaluation will be required to verify if an event mode utilizing a positive alarm sequence will be required during game day events. This will allow facility employees to verify an alarm before the stadium is evacuated. During non event days the fire alarm system will operate as a typical fire alarm system and will actuate an alarm immediately.

ELECTRICAL / GENERAL

- A. Power requirements and equipment quantities are based on preliminary information provided. Exact equipment size and quantities may vary. Estimated power requirements and equipment quantities as follows assuming gas cooking in the concessions:
 - 1. North Side
 - a) Additional load added to the existing north side of the stadium is estimated at approximately 1,200 kW. This is estimated at approximately 17 VA/SqFt. The load includes general power, HVAC, and lighting for the new spaces including concessions, ledge seating, restrooms, and concourses.
 - 2. East Side
 - a) Additional load added to the existing east side of the stadium is estimated at approximately 1,700 kW. This is estimated at approximately 18 VA/SqFt. The load includes general power, HVAC, and lighting for the new spaces including storage, maintenance, concessions, restrooms, ledge seating, and concourses.
 - 3. South Side
 - a) New load added to the existing south side of the stadium is estimated at approximately 6,000 kW. This is estimated at approximately 23 VA/SqFt. The load includes general power, HVAC, and lighting for the new spaces including clubs, retail, guest services, concourse, concessions, ledge seating, sky garden, and restrooms.
 - 4. West Side
 - a) New load added to the existing west side of the stadium is estimated at approximately 6 kW. This is estimated at approximately 5 VA/SqFt. The load includes general power, HVAC, and ledge seating areas.
 - 5. Videoboard North Side
 - a) One new large videoboard The total service size for a 140x35 videoboard is approximately 500 KW.
 - 6. Videoboard South Side
 - a) One new large videoboard The total service size for a 140x35 videoboard is approximately 500 KW.
- B. Distribution of power shall be from 480Y/277 volt and 120/208 volt, circuit breaker switchboards for each of the following locations: North Side, East Side, and South Side. From there, 480Y/277 volt branch circuit panelboards, dry-type step-down transformers, and 208Y/120 volt branch circuit panelboards shall be installed at strategic locations throughout the facility for efficient distribution of power. Panelboards serving sensitive equipment and exterior lighting shall be provided with surge protection devices (SPD) to protect against voltage transients generated by lightning, utility, electro-mechanical, and electronic equipment.

- C. All general lighting shall be served from a dedicated "Lighting" panelboard.
- D. Mechanical Equipment shall generally be served from 480Y/277 volt, circuit breaker, distribution type boards.
 - 1. Motor loads 3/4 HP and greater shall be powered at 480 volts. Provide VFD controllers for all motors that are rated 25 horsepower and larger. Capacitors shall be fused and include a discharge register.
- E. Convenience power, incandescent/LED specialty lighting and computer equipment shall be served at 208 volt or 120 volt as required.
- F. Emergency power shall be supplied by new generators. The Article 700, 701, and 702 loads will be separated on individual automatic transfer switches (ATS). The emergency loads shall include emergency egress lighting within the building, exterior emergency egress lighting to 5 foot outside the exit doors, all elevators, the fire alarm system, smoke evacuation, elevator pressurization, exit stair pressurization system, sound system, and sound system, videoboards. The fire pump will be fed by an dedicated circuit breaker on the generator. The elevators will be served from a distribution panelboard provided on its own automatic transfer switch. Additional owner selected standby loads will be supplied by a third ATS and separate distribution system. The generator shall be located within the building with access for fueling the generator. If access cannot be obtained. natural gas generators shall be utilized. Provide services to remote radiator, intake and exhaust equipment. Emergency distribution equipment shall be circuit breaker type equipment including all switchboards, distribution panelboards, and panelboards.

1. North Side

a) Adding the additional emergency load of 50 kW to the existing diesel gas generators on the north side.

2. East Side

a) The East Side will be supplied by a new 800 kW diesel generator with a fuel tank capacity for minimum run time at full load for 24 hours with a minimum of 3 automatic transfer switches.

3. South Side

a) The South Side will be supplied by a new 1500 kW diesel generator with a fuel tank capacity for minimum run time at full load for 24 hours with a minimum of 3 automatic transfer switches.

4. South Videoboard

a) Both videoboard options will be supplied by a new 400 kW generator with a minimum of 1 automatic transfer switch. Fuel tank, if required, shall have a minimum run time at full load of a minimum of 2 hours.

5. North Videoboard

a) Both videoboard will be supplied by a new 400 kW generator with a minimum of 1 automatic transfer switch. Fuel tank, if required, shall have a minimum run time at full load of a minimum of 2 hours.

ELECTRICAL / SYSTEM COMPONENTS

A. Receptacles:

- 1. Receptacles for maintenance, any special equipment, and near roof-mounted HVAC equipment (if applicable) shall be provided as required by Code.
 - a. Receptacles mounted near roof-mounted HVAC equipment shall be GFCI type.
- 2. Receptacles shall be provided in each space per program requirements. At a minimum, each regularly occupied space shall have at least one receptacle per wall.
- 3. All receptacles in toilets, janitor closets, outdoors and counter tops with sinks shall be GFCI type.

B. Grounding:

1. The electrical service and all switchgear, switchboards, transformers, motor control centers, motor starters, panelboards, and derived systems shall be grounded per the NEC.

C. Equipment Connections:

1. Electrical power connections shall be made to all elevators, electrically operated doors, etc., including furnishing of all electrically associated devices such as disconnect switches, lock-out switches, etc.

D. Mechanical Equipment Connections:

1. Electrical power connections shall be made to all mechanical equipment including furnishing of all electrically associated devices such as disconnect switches, contactors, magnetic or manual starters, lock-out switches, etc., which are not furnished under the Mechanical, Plumbing and Fire Protection Sections.

E. Switchgear:

- 1. The medium voltage main switchgear(s) shall consist of a single self-supporting enclosure, containing interrupter switches and power fuses, all completely factory-assembled and operationally checked.
- 2. The rating and construction of the integrated pad-mounted gear shall be as indicated in the University Standards.
- 3. The pad-mounted gear shall conform to or exceed the applicable requirements of the following standards and codes:
 - a. All portions of ANSI C57.12.28, covering enclosure integrity for pad-mounted Equipment;
 - b. Article 490-21(3) in the National Electrical Code, which specifies that the interrupter switches in combination with power fuses shall safely withstand the effects of closing, carrying, and interrupting all possible currents up to the assigned maximum short-circuit rating;
 - c. All portions of ANSI, IEEE, and NEMA standards applicable to the basic switch and fuse components.

F. Switchboards:

- 1. The low voltage main switchboard(s) shall be completely assembled NEMA Class PB 2, front accessible with copper bus bars, full neutral bus, and separate ground bus. All bus work shall extend the full height of the panel without reduction and shall be braced to withstand available RMS symmetrical fault currents. Protective devices shall be provided with approved barrier between sections and extended load terminals.
- 2. Main breakers shall be low voltage AC power type, dead front, stored energy with solid state trip devices. Arcing contacts shall be renewable.
- 3. Rating shall be 3-pole, 600 volts AC, 60-cycle with frame size, trip rating, system, voltage, and interrupting rating as shown on the drawings.
- 4. Provide an indicator visible from the front of the unit to indicate whether the breaker is open or closed.
- 5. Include provisions for a padlock.
- 6. Unless otherwise shown on the drawings, breakers 1600 ampere frame size and less shall be manually operated. Breakers larger than 1600 ampere frame size shall be electrically operated.
- 7. Trip devices shall have the following features:
 - a. Trip device in each pole.
 - b. Mechanically and electrically trip free.
 - c. Long time element with adjustable pick-up and selective maximum, intermediate, and minimum time delay bands.
 - d. Short time element with adjustable pick-up and selective maximum, intermediate, and minimum time delay bands.
 - e. Ground fault element with adjustable pick-up and selective maximum, intermediate, and minimum time delay bands.
 - f. Final settings of pick-up and time bands shall be as reflected by the Electrical System Protective Device Study.
- 8. Feeder devices shall be UL listed and labeled molded case circuit breakers, in accordance with the NEC, as shown on the drawings, and as herein specified.
- 9. Provide molded case, solid state adjustable trip type circuit breakers. Breakers which have same rating shall be interchangeable with each other. Trip units shall have field adjustable tripping characteristics as follows:
 - a) Ampere setting (continuous).
 - b) Long Time band.
 - c) Short time trip point.
 - d) Short time delay.
 - e) Instantaneous trip point.
 - f) Ground fault trip point.
 - g) Ground fault trip delay.
- 10. Space for a minimum of four spares, three-pole breakers shall be included in each switchboard. Provide spare circuit breakers as indicated on the drawings.
- 11. Ground fault protection shall be provided for 480-volt services on each service breaker rated 1,000A or more.

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- 12. Provide ammeter, voltmeter and watt hour demand meter unless otherwise directed.
 - a. Ammeter and voltmeter shall conform to ANSE C39.1 specification, 250 scale + 1% of full-scale basic accuracy class.
 - b. Provide instrument transfer switches to read current in each phase and voltage, phase to phase and phase to ground, and off positions.
 - c. Watt hour demand meter shall be draw out type, semiflush mounting indicating demand meter with 15 minute interval and multiplier. Meter shall be capable of adaptation to remote readout via Central Control and Monitoring System.
- 13. Multi-line meters with radio equipment will be supplied for all Service transformers and Main Switchboards per University Standards.
 - a. Metering Equipment: Provide a G.E. MULTILIN PQM II-T20CA with multi-net-FE, multi-function, high accuracy digital power metering instrumentation module equipped with an LCD display. The power metering module shall provide simultaneous measurements for current, voltage, and power parameters. Power meter shall be equipped with a communications port for connection to customer's future SCADA network.
- G. Transformers (480 Volt, 3-phase, 3-wire primary to 208Y/120V, 3 Phase, 4 Wire secondary):
 - 1. Dry type, ventilated, 220°C insulation system temperature class and shall meet current DOE energy savings standards.
 - 2. NEMA standard voltage taps.
 - 3. NEMA standard sound ratings.
- H. Starters and Controls:
 - 9. All temperature control and mechanical equipment interlock wiring, raceways and associated devices shall be provided by the Mechanical Contractor or Temperature Controls Contractor. All alarms, plumbing and fire protection control and equipment interlock wiring, raceways and associated devices shall be provided under this Section. All fire detection, alarm and communications wiring, raceways and associated devices shall be provided under this Section.
 - 10. Magnetic starters shall be combination type complete with circuit breaker disconnect, auxiliary contacts, overload relays, individual fused control transformer, hand-off-automatic selector switch and red "run" pilot light.
- I. Panelboards General:
 - 1. Provide standard manufactured products. All components of panelboards shall be the product and assembly of the same manufacturer. All similar units of all panelboards to be of the same manufacturer.
 - 2. Panels shall be dead front safety type.
 - 3. All new panelboards shall be completely factory assembled with molded case, bolt-on circuit breakers.
 - 4. Panels shall have main breaker or main lugs, bus size, voltage, phase, top or bottom feed, and flush or surface mounting as applicable to design.
 - 5. Panelboards shall have the following features:
 - a. Non-reduced size copper bus bars and connection straps bolted together and rigidly supported on molded insulators. Bus bar taps for panels with single pole branches shall be arranged for sequence phasing of branch circuit devices.

- b. Full size neutral bar, mounted on insulated supports.
- c. Ground bar with sufficient terminals for all grounding wires.
- d. Buses braced for the available short circuit current, but not less than 10,000 amperes symmetrical for 208Y/120 volt panelboards and 14,000 amperes symmetrical for 480Y/277 volt panelboards.
- e. All breakers arranged so that it will be impossible to substitute a 2 pole breaker for two single pole breakers, and a 3 pole breaker for three single pole breakers, when frame size is 100 amperes or less.
- f. Where designated on panel schedule as "space", include all necessary bussing, device support and connections. Provide blank cover for each space.
- g. In two section panelboards, the main bus in each section shall be full size. The first section shall be furnished with sub-feed breaker on the line side for cable connections to the second section. Panelboard sections with feed thru, tapped bus, or crossover bus shall not be accepted.
- h. All panelboards shall have covers with hinges.
- J. Lighting and Branch Circuit Panelboards:
 - 1. 480Y/277 volt panelboards shall be equal to Square D type "NF" as manufactured by Square D, Eaton, or Siemens.
 - 2. 208Y/120 volt panelboards shall be equal to Square D type "NQOD" as manufactured by Square D, Eaton, or Siemens.
 - 3. Typed directories shall be provided in each panelboard. Main breakers shall be provided where required by code.
 - 4. A minimum of 25% spare circuit breakers shall be provided in each panelboard.
- K. Distribution Panelboards Circuit Breaker Type:
 - 1. Panelboards shall be equal to Square D type "ILINE" as manufactured by Square D, Eaton, or Siemens.
 - 2. Breakers shall be the thermal magnetic type, quick-make, quick-break, trip indicating, ambient compensated bolt-in type.
 - 3. Typed directories shall be provided in each panelboard. Main breakers shall be provided where required by code.
 - 4. Space for a minimum of three (3) 3-pole breakers shall be provided in each panelboard.
- L. Cables, Wiring and Raceways:
 - 1. Cable and wiring shall be 75°C rated insulation, except as noted below, copper conductors and color coded.
 - 2. Lighting and receptacle branch circuit conductors #10 and smaller shall be solid copper, type "THWN" or "THHN". Minimum size shall be #12 AWG, except control wiring may be #14 AWG, type "THHN".
 - 3. Conductors #8 and larger shall be stranded copper with "THWN", "THHN" or "XHHW" insulation.
 - 4. Wire sizes #10 AWG and smaller shall be solid copper. Wire sizes larger than #10 AWG shall be stranded copper.
 - 5. Metal-Clad cable type "MC" will not be allowed.
 - 6. Final wiring connections to motors and dry type transformers shall be run in flexible metal conduit. Liquid tight flexible conduit shall be used in wet locations or where exposed to the weather. Flexible conduits shall be used for connections to vibrating or rotating equipment.

M. Conduit Systems

- 1. Unless otherwise specified herein, all wiring shall be installed in conduit.
- 2. Conduit size shall be in accordance with the NEC, but not less than 3/4" unless otherwise shown. Where permitted by the NEC, 1/2" flexible conduit may be used for tap connections to recessed lighting fixtures.
- 3. Conduit shall be rigid, galvanized, heavy wall steel, intermediate metal conduit or rigid aluminum for all raceways where subject to damage, all stub-ups in concrete, all stub-outs thru concrete walls or from slabs, or where exposed to weather. Aluminum conduit shall not be buried in concrete or directly in earth.
- 4. Electrical metallic tubing (EMT) shall be allowed indoors in dry areas where not subjected to damage. EMT shall not be installed in slabs on grade, underground, building exterior, or where prohibited by Code, in which case rigid metallic conduit as described above shall be used.
- 5. PVC conduit may be used for underground conduit runs in the horizontal portion only. Rigid metallic conduit shall be required for elbows and vertical transitions for all underground conduit installations.
- 6. Rigid steel conduit shall have steel or malleable iron threaded couplings, locknuts, bushings, and elbows.
- 7. Rigid aluminum conduit fittings shall have malleable iron, steel, or aluminum alloy threaded couplings, locknuts, bushings, and elbows. Zinc or cadmium plate iron or steel fittings shall not be allowed. Aluminum fittings containing more than 0.4 percent copper shall not be allowed.
- 8. Electrical metallic tubing fittings shall comply with the following:
 - a. Raintight or steel type using a split corrugated compression ring and tightening nut or stainless steel locking disc.
 - b. Steel set screw fittings are not permitted.
 - c. Indenter, drive-on and pressure cast or die-cast type connectors or couplings are not permitted.
- 9. Conduit supports, couplings and fittings, pullboxes and other wiring materials and devices shall be provided as required.

N. Light Switches, Receptacles and Coverplates:

- 1. Lighting switches shall be quiet type, toggle or key type, heavy duty specification grade, ivory; Hubbell #1221 Series, or approved equal.
- 2. Duplex receptacles shall be specification grade, grounding type, ivory; Hubbell #5362, UL verified to Federal Spec. WC596-F, or approved equal.
- 3. Floor boxes shall be flush mounted.
- 4. Wall plates for switches and receptacles shall be UL listed brushed stainless steel type 302.. Oversize plates shall not be acceptable.
- 5. All plates for multiple gang requirements shall be one-piece combination.
- 6. Floor service fittings shall be combination type (duplex receptacle and telephone service), back-to-back design, and extruded aluminum.

- O. Concrete Pads and Sealing:
 - 1. Concrete housekeeping pads shall be provided for electrical equipment in the building and the pad mounted utility transformers and emergency generators. Floors, walls and ceiling openings shall be sealed to prevent air and noise transmission from floor-to-floor and from room-to-room.

ELECTRICAL / LIGHTNING PROTECTION

Lightning Risk Assessment will be performed during design development to determine if the building should be considered for protection. If the assessment recommends protection is warranted, the owner should discuss lightning protection with their insurance carrier to determine the extent of structures to be protected. If deemed necessary, a standard Franklin type system as recognized by NFPA 780 will be specified.

ELECTRICAL / LIGHTING SYSTEMS

- A. General Requirements: Illumination levels for all spaces shall be as recommended by University of Tennessee guidelines or per IES standards of good practice. Illumination levels referenced are maintained levels measured at 30" AFF or at an actual work surface and represent an average level for the area. See Table 1 - Lighting Criteria below.
 - 1. High efficiency light sources (LED, HID and fluorescent) will be utilized wherever possible and will typically operate at 277 volts. LED or compact fluorescent lamps (either 4-pin bases or self-ballasted medium base) will be used in decorative fixtures or downlights in lieu of incandescent lamping except where noted. Energy saving type T8 warm white, 3500K lamps and energy saving electronic ballast, compatible approved to work with Lutron controls, will be specified. LED lighting will also be utilized where task and special effects lighting are required and when dimming is desired but not possible from other sources.
- B. Multiple switching will be utilized in large areas (500 sg. ft. and larger) where fluorescent lighting is used and where required by energy codes. Wall dimmers or preset dimming systems will be utilized in miscellaneous rooms where applicable. Summary of target maintained interior and exterior lighting foot candle levels of areas as follows. Exterior lighting levels are based on IES Outdoor Lighting Zone 3 and High Activity.
- C. Exterior Lighting: Landscape and area lighting shall be provided for all exterior walkways and public plaza.
- D. Lighting for Public Spaces: Lighting shall generally be by LED and fluorescent lighting fixtures. Incandescent fixtures may be provided in certain areas only for special effect architectural lighting or for limited dimming applications.
 - 1. All lighting in public spaces shall be tied into a central lighting control system to allow central control of lighting in public spaces.

- E. Lighting for Non-Public Spaces (Administrative, Team Meeting, and Locker Room etc.): Lighting shall generally be by LED and fluorescent lighting fixtures.
 - 1. A central lighting control system shall be utilized to meet the energy code.
 - 2. Local controls shall be provided. Where automatic shut off of lights is provided through the central lighting control system, over-ride switches shall be provided.
- F. Egress Lighting: Egress lighting shall be provided as required to meet governing codes. Emergency egress lighting shall be connected to emergency panelboards fed from the emergency generator. Exterior emergency egress lighting shall be provided to 5 foot outside the entry/exit.
 - 1. Bowl and exterior concourse egress lighting: Additional field lighting fixtures shall be added to the field lighting poles and brow to provide egress lighting in open areas.
- G. Lighting Controls: The control of the facility lighting, interior and exterior, shall meet or exceed ASHRAE 90.1, 2010.
 - 1. University standard for lighting control is Lutron. Provide new Lutron control system with Quantum software to control new and existing lighting and upgrade/replace all existing Lutron switches with new Lutron switches compatible with new software.

ELECTRICAL / SHORT CIRCUIT, PROTECTIVE DEVICE COORDINATION AND ARC FLASH HAZARD (SPA) STUDIES

- A. Perform Short Circuit, Protective Device Coordination and Arc Flash hazard (SPA) studies as required by the University of Tennessee.
 - 1. Arc Flash Studies required for all new electrical services. (13.2KV and 480V) including all medium voltage designs (13.2KV).
 - 2. Low voltage (480V) systems shall have Arc evaluation.
 - a. Arc Flash resistant equipment depends on the SIZE of the 480V service and number of protective devices in a particular switchgear.
- B. Short circuit and Protective Coordination Device studies shall be prepared in accordance with IEEE standard 141.
- C. Arc Flash Hazard studies shall be prepared in accordance with IEEE Standard 1584 **and** NFPA 70E.
- D. Studies for project shall include new installations, total replacements, or partial replacements of power distribution systems. Studies are required to establish proper electrical equipment ratings and setting of electrical distribution equipment and powered mechanical equipment including, but not limited to, unit substations, switchgear, switchboards, panelboards, motor control centers, transformers, transfer switches, UPS's, generators, motor starters, disconnect switches, variable frequency drives and control panel.

TABLE 1 - LIGHTING CRITERIA

Area Description	Light Levels (FC)	Anticipated Lamp Type	Control Method	Emergency Lighting (Y/N)
Administration	35-50	LED, FL, CFL	CLC, ML, LS	Υ
Concessions/Food Prep	50	FL	CLC, LS	Υ
Concessions/Sales	30	FL	CLC, LS	Υ
Lobbies	10-20	FL, LED	CLC, DM	Υ
Corridors/Concourses	10-15	LED	CLC	Υ
Mech/Elec Rooms	20-30	FL	CLC, LS	Υ
Telecommunication Closets	50	FL	CLC, LS	N
Ticketing	30	FL, LED	CLC, ML	Υ
Storage	20	FL	CLC, LS	N
Stairs	10-15	LED, FL	CLC	Υ
Restrooms	20	FL, LED	CLC	Υ
Retail Spaces/Novelty	20-30	LED	CLC, LS	Υ
Conference / Multipurpose	35-50	FL, LED	CLC, ML, DM	Υ
Rooms				
Locker Rooms	20-30	FL, LED	CLC, ML, DM, WS	Υ
Club/Suites	10-15	CFL, LED	CLC, DM, LCS, WS	Υ
Entry Plaza	5-10	FL, LED, MH	PS, CLC	Υ

FT = Fluorescent Troffer ML = Multi-Level CFL = Compact Fluorescent L = Local, single level LED = Light Emitting Diode Lamps DM = Dimmer MH = Metal Halide PS = Photocell

ID = LED Indirect/Direct troffer CLC = Central Lighting Contrl I = LED can or track BMS = Building Mgmt. System LS = Local Control System LV = Low Voltage (MR16) WS = Touchscreen Wall Station

ELECTRICAL / LIGHTING FIXTURES AND MATERIALS

General: Provide lighting fixtures; complete with, but not necessarily limited to, lamps, lamp holders, reflectors, ballast, starters and wiring.

- 1. Fluorescent Lamp and Ballast Specifications
 - a) Lamps shall be energy saving 28 watt T-5 style, CRI 85 (minimum), with a 3500°K color temperature; or
 - b) Lamps shall be rapid-start 54 watt T-5HO (high-output), CRI 85 (minimum), with a 3500°K color temperature.
 - c) Ballasts shall be the electronic type for maximum energy savings, silent operation, rated for 277V single-phase operation, and have less than 15% Total Harmonic Distortion.
- 2. LED Lamp and Driver Specifications
 - a) Minimum 70% maintained initial-rated lumens at an average rated life of 50,000 hours, with a minimum CRI of 80.
 - b) Drivers shall comply with ANSI C 82.11, designed for the type and quantity of LED lamps connected.
- 3. Emergency Lighting Fixtures
 - a) Under emergency lighting conditions, a minimum illumination of 1 foot-candle shall be maintained along the egress paths as required by code.
 - b) Emergency lighting shall be powered via the emergency generator.
 - c) Emergency signage fixtures shall be injection molded plastic plaque with red letters and brushed aluminum housing face. Illumination shall be by low wattage, long life LED type lamps.

TELECOMMUNICATIONS SYSTEMS / BASE OPTION:

- A. General Technology
 - 1. All structured cabling system (SCS) installations are to adhere to the University of Tennessee, Office of Information Technology Communications Group's (OIT) Telecommunications Design and Installation Standards Revised June 2015 and the latest versions of the industry standards and codes listed above.
 - 2. Structured Cabling Backbone
 - a. The backbone fiber optic cable from campus shall consist of 36 Strand (minimum) Singlemode as needed.
 - b. The backbone cable between rooms shall consist of 12 Strand (minimum) Singlemode Fiber. Multi-pair copper as required for truck docks.
 - c. Supported by an appropriately sized conduit, cable-tray, or equivalent pathway.
 - d. Extension of backbone cabling to be provided from main TR to each intermediate TR

- e. UTK OIT requires all installations to have a 25-year warranty.
- f. Connectivity manufacturer Corning.
- g. Fiber Optic OSP Cable Fiber and connectors shall be manufactured by Cornina
- h. Fiber Optic Riser Cable Fiber and connectors shall be manufactured by Cornina
- i. OSP Phone CAT3, BSW (Buried Service Wire), Essex or General Cable PE89 and /or PE22 as determined by UTK OIT.
- j. Inner Duct, MaxCell 3X3, (Locatable for OSP), color ID
- k. All components to be rack mounted in telecommunications equipment racks.
- I. Active components of the LAN (wired and wireless) networks and CATV are provided per University Standards.
- 3. Structured Cabling Horizontal
 - a. UTK OIT requires all installations to have a 25-year warranty. This warranty shall include all types of telecommunications services such as Power over Ethernet (PoE), Voice over IP (VoIP), LAN Security Cameras, Wireless LAN, Fiber applications, and any future services that meet CAT6A ANSI/ TIA/EIA and or IEEE specifications.
 - b. Connectivity manufacturers Hubbell or Panduit
 - c. CAT6A Cable Mohawk, General, Commscope and Berk-Tek
 - d. Fiber Optic Horizontal Cable Fiber and connectors shall be manufactured by Corning
 - e. Coax Horizontal--- to be determined on a per project basis.
- 4. Neyland Stadium contains approximately 16 Telecommunication Rooms (TRs) - 2 Main Distribution Frames (MDFs) and 14 Intermediate Distribution Frames (IDFs). A Telecommunications Room (TR) should be provided for each area of the building where the farthest horizontal cable run supported is less than 295 feet (including vertical and lateral bends), including demolition areas containing an existing TR. The primary purpose of these spaces is the consolidation of horizontal cabling systems into Category 6 or 6A Category copper and single mode fiber optic backbone infrastructure. The facility will require a minimum of one TR per quadrant level. These rooms should be stacked for ease of distribution. The minimum TR dimension should be 10' x 15' for main distribution room and 8' x 10' for intermediate distribution rooms.
- 5. TRs should not be shared with electrical installations other than those for telecommunications.
 - a. If other services such as Fire Alarm panels or CBORD panels have to be housed in a TR. increase the size of the room 20%.
 - 2. Equipment and utility services not related to the support of the TR (e.g. piping, ductwork, pneumatic tubing, etc.) shall not be installed in, pass through, or enter the TR.

- 6. Doors shall be a minimum of 36" wide and 7' tall. Doors must swing out of room or increase room size 3'. Floors are to be light in color and be either VCT or treated/painted concrete to prevent dust and enhance lighting. There should not be any windows in a TR.
- 7. All walls should be covered with rigidly fixed 1" A-C plywood, 8' high, capable of supporting attached equipment. Plywood should either be fire-rated, or covered with two coats of fire retardant paint. If fire-rated plywood is used, the rating mark shall be visible and remain unpainted.
- 8. For maximum flexibility, no false ceiling shall not be provided in these spaces. Ceiling heights in a TR is recommended to be 8'6" minimum; 10' maximum.
- 9. Electrical Requirements:
 - a. It is required that the electrical feed to the TR be backed up by a generator, including all convenience outlets to conform to current NFPA code. (University of Tennessee, Office of Information Technology Communications Group's (OIT) Telecommunications Design and Installation Standards Revised June 2015)
 - (1) When generator power is provided to the building: All power, including power to all mechanical systems, in the TR shall be installed to the buildings generator. All electrical outlets connected to the generator must be red in color with red faceplates. Circuit ID to be labeled on faceplate for all electrical outlets
 - b. A separate supply circuit serving the TR shall be provided and terminated in its own electrical panel inside the TR.
 - c. In all TRs, a minimum of two dedicated non-switched 3 wire 12 gauge single phase 120V ac 20amp duplex electrical outlets for equipment power, each on a separate branch circuits. The outlets shall be mounted one each above each rack. Note: A twist lock receptacle may be required.
 - d. In all TRs, a separate quad 120v ac convenience outlets for tools, test equipment, etc. are to be placed at maximum of 6' (wall space) intervals around perimeter of room and below the plywood.
 - e. A grounding system, per ANSI-J-STD-607A, shall be provided at each TR for the communications/data equipment.
 - f. Follow the manufacturer's recommendation for power needs of a UPS system.
 - g. Lighting Requirements:
 - 1. Should be a minimum of 500 lx (50 foot candles) measured 3ft above FF
 - 2. Locate light(s) 8.5' minimum above finished floor
 - Power for lighting shouldn't come from the power panel located inside the TR
 - 4. At least one light is to be powered from generator
 - 5. Coordinate the lighting layout with equipment layout, especially cable trays.

10. HVAC Requirements:

- a. Minimum of 5,000 BTU's from equipment, for up to 144 data outlets, add 1.000 BTU's for every 48 additional outlets served. HVAC shall be provided on a 24 hours-per-day, 365 days-per year basis. A stand-alone unit should be considered. When building is being backed up by generated power. it is required that the HVAC be tied into the backup power, to keep the network and telephones working during a power outage.
- b. The temperature and humidity shall be controlled to provide continuous operating ranges of 68 degrees F to 77 degrees F with 40% to 55% relative humidity.
- c. The ambient temperature and humidity shall be measured at a distance of 5 ft. above floor level, after equipment is in operation, at any point along an equipment aisle centerline.
- d. When a UPS system is installed in the ER, the engineer will need to factor in the units BTU's.
- e. The TR shall have positive air pressure with at least one air change per hour.

11. Telephone and Data Network Infrastructure

- a. Physical transport of the cabling infrastructure for these systems shall be accomplished by a combination of 18" minimum aluminum ladder or basket cable tray and conduits extending outward from the TR in a star topology; minimum conduit to be trade size 1". Provisions for pathways may include empty conduits, cable trays, conduit sleeves, pull boxes. outlet boxes, floor boxes, floor poke-through devices, telephone terminal boards, etc. Penetration sizing in assemblies to take into consideration the 33% fill ratio of the cable plant so as to provide for future adds, moves and changes. Surface raceways shall only be used where designated.
- b. Within the TRs, minimum 18" ladder rack or basket cable tray is used in conjunction with equipment racks, sleeves, and fire stop systems. Factory radius drop outs will be installed wherever cables exit the cable tray to a lower elevation.
- c. A grounding system, per ANSI-J-STD-607A, shall be provided at each TR for the communications/data equipment.
- 12. Labeling of the structured cabling system (SCS) components shall adhere to the University of Tennessee, Office of Information Technology Communications Group's (OIT) Telecommunications Design and Installation Standards Revised June 2015.
- 13. All categorized voice and data cabling associated with the SCS shall be tested in accordance with the University of Tennessee, Office of Information Technology Communications Group's (OIT) Telecommunications Design and Installation Standards Revised June 2015.

6.6 MEP + FIRE PROTECTION

- B. Wi-fi and Distributed Antenna System (DAS):
 - 1. Complete removal of the Wi-Fi and DAS cable and equipment in areas of demolition.
 - 2. Complete extension of Wi-Fi and Distributed Antenna System (DAS) systems including site survey(s), equipment, software/configuration, preliminary and post installation heat maps for the new and renovated Premium areas of the Stadium.
 - 3. Distributed Antenna System (DAS) (The cellular DAS system may change or be removed as the project progresses.)
 - a. Meet and exceed cellular customer capacity demands for data bandwidth, voice calls, texting, video and simultaneous connections in effect now and for five years beyond. Must deliver the bandwidth (upload, download, throughput) required for sharing pictures, multi-cast video, streaming video, and text across carrier and social media networks.
 - b. Provide 100% DAS coverage uniformly in the new and renovated Premium areas including the concourses and interior stadium areas affected.
 - c. The existing DAS is a neutral host with Verizon / ATandT / US Cellular / Sprint. The DAS Cellular System must be a neutral host design or an extension to the existing DAS System, supporting a minimum of four (4) carriers support all major and local Cellular Carrier signals. The DAS coverage will be ubiquitous throughout the stadium in all public and nonpublic areas.
 - d. DAS head-end equipment, remote units, transceivers, media converters, amplifiers, and patch panels shall be installed in cabinets and/or racks within designated DAS equipment locations.
 - e. System Components:
 - (1) Primary Point of Interface (POI): Neutral demark point-of-interface for RF services to be distributed.
 - (2) Remote Distribution Units: Shall be located in the TRs and above ceilings as necessary to transition from single-mode fiber optic backbone to horizontal antenna cables (horizontal distribution).
 - f. Building Operations: Shall include all necessary head-end equipment rebroadcast the Building Operations Two-Way Radio and messaging Communications System.
 - g. GPS: Shall include (2) GPS receivers and antennas located on the roof for location-based services. Shall provide GPS distribution panels at the DAS Room for the base station interfaces for each GPS receiver and antennas.
 - h. Management/Monitoring: Shall provide for interactive interfaces to all major DAS electronic components including base head-end, remote units, antenna points, and power supplies. Components shall be interfaced to
 - i. Electrical power receptacles, UPS power, HVAC including air-conditioning and Fire suppression system for designated equipment room.

- i. Public Safety/First Responder criteria:
 - 1. Ability to support the First Responder Network Authority (FirstNet) broadband network dedicated to police, firefighters and emergency medical services (EMS).
 - 2. Law Enforcement: Shall include all necessary head-end equipment to rebroadcast all Local Public Safety and any Federal Law Enforcement radio traffic. Shall coordinate Public Safety requirements including equipment and radio frequencies, etc. with each authority. System requirements shall meet Police Department's current wireless communication standards.
 - 3. Fire Department and EMS: Shall include all necessary head-end equipment to rebroadcast all Fire Department and EMS Two-Way Radio Communications System. Shall coordinate Public Safety requirements including equipment and radio frequencies, etc. with each authority. System requirements shall meet Fire Department and EMS's current wireless communication standards.
- 4. Wireless Access (Wi-Fi) High Density
 - Extend the existing Wi-Fi system to meet and exceed auto authenticated Wi-Fi customer capacity demands for mobile data bandwidth, video and simultaneous connections in effect now and for five years beyond.
 - b. Provide pervasive High Density 802.11xx compliant 100% Wi-Fi coverage in the new and renovated Premium areas including concourses, interior stadium areas affected. Explore Wi-Fi coverage at outdoor plazas.
 - 1. Wireless coverage is currently only in premium suites, press level and gates. Existing Access points shall be removed in renovated areas. Existing and new access points will be installed in new and renovated areas.
 - c. The Wi-Fi system must deliver the bandwidth (upload, download, throughput) required for sharing pictures, multi-cast video, streaming video, and social media networks.
 - d. Wi-Fi equipment and patch panels shall be installed in cabinets and/or racks within designated telecom equipment rooms.
 - e. Wireless LAN Controller: A primary and redundant Wireless LAN Controller shall be provided; shall be installed with a minimum of (2) 10Gigabit Ethernet ports; shall support up to (5000) Access Points; Redundant power supplies and modules; WLAN configurations and management; shall support IEEE 02.11 a, b, g, IEEE 802.11 n draft 2.0, and 802.11 ac Wave 2 standards.
 - f. Wireless Access Points: Shall support IEEE 802.11 a, b, g, n, ac, (or highest available standard at time of procurement).
 - (1) External Antennas: Designed to fit in discrete locations around the stadium.

6.6 MEP + FIRE PROTECTION

- C. Telecommunication Cable and Backbone Pathway
 - 1. A majority of the backbone pathways to support the technology cable infrastructure are located within the structural supports/beams. These pathways will most likely have to be relocated with renovation of the area.
 - 2. Cable pathway typically follows common spaces, such as hallways; this pathway is preferred over passing through suites, offices or supporting. Cable trays shall be utilized as secondary pathways for horizontal cable runs. Cables should be supported as they exit conduits or sleeves. Maintain support to within 4' of the cable-tray.
 - 3. The cable within rooms with accessible ceilings should be supported with J-hooks or other approved support.
 - 4. The cable within areas with inaccessible or no ceilings should be supported with conduit to nearest cable tray or telecommunications room.

TELECOMMUNICATIONS SYSTEMS / ALTERNATE OPTIONS:

- A. Complete extension of Wi-Fi and Distributed Antenna System (DAS) systems including site survey(s), equipment, software/configuration, preliminary and post installation heat maps for the new and renovated Premium areas and Full Bowl of the Stadium.
- B. Provide 100% DAS coverage uniformly in the new and renovated Premium areas including concourses, interior stadium areas affected and Full Bowl.
- C. Provide pervasive High Density 802.11xx compliant 100% Wi-Fi coverage in the new and renovated Premium areas including concourses, interior stadium areas affected and Full Bowl.

AREA SPECIFIC MEPF REQUIREMENTS / SUITES

- A. HVAC -The Suite Areas will have dedicated, variable refrigerant flow (VRF) type fan coil units to condition the interior and exterior spaces. Each suite will have a 5-ton condensing unit. The suite units will be tied together and will be served by two (2) 30 ton condensing units located on the roof. These indoor units will be provided with code-minimum outside air via a dedicated outside air unit. Densely occupied spaces will be provided with CO2 control to modulate outside air based on total occupancy. All restrooms will be exhausted to the exterior through a roof-mounted down-blast fan, where possible. At this time the mechanical design assumes the exterior suite windows are non-operable.
- B. Plumbing Plumbing services (domestic water and sewer) shall be provided as required to the Suites and food service equipment with rough-in as required to ensure a complete hook-up to the equipment. Suite sinks will be supplied with both hot and cold water. The under side of the Suite Sink bowls shall be insulated to prevent condensation if sinks are used as ice bins. One hose bibb shall be installed under the restroom counter for washdown. Hot water will be supplied by new central steam fired water heaters.

- C. Fire Protection Wet pipe sprinkler protection will be provided throughout the space in accordance with NFPA 13.
- D. Electrical General power receptacles shall be provided throughout. Power shall be provided for an undercounter refrigerator, ice machine and televisions. A dedicated outlet shall be provided within each suite for a hot food cart. General lighting shall be provided utilizing dimmable fluorescent or LED can lights with as well as LED undercounter lighting with separate on/off switch. In addition, provide 3-4 dimmable decorative low-voltage type pendant fixtures per suite. Each suite shall be controlled individually thru local lighting control stations or globally thru the main lighting control system.
- E. Fire Alarm Fire alarm notification appliances and initiating devices shall be provided throughout the space in accordance with the applicable building and fire codes and NFPA 72.
- F. Data General data receptacles with a minimum of 2 outlets shall be provided throughout. Data shall be provided for televisions, phone and Wi-Fi.

AREA SPECIFIC MEPF REQUIREMENTS / CLUBS + 02 LOUNGE

- A. HVAC -Club Areas will have dedicated, roof-top air handling units with hot water reheat and single zone VAV control to condition the interior and exterior spaces. This units will be provided with code-minimum outside air, in addition to an enthalpy-based airside economizer for mild weather conditions. Densely occupied spaces will be provided with CO2 control to modulate outside air based on total occupancy. The unit will serve the club zone directly, without the use of VAV boxes. The units will be controlled by a series of temperature and humidity sensors throughout the space. All restrooms will be exhausted to the exterior through a roof-mounted down-blast fan, where possible. At this time the mechanical design assumes the exterior club windows are non-operable.
- B. Plumbing Plumbing services (water and gravity sewer) will be brought to food service equipment with rough-in as required to ensure a complete hook-up to the equipment. Hot water will be supplied by new central steam fired water heaters. Any exterior seating bowl drains will be connected to the facility storm drain system. Wash down hose bibbs for exterior suite seating shall be installed as required.
- C. Fire Protection Wet pipe sprinkler protection will be provided throughout the space in accordance with NFPA 13.
- D. Electrical General power receptacles shall be provided throughout for convenience and televisions. Dedicated outlets shall be provided along walls where serving lines may be set up for hot food carts. General lighting shall be provided utilizing dimmable fluorescent or LED can lights. In addition, high-end decorative wall sconces and pendant fixtures for accent within the space. Club lighting shall be controlled thru a local architectural dimming system.

6.6 MFP + FIRE PROTECTION

6.6 MEP + FIRE PROTECTION

- E. Fire Alarm Fire alarm notification appliances and initiating devices shall be provided throughout the space in accordance with the applicable building and fire codes and NFPA 72.
- F. F. Data General data receptacles with a minimum of 2 outlets shall be provided throughout for convenience, phones, Wi-Fi and televisions.

AREA SPECIFIC MEPF REQUIREMENTS / LEDGE SEATS

- A. Plumbing Any exterior seating bowl drains will be connected to the facility storm drain system. Wash down hose bibbs for exterior suite seating shall be installed as required.
- B. Fire Protection Will be protected by concourse sprinkler system, if existing.
- C. Fire Alarm Fire alarm notification appliances and initiating devices shall be provided throughout the space in accordance with the applicable building and fire codes and NFPA 72.
- D. Data Wi-Fi and DAS coverage as required by the space and the University standards

AREA SPECIFIC MEPF REQUIREMENTS / SKY GARDENS

- A. HVAC Enclosed portions of the Sky Gardens will have dedicated, roof-top air handling units with hot water reheat and single zone VAV control to condition the interior and exterior spaces. These units will be provided with code-minimum outside air, in addition to an enthalpy-based air-side economizer for mild weather conditions. Densely occupied spaces will be provided with CO2 control to modulate outside air based on total occupancy. The units will have hydronic heating and DX cooling coils, filter rack (MERV 13), and supply fan. The unit will serve the zones directly, without the use of VAV boxes. The units will be controlled by a series of temperature and humidity sensors throughout the space. All restrooms will be exhausted to the exterior through a roof-mounted down-blast fan, where possible. At this time the mechanical design assumes the exterior club windows are not-operable. If it is not feasible to get heating water to these locations, a gas-fired heat exchanger will be provided in the roof-top units.
- B. Plumbing Plumbing services (domestic water and sewer) shall be provided as required to food service equipment with rough-in as required to ensure a complete hook-up to the equipment. Hot water will be supplied by new central steam fired water heaters. Roof drains as well as exterior seating bowl and area drains will be connected to the facility storm drain system. Recessed box type freeze-proof wall hydrants on the exterior near each entrance or at a maximum of every 200 feet shall be installed.
- C. Electrical General power receptacles mounted utilizing in-use waterproof covers shall be provided throughout for convenience.

- D. Fire Alarm Fire alarm notification appliances and initiating devices shall be provided throughout the space in accordance with the applicable building and fire codes and NFPA 7.
- E. Data General weatherproof data receptacles for wired data connections, Wi-Fi and DAS coverage as required by the space and the University standards. The systems covered may include data, Wi-Fi and POS connections for food service equipment in the concessions area; TVs, computer and telephone devices, etc.

AREA SPECIFIC MEPF REQUIREMENTS / PUBLIC RESTROOMS

- A. HVAC Each restroom shall be exhausted with a roof-mounted exhaust fan, where possible. Ductwork shall connect ceiling or duct mounted exhaust grilles to the fan. Makeup air for the toilet exhaust fans shall be through open entrances to the restrooms or louvers. Restrooms shall be provided with space mounted unit heaters and/or ducted cabinet unit heaters, but will not be provided with space cooling. Unit heaters will be served by the hydronic heating water system. Any associated janitor's closets shall be exhausted by the same exhaust system serving the adjacent restroom and heated by the same means. HVAC ductwork shall be galvanized steel.
- B. Plumbing Plumbing services (domestic water and sewer) shall be provided as required. Lavatories will be supplied with both hot and cold water. One hose bibb shall be installed under the restroom counter for washdown. Hot water will be supplied by new steam fired water heaters.
- C. Fire Protection Wet pipe sprinkler protection will be provided throughout the space in accordance with NFPA 13.
- D. Electrical General power shall be provided throughout utilizing GFCI receptacles. Lighting shall be provided utilizing linear lensed fluorescent lighting fixtures recessed in the ceiling around the perimeter above the toilets, urinals and lavatories along with LED

6.6 MEP + FIRE PROTECTION

AREA SPECIFIC MEPF REQUIREMENTS / FOOD SERVICE AREAS

- A. HVAC Concessions Approximately 25% of new concessions will be cooking locations. Refer to architectural and food service for more detail. It is anticipated that the cooking concessions will have a single hood for fryers, griddles, ovens, char-broilers, etc. The main kitchen will have multiple hoods. Where possible, grease exhaust fans will be located on the roof directly above the concession and will discharge to the outside. In areas where stadium stands above or other obstructions occur requiring further ductwork, a grease scrubber with an inline fan will be used to mitigate the grease laden air prior to exhausting the "normalized" air from the building via a sidewall louver. The ductwork from the hood to the fan or the grease scrubber and from the grease scrubber to the louver will be welded black iron with 2-hr fire wrap. Alternately, a rated and UL listed grease duct system may be utilized. The ductwork will be sloped per code for all horizontal runs. All vertical runs will have an access door at the 90 degree bend. Make-up air for the exterior concessions shall be provided via the concession opening. Heating for exterior concessions will be provided via ducted hydronic unit heaters. If it is not feasible to get heating water to these locations, a gas-fired heat exchangers will be provided. No mechanical cooling will be provided at the exterior concessions. The kitchen and main commissary will be provided with dedicated DX roof-top units with hydronic reheat and single-zone VAV controls to condition the spaces. These units will be provided with code-minimum outside air, in addition to an enthalpy-based air-side economizer for mild weather conditions. Make-up air for the main kitchen will be via a dedicated make-up air unit with hydronic heat.
- B. Plumbing services (gas, water and gravity sewer) will be brought to food service equipment with rough-in as required to ensure a complete hook-up to the equipment. An exterior grease interceptor will be installed as per local authority's requirements to serve cooking food service spaces. A point-of-use grease trap will be provided by the three compartment sink in non-cooking food service spaces. Hot water will be supplied by new central steam fired water heaters.
- C. Fire Protection Wet pipe sprinkler protection will be provided throughout the space in accordance with NFPA 13.
- D. Electrical Each kitchen/concession area shall have a panelboard located inside the room dedicated to serving that space. Power connections shall be provided for all cooking and concession equipment in accordance with the Food Service drawings. All standard 15 amp and 20 amp receptacles shall be provided with GFCI protection. Lighting shall provide at least 70 footcandles utilizing lensed fluorescent light fixtures.
 - 1. Panelboards shall be sized at 65 watts/sq. ft. if the concessions utilize gas for cooking or 110 watts/sq. ft. if they are all electric. Preliminary power requirements were estimated utilizing gas for cooking.

- E. Fire Alarm Fire alarm notification appliances and initiating devices shall be provided throughout the kitchen/concessions areas in accordance with the applicable building and fire codes and NFPA 72. Interface fire alarm system with all cooking hood fire suppression system as required to provide full coordination between systems.
- F. Data General data receptacles with a minimum of 2 outlets shall be provided throughout for POS connections for food service equipment, convenience, phones, Wi-Fi and televisions.

AREA SPECIFIC MEPF REQUIREMENTS / LOCKER ROOMS

- A. HVAC The locker rooms/team facilities spaces shall be heated and cooled using variable air volume air handlers with DX cooling and heating water coils, to be located on the roof adjacent to the spaces served. The RTUs shall be 100% outside air (OA) type with integral total energy recovery wheel to handle the high OA loads. Exhaust/ relief air shall be run at least 10 feet from outside air intake. Supply and exhaust air shall be ducted in the plenum. A dedicated exhaust fan shall serve the shower/restroom facilities. Ductwork shall be wrapped (no liner allowed at this area). Ductwork shall connect ceiling-mounted supply and exhaust air devices to each unit. Ductwork from wet areas (e.g. shower, locker rooms, and drying rooms) shall be aluminum construction for 25' from area served and shall be sloped at 1/4" per foot. Ductwork from dry areas (e.g. grooming areas, training, lounges, offices, etc.) shall be galvanized steel.
- B. Plumbing Plumbing services (domestic water and sanitary) shall be provided as required for the locker rooms and team facilities. Showers and lavatories will be supplied with both hot and cold water. One hose bibb shall be installed under the counter of each locker room for wash down. Hot water will be supplied by new central steam fired water
- C. Fire Protection Wet pipe sprinkler protection will be provided throughout the space in accordance with NFPA 13.
- D. Electrical General receptacle power shall be located throughout the locker room/team facilities. Additional power shall be provided for TV monitors, laptops, phone and i-pod chargers, etc. as required. Generally, lighting throughout shall be lensed fluorescent fixtures and recessed fluorescent or LED can lights.
- E. Fire Alarm Fire alarm notification appliances and initiating devices shall be provided throughout the space in accordance with the applicable building and fire codes and NFPA 72.
- F. Data General data receptacles with a minimum of 2 outlets shall be provided throughout for convenience, phones, Wi-Fi and televisions.

6.6 MEP + FIRE PROTECTION

6.6 MEP + FIRF PROTECTION

AREA SPECIFIC MEPF REQUIREMENTS / GENERAL MEETING SPACES

- A. HVAC Meeting spaces will be served by a roof-top air handling unit with hydronic heating coil and multi-zone VAV controls. These units will be provided with codeminimum outside air, in addition to an enthalpy-based air-side economizer for mild weather conditions. Densely occupied spaces will be provided with CO2 control to modulate outside air based on total occupancy. The units will serve various zones with the use of VAV boxes controlled by a temperature sensor. All restrooms will be exhausted to the exterior through a roof-mounted down-blast fan, where possible. At this time the mechanical design assumes the exterior windows are non-operable. Smaller meeting spaces located throughout the stadium will be served by ducted split-system type units with air-cooled heat pumps and auxiliary electric heat.
- B. Plumbing no plumbing required in this area.
- C. Fire Protection Wet pipe sprinkler protection will be provided throughout the space in accordance with NFPA 13.
- D. Electrical General power and receptacle outlets will be provided for normal routine room functions. General lighting shall be provided utilizing recessed indirect/direct troffers that are double switched to provide two levels of light. Additional LED or compact fluorescent downlights or wallwash fixtures could supplement some spaces but should account for only 15% of the overall quantity of fixtures.
- E. Fire Alarm Fire alarm notification appliances and initiating devices shall be provided throughout the space in accordance with the applicable building and fire codes and NFPA 72.
- F. Data Multiple data receptacles with a minimum of two outlets shall be provided throughout for halftime viewing of game video for various wired devices, televisions, phone and high speed Wi-Fi.

AREA SPECIFIC MEPF REQUIREMENTS / MECHANICAL/ELECTRICAL ROOMS/ IT CLOSETS

- A. HVAC Mechanical, electrical, and IT rooms will be served by split system, cooling-only fan-coil units. Units shall either be ducted to the spaces served, or located directly in the spaces served. Rooms with minimal heat output from equipment located on exterior walls will be served by split system heat pumps with auxiliary electric heat. Fan-coil units shall be provided with MERV 8 filters in the return air stream. Server rooms, AV Rooms or other IT spaces with larger and/or more sensitive loads will be served by a dedicated floor-mounted computer room type unit utilizing an air cooled DX coil. Larger server rooms will be provided with multiple computer rooms units for a level of redundancy.
- B. Plumbing Any required sanitary waste shall be connected to the gravity sanitary sewer system. A wash down hose bibb shall be provided in all mechanical rooms.

- C. Fire Protection Wet pipe sprinkler protection will be provided throughout the mechanical/electrical rooms in accordance with NFPA 13.
- D. Electrical General power receptacles shall be provided throughout. Lighting throughout shall be industrial strip fluorescent fixtures with metal reflectors.
- E. Fire Alarm Fire alarm notification appliances and initiating devices shall be provided throughout the mechanical/electrical rooms in accordance with the applicable building and fire codes, NFPA 72 and Americans with Disabilities Act.
- F. Data General data shall be provided for general Wi-Fi coverage and Mechanical and Electrical control panels as required. As required in the specifications above in the Telecommunications Section.

AREA SPECIFIC MEPF REQUIREMENTS / ELEVATORS and STAIRWAYS

- A. HVAC Elevator machine rooms will be conditioned with a dedicated split system fancoil unit. The unit will be located outside of the machine room and a single duct with a grille will terminate into the room. No piping or ductwork shall run through the elevator machine room. Stairways connected to conditioned spaces shall be heated and cooled by dedicated fan-coil units located at the landing at the bottom of the stair. Stairways connecting 4 or more floors will have fan-coil units at the top and bottom of the stair. Stairways exterior to the building will be heated only.
- B. Plumbing Elevators shall be equipped with an elevator sump pump and high level alarm and piped to the nearest floor drain with an air gap per code. Elevator sump pumps shall be provided with emergency power.
- C. Fire Protection Wet pipe sprinkler protection will be provided at the highest and lowest level landings of heated stairwells in accordance with code. Existing non-conditioned stairwells are protected with existing preaction sprinkler system systems. Hydraulic elevators shall be provided with a sidewall sprinkler within 2' of elevator pit. A Class 1 standpipe shall be provided in each rated stairwell with hose valves at the intermediate level landings.
- D. Electrical General power shall be provided throughout utilizing weatherproof GFCI receptacles in elevator pits equipment rooms. Lighting shall be provided utilizing vandal resistant type fluorescent lighting fixtures in most areas and wall mounted accent lighting or recessed compact fluorescent downlights in elevator lobbies and stairways located in areas with higher end room finishes.
- E. Fire Alarm Fire alarm notification appliances and initiating devices shall be provided throughout the surrounding areas in accordance with the applicable building and fire codes and NFPA 72.
- F. Data General data shall be provided for Wi-Fi coverage and provided throughout utilizing weatherproof data receptacles in elevator pits equipment rooms.

6.6 MFP + FIRE PROTECTION

6.6 MEP + FIRE PROTECTION

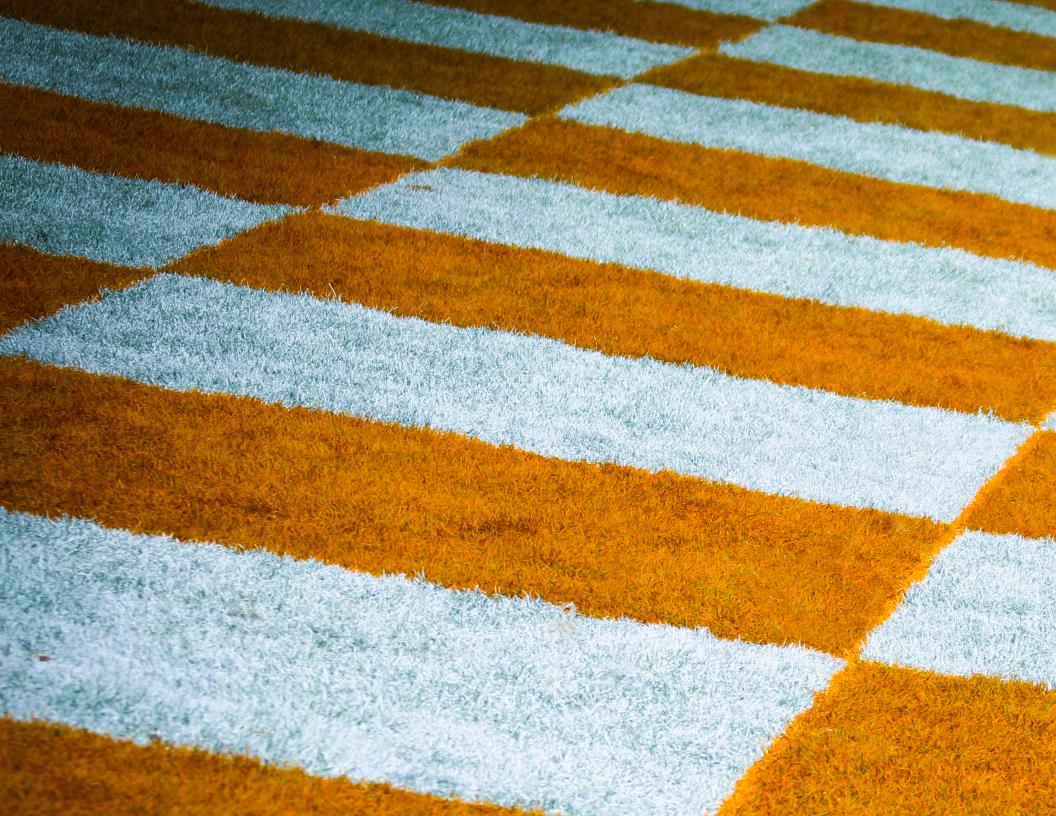
AREA SPECIFIC MEPF REQUIREMENTS / OPEN AIR CONCOURSES

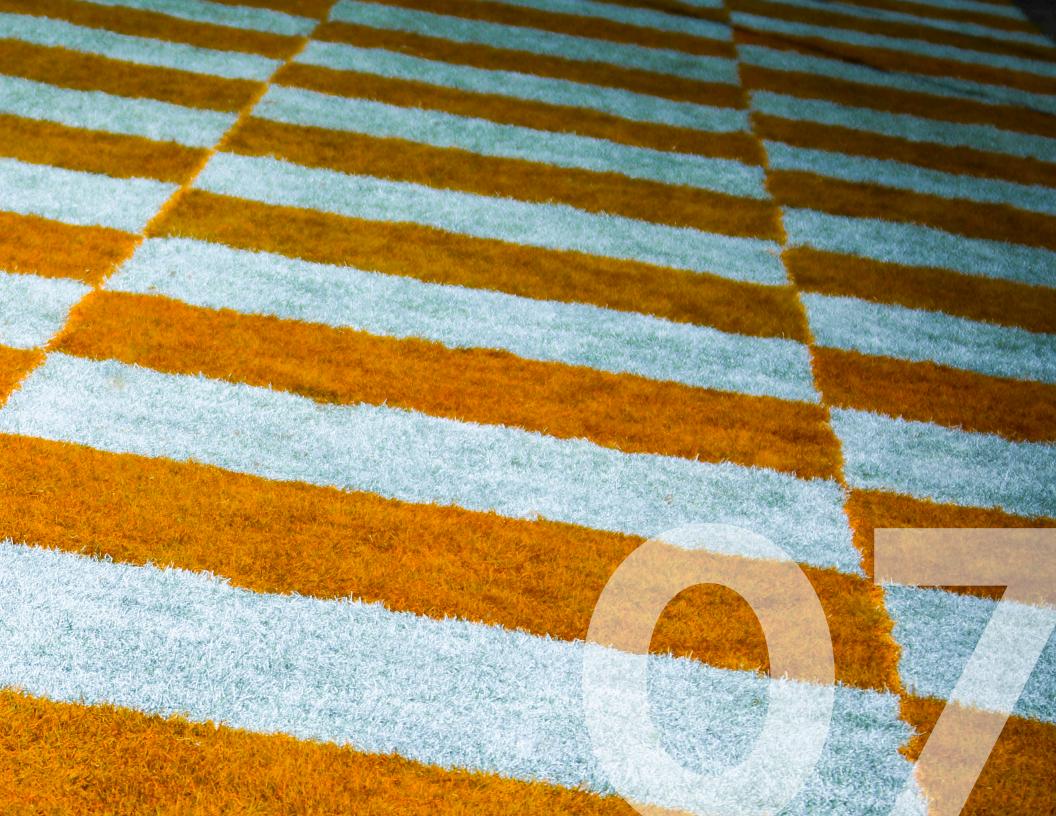
- A. HVAC Concourse areas shall be provided with suspended propeller-type circulation fans equal to Big Ass Fans.
- B. Plumbing All concourse drains will be connected to the storm sewer system. Recessed box type freeze-proof wall hydrants on the exterior of the concourse near each entrance or at a maximum of every 200 feet shall be installed.
- C. Fire Protection -Concourses 50% open or more will not be provided with sprinkler protection. Concourses less than 50% open will be protected with a wet sprinkler system, utilizing a heat trace to protect against freezing.
- D. Electrical General power receptacles shall be provided throughout. Additional power shall be provided for televisions, displays, ATMs, and portable concessions. Provide power for portable concessions at gated entries. Provide receptacles for two (2) camera locations at the lower seating bowl level. Lighting shall generally be provided by high bay LED fixtures throughout the concourse areas. Lighting control shall be provided globally thru the main lighting control system.
- E. Fire Alarm Fire alarm notification appliances and initiating devices shall be provided throughout the space in accordance with the applicable building and fire codes and NFPA 72.
- F. Data General weatherproof data receptacles for wired data connections, Wi-Fi and DAS coverage as required by the space and the University standards. The systems covered may include data, Wi-Fi and POS connections for food service equipment in the concessions area; TVs, computer and telephone devices, etc.

AREA SPECIFIC MEPF REQUIREMENTS / VIDEOBOARDS

- A. Electrical Power as required by equipment manufacturer.
- B. Data General weatherproof data receptacles for wired data connections as required by the equipment and the University standard

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APPENDIX

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7.1 PARTICIPANTS

UNIVERSITY OF TENNESSEE

Mike Berger **Brian Browning** Jim Campbell Craig Canevie David Cash Bob Caudill Chris Cimino Michelle Crowder Keith Downen Alyssa Drummer Mark Hairr Randy Hamilton Helen Hennon Brian Huskey Dave Irvin Megan Kain Steve Keys Billy King Keith Lambert Ben Luttrell Jeff Maples Tim Mendenhall **Bethany Morris** Ted Murphy Andy Powers Jonathon Sawyer Carol Schafer John Sealy Tim Sellers Phil Shokouhi Drew Sims Mark Smith

Jack Stallings Austin Stoner Keith Thomas Roy Warwick Bill White

UNIVERSITY OF TENNESSEE ATHLETICS

Joe Arnone
Tara Brooks
Danny Burnley
John Currie
Jim Delaney
David Elliott
Brett Huebner
Blake Johnson
Thomas Moats
Reid Sigmon
Adam Wilgus
Kevin Zurcher

POPULOUS

Mary Abner Nick Curtis Chris Herring Craig Kaufman Peter Lang Kuebler Perry Dan Schaaf Brian Smith Timarie Trarbach

HENDERSON ENGINEERS

Barbara Hoppas Julie LeClair Ben Weigand

S20

Peg Galie Ryan Rongo Harry Schildkraut

RBA SRUCTURAL ENGINEERING

Mark Dunning

WJHW

Jack Wrightson

CMR

Pat Bartko

ARAMARK

Brian Dougherty Steven Kildow Dave Levins Jennifer Lunde

DOFFING CONSTRUCTION

Matt Doffing

IMG COLLEGE

Steve Early Brandon Lane

PREMIUM SEATENG

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SIGN IN

PROJECT NAME	University of Tennessee Neyland Stadium Programming			
PROJECT No.	16.4231			
DATE OF MEETING	July 12-13, 2017	MEETING LOCATION	Knovville	

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7.2 MEETING NOTES

DEVELOPMENT / PREMIUM SEATING

DEVELOPMENT / PREMIUM SEATING

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MEETING NOTES

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u	
PROJECT NAME	University of Tennessee, Neyland Stadium Renovations
PROJECT No.	16.4231

ATTENDEES	See Attached Sign-In	COPIES	Kyleen Miller, Populous File
DATE OF MEETING	July 12, 2017	MEETING LOCATION	Brenda Lawson AC
ISSUE DATE	July 21, 2017		Development & Premium Spaces

The following meeting notes have been prepared from meeting held **July 12th**. These notes constitute our understanding of the items discussed, key decisions made, and action items assigned at the meeting. If you have any questions or comments about these notes or require additional copies of meeting notes or handouts, please contact Populous at your convenience. Action items are marked in **bold and underlined**.

PURPOSE OF MEETING

The meeting was held to discuss the premium spaces being proposed for the stadium including what they will offer, how they can operate and desired capacities.

DISCUSSION TOPICS AND NOTES

UTNS 170712 DevPrm - 1 Comments during Project overview.

- 1.1. Rename space under Southeast Sky Garden on 02 to "Fan Zone" to better reflect intention.
- 1.2 Populous to confirm that proposed Engineering Building does not impede view from existing East Skybox.

UTNS 170712 DevPrm - 2 South Field Membership Club (SFMC)

- 2.1. Field wall was to be moved to provide more run out beyond back of the end zone. Moving the field wall to meet NCAA recommendations would lead to loss of three rows. To achieve the required height SFMC glass wall, seven total rows to be removed, equal to approximately 730 seats.
- 2.2. The wall between the field and club will be glass to provide views to field. This wall can be retractable to open the space to the field like the proposed suites or can be fixed glass with smaller frames. Group thought fixed glass would be better option especially if lower cost.
- 2.3. Mississippi State (MSU) has a similar field club. Craig showed photos of their club to the group. Their club has rows of drink rails and raised platforms on the field that can block the view from the club. John requested his team reach out to MS State to see how their club is operating and any feedback they can provide.
- 2.4. Populous to prepare diagram comparing distance from back line of endzone to field wall of SEC schools and to rail/walls at other stadiums with field clubs. Study to address how

POPULOUS" MEETING NOTES

University of Tennessee Neyland Stadium

July 12, 2017 Page 2 of 5

close to the field patrons will be to field/players, the effectiveness of the envisioned separation wall and player safety.

- 2.5. Pricing model and the level of food/beverage inclusion discussed.
 - 2.5.1. Current thinking is the club will not be all inclusive, but UT will review ROI.
 - 2.5.2. Operationally, it is easier to manage food if whatever is being served is available to everyone with club access.
 - 2.5.3. The space would include full service bars if alcohol is allowed to be served.
 - 2.5.4. Space will probably be a mixture of stand up and sit down dining options. John suggested more stand up and bar stools and less soft furniture on the field side of the club

2.5.5. Populous to study capacity based on differing sf/patron for stand up, sit down and combination.

- 2.6. The option for an awning over SFMV interior entrance discussed to protect club patrons from weather or spilled drinks from above. An awning could be added to the fascia above the glass wall which would extend approximately six feet, but current plan was to put signage or an LED board on the fascia. Populous to study section and present options for awning.
 - 2.6.1. MSU does have a deep awning covering most of the exterior area of the club. <u>UT to call MSU to see if they've had problems with fans spilling drinks, food, etc onto the club patrons</u>
- 2.7. The SFMC could benefit recruiting process by walking players/families/etc through.

UTNS 170712 DevPrm - 3 Populous reviewed the entry and circulation paths in the new design.

- 3.1. Security and Operations of Neyland to be improved with the consolidation & reconfiguring of entry gates. Most general patrons will enter through 4 entry plazas on the four corners of the stadium. The southwest and southeast plazas will be similar to the current northwest.
- 3.2. New Southwest ramp to be wider than current to allow more flow and will be ADA-compliant.
- 3.3. Looking at ways for east skybox patrons to enter from G10 garage. Could go through new VIP entry area of northwest plaza. Existing east elevators to stop on 00, 01, 02 & 03. Currently a wristband grants access to elevators & East Skybox.
- 3.4. Concourses will be widened throughout stadium, improving congestion & opening up travel within stadium before during and after games. This is safety as well as fan comfort issue.

UTNS 170712 DevPrm - 4 O2 Southwest Lounge

- 4.1. The Southwest lounge is located on concourse 2 directly off a VIP elevator.
- 4.2. Plan would be to have the VIP elevator drop directly into the space with a second elevator adjacent that could have access to the lounge.
- 4.3. Lounge is envisioned to be a pre-function space for the new SW Suites but could also support patrons going to the east skybox.
- 4.4. Lounge would be fully enclosed with heating and cooling.
- 4.5. Food/beverage operation at lounge vs SW Suites discussed.
 - 4.5.1. It is to be determined if this space will offer food as it may affect suite food sales
 - 4.5.2. Space could have a full service bar or could be portable
- 4.6. Could Southwest Suite amenities conflict with offerings in this lounge
- 4.7. Some thought that the space may not even be needed. Populous will include in program but could be a VE item and developed in future.

7.2 MEETING NOTES

DEVELOPMENT / PREMIUM SEATING

DEVELOPMENT / PREMIUM SEATING

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MEETING NOTES

University of Tennessee Neyland Stadium

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UTNS 170712 DevPrm - 6 Southwest Suites

- 6.1. Could have private toilet within each suite or private toilets off suite corridor. Group thought individual suite toilets would not be desired. But also don't want patrons to have to cross concourse or share toilet with general patrons.
- 6.2. Populous to incorporate communal restrooms, and pantry on suite side of concourse to reduce crossing of concourse traffic.
 - 6.2.1. Incorporate separation of suite patrons and GA concourse in program
 - 6.2.2. Populous will look at a hallway or some physical separation between suite doors & concourse. Need to review impact on concourse circulation.
- 6.3. The current design has continuous aisles connecting the seating areas below the suites to concourse 01. Concourse 01-will be their main path of travel, but may need flow in both direction for emergency exiting.
 - 6.3.1. Concourse 2 is least populated (corridor loading)
 - 6.3.2. Consider option of cross-aisle in front of suites
- 6.4. Suites currently planned to be approximately 15' wide.
 - 6.4.1. Populous to confirm seating configurations in suites and capacity.
- 6.5. Proposed design has suite seating in the bowl with operable glass wall between seats and suite lounge.
 - 6.5.1. Glass wall would be in panels and can be full opened to bowl or completely closed off to protect from weather.
 - 6.5.2. HVAC in suite would have extra capacity to help keep cool with wall open.
 - 6.5.3. Alternate could use fixed glass with swing door. This would reduce the glass frames when suite is closed.
 - 6.5.3.1. Populous will prepare information showing options for glass wall.
- 6.6. Funding model for Suites discussed
- 6.7. Suite amenities:
 - 6.7.1. Suites would have induction warmers for food, refrigerator, TV(s), charging station, preferred audio, WiFi.
 - 6.7.1.1. Currently skybox suites load the food 24hrs before game but this could change if premium kitchen is added to the stadium.
 - 6.7.1.2. Single large TV is more expensive than six smaller. Group believes multiple TVs would be preferred over single larger.
 - 6.7.2. Exterior amenities; Can provide cooling or air flow over suite seating.
 - 6.7.2.1. Conditioned air is nice by may not be required as long as air is flowing. Conditioned air can also lead to condensation drips on seats.
 - 6.7.2.2. Fans preferred over outdoor air conditioning.
 - 6.7.2.3. Radiant heating would be desired for the last 2 games.
 - 6.7.2.4. View to north videoboard would be bonus, but if blocked, TVs overhead would meet need.

UTNS 170712 DevPrm - 7 Premium Food Service

- 7.1. Current catering:
 - 7.1.1. While premium spaces are currently brought in from outside stadium, the addition of a premium kitchen could eliminate the requirement for outside catering. Expectations, goals and options for catering were discussed.



POPULOUS^T MEETING NOTES

University of Tennessee Neyland Stadium

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- 7.1.1.1. Generally, catered food is limited to options that retain heat/moisture well. The length of time you transport/hold food has a direct correlation to the quality of food. This is especially true with fried foods.
- 7.1.2. S2O recommends including pantries near the points of service. This would apply even if food is made on site. To improve further, the ability to allow some level of cooking/finishing in these spaces would provide added menu flexibility, expansion and increase the food quality to the suites and premium spaces.
- 7.1.3. Commissary; the commissary space being programed is 10,000 square feet. The renovation includes a commissary for general concessions and storage. The commissary will include walk-in coolers, freezers, potential ice production, prep and bulk cooking to reallocate functions/storage out of the concession stands.
- 7.1.4. Premium Kitchen; a separate kitchen is included to support any premium spaces.
 - 7.1.4.1. The kitchen will be designed and equipped to prepare all the food for the premium facilities: suites, clubs, and banquet rooms; and provide support to the premium concessions.
 - 7.1.4.2. The kitchen spaces will include dry storage, refrigerated and frozen storage, hot and cold prep, and beverage production areas.
 - 7.1.4.3. S2O recommends the kitchen be designed so it can operate independent of the commissary. This is helpful for non-game events but also for potential of separate operators for premium and concessions.
- 7.2. One vs Two Operators:
 - 7.2.1. The university was presented with the following food service options to manage the premium spaces: Option one, use a single operator to operate both the premium spaces and general concessions; Option two, separate operators for general concessions and premium spaces.
 - 7.2.2. Considerations of two separate operators on design/footprint:
 - 7.2.2.1. Food product and staff must be separate and secure for each operator.
 - 7.2.2.2. Two operators will require more space than a single operator
 - 7.2.2.2.1. Redundancies will consist in following areas:
 - i. Office space, two offices are required for two operators
 - Storage spaces, including walk-in cooler/freezer storage, and dry storage
 - iii. Cooking equipment-food production areas
 - 7.2.2.3. A single operator can provide efficiencies in space, labor and food cost which are economically beneficial.
 - 7.2.2.4. A secondary premium foodservice provider can be more specialized on serving premium customers and may have a local presence/support, however, there are several operators that have done exceptionally well in providing services for both general concessions and premium concessions.
 - 7.2.2.4.1. Some of these operators were mentioned and included Levy Restaurants, Legends Hospitality, and Delaware North.
 - 7.2.3. China vs. disposables dishware was discussed and the pros and cons of each.
 - 7.2.3.1. Disposables were recommended for gameday functions.
 - 7.2.3.1.1. It was recommended that china be used for non-game day functions as clients renting out spaces for weddings, etc. may expect china in lieu of disposables. Rental vs. on site inventory should be discuss/determined

7.2 MEETING NOTES

DEVELOPMENT / PREMIUM SEATING

DEVELOPMENT / PREMIUM SEATING

POPULOUS

MEETING NOTES

University of Tennessee Neyland Stadium

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7.3. Warewashing:

7.3.1. Options for dishwashing was discussed. It was recommended that warewashing be located closest to the most leased premium spaces where china is used most often. Typical warewashing space is 350 to 400 sq. ft

7.4. Bars & Alcohol:

- 7.4.1. The current alcohol program was discussed and consists of suite holders providing their own alcoholic beverages. The UT campus is currently a "dry" campus but the expectation is for this to change over the next several years. S2O recommends providing utilities and power for future bars and refrigeration.
 - 7.4.1.1. · If the policy is to remain, alcohol lockers, locations/logistics will need to be determined.

UTNS 170712 DevPrm - 8 A new loading dock is located next to the commissary for deliveries.

- 8.1. The dock is currently shown to be 4 bays.
- 8.2. One will probably be for trash/recycling.
- 8.3. Dock will also be used by team equipment trucks and other general deliveries.
- 8.4. UT may want additional bays.

UTNS 170712 DevPrm - 9 Ledge seating pricing model discussed. May vary based on bowl position.

- 9.1. Ledge seating can count as ADA-compliant seating.
- 9.2. Ledges will have power for charging
- 9.3. TVs will be overhead for areas with blocked view of videoboard. These are already in place in some sections. Ledge seating does not currently have dedicated TVs.
- 9.4. Food and beverage will come from concessions and probably will not need to be in-seat service.

UTNS 170712 DevPrm - 10 Ticket operations: 'wearable ticket'/lanyard/credentials for people who are moving from one place to another (ie between suites, clubs, etc) considered.

- 10.1. There are several ways the tickets to the premium spaces can be sold and each has a direct correlation to the food service program and design. Options and trends were discussed including loaded tickets and ala carte purchasing.
 - 10.1.1. All inclusive- food and beverage
 - 10.1.2. Ala Carte- pay as you go
 - 10.1.3. Hybrid- all-inclusive food and soft drinks- alcohol a la carte

UTNS 170712 DevPrm - 11 John is excited about the new image of the stadium. He stated that football and engineering are what Tennessee are known for. SE view of stadium envisioned to represent the best of TN.

11.1. Will/could be the new face of the university – one of the most visible/viewed parts of campus.

End of Notes





S2O Consultants, Inc.

Consultants to the Hospitality Industry Ryan Rongo 530 N. Wood St. #C Chicago, IL 60622 Phone: 1-224-717-1999

To: Craig Kaufman	From: Peg Galie	
Phone:	Date: 7.14.17	
Re: UT Premium Spaces Discussion	CC: Peter Lang, Timarie Trarbach,	
	Harry Schildkraut	

The following meetings notes were taken during our July 12, 2017 meeting to discuss the new premium spaces. S2O presented several topics for the team to consider when determining how the spaces are to function.

General Notes for Premium Spaces:

Currently, food service for the premium spaces is catered in from an outside vendor. Food is produced in a remote kitchen and transported the stadium via box truck where it is distributed to premium spaces using hot carts. The university is in the process of determining the premium foodservice operator, and how the premium foodservice spaces will function.

S2O has provided several discussion topics to aid the university in determining which course of action will best achieve their desired goals and expectations for the premium spaces and the general foodservice program. Below are topics discussed in detail.

Premium Areas Discussed

Field Club

- 1350 person capacity
- Ticket price and type not determined at this time
- Menu and ticket price to be determined

Suite Club, include 15 suites- menu and ticket prices

- 240 person capacity
- It is to be determined if this space will offer food as it may affect suite food sales
- Future bar

South East and South West "Cool Down Zones"

- · 350-400 person capacity
- Spaces to be further developed
- Possible foodservice offerings and future bar
- •

 $Commissary \ and \ kitchen \ included \ in \ renovations \ to \ support \ general \ concessions \ and \ premium \ spaces. \ Commissary \ space \ is \ 10000 \ square \ feet.$

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7.2 MEETING NOTES

DEVELOPMENT / PREMIUM SEATING

DEVELOPMENT / PREMIUM SEATING

Catering:

While premium spaces are currently catered, the addition of a kitchen/commissary could eliminate the requirement for outside catering. Expectations, goals and options for catering were discussed to assist the university in determining a future course of action.

- Generally, catered food is limited to options that retain heat/moisture well.
 - The length of time you transport/hold food has a direct correlation to the quality of food. This is
 especially true with fried foods.
- Whether the university continues with an outside caterer or produces food on premise, S2O recommends
 including pantries near the points of service. To improve further, the ability to allow some level of
 cooking/finishing in these spaces would provide added menu flexibility, expansion and increase the food
 quality to the suites and premium spaces.

Commissary and Kitchen

The renovation includes a commissary for general concessions and storage.

The commissary will include walk-in coolers, freezers, potential ice production, prep and bulk cooking to reallocate functions/storage out of the concession stands.

A separate kitchen is included to support premium spaces. It will be designed and equipped to prepare all the food for the premium facilities: suites, clubs, and banquet rooms; and provide support to the premium concessions (if applicable). The kitchen will include dry storage, refrigerated and frozen storage, hot and cold prep, and beverage production areas. Dishwashing will also be included

A new loading dock is located next to the commissary for deliveries.

One vs Two Operators:

The university was presented with the following food service options to manage the premium spaces: Option one, use a single operator to operate both the premium spaces and general concessions; Option two, separate operators for general concessions and premium spaces.

Considerations of two separate operators on design/footprint:

- Food product and staff must be separate and secure for each operator.
- Two operators will require more space than a single operator.
 - o Redundancies will consist in following areas:
 - · Office space, two offices are required for two operators
 - Storage spaces, including walk-in cooler/freezer storage, and dry storage
 - · Cooking equipment-food production areas
- A single operator can provide efficiencies in space, labor and food cost which are economically beneficial.
- A secondary premium foodservice provider can be more specialized on serving premium customers and
 may have a local presence/support, however, there are several operators that have done exceptionally well
 in providing services for both general concessions and premium concessions.
 - Some of these operators were mentioned and included Levy Restaurants, Legends Hospitality, and Delaware North.

The Ticket:

There are several ways the tickets to the premium spaces can be sold and each has a direct correlation to the food service program and design. Options and trends were discussed including loaded tickets and ala carte purchasing.

- · All inclusive- food and beverage
- · Ala Carte- pay as you go
- · Hybrid- all inclusive food and soft drinks- alcohol a la carte

Serving Options:

Foodservice serving options and trends for premium spaces were discussed.

- · Buffet counters, both fixed and portables
 - · Induction warmers-both drop-in and undermount,
 - · Cold Plates- drop-in or under mount
 - · Carving stations and warming cabinets.
- Action stations: portable or fixed display cooking stations that may or may not require fixed type 1
 exhaust hoods
- · A la carte ordering
- · High end concession style
- Soda trends were discussed.
 - The current trend is for soda dispensers to be located on beverage counters within premium spaces and soda to be self-served.
 - o Self-service bottled beverages/water are also popular in Premium spaces

China vs. Disposables:

China vs disposables was discussed and the pros and cons of each.

- · Disposables were recommended for gameday functions.
- It was recommended that china be used for non-game day functions as clients renting out spaces for weddings, etc. may expect china in lieu of disposables.
 - o Rental vs. on site inventory should be discuss/determined

Warewashing

Options for dishwashing was discussed. It was recommended that warewashing be located closest to the most leased premium spaces where china is used most often. Typical warewashing space is 350 to 400 sq. ft

Bars & Alcohol:

The current alcohol program was discussed and consists of suite holders providing their own alcoholic beverages. The UT campus is currently a "dry" campus but the expectation is for this to change over the next several years. S2O recommends providing utilities and power for future bars and refrigeration.

• If the policy is to remain, alcohol lockers, locations/logistics will need to be determined.

Next Steps/Decisions Required

- University will need to provide direction on number of foodservice operators; one or two?
- University will need to determine the pricing structure for premium spaces as well as the type of menu style desired
- University will need to determine how the future of the alcohol policy will/will not affect future design.
 - Based on trends we are seeing in other collegiate sports venues across the country, S2O recommends including provisions for the future addition of alcohol in the renovated spaces
 - This would include small walk-in coolers (in lieu of reach-ins). These could provide
 the needed refrigeration today but allow for keg storage in the future.
 - Additional storage space.
- · Determine if bars will be fixed or portable

2

7.2 MEETING NOTES

DEVELOPMENT / PREMIUM SEATING

DEVELOPMENT / PREMIUM SEATING

POS count and beer location breakdown for reference

Level oo (Field)

South EZ Club:

1350ppl @ 100ppl/POS = 15 POS

Includes draft beer

Concourse 01:

North (NE only): 6875 people @ 250ppl/POS = 28 POS. East: 9756 people @ 250ppl/POS = 40 POS. South: 16377 people @ 250ppl/POS = 66 POS.

Total 134 POS

No draft beer included

Concourse 02:

North: 4990 people @ 250ppl/POS = 20 POS.

East: 2160 people @ 250ppl/POS = 9 POS. South: 4656 people @ 250ppl/POS = 19 POS. Total 48 POS

No draft beer included

Concourse 03:

North: Renovate Existing Concession stands: 9586 people [have] 35 POS (@ 5lf/POS, =273ppl/POS)

No draft beer included.

East: 4245 people @ 250ppl/POS = 17 POS.

No draft beer included.

South Base Option (keep existing bowl): 15317 people @ 250ppl/POS = 62 POS

No draft beer included.

South Alternate Option (new Bowl): 11994 people @ 250ppl/POS = 48 POS.

No draft beer included.

Level 04 (Rocky Top)

South Asse Option: 935 ppl @ 100ppl/POS = 10 POS South Alternate Option: 250oppl @ 100ppl/POS = 25 POS

Includes draft beer.

End of Meeting Notes

POPULOUS'



JECT NAME	University of Tennessee Neyland Stadium Programming	
JECT No.	16.4231	
JECT No.	16.4231	

1				
	DATE OF MEETING	July 12-13, 2017	MEETING LOCATION	Knoxville
- 9				

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DRAWING PEOPI E TOGETHER

MEETING NOTES

CONCESSIONS / CATERING

CONCESSIONS/CATERING

POPULOUS

MEETING NOTES

PROJECT NAME	University of Tennessee, Neyland Stadium Renovations	
PROJECT No.	16.4231	

ATTENDEES	See attached Sign-In	COPIES	Kyleen Miller, Populous File
DATE OF MEETING	July 12, 2017	MEETING LOCATION	Brenda Lawson AC
ISSUE DATE	July 21, 2017	MEETING SUBJECT	Concessions & Catering

The following meeting notes have been prepared from meeting held **July 12th**. These notes constitute our understanding of the items discussed, key decisions made, and action items assigned at the meeting. If you have any questions or comments about these notes or require additional copies of meeting notes or handouts, please contact Populous at your convenience. Action items are marked in **bold and underlined**.

PURPOSE OF MEETING

The meeting was held with University groups to update on concepts and discuss specific needs related to their department. See attached presentation materials distributed in meeting.

DISCUSSION TOPICS AND NOTES

UTNS 170712 Conc - 1 Populous provided an overview of the current project.

1.1. Populous to consider dropping the Commissary from 00 to SE Plaza Ivl.

UTNS 170712 Conc - 2 Trends in stadium food service discussed.

- 2.1. Renovation is an opportunity to adjust the type & ratio of cooking concessions.
- 2.2. Bringing local establishments into stadiums is currently trending
 - 2.2.1. Calhoun's brings in food.

UTNS 170712 Conc - 3 Neyland Stadium current operation.

- 3.1. Current menus concepts include the following: Hotdogs, hamburgers, Calhoun's BBQ, Steak and Cheese, Jimmy Johns, Pizza, Dunkin Donuts, Petra's (Chili & Chips), popcorn and pretzels.
- 3.2. The current ice program utilizes ice chests located throughout the facility
 - 3.2.1. They would like to eliminate a portion of the need for ice chests and ice deliveries by providing ice makers in concessions and pantries and only use chests where necessary.
- 3.3. Soda contract is with Coke
 - 3.3.1. Coke provides the soda dispensers and the glass door bottle coolers
- 3.4. Popcorn is currently popped in the concession stands and portables



POPULOUS MEETING NOTES

University of Tennessee **Nevland Stadium Renovation**

July 12, 2017 Page 2 of 4

- 3.5. Papa Johns is the pizza vendor and cooks their pizzas in two onsite kitchens
 - 3.5.1. Cheese and pepperoni pizzas only
- 3.6. Popcorn, hotdogs, and pretzels are most common.
- 3.7. There is no discounted student pricing program
- 3.8. Some concessions are currently cash only
 - 3.8.1. Students are able to use their food program card (VOD card) to purchase food and
 - 3.8.2. The goal is to take credit cards at all lines in concessions and in portables.
- 3.9. Soda dispensing trends was presented by S2O for consideration by the team
 - 3.9.1. Dispensers are located in hydration stations outside of the concessions. The fan purchases a cup and fills their own beverages. This increases throughput at the concession stands and presents a clutter free counter. Fans also feel they get a better value with "free" refills.
- 3.10. UT has completed surveys for food preferences, but not specific to Neyland.
- 3.11. There are currently 5-6 grill/fry stands in the stadium
- 3.12. Hawking is currently contracted out
 - 3.12.1. Hawking is performed on all levels
 - 3.12.2. Hawkers have two areas for storage.
 - 3.12.2.1. One space has a walk-in for beverages.
 - 3.12.2.2. The second area utilizes large troughs filled with ice.
 - 3.12.3. Hawking items consist of bottled beverages and candies only
 - 3.12.3.1. Hot dogs and hot items are not sold through hawking.

UTNS 170712 Conc - 4 Project Improvements

- 4.1. UT open to do new things/better food with improved facility.
- 4.2. Food operations have done a remarkable job with what they have.
- 4.3. UT fans that attended game at Texas A&M last fall like quality and selection of concessions. A&M was by Populous and S2O was food service consultant.
- 4.4. Local food options are very popular, S20 would recommend more stations throughout stadium.
- 4.5. Millennial enjoy hot & cold coffee drinks. Stands could include coffee makers and have some dedicated coffee stands.
- 4.6. Food service equipment to be tailored to food served while allowing for flexibility for future
- 4.7. Design should account for alcohol being sold at future date.
 - 4.7.1. Would need more pantry space for kegs.
 - 4.7.2. Microbreweries are very popular.
 - 4.7.3. Beer, if actualized, would only be sold out of approximately 50% of stands.
 - 4.7.3.1. Could have issue sales because many stands are manned by underage charity volunteers.
 - 4.7.4. Cans thought to be preferred over drafts & bottles.
 - 4.7.5. Slushy drinks (margaritas/etc.) are a relatively easy alternative to provide. Can be
- 4.8. Electronic menu boards preferred (included in current design). These will allow for changes from game to game and even during games.
- 4.9. Onsite trash compactor desired if kept in a secure area, near Commissary.
 - 4.9.1. Management of trash and waste currently works well.
- 4.10. Condiment stands will be updated and upgraded.

MEETING NOTES

CONCESSIONS/CATERING

CONCESSIONS/CATERING

POPULOUS" MEETING NOTES

University of Tennessee Neyland Stadium Renovation

July 12, 2017 Page 3 of 4

4.11. "Fan Zone" in SE of concourse 02 could be an enclosed 'Cool Zone.'

UTNS 170712 Conc - 5 Food Options

- 5.1. Healthier options are not really preferred by fans, per sales.
- 5.2. Pretzel cabinets are currently provided. Pretzels are made off site, and then warmed in the concessions.
- 5.3. Opportunity to consider Grab and Go stations/Box sandwiches, etc.
- 5.4. Modern stadiums have water bottle-filling stations. Fans can bring in empty, clear bottles.
- 5.5. Remote ordering becoming popular. Fans order on phone and pick up. Speeds up process.
- 5.6. S2O's experience is that card stations are faster than cash. UT experience would keep cash option.

UTNS 170712 Conc - 6 Portable Options

- 6.1. Very popular, esp popcorn and drink.
- 6.2. Current offerings include: frozen lemonade, Great American cookie, Dippin Dots.
- 6.3. UT to confirm canopy requirements for portables. May be required by health dept.
- 6.4. Potential requirement for associated/near hand-washing stations if the portable menu changed.
 - 6.4.1. If a permit is required then so is a hand wash station
- 6.5. Renovation to provide appropriate power for portables throughout the stadium.
 - 6.5.1. Project should design portable locations vs haphazard placements.

UTNS 170712 Conc - 7 South Field Membership Club (SFMC)

- 7.1. Design to get cooking and grease exhaust out of the space. Will need hoods.
- 7.2. Sky box style food using induction stations
- 7.3. Pricing model discussed, including food component. Who has access and what food options?
 - 7.3.1. All-included ticket
 - 7.3.2. Preloaded ticket presented as an option.
 - 7.3.3. Distinguishing a method to determine who has access to Club is necessary.
- 7.4. There is a designated SFMC entrance in south at 00 level in current concept.
- 7.5. Earlier concept included a private dining room within a club for large donor/naming sponsor.
 - 7.5.1. Discussion trended against doing this space. Overall capacity was decreased to 1.200 in scenario.
- 7.6. Current concept capacity is 1,350 but Populous is looking at options based on configuration.

UTNS 170712 Conc - 8 Food Catering.

- 8.1. Kitchen supports premium options while commissary primarily supports concession stands.
- 8.2. Freights elevators will be helpful. Can preload the spaces before the game.
 - 8.2.1. Freight elevator currently planned for SE tower.
- 8.3. Catering currently has to push food all the way around the stadium
- 8.4. Catering requires access to full-service kitchen.

UTNS 170712 Conc - 9 Premium on Concourse 02

- 9.1. Southwest Suites are lower in the bowl. Seats are better than sky boxes. The open glass is a selling point.
 - 9.1.1. SW Suites are closest to the kitchen and have access to O2 Lounge.



POPULOUS MEETING NOTES

University of Tennessee Neyland Stadium Renovation July 12, 2017 Page 4 of 4

- 9.1.2. SW suites could have a dedicated pantry preloaded before game, to diminish/reduce thru-concourse cart delivery.
- 9.2. Ledge seats number approximately 600 seats. Seats will be priced differently around and throughout the stadium. Some of the seats will be ADA compliant. Rolling chairs definitely have their challenges, but allow for flexibility. Ledge seats will get food/beverage from concessions and won't need in seat service.
- 9.3. Challenge to get fresh food to Skyboxes. Two freight elevators desired. SE tower would serve West Skyboxes.
- 9.4. UT to consider transition to using strictly/primarily onsite kitchen for operational improvement.
- 9.5. Dishes to be washed onsite, located near kitchen.
- UTNS 170712 Conc 10 As project progresses, revised menu, pricing and sales plan to be created, along with the indicated next steps:
 - 10.1. Determine new concessions menu concepts
 - 10.1.1. S2O suggested a survey or study to determine menu concepts
 - 10.2. Identify which concession stands will be cooking vs. non-cooking
 - 10.3. Determine if/how future beer/alcohol sales should be considered in the design
 - 10.3.1. The recommendation would be to design for future beer/alcohol sales including walk-in coolers in premium and concession spaces to house kegs and beer systems.
 - 10.4. Determine if the digital menu boards will be simple monitors or part of the POS systems
 - 10.5. Determine the path and process of trash processing.

UTNS 170712 Conc - 11 Open Items

- 11.1. Pretzels How are pretzels produced? Will this be relocated to the commissary?
- 11.2. Remote Ordering Equipment required/design implications....
- 11.3. Fulfilment Concessions Aramark will need to consider what type of POS system is required to keep track of this.

End of Notes

MEETING NOTES

CONCESSIONS/CATERING

CONCESSIONS/CATERING



S2O Consultants, Inc.

Consultants to the Hospitality Industry
Peg Galie
530 N. Wood St. #C
Chicago, IL 60622
Phone: 1-224-717-1999

MEMO

To: Craig Kaufman	From: Peg Galie
Phone:	Date: 7.14.17
Re: UT Concession Discussion	CC: Peter Lang, Timarie Trarbach,
	Harry Schildkraut

The following meetings notes were taken during our July 12, 2017 meeting to discuss the new concessions spaces. S2O presented several topics for the team to consider when determining how the spaces are to function. S2O attendees were Peg Galie and Ryan Rongo.

General Concession Notes:

- Current menus concepts include the following: Hotdogs, hamburgers, Calhoun's BBQ (locally owned and
 operated by Calhoun's), Steak and Cheese, Jimmy John Pizza, Dunkin Donuts, Petra's (Chili & Chips),
 popcorn and pretzels.
 - Hot dogs, popcorn and beverages are top sellers
 - o This may be due to students and their limited spending capabilities
- The current ice program utilizes ice chests located throughout the facility
 - They would like to eliminate a portion of the need for ice chests and ice deliveries by supplementing with locally produce ice.
- · Soda contract is with Coke
 - Coke provides the soda dispensers and the glass door bottle coolers
- Popcorn is currently popped in the concession stands and portables
- Papa Johns is the pizza vendor and cooks their pizzas in two onsite kitchens
 - o Cheese and pepperoni pizzas only
- There is no discounted student pricing program
- Some concessions are currently cash only
 - o Students are able to use their food program card (VOD card) to purchase food and beverages.
 - o The goal for the new concessions is to include the ability to accept credit cards
- · Pretzels are currently produced by Aramark offsite and transported to the stadium on game days.
 - o Pretzel warmers are provided by vendor

Soda Dispensing Trends:

Soda dispensing trends was presented by S2O for consideration by the team

Current soda trend is for the dispensers to be located in hydration stations outside of the concessions. The fan
purchases a cup and fills their own beverages. This increases throughput at the concession stands and
presents a clutter free counter

1

Remote Ordering & Pick Up:

A remote ordering program was presented by S2O for consideration by the team.

- Ordered on the phone or the internet through a website and picked up at the concession. Prepaid over the phone/internet, it's made, and the customer picks up.
- Remote ordering and pick up style concessions increase throughput and expedites service

Fulfillment Concessions:

A fulfillment style concession program was presented by S2O for consideration by the team.

- · Order on one end and pay on the other
- · Fulfillment style concessions increase throughput and expedite service

Digital Menu Boards:

- · Magnetic menu boards are currently used
 - o The goal is to use digital menu boards

Portables:

- Portables are all currently vendor provided
 Products served in portables consist of popcorn, beverages, Italian ice, and Dippin Dots
 - o UT expressed interest in expanding their portables program
 - o S2O recommends determining portable type and placement during design phase in order to provide the necessary utility load information to the engineers

Vendor Commissary / Hawking

- · Hawking is currently contracted out
 - Hawking is performed on all levels
 - Hawkers have two areas for storage.
 - One space has a walk-in for beverages.
 - The second area utilizes large troughs filled with ice .
 - Hawking items consist of bottled beverages and candies only
 - Hot dogs and hot items are not available

Trash Program:

- Concession trash is currently transported to dumpsters during the game.
 - o There is no trash holding currently

Next Steps/Decisions Needed:

- Determine new concessions menu concepts
 - o S2O suggested a survey or study to determine menu concepts
- Identify which concession stands will be cooking vs. non-cooking
- Determine if/how future beer/alcohol sales should be considered in the design
 - o The recommendation would be to design for future beer/alcohol sales including walk-in coolers in premium and concession spaces to house kegs and beer systems.
- · Determine if the digital menu boards will be simple monitors or part of the POS systems
- Determine the path and process of trash processing

Open Items:

Pretzels - How are pretzels produced? Will this be relocated to the commissary?

Remote Ordering - Equipment required/design implications....

Fulfilment Concessions - Aramark will need to consider what type of POS system is required to keep track of this.

2

MEETING NOTES

CONCESSIONS/CATERING

SALES / MARKETING / BROADCAST



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SIGN IN

PROJECT NAME University of Tennessee Neyland Stadium Programming		
PROJECT No.	16.4231	

MILETING EGGATION RIDAVILLE		DATE OF MEETING	July 12-13, 2017	MEETING LOCATION	Knoxville
-----------------------------	--	-----------------	------------------	------------------	-----------

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MEETING NOTES

PROJECT NAME	University of Tennessee, Neyland Stadium Renovations			
PROJECT No.	16.4231			
ATTENDEES	See Attached Sign-In	COPIES	Kyleen Miller, Populous File	
DATE OF MEETING	July 12, 2017	MEETING LOCATION	Brenda Lawson AC	
ISSUE DATE	July 21, 2017	MEETING SUBJECT	Sales, Marketing, Broadcast	

The following meeting notes have been prepared from meeting held July 12th. These notes constitute our understanding of the items discussed, key decisions made, and action items assigned at the meeting. If you have any questions or comments about these notes or require additional copies of meeting notes or handouts, please contact Populous at your convenience. Action items are marked in **bold and underlined**.

PURPOSE OF MEETING

The meeting was held with University groups to update on concepts and discuss specific needs related to their department. See attached presentation materials distributed in meeting.

DISCUSSION TOPICS AND NOTES

UTNS 170712 MktgBdcst - 1 Broadcast camera placements

- 1.1. Mike and Tim discussed current camera positions in the stadium and locations needing to be modified in renovations.
- 1.2. Will need low endzone cameras in the standing areas of the field club.
 - 1.2.1. Suggest camera connections at the corners of the field wall on east and west ends of the field club glass wall.
 - 1.2.2. These can be up against the front rail and accessed from the field side. Can run cables along rail to the position. Junction boxes to be on the spectator side of the
 - 1.2.3. These positions can be on portable platforms so they are removed when not needed
 - 1.2.4. Need some separation from spectator seating, but ok to be in front of club glass. Typical platform height above the field is 3-5 ft.
- 1.3. Concern expressed about handheld cables on the field, will need to be separated.
 - 1.3.1. Power to be provided inside cabling junction boxes for UT fiber converters
 - 1.3.2. Sideline broadcast cabling (ie; carts, handhelds) can come from corners
- 1.4. The South Upper Bowl camera platform and other network camera locations require additional fiber optic cabling.
 - 1.4.1.1. Consider this location for potential additional Coaches camera location.

MEETING NOTES

SALES / MARKETING / BROADCAST

SALES / MARKETING / BROADCAST

POPULOUS" MEETING NOTES

University of Tennessee Neyland Stadium

July 12, 2017

Page 2 of 4

- 1.5. Stadium has coaches and broadcast cameras under awning at top of north upper bowl.
 - 1.5.1. Platform has one network camera and 2-3 coaches' cameras.
- 1.6. Would like to duplicate high endzone cameras in south to match north.
 - 1.6.1.1. Current high endzone coaches' camera in south is temporary platform that is hung in a vomitory.
- 1.7. Sidelines camera carts move along side lines, and but would prefer boxes located more strategically cables aren't extended too far.
 - 1.7.1. Troughs for cables are not desired, if possible. The University's experience with cables run in troughs indicates that the process is messy and exposes cables to damage.
 - 1.7.2. Look at adding pylon cameras at goal lines.
- 1.8. Anchor points for the sky cams are close to the end of the sky boxes and shouldn't be affected with planned renovations.
- 1.9. Camera locations in corners at same elevation are to be maintained as is.
- 1.10. UT to mount more antennas for wireless cameras this season. Plan is for more wireless cameras in the future for more in-house experience(s).
- 1.11. <u>UT to provide a chart of the existing camera locations, current & planned, and what the cable layout is and what it will be and/or desired.</u>
- 1.12. WJHW and Populous will develop program for camera positions and review with UT after review of the existing camera locations

UTNS 170712 MktgBdcst - 2 Broadcast trucks in northwest.

- 2.1. Operates well. Some elevation changes. No big problems. No architectural changes in that area planned right now. If there were to be work in this area, desire would be for the parking are to have a shallower grade slope.
- 2.2. Populous and WJHW to review entrances and pathways and fiber between trucks and camera
- 2.3. Populous to verify that the structure for the new North board isn't going to affect the broadcast truck parking.
- 2.4. Local stations use ENG trucks and don't do much live work. They usually record and then send it out later from press room or truck. No infrastructure is needed.
- 2.5. Visitor's post-game interview room should have upgraded broadcast infrastructure.

UTNS 170712 MktgBdcst - 3 TVs and video displays

- 3.1. Each concession stand to have one or more TVs for patrons in line.
- 3.2. Menu boards to be digital after renovation.
- 3.3. New North & South videoboards included in second phase
 - 3.3.1. Boards to have same aspect ratio and may be same size.
 - 3.3.2. Project team is investigating options for new north videoboard, including keeping the canopy intact.
 - 3.3.3. Populous is studying sightlines from SW Suites as part of exercise. Some people in suites on end may not have view of the whole board but TVs can be mounted in soffit above seating.
- 3.4. Project will include a new ribbon board at the fascia of the Upper Bowl.
 - 3.4.1. Ribbon board to be 360 around bowl
 - 3.4.2. Ring of honor includes championships, veterans, Johnny Majors, Retired jerseys and Ring of Honor, etc. are currently fixed permanent signage in between digital LED



POPULOUS MEETING NOTES

University of Tennessee Nevland Stadium

July 12, 2017

Page 3 of 4

- 3.4.3. Johnny Majors lives through digital
- 3.4.4. Assess relocation 'hall of fame' outside of the digital loop
- 3.4.5. Permanent "ring of honor, etc." listing somewhere else in bowl. Study placement on face of sky boxes.
- 3.4.6. Populous to show options for presenting names on the skyboxes
- 3.4.7. Populous to review section and determine how tall board can be without obstruction sightlines.

UTNS 170712 MktgBdcst - 4 Project Planning

- 4.1. Populous to verify any requirements from the SEC for visiting team locker
- 4.2. TVs in Suites.
 - 4.2.1. Separate screens with different content is less expensive and easier to control vs. one screen with different content.
 - 4.2.2. Multiple TVs typically preferred to watch other games/news, etc.
- 4.3. Cable TV and distributed system.
 - 4.3.1. Signal is currently fed to the northwest side "bunker" with fiber from the Communications building. The "head end" equipment at the bunker allows for control and insertion of stadium produced channels on to the system. The entire stadium is then fed with signal from the bunker head end
 - 4.3.2. Distribution on east side could be a little better, signal levels are low to other areas of the stadium. It is recommended to create a node at the head end then run fiber to other areas of the building to allow for better signal levels, particularly on the east
 - 4.3.3. Creating a fiber trunk system will allow for improvements in signal levels and quality of existing TV sets and provide capacity to add additional TV set locations.
 - 4.3.4. The University believes that converting to a fiber trunk system will allow the TV infrastructure to be good for the next 20 years.
- 4.4. Game day operations of several systems are outsourced to gameday-only staff.
- 4.5. Seating Bowl Sound System Current system is primarily a single cluster on the top of the west side with some fill speakers in shadow zones. This system is supplemented with field level temporary speakers to provide additional sound to the lower bowl. The portable system is rented and typically installed on Wednesday for Sat. game.
- 4.6. Current system doesn't have the loudness and musical quality as expected by fans and in support of the scoreboard show.

Any new/renovated seating bowl sound system needs to fit into the geometry and architecture of the stadium. While it is expected fill speakers will be required for some seating areas, the main speaker system could be either an end clusters, associated perhaps with the new north end zone work, or a distributed system. Study is required to determine which option will offer the best combination of cost and performance (musical quality and speech intelligibility).

UTNS 170712 MktgBdcst - 5 Marketing, current assets and improvements

- 5.1. End Zone Video Display/Scoreboards
- 5.2. Existing South Videoboard
 - 5.2.1. Back of existing videoboard is backlit canvas and is an excellent sponsor branding sign.

MEETING NOTES

SALES / MARKETING / BROADCAST

SALES / MARKETING / BROADCAST

UNIVERSITY OF TENNESSEE

POPULOUS" MEETING NOTES

University of Tennessee Neyland Stadium

July 12, 2017

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- 5.2.2. The University is not happy with the image quality of the backlit sign and would prefer something better and easier to change out. Currently workers hang off top of board to change.
- 5.2.3. City sign ordinance have not impacted South videoboard to date. May want to consider LED for this sign along with other static images.
- 5.2.4. Back of board includes a historic image, one of General Neyland and one current.
- 5.2.5. Renovation should incorporate tradition of, "Home of the VOLS" included on back of videoboard. Traditional images and phrases are important and should be incorporated where possible.
- 5.2.6. New LED displays should be accessible from the catwalk.
- 5.3. For new north and sound end zone displays, the overall strategy is to favor digital boards over static ad panels and branding
- 5.4. UT desires study of locations within the seating bowl for signage that will appear in TV shots of the game. Behind the benches has not proven to be a good location.
 - 5.4.1. Populous to include option for South Field Club awning/canopy to have digital surface
 - 5.4.2. Idea expressed to add digital element above the East field-level vom at 50 yd line.
- 5.5. Populous to seek ways to incorporate UT traditional elements as well as digital.
 - 5.5.1. UT old VOLS letters in storage. 'Generational' fan would recognize and appreciate its inclusion in the project. Plaza as potential location. Locations where there is fan congregation and would look good on TV/in-house show should be considered as opportunities for additional LED signage.
- 5.6. Suggestion made that all signage be done with digital boards to increase flexibility. Limitless opportunities for naming rights and activation. It maximize use of space and eliminate some of the clutter.
 - 5.6.1. Even wayfinding could be done through digital signs. Impact of any code requirements for such signs to be on UPS or emergency power need to be determined and any cost factored into sign cost.

UTNS 170712 MktgBdcst - 6 The band requires ready access to field.

End of Notes

TICKETMY / SECURITY, ETC.

POPULOUS

SIGN IN

PROJECT NAME University of Tennessee Neyland Stadium Programming	
PROJECT No.	16.4231

DATE OF MEETING	July 12-13, 2017	MEETING LOCATION	Knoxville	er*	
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MEETING NOTES

TICKETING / SECURITY / **OPERATIONS + MAINTENANCE**

TICKETING / SECURITY / OPERATIONS + MAINTENANCE

POPULOUS MEETING NOTES

PROJECT NAME	University of Tennessee, Neyland Stadium Renovations	
PROJECT No.	16.4231	

ATTENDEES	See attached Sign-In	COPIES	Kyleen Miller, Populous File
DATE OF MEETING	July 13, 2017	MEETING LOCATION	Brenda Lawson AC
ISSUE DATE	July 21, 2017	MEETING SUBJECT	Ticketing, Security, Operations & Maintenance

The following meeting notes have been prepared from meeting held **July 13th**. These notes constitute our understanding of the items discussed, key decisions made, and action items assigned at the meeting. If you have any questions or comments about these notes or require additional copies of meeting notes or handouts, please contact Populous at your convenience. Action items are marked in **bold and underlined**.

PURPOSE OF MEETING

The meeting was held with University groups to update on concepts and discuss specific needs related to their department. See attached presentation materials distributed in meeting.

DISCUSSION TOPICS AND NOTES

UTNS 170713 Ops-1 Entry gates;

- 1.1.1. Neyland currently has 27 gates.
- 1.1.2. Concession workers come through gate 24
- 1.1.3. Currently, number of gates negatively impact site security and fan safety.
 - 1.1.3.1. Reducing the number of entrances into the stadium to four major public entrances points is a primary feature of the conceptual renovation.
- 1.1.4. Gates to have power for magnetometers.
 - 1.1.4.1. Magnetometers require 5 people to operate two.
- 1.1.5. Neyland has a clear bag & empty bottle policy.
- 1.1.6. Should have bollards (fixed or mobile) to protect plazas.

UTNS 170713 Ops-2 Ticketing

- 2.1. Program sales occur at Gate 10, new place desired in new SW Plaza.
- 2.2. Request for two ticket counters/service window at each new gate, for resolving ticket issues.
 - 2.2.1. UT to provide layout of current NW ticket facilities for analysis.

UTNS 170713 Ops-3 Loading Dock & Visiting Team

POPULOUS MEETING NOTES

University of Tennessee Neyland Stadium

- 3.1.1. Queuing team buses will be by engineering building.
- 3.1.2. The potential exists for 6 buses to park by Tickle building.
- 3.2. Loading dock currently shown as having 4 bays. The truck dock will be screened from the

UTNS 170713 Ops-4 Game day Operations

- 4.1. No vehicular access to west side of building (sw plaza) after Friday at 6:00pm.
- 4.2. Cars to be 150' minimum away from building. Buildings within 150' are searched and secured.
 - 4.2.1. Distance per Homeland Security for the safety of the building re: blast radius/etc.
- 4.3. West side of new Engineering building will be closed off and secured by police before game
- 4.4. Concern expressed by Facilities/Maintenance about how they access their shop during game because a lot of work goes in and out of there on game day.

UTNS 170713 Ops-5 **Project Planning**

- 5.1. May have to put an awning out on top of visiting team tunnel because they are sitting next to student section.
- 5.2. Widening of the concourse, removing old dorms and scissor ramps on east side all viewed positively from an operations standpoint.
- 5.3. Clarification required for segregation of suite patrons from GA, especially access to suites. Project to maintain people-flow on Concourse 02.
- 5.4. New videoboards in north & south.
 - 5.4.1. Visibility increases safety in the event of an emergency.
 - 5.4.2. Value of tickets on south increased with north videoboard addition.
- 5.5. Secure line extents reviewed to address current inability to wand and bag check outside the perimeter of the building.
- 5.6. Building will be made ADA compliant for areas affected by renovation.
- 5.7. Route options for East Skybox patron from G10 reviewed.
 - 5.7.1. Option 01: Out of G10 at SE plaza level, use elevators to concourse 01, 02 or 03, use elevators to Skybox.
 - 5.7.1.1. Skybox elevator doesn't currently stop on 02 but could be added.
 - 5.7.2. Option 02: Out of G10 at SW plaza (Con 01 lvl), walk to East elevators or take SW elevators to O2 Lounge or Concourse 03 before walking to Skybox elevators
 - 5.7.3. Option 03: Stadium access via South entry, use current Service drive to access service drive.
- 5.8. Path from G10 at the SW plaza to the SW Entry gate needs to gain 4-5' in elevation.
 - 5.8.1. UT to conduct survey.
- 5.9. Turf maintenance requires access during the game.
- 5.10. Student access route to SE seating section would use ramps in SE tower to concourse 01, through voms, up to designated section.
- 5.11. Access by fans to gates 24 & 25 to be limited. Operations have a hard time navigating the stadium.

UTNS 170713 Ops-6 Trash and recyclables removal.

- 6.1. Games generate a lot of trash that is currently removed around and down during the game.
 - 6.1.1. Populous suggests trash rooms on each level to reducing hauling during games.
- 6.2. Trash compactor should be down by the loading dock near commissary
- 6.3. UT currently collects recyclables inside the stadium, taken off-site and sorted.

MEETING NOTES

TICKETING / SECURITY / **OPERATIONS + MAINTENANCE**

TICKETING / SECURITY /
OPERATIONS + MAINTENANCE

POPULOUS" MEETING NOTES

University of Tennessee Neyland Stadium

- 6.4. UT will send Populous amount and items recycled in stadium.
- 6.5. Project team to review trash removal and recycling with Jay Price

UTNS 170713 Ops-7 Safety and security

- 7.1. Populous to provide sq.ft of areas (concourses used for sheltering (re: storms).
- 7.2. Police desires cameras and public address system in the concourses, plazas, Sky Gardens, and all entry points. Not required in concessions.
 - 7.2.1. Bryan to provide diagrams of current camera locations.
- 7.3. Project sound system to be addressable system connected to toilets, concourses.
 - 7.3.1. Don't currently have PA system in concourses

UTNS 170713 Ops-8 Command Center.

- 8.1. Currently exists on 5th floor west side. Space is appropriate size, but could accommodate more people if some of the electronics to be relocated to a dedicated server room. Would be better if move air handler outside of the room.
- 8.2. A command post is also set up in police station and has full capabilities. If anything happens in stadium –emergency goes immediately to the police station.

UTNS 170713 Ops-9 Project to provide a secure perimeter.

- 9.1. Renovation to close/mitigate access control gaps.
- 9.2. Physically secure perimeter in addition to cameras, ensure people cannot get through fences.
- 9.3. Card reader access is good so you can know who is going in when.
 - 9.3.1. Currently not used at Neyland. Need further study if system can/should be added.

UTNS 170713 Ops-10 Transfer/Processing Center currently is temporary building in the SW of stadium to the exterior of the building.

- 10.1. Currently consists of a desk space and area for the over-served patrons to sit before their transfer elsewhere.
- 10.2. On average 200-300 people are arrested at Neyland per season.
 - 10.2.1. Florida or Georgia games might see an increase.

UTNS 170713 Ops-11 Emergency medical

- 11.1. Project should add more first aid stations.
- 11.2. First aid by gate 1 is busy.
- 11.3. First aid station to have both male & female restrooms and nursing stations accessed through first aid so they can control.
- 11.4. Nursing rooms would include a chair, sink, tv, coat hook, changing table.

UTNS 170713 Ops-12 Game Officials and chain gang locker room(s) to be separate

- 12.1. To include accommodations for females.
- 12.2. May need to include programming for transgendered facilities also per NCAA.

UTNS 170713 Ops-13 Maintenance

- 13.1. Request for maintenance storage at each level of stadium.
 - 13.1.1. Example: Augers for plumbing, lightbulbs.
- 13.2. Need to have separation of custodial and maintenance closets, they are different crews.
 - 13.2.1. <u>UT to send list of types of items to be stored on each level so space can be programmed.</u>

POPULOUS MEETING NOTES

University of Tennessee Neyland Stadium

13.3. Request for lounge to be used for Maintenance crews off of the concourses.

UTNS 170713 Ops-14 Communications/Data to have separate access from Electrical rooms.

UTNS 170713 Ops-15 Contracted Security are used inside the stadium. Police control building exterior.

Usually have around 200 security personnel pre-event meetings held in bowl.

- 15.1. Need area near check in for radios and jackets checkout and offices for four people.
- 15.2. They go in Gate 7
- 15.3. Separate contracted security from Visiting Team facilities.
- 15.4. Police convene at the nearby station.

UTNS 170713 Ops-16 Bands

- 16.1. Access for UT band to and from stadium
 - 16.1.1. Band requires access to the field and water/ice station.
 - 16.1.2. Band enters stadium through Gate 21, enters field and proceeds to Section H.
- 16.2. Visiting band enters at Gate 25.
- 16.3. Visiting band enters stadium 1-2 hrs before game, sit in Section A

UTNS 170713 Ops-17 Triage/Ambulance/Emergency plan

- 17.1. Need to identify an area to stage ambulances for mass casualty event.
- 17.2. Currently there are two ambulances staged at Gate 9, near a first aid station.
 - 17.2.1. Additional first aid station at NW.
- 17.3. Don't want the ambulances to be an eye sore.
- 17.4. Could be 25-30 transports by ambulance on hot, night games.
 - 17.4.1. Ambulances cycle through Fulmer and Neyland drive on opposite sides of stadium.

UTNS 170713 Ops-18

- 18.1. Redundant power requested to be provided throughout the facility.
- 18.2. Stadium to be divided into water zones for ease of maintenance.
- 18.3. Maintenance currently drains down after season to protect from freezing.

End of Notes

MEETING NOTES

TICKETING / SECURITY / **OPERATIONS + MAINTENANCE**

RETAIL OPERATIONS /

MERCHANDISE

POPULOUS'

July 12-13, 2017

DATE OF MEETING

SIGN IN

University of Tennessee Neyland Stadium Programming	
16.4231	
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MEETING LOCATION

Knoxville

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MEETING NOTES

PROJECT NAME	University of Tennessee, Neyland Stadium Renovations
PROJECT No.	16.4231

ATTENDEES	See attached sign-in	COPIES	Kyleen Miller, Populous File
DATE OF MEETING	July 13, 2017	MEETING LOCATION	Brenda Lawson AC
ISSUE DATE	July 21, 2017		Retail Operations & Merchandising

The following meeting notes have been prepared from meeting held July 13th. These notes constitute our understanding of the items discussed, key decisions made, and action items assigned at the meeting. If you have any questions or comments about these notes or require additional copies of meeting notes or handouts, please contact Populous at your convenience. Action items are marked in **bold and underlined**.

PURPOSE OF MEETING

The meeting was held with University groups to update on concepts and discuss specific needs related to their department. See attached presentation materials distributed in meeting.

DISCUSSION TOPICS AND NOTES

UTNS 170713 Retail - 1 Current conditions of team shops:

- 1.1. There currently isn't any storage for team shops on any of the concourses.
 - 1.1.1. Stock is removed from stands after each game.
- 1.2. Kiosks and other retail storage is in northeast corner of concourse 00
 - 1.2.1. Approximately 2,400 SF for retail merchandise.
- 1.3. Old/small food concessions have been converted to shops on concourses
- 1.4. "Block Shop" exists in on concourse 01 in northeast corner and has good sales.
 - 1.4.1. Customers are able to walk in and touch merchandize. Good lighting also is key to sales. This is desired model for future stands.
- 1.5. Limited options for skybox shops, a cart is used in the West Skyboxes.
 - 1.5.1. Sales in Tennessee Terrace are pretty limited after first couple games possibly because of consistent clientele and few first timers.
- 1.6. East skybox has small stand near gate 26.
- 1.7. Students do not purchase much at 47 shop. Current location is too congested because of tight
- 1.8. Large tent at top of gate 10 used on game day. Good locations with heavy sales.

MEETING NOTES

RETAIL OPERATIONS / **MERCHANDISE**

RETAIL OPERATIONS / MERCHANDISE

POPULOUS" MEETING NOTES

University of Tennessee Neyland Stadium

July 13, 2017 Page 2 of 3

1.9. There are no temporary kiosks used outside of stadium except NW plaza.

UTNS 170713 Retail - 2 Vol Shop

- 2.1. Vol Shop in northwest of concourse 01 is primary outlet and is open year around.
- 2.2. Sales fairly minimal in week except on special weeks like orientation.
 - 2.2.1. At the end of stadium tours visitors get a discount at the shop.
- 2.3. Very busy on game day with lines running down concourses.
- 2.4. Florida game last year the Vol Shop stayed open an extra 2 hours because of high demand.
- 2.5. Underwent Nike renovation in July 2015.
- 2.6. Nike only merchandise is sold there with exception of small add on items.
- 2.7. Not visible from street which may affect sales. Would be good to have street presences.
 - 2.7.1. Brian Browning sent pic of Cardinals Team Store for comparison.
 - 2.7.2. Vol Shop and surrounding area outside of current project scope.
 - 2.7.3. An all glass exterior at retail stores will provide visibility from the stadium exterior.
- 2.8. Currently the store is 2,100sf, Retail Operations would prefer it larger and with more storage.

UTNS 170713 Retail - 3 Project Considerations

- 3.1. Additional outlets like the block shop are desired because they would provide a better buying experience and increase revenue. Stores should allow 'experience of touching.' and trying on products.
- 3.2. Project team to consider a store in the SE to serve the large(r) number of people entering that direction.
- 3.3. A bigger store on SW would be a welcome addition.
- 3.4. Existing Vol Shop (NW) might could expand if aid station relocated.
- 3.5. Power and data to be routed to all kiosks and Plazas.
- 3.6. Notre Dame has (4) 1200sf "Block Shop"-like stores in each corner of stadium, at each level in addition to two anchor stores similar to the Vol Shop.
 - 3.6.1. Request for a similar setup at renovated Neyland: Block Shops outperform kiosks
 - 3.6.2. Many D1 stadiums only have one stand per level, so UT should consider ROI for additional stands requested.

UTNS 170713 Retail - 4 Have a trailer that can be used for sales and trailers outside of the stadium.

4.1. Trailers PCI Compliance has to be hard lines for trailer plaza. These can be changed to fixed stands in plazas if space and budget allows

UTNS 170713 Retail - 5 Additional Project Considerations

- 5.1. Could consider hawking some products in stands.
- 5.2. Each sales location should have hardline POS to facilitate credit card sales.
- 5.3. Consider changing current project layout to provide access to store off of (SW) plaza before gates open.
- 5.4. Stand at section A, behind row 60 (east side Concourse 02) recently had a renovation. Suggestion to enclose stand and have front & back counters, becoming more of a block shop to capitalize on proximity to ramp.
- 5.5. Storage requirement could be reduced with more Block Shops and fewer kiosks.
- 5.6. A store/stand in the South Field Membership Club could capitalize on the anticipated transient nature of the patrons (tickets anticipated to be popular for businesses/networking)
- 5.7. Project should have a shop/stand in proximity each of the Sky Gardens.



MEETING NOTES

University of Tennessee Neyland Stadium

July 13, 2017 Page 3 of 3

UTNS 170713 Retail - 6 Staff does the best that they can with what the facilities available and are excited to elevate the experience.

- 6.1. Employees currently move merchandise from level to levee with carts on ramps or by hand using elevators that aren't ideally located.
- 6.2. Storage within stands will reduce need to move merchandise before games.
- 6.3. Staff currently carries heavy bags on their back hauling inventory through stadium.

End of Notes

MEETING NOTES

RETAIL OPERATIONS / **MERCHANDISE**

UTILITIES / INFRASTRUCTURE / IT

UTILITIES INFRASTRUCTURE

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University of Tennessee Neyland Stadium Programming PROJECT NAME PROJECT No. 16.4231

DATE OF MEETING	July 12-13, 2017	MEETING LOCATION	Knoxville

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POPULOUS MEETING NOTES

PROJECT NAME	University of Tennessee, Neyland Stadium Renovations			
PROJECT No.	16.4231			
ATTENDEES	See attached sign-in	COPIES	Kyleen Miller, Populous File	
DATE OF MEETING	July 13, 2017	MEETING LOCATION	UTK Facilities Services	
ISSUE DATE	July 21, 2017	MEETING SUBJECT	Utilities, Infrastructure, IT	

The following meeting notes have been prepared from meeting held **July 13th**. These notes constitute our understanding of the items discussed, key decisions made, and action items assigned at the meeting. If you have any questions or comments about these notes or require additional copies of meeting notes or handouts, please contact Populous at your convenience. Action items are marked in **bold and underlined**.

PURPOSE OF MEETING

The meeting was held with University groups to update on concepts and discuss specific needs related to their department. See attached presentation materials distributed in meeting.

DISCUSSION TOPICS AND NOTES

UTNS 170713 Util-1 Information Technology, DAS

- 1.1. Some systems will have to be rerouted and put back into place
- 1.2. Main DAS & telephone distribution by 'Globe 57'
 - 1.2.1. Assessment to identify pinch points.
- 1.3. AT&T planning to upgrade their system, UT has invited T-Mobile.
- 1.4. JumboTron room would be required on the north for new videoboard.
- 1.5. Brief discussion of the DAS system.
 - 1.5.1. <u>Project Team to schedule a conference call for more detail.</u> Post meeting note: this meeting will be held on 7/25 via conference call.

UTNS 170713 Util-2 WiFi

- 2.1. UT Network is/will be a smooth transition for people when they move around campus.
- 2.2. Currently planning on putting in bowl WIFI, but DAS will be something that will be in addition to WiFi.
- 2.3. Transfer WiFi in the future.
- 2.4. WiFi. Goes through stadium and spider web throughout the stadium –that affects different buildings on campus.
- 2.5. Data/DAS: University personnel are generally concerned with pinch points. Places where power may not be available when data systems need to be up and running, as well as areas

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7.2 MEETING NOTES

UTILITIES / INFRASTRUCTURE / IT

UTILITIES / INFRASTRUCTURE / IT

UNIVERSITY OF TENNESSEE

POPULOUS" MEETING NOTES

University of Tennessee Neyland Stadium

July 13, 2017 Page 2 of 4

where work is being performed that will affect areas outside the stadium being served via the stadium infrastructure. Henderson to address these concerns to a larger extent.

- 2.6. Wi-Fi Not intended to be an athletic network only in the facility. It was discussed that the day-to-day spaces should be connected to the campus network. The bowl network may be provided by a third-party, again needing further discussion.
- 2.7. UT personnel indicated that capacity requirements are changing, requiring a more extensive fiber network than currently exists within the stadium.
- 2.8. UT would prefer a complete fiber loop in the stadium, if possible. The stadium is currently treated as three separate buildings, which has been problematic.
- 2.9. University utilizes single mode fiber as a standard.
- 2.10. UT personnel indicated they would prefer two entry points for the data network into the stadium. These do not need to be across the stadium from each other, but the preference is that they could not be damaged by the same piece of excavation equipment, so a minimum of several feet apart.
- 2.11. Project team to schedule a follow-up meeting to review correct approach. Post meeting note: this meeting will be held on 7/25 via conference call

UTNS 170713 Util-3 Project Coordination

- 3.1. Neyland requires more emergency power.
 - 3.1.1. It is required that the electrical feed to the TR be backed up by a generator, including all convenience outlets and mechanical system.
- 3.2. There are currently two entry points for cable.
 - 3.2.1. East & South are grouped together, and then everything else.
- 3.3. IT is putting together a laundry list of things that they prefer re: cameras/WiFi/power.
 - 3.3.1. UT to forward information.
- 3.4. Each concession stand to have a hardwired system.
 - 3.4.1. Populous will develop projected number of POS connections.
- 3.5. Project will have new camera locations for broadcast and security.
- 3.6. Communication rooms require coordination with UT personnel.
 - 3.6.1. Project needs Comm rooms every 100m re: Ethernet length.
- 3.7. Power to IT room mechanical systems is tied to generators.
 - 3.7.1. Neyland will need new generator(s), pending assessment.
- 3.8. UT personnel to review all telephone/data plans once developed.
 - 3.8.1. Project team to have Comm meeting in the next 1-2 weeks. Post meeting note: this meeting will be held on 7/25 via conference call.
- 3.9. Roy reminded team that several lines serving the east side of the stadium run through the south. Project will need to address these lines if phase 1 work is only south end.

UTNS 170713 Util-4 Power

- 4.1. A full assessment of Neyland's power system is required.
- 4.2. An assessment of the existing generators will need to be completed. It is the university's preference to maintain the generators as natural gas. Henderson will evaluate the feasibility of new natural gas generators in lieu of the previously proposed diesel in the May 2016 narrative.
 - 4.2.1. Natural gas generator at Gate 4 may need replacing.
 - 4.2.2. UT personnel indicated that existing generators are largely in good condition and

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University of Tennessee Neyland Stadium

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that only units causing problems should be replaced.

- 4.2.3. A generator on the west needs capacity confirmed.
- 4.2.4. New generators shall have a run time of a minimum of 12 hours if diesel.
- 4.3. Fire system needs to be uniform and networked throughout the stadium.
 - 4.3.1. Fire system to include audible speakers
- 4.4. Project Team to target 15watts/sqft.
- 4.5. All lighting to be control the lighting from the networked lighting control system (Lutron).
 - 4.5.1. Controlled receptacles only if required by energy code.
 - 4.5.2. Overall lighting control system needs to be secure and user friendly.
- 4.6. No panelboards in prep areas of concessions where hot carts can be stored.
- 4.7. UT requested power be added for the air conditioned benches on the sidelines and grow lights for the fields.

UTNS 170713 Util-5 MECHANICAL

- 5.1. Existing systems description:
 - 5.1.1. Radiant heat throughout, steam utilized for all heating purposes.
 - 5.1.2. Cooling towers and chillers in alumni building provide chilled water to locker room area along with a single air-cooled chiller.
 - 5.1.3. Both sideline towers are served by air-cooled chillers and AHUs/FCUs
 - 5.1.4. Remainder of facility is a mixture of unitary and split type air conditioners.
- 5.2. Ben gave a brief overview of the proposed HVAC and plumbing systems with Q&A interspersed. Refer to the May 2016 Narrative for complete description of the proposed systems.
- 5.3. Natural gas will be extended around the facility for concession purposes. Natural gas estimate in the narrative will need to be revised to accommodate generators, if they are changed from diesel
 - 5.3.1. Natural gas system in building to be upgraded pending assessment.
 - 5.3.2. Project team to consider that concessions use gas
 - 5.3.3. Natural gas is efficient money-wise for UT to use.
- 5.4. Roy Warwick discussed the steam main running along the south end of the stadium. There is a concern that the steam and condensate lines will be interrupted by the structural and utility work in this area. These steam mains feed a good portion of the campus and cannot be interrupted for any significant length of time (generally, only the time for a change-over to new pipes would be acceptable.) Narrative describing this scope of work needs to be included in any future narratives and programming. Henderson and Populous to discuss further, along with perhaps the civil engineer.
- 5.5. UT personnel voiced concern about freezing pipes in areas open year round. Henderson indicated that the year-round areas would be heated and that heat-trace would be provided for any connecting piping outside the space served.
- 5.6. The addition of a larger, more centralized steam entry affirmed by UT personnel.
- 5.7. UT personnel requested the Henderson give extra attention to air handling systems serving densely occupied spaces, given the limitations of DX to handle large amounts of humid outside air. Energy recovery was discussed as a potential solution. From a maintenance standpoint, the university prefers to avoid heat wheels. However, it was conceded that there are acceptable applications, Locker rooms, etc. where their use is not avoidable. Henderson will look at this as the design progresses.
- 5.8. Henderson to follow up with Populous regarding cooling air on the suite seating.

7.2 MEETING NOTES

UTILITIES / INFRASTRUCTURE / IT

NEYLAND STADIUM RENOVATION / STADIUM PROGRAM | 305

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- 5.9. UT personnel voiced concerns about accessibility and future equipment removal and replacement and requested that extra care be taken when selecting locations of large HVAC equipment on roof-tops where structure may create issues. It was proposed that RTUs be kept as low in the building as possible, where possible. VRF condensing unit locations will require similar care when selecting a location. Also requested hose bibs be provided adjacent to RTUs for cleaning.
- 5.10. A water flow test has not been performed to this point in the project. One will be required before design is finalized.
- 5.11. Main water runs down Tee Martin drive, isolation valves are in bad shape.
- 5.12. Stubs and drains will be provided on roof garden.

UTNS 170713 Util-6 Storm Line

- 6.1. Project team will be better informed by geotech report, once complete.
 - 6.1.1. UT to forward report.
- 6.2. Storm line(s) have to be operational throughout the project.
- 6.3. UT considering resleeving storm water line through stadium.
- 6.4. Storm water management plan at/around/through Neyland needs an update.
 - 6.4.1. Currently requires 1" of water to be removed/absorbed in 72 hours.
 - 6.4.2. Project has the option of contributing to UT's storm line mitigation bank for approximately \$927,000, or \$6.50/gallon of water for each square foot of the project.
 - 6.4.3. Applications for re-use of site water are limited on this project given the intermittent use of the building and lack of evaporation-based HVAC heat rejection.

End of Notes

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UNIVERSITY OF TENNESSEE

MEETING NOTES

PROJECT NAME	University of Tennessee, Neyland Stadium Renovations		
PROJECT No.	16.4231.20		
ATTENDEES	Brett Huebner, Kevin Zurcher, Keith Downen, Helen Hennon, Bob Caudil, Randy Hamilton, Jonathan Sawyer, Roy Warwick, Austin Stoner, Ben Luttrell, Jim Campbell, Bethany Morris, Ted Murphy, Ted Davis, Craig Kaufman, Peter Lang	COPIES	Kyleen Miller, Populous File
DATE OF MEETING	July 14, 2017	MEETING LOCATION	UTK Facilities Services
ISSUE DATE	July 21, 2017	MEETING SUBJECT	Abatement & Hazardous Material Discussion

The following meeting notes have been prepared from meeting held July 14th. These notes constitute our understanding of the items discussed, key decisions made, and action items assigned at the meeting. If you have any questions or comments about these notes or require additional copies of meeting notes or handouts, please contact Populous at your convenience. Action items are marked in bold and underlined.

PURPOSE OF MEETING

The meeting was held with University groups to update on concepts and discuss specific needs related to their department. See attached presentation materials distributed in meeting.

DISCUSSION TOPICS AND NOTES

UTNS 170714 Abt-1. Concept Project Scope

- 1.1. Project team advised to consider the larger picture/surrounding campus in addition to the defined project area. Project team to coordinate with UT in an ongoing manner.
- 1.2. Program process to identify 106, 170 & 300m projects: exact scope not assured.

UTNS 170714 Abt-2. Demolition/Renovation Considerations

- 2.1. Asbestos will be encountered and should be remediated before major demolition. Most of the pre-1980 pipe lagging likely contains asbestos. In addition, the older concessions standards were constructed with transite, which is an asbestos-containing material.
- 2.2. Polychlorinated biphenyls (PCBs) This dielectric fluid was found in transformers, capacitors, oil-filled switches and alike in pre-1980 equipment. These sources should have been removed from service campus-wide, however, it's possible some equipment could have been overlooked.
- 2.3. Egress from the stadium must meet code requirements during games while the renovations are underway.
- 2.4. The contractor performing the work should manage storm water in accordance with state regulations.
- 2.5. Controlled access to the site. Care must be exercised to control unauthorized access to the work area. In addition, the safety of those passing near or under renovation work should be addressed.

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- 2.6. Hazardous materials (propane, diesel fuel, gasoline) used by the contractor should be removed from under the stadium before football games while renovations are in progress.
- 2.7. Items currently in & around Neyland Stadium thought to be at least somewhat composed of hazardous materials include, but aren't limited to:
 - 2.7.1. Floor tiles in the dorms & elsewhere. Depth/# of tiles to be confirmed.
 - 2.7.2. Stand pipes.
 - 2.7.3. Previously noted transite panels in restrooms and concessions.
 - 2.7.4. Steam lines (most exposed, some not).
 - 2.7.5. Window glazing (asbestos).
 - 2.7.6. Paint (lead).
 - 2.7.7. Mastic used in walls.
 - 2.7.8. R/W(?) wiring (asbestos)
 - 2.7.9. Roofing materials on concourses
 - 2.7.10. Fire doors
- 2.8. Abatement/mitigation efforts currently thought to focus (but not limited to) on the following areas: Four levels of the South & East dorms (approximately 260k sf), the Service level (00), Concourse 01, Concourse 02 and concessions & restrooms throughout.
 - 2.8.1. The Biology Annex's date of construction suggests it may not require much mitigation. To be independently verified.

UTNS 170714 Abt-3. Project Considerations

- 3.1. Campus Environmental Health and Safety should review the location of portable fire extinguishers for this project.
- 3.2. Firestopping will be important for barriers (walls, floor, etc.) that separate renovated areas from those that are undisturbed.
- 3.3. Confined spaces must be identified and posted.
- 3.4. Storm water management will be important. Garrett Ferry, the campus storm water manager, should be contacted.
- 3.5. Consideration should be given to getting input from the group (Rural Metro) that provides emergency medical services for football games relative to the first aid rooms.
- 3.6. Emergency Management The campus emergency manager, Brian Gard, should be consulted relative to emergency management planning.
- 3.7. Egress The State Fire Marshal will likely need to see an egress plan, which may indirectly impact existing seating.
- 3.8. Considerations for fall protection will be important for maintenance activities, such as changing lights located far above a walking surface, elevated mechanical equipment that need periodic maintenance, inspection or repair. This includes motors, pumps, fire dampers, etc.
- 3.9. EPA SPCC Plan The following aboveground sources of oil in containers of 55 gallons or more will need to be included in the campus SPCC plan:
 - 3.9.1. Oil-filled transformers
 - 3.9.2. Diesel generator saddle tanks
 - 3.9.3. Hydraulic elevators
 - 3.9.4. Bulk oil and lubricant storage
- 3.10. Local exhaust ventilation will be necessary for:
 - 3.10.1. Commercial kitchen hoods (NFPA96)
 - 3.10.2. Dust collection from woodworking activities in the maintenance shop if applicable
 - 3.10.3. Paint spray for any maintenance shop if applicable
 - 3.10.4. Hazardous materials storage rooms, if applicable
- 3.11. Will there be any underground storage tanks associated with this project?

MEETING NOTES

University of Tennessee Neyland Stadium

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- 3.12. Applicable codes for this project include:
 - 3.12.1. NFPA 101 Life Safety Code
 - 3.12.2. NFPA 102- Stadiums and Grandstands
 - 3.12.3. International Fire Code
 - 3.12.4. International Building Code
- 3.13. Information on hazardous materials storage should be reviewed by Environmental Health and Safety, including:
 - 3.13.1. Propane tank storage for forklifts
 - 3.13.2. Aerosol paint spray containers
 - 3.13.3. Paint storage in general
 - 3.13.4. Fertilizer, pesticides, etc. associated with turf management
 - 3.13.5. Bulk storage of other chemicals
 - 3.13.6. Other hazardous materials.
- 3.14. Spill containment (could be portable spill pallets) will be necessary for containers 55 gallons
- 3.15. Flammable liquid storage cabinets or a fire-rated room may be necessary. There are considerable design requirements for rated rooms.
- 3.16. Battery charging areas for powered industrial trucks (if applicable) Ventilation will be required depending on the room size, number and size of batteries being charged, etc.
- 3.17. Universal Waste This includes spent fluorescent bulbs, rechargeable batteries and ballasts. This waste category could be co-located with recycling waste.
- 3.18. Fall protection from viewing area Codes generally permit a railing of 26 inches in height, above the finished floor, for fall protection from viewing areas in places of assembly. This distance is not protective an alternate means must be provided.
- 3.19. Fire suppression and fire-resistive construction- A sprinkler system will be necessary. In addition, fire/smoke barriers will be important for space under the stadium seats. This can be addressed by the designer and State Fire Marshal. Prevention of frozen sprinkler pipes must be addressed during the design phase.

UTNS 170714 Abt-4. Project Planning

- 4.1. Steam will need to be turned off for work to proceed. There are some under the ramps in the South & East.
 - 4.1.1. If the lines are continuous, how will Phase 01/South demo impact operations on the East?
 - 4.1.1.1. Project Team to coordinate existing utilities with construction activities.
- 4.2. East Stadium
 - 4.2.1. Zone Maintenance in the East Stadium to remain operational during Phase 01.
 - 4.2.2. Facilities offices, Cheer & Officials' locker rooms to remain operational until replaced.
- 4.3. UT officials to coordinate migration of people and relay potential impacts to the Project
- 4.4. UT officials to forward Campus Standards that are being revised in the next 2-3 weeks.
- 4.5. Comment made that the Project could tie to the "Green Way" path on Neyland drive.
 - 4.5.1. Not currently part of defined project scope though the incorporating a revised approach/view from Neyland is in keeping with the Project's principles.

End of Notes

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ABATEMENT HAZMAT

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Environmental Health and Safety

Mark Smith

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Finished Project Considerations

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