



September 2, 2010

ICE ARENA

Design Professional Long List

- 1) Cannon Design
- 2) Crawford Architects LLC
- 3) Ellerbe Becket
- 4) Ewing Cole
- 5) HKS, Inc
- 6) HNTB
- 7) Lempka Architects
- 8) NBBJ
- 9) Moody Nolan, Inc.
- 10) Populous
- 11) Rosser International, Inc.
- 12) Rossett
- 13) Sasaki Associates
- 14) Sink Combs Dethlefs
- 15) Three Sixty Architecture

SUBJECT: Ice Arena
University Park

Dear Design Professional:

The success of the men's and women's ice hockey club teams and the popularity of the sport in the State College area have created facility demands that can no longer be adequately accommodated by the existing rink. In order to address this need, Penn State intends to build a new Ice Arena to be located near the corner of University Drive and Curtin Road, across the Bryce Jordan Center on the University Park Campus.

In December, 2008 Crawford Architects of Kansas City, MO prepared a feasibility study for a new hockey arena with 2 sheets of ice that would accommodate 6,000 spectators; excerpts from that study are attached to this letter. Our goal is to create a state-of-the-art facility that will provide a venue for Division I Intercollegiate competition and serve the recreational needs of the University's students as well as those of the surrounding community.

The feasibility study includes a program that identifies eight broad functional categories:

- Spectator facilities including general seating, suites and guest services.
- Food and retail facilities.
- Event facilities including competition, practice and recreation surfaces.
- Team facilities including locker rooms and training areas.
- Administration.
- Media facilities.
- Circulation.
- Operations support.

Development of the surrounding site will be a part of the project and the design should accommodate game day crowd as well as day to day pedestrian traffic. A limited amount of parking must also be provided. As part of the exterior site development scope we want to study the feasibility of including a 185' x 85' roller rink near the Arena. This is not shown in the Crawford study. The cost of investigating the feasibility, designing and constructing this roller rink is over and above the budget stated below and will be funded separately.

We expect that the architectural expression of the facility will reflect its uniqueness while fitting within the context of the athletic precinct. We anticipate that the current program will require a facility of approximately 200,000 to 220,000 GSF and in keeping with our commitment to environmental sustainability, we expect that this facility will, at a minimum, attain USGBC's LEED certified level. Our total project budget including soft costs and FF&E is \$75,000,000.

With this letter we are inviting the firms identified in the above list to submit proposals for the design of this facility. We expect design to commence immediately with occupancy by December, 2013. Because of the specialized nature of this facility, the list includes firms located outside Pennsylvania that have expressed interest in working with us and have extensive experience designing this type of facility. We will not require that out-of-state firms team up with in-state firms.

If your firm is interested in pursuing this project, please provide us with the information requested in the attached questionnaire no later than **September 30, 2010 at Noon**. Please answer all of the questions in the order requested. This will provide uniform information on all firms for evaluation by the Selection Committee. We encourage you to be as brief as possible without sacrificing accuracy and completeness. Please submit **twenty-one (21) copies** of all materials. In addition, I am including a non-binding fee proposal form for you to fill out; please submit one copy under separate cover; to assist you in filling out this form please assume a construction budget of \$59,200,000 and an FF&E budget of \$4,000,000. I have also included a copy of our Form of Agreement 1-P. Please review this agreement to ensure that your firm accepts all terms and conditions as written. I encourage you to visit the site in order to thoroughly familiarize yourself with the project and meet with the appropriate program's personnel. Please contact Marv Bevan, the Project Manager at 814-865-3474 to schedule your visit. Please contact me if you have any process or campus planning questions.

The University will use a qualifications based selection process with long list, short list and interviews. A Screening Committee will select three firms from the respondents to this RFP. The Architect Selection Subcommittee of the University's Board of Trustees will interview the three firms during the week of November 1, 2010. The results of the interviews will be

announced at the Board of Trustees meeting on November 5, 2010. All three firms will be notified immediately after the meeting.

If you have any questions regarding this request, please do not hesitate to call Marv or me.

Sincerely,

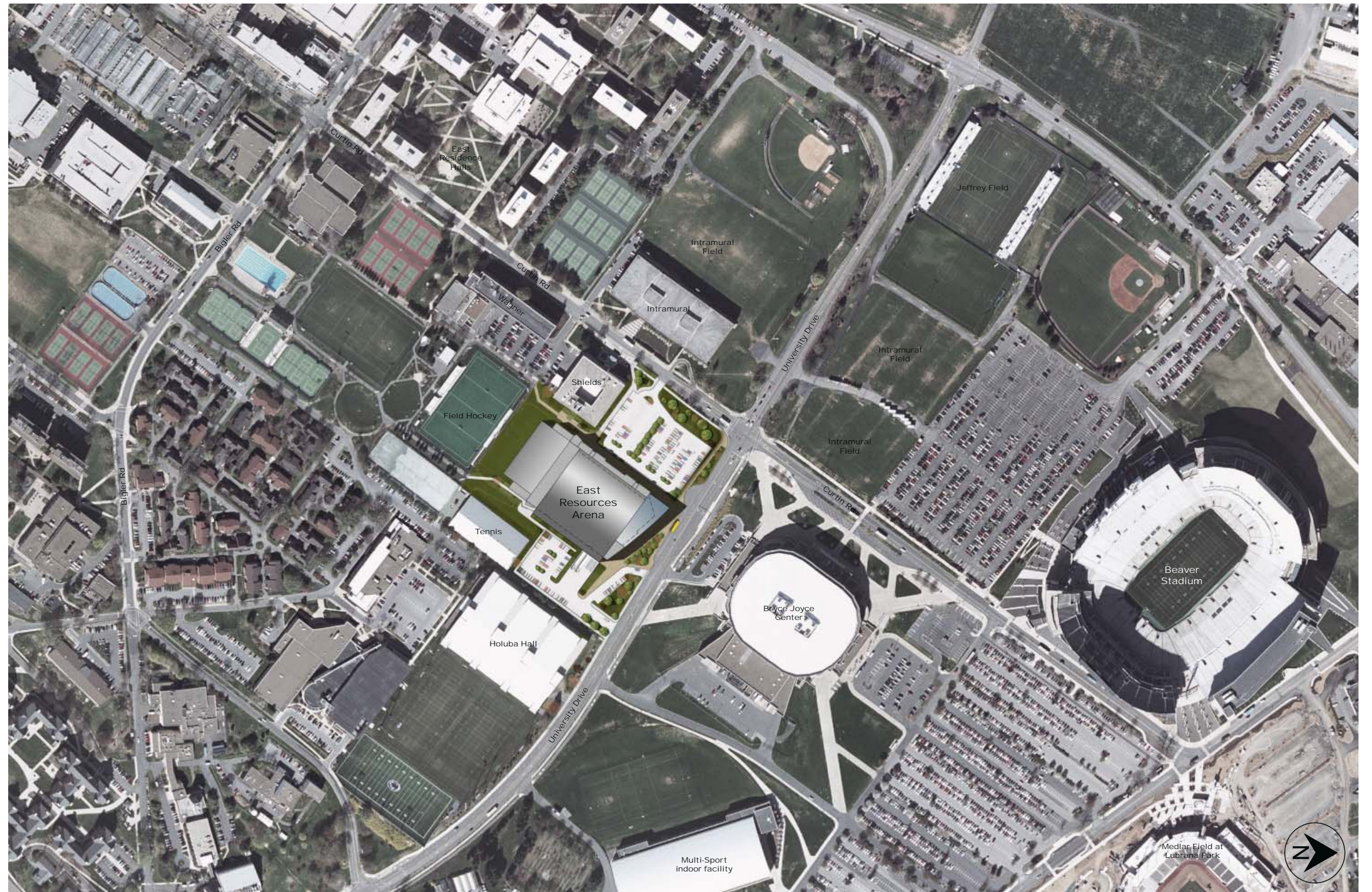
David Zehngut
University Architect
(814) 863-3158, fax (814) 863-7757
E-mail: dxz3@psu.edu

cc: Screening Committee
A. G. Horvath

PREFERRED CONCEPT

Vicinity Plan

Note: This plan is reoriented (rotated 90° clockwise) to fit the page.



EXECUTIVE SUMMARY

EXECUTIVE SUMMARY::

Introduction

Penn State University is in the process of transforming its highly successful Men's Hockey Club Team into a Division 1 – NCAA Hockey Program. As this process unfolds, a key component of this process is the assessment of existing facilities and the evaluation of new facilities that may be required. This feasibility study represents one of the first steps to this evaluation.

Since hockey's reemergence on campus in 1971, the Nittany Lion Icers' have competed at the highest levels with multiple championships on the ice. As they move to the next level, this commitment to excellence remains steady and consistent with Penn State Athletics as a whole. Crawford Architects have conducted this study with this commitment in mind.

During this course of this study, several goals for the program, and thus this facility have been stated. They include the following:

1. Make Penn State Hockey a NCAA Division 1 - Big 10 Conference Sport.
2. Accommodate both Men's and Women's hockey.
3. Create a facility that is a championship caliber – the best hockey building possible - so that the team (s) can compete for National Championships.
4. Provide facilities that can also be used by students and the community for recreational, educational and intramural uses.
5. Maximize Revenue Generation Opportunities and Fan Amenities to the fullest extent possible.
6. Build on the tradition of Penn State Hockey and the culture of Section 'E' to create a formidable home ice advantage and a positive hockey experience.
7. The new facility should make a positive contribution to the overall campus and be compatible architecturally with its adjacent context.

The culture of Section 'E' and Penn State's tradition of success on and off the ice is testimony to the Icers' tremendous support, both among the student body and the University community as a whole. Pennsylvania is a hockey state with a wealth of amateur and professional teams that create a unique fan base on campus. This support coupled by emergence of a potential donor that may fund a major portion of the project, prompted planning for a new arena in October of 2008.



Our Assignment

In conducting this study, Crawford Architects focused on 4 tasks:

1. Develop a Program of Requirements for a Division 1 – NCAA Hockey Arena that meets the needs of Penn State University – for NCAA competition and for recreational/ intramural/ educational use,
2. Develop design concepts to confirm that the Program fits on the site,
3. Develop a preliminary cost model and budget recommendation for the Project,
4. Develop graphic material for presentation to potential donor (s).

Program

The Preliminary Program of Requirements is provided in outline and narrative form. Please refer to Section 3 for more detail.

The Program consists of 8 categories of space including:

1. Part 1: Spectator Facilities
2. Part 2: Food and Retail Facilities
3. Part 3: Circulation
4. Part 4: Event Floor Facilities
5. Part 5: Team Facilities
6. Part 6: Administration
7. Part 7: Media Facilities
8. Part 8: Operations Support

Program areas are presented as net areas for spaces in each category with a net to gross area multiplier factored at the end of the Program. These spaces correspond to areas as indicated by concept diagrams found in this section and in Section 5.

Net and gross areas are summarized in two forms – spaces that 'must' be provided to meet the goals stated above, plus spaces that are desirable (wish list) if feasible. In addition program areas are compared to program areas found at the Goggin Ice Center at Miami of Ohio University (3000 seats), the new Hockey Arena at the University of Notre Dame (4000 seats) and the Preliminary Program – Option 5 that was prepared for Penn State University in 1999 (6000 seats).

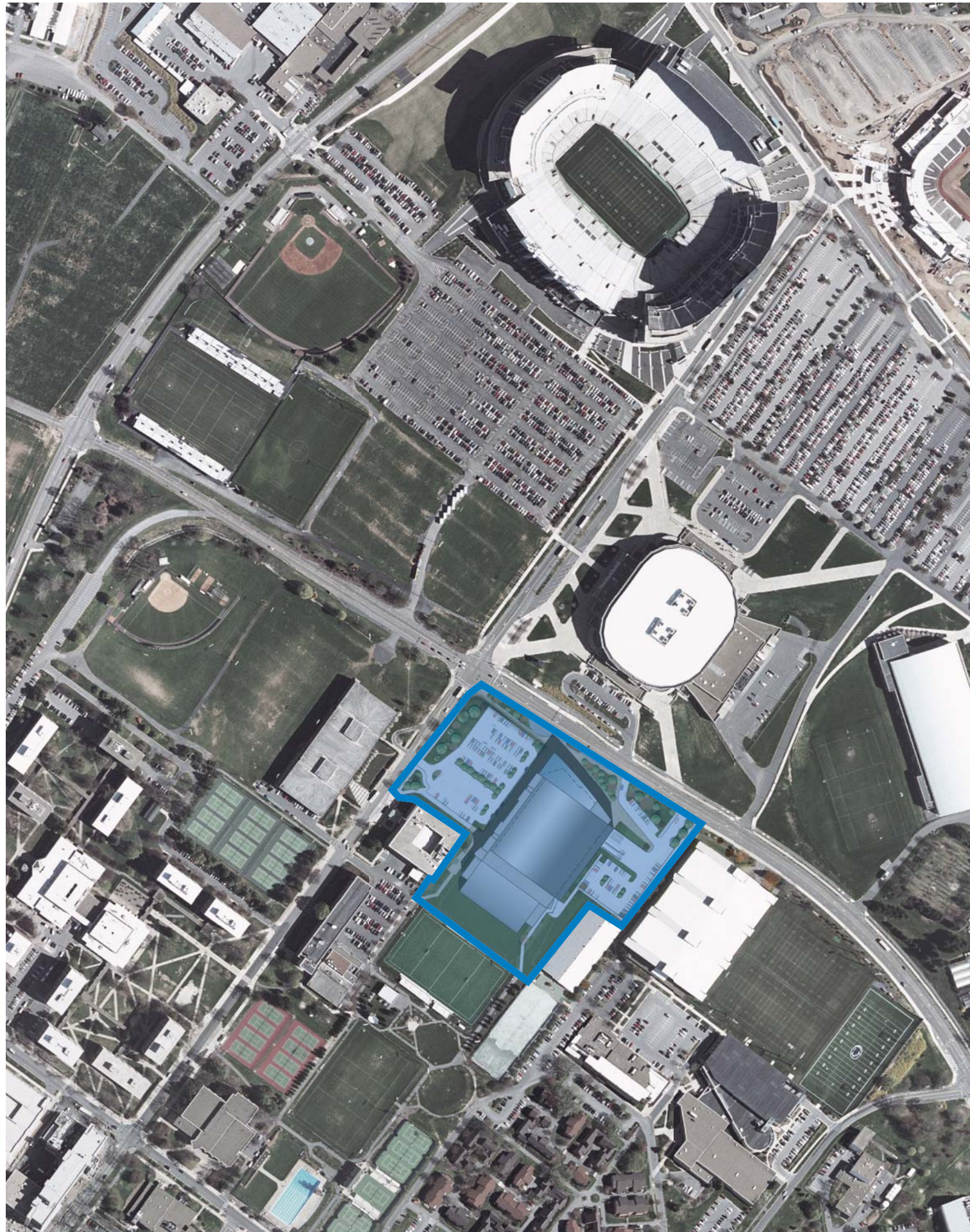
The conclusions of the programming effort indicates that a building consisting of 6000 seats inclusive of 24 Suites (12 initial and 12 future), 500 club seats and 2 sheets of ice requires approximately 198,663 to 219,574 gross square feet depending on the final design of the seating bowl, concourses and overall building. Concept studies developed to date yield a building of approximately 216,240 gross square feet consisting of the following breakdown:

- | | |
|------------------|---------------------------|
| 1. Arena | 176,985 gross square feet |
| 2. Ancillary Ice | 39,255 gross square feet |

As indicated by the outline program, the overall area of the building has been compared to comparable facilities and the Program developed in 1999 – Option 5.

Facility - Arena and Ancillary Ice Sheet	Seating Capacity	Number of Ice Sheets	Gross Area in Square Feet
New Penn State Hockey Arena	6,000	2	216,240
Penn State 1999 Study Option 5	6,000	2 ½	214,094*
New Arena at Notre Dame	4,000	2	191.197
Goggin Center at Miami of Ohio Univ.	3,000	2	170.033

*Note: In previous cost analysis and program summaries, the 1999 Program – Option 5 has been represented as a building of 165,000 square feet. During our evaluation of this program, we have determined that the actual net area is 193,015 square feet in lieu of 165,000 square feet. Applying a consistent net to gross multiplier yields a building of 214,094 gross square feet.



Other Program Requirements

In addition to the building area prescribed by the Program of Requirements, dedicated parking on-site for 50 cars (minimum) is required to accommodate ADA, visitor and staff parking. Existing parking that is displaced must be replaced off-site as well.

The current concept proposal displaces approximately 172 existing parking spaces. Approximately 69 new parking spaces are provided as shown. Thus, 103 parking spaces must be replaced off-site.

These parking spaces do not constitute total parking demand during an event. We estimate that a range of 730 (per Township requirements) to 1326 (per 3.5 people per car with modal split) event parking spaces will have to be accommodated off site depending on overall demand to be determined at a later date via a detailed traffic/ transportation plan. Please refer to Section 4 – Site Analysis for more detail.

Proposed Site and Concept Design

The proposed site is bordered by the Curtin Road, the Shields Building and parking lot to the north, the existing Field Hockey Field to the west, Holuba Hall to the south and University Drive to the east. Consisting of approximately 8.8 acres, the proposed site is a gateway opportunity with high visibility and good access – both pedestrian, transit and vehicular.

Concept designs based on the Program of Requirements developed in this study indicate that a 6000 seat hockey arena with 2 sheets of ice will fit on the site. In fact, the site will accommodate several arena configurations including seating in the round, horseshoe, single concourse and multiple concourse solutions. Please refer to Section 4 – Site Analysis, Section 5 – Design Studies and the Appendix for more information.

Crawford Architects has worked closely with the Penn State Project Team to develop the preliminary concept design presented in this report. The preferred scheme has been determined to be the best solution at this time by the Project Team. It is not a final solution but instead a snap shot that illustrates key design principles that should be considered as subsequent design proceeds. Key design principles that have influenced the concept design are:

1. Provide strong visual connections to/from the new arena. Key relationships include views to/from:
 - a. Surrounding streets and highways
 - b. Beaver Stadium
 - c. Bryce Jordan Arena
2. Enhance and reinforce pedestrian connections to/from the site.
3. The new Arena should take cues from its adjacent context including pedestrian circulation, view corridors and adjacent building massing.
4. Minimize existing parking displacement. Parking immediately adjacent to the Shields Building should be preserved to the fullest extent possible.
5. The existing Tennis Building should be maintained in the initial phases of development. This facility may be demolished in the future depending on final design of a new indoor tennis facility.
6. Respond to and capture views to Mount Nittany to the fullest extent possible
7. The building's BRAND should be a prominent feature/ theme on the site.
8. Maintain the existing Utility Duct Corridor located immediately to the south of Shields if possible.
9. Provide connections to, and share concession/ toilet facilities with the existing Field Hockey Facility if possible.
10. Provide flexible and convenient vehicular and pedestrian access to 365 day a year functions within the facility such as the Ancillary Ice (2nd sheet of ice) Facility.
11. The building should be designed to meet LEED certification standards.

PROGRAM

INTRODUCTION::

This document is intended to serve as a “master guideline” for the Program Statement. It is intended to include all possible spaces which might be found in an Arena facility, whether it be for use by a civic, collegiate, and/or professional organization. It is intended to include Team Facility spaces for sports teams such as: NCAA Basketball, Hockey, Volleyball, and/or Wrestling; Arena Football, Indoor Soccer, Minor League and NHL Hockey, and entertainment events such as concerts and/or trade shows.

NOTE: Teams and/or spaces which are not applicable to a specific client project should be deleted.

CLASSIFICATION 1:: SPECTATOR FACILITIES

- Spectator Seating
- Suites
- Club Lounge / V.I.P. Hospitality Room
- Restrooms
- Guest Servies

CLASSIFICATION 2:: FOOD and RETAIL FACILITIES

- Concession Stands
- Eating Areas
- Kitchens
- Vendor Staff
- Retail Sales

CLASSIFICATION 3:: CIRCULATION

- Lobbies
- Concourses
- Corridors
- Vertical Circulation

CLASSIFICATION 4:: EVENT FACILITES

- Event Floor
- Practice Facilities
- Recreation and Skating
- Meeting Rooms
- Hall of Fame

CLASSIFICATION 5:: TEAM FACILITIES

- Home Hockey Team - Men
- Home Hockey Team - Women
- Field Hockey Team Suite
- Training
- Hockey Coaches Men
- Hockey Coaches Women
- Field Hockey Coaches
- Team Service Facilities
- Visiting Team Lockers - Men
- Visiting Team Lockers - Women
- Auxiliary Lockers
- Ice Officials Lockers

CLASSIFICATION 6:: ADMINISTRATION

- Athletic Administration
- Arena Management Offices
- Ticket Office
- Hockey Offices
- Recreation Offices

CLASSIFICATION 7:: MEDIA FACILITIES

- Press Support
- Press Box
- Control Rooms
- Video Production
- Sports Information
- Camera Locations
- Follow Spots

CLASSIFICATION 8:: OPERATIONS SUPPORT

- Event Staff
- Building Staff
- Event Storage
- Dock / Staging
- Ice Support
- Security Office
- Maintenance
- Janitorial
- M/E/P

CLASSIFICATION 1: SPECTATOR FACILITIES											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
Spectator Seating	A total of 6,000 seats will be provided in a hockey configuration, distributed across the following categories:										
	Bleacher seating in Auxiliary Rink (18" min. width):	1000	5.5	5,500	300	5.5	1,650	2750	1,650	9,600	Larger number to accounted for Women's Hockey games in Aux Rink
	Bleacher seating in arena (18" min. width):	1000	5.5	5,500	1000	5.5	5,500		5,500	0	Consider bleacher seats for student section, "stands" with bench low to tread.
	Armchair seating, retractable (19" min. width)	0	6.5	0	0	6.5	0				Condsider retractables at stage end. Could be student section as well.
	Armchair seating, permanent (19" min. width)	4212	6.5	27,378	4212	6.5	27,378	20,900	22,500	39,000	
	Club seating, permanent (21" min. width)	500	8.0	4,000	500	8.0	4,000	4200	4,200	0	
	Suite seating, permanent (22" min. width)	144	9.5	1,368	144	9.5	1,368			0	12 per suite, 144 now, 144 future
	SUB-TOTAL - SPECTATOR SEATING	6,856		43,746	6,156		39,896	27,850	33,850	48,600	Includes seating in Aux Rink, Future suites will bring total to 6k in arena
	Note: accommodations for wheelchair and ambulatory disabled patrons and their companions shall be provided in accordance with the ADA.										
Suites	Suites will be fit-out with: 1) a small serving area with sink, undercounter refrigerator, and undercounter icemaker; 2) closet; 3) TV monitors; 4) stereo system.										
	Concierge - Customer Service	0	0	0	0	0	0	0	0	300	
	Suites with toilets	0	375	0	0	375	0				
	Suites without toilets	12	280	3,360	12	280	3,360	1,580	0	11200	12 now - allow for 24 later (both sides)Consider on mezzanine like UNI. Mezzanaine on one side built out now.
	Number of Party Suites	0		0	0		0	800	0		
Club Lounge/Hospitality	Lounge with bar and dining tables for use by premium seat holders on Event Day, and for meetings and banquets at other times										(note: review non-event day access requirements and location requirements). See Part 2 for associated kitchen facilities. Verify state and local plumbing requirements.
	Dining/bar area occupancy	300	15	4,500	300	15	4,500	5,205	5,180		Final occupancy level to be determined. Catering Pantry in Food & Bev
	Mens toilets: w.c. + urinals + lavs	3	75	225	3	75	225	170	540		
	Womens toilets: w.c. + lavs	3	75	225	3	75	225	230	689		
	Number of Family Toilets	1	80	80	1	80	80				
	Bar and stools	1	250	250	1	250	250				Includes sink, ice maker, etc.
	Smoking will be allowed: yes/no										
Public Restrooms	Public restroom facilities will be provided based on an assumed ratio of 50:50 male-female attendance.										Includes both rinks. Ratios are based on IPC 2000 codes; check state and local requirements.
	Mens toilets: (1:300) + urinals (1:90) + lavs (1:200)	51	50	2,550	46	50	2,300	2,318	2,682	2,650	Facilities open for field hockey games. Adjacent to pitch.
	Womens toilets: w.c. (1:60) + lavs (1:150)	58	50	2,900	52	50	2,600	2,690	2,944	5,300	Facilities open for field hockey games. Adjacent to pitch.
	Family toilets	4	80	320	4	80	320	400	400	1,200	For use by parents with small children or disabled people who need special assistance.
Suite Restrooms	Common restroom facilities will be provided on the Suite Corridor for premium seat holder use.										
	Mens toilets: w.c. or urinals + lavs	4	75	300	4	75	300				4 now, 4 future, check sf
	Womens toilets: w.c. + lavs	4	75	300	4	75	300				
Guest Services	First Aid Room for spectator use. Office Holding/Treatment Toilet Storage	1	400	400	1	400	400	110	280	245	Accessible to both Rinks
	Satellite facilities for spectator use.	0	250	0	0	250	0				
	Information and Lost & Found Booth	1	100	100	0	100	0				
	Business Center for premium seating patrons.	0	500	0	0	500	0				
SUB-TOTAL (NET AREA)				59,256			54,756	41,353	46,565	69,495	

CLASSIFICATION 2: FOOD and RETAIL FACILITIES											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
Concession Stands	Concession Stands will be distributed at regular intervals on the Concourse(s).										
	Arena Concession stands based on ratio of 1:200 spectators.	19	100	1,900	19	100	1,900	1,435	1,804	3,000	Also open for Field Hockey games. 2-4 Points of sale adjacent to FH Pitch.
	Auxiliary Rink Concession	5	100	500	2	100	200	400	400	600	
	Concession Storage	4	250	1,000	4	250	1,000	400	400	1,250	
	Portable specialty vendor concession stands will be provided in the Concourse area, with utility services available for temporary tap-ins.	15.2	50	760	15.2	50	760		0		
	Vendor Stands: facilities for food handling and storage by vendors will be distributed on each concourse.	0	20	0	0	20	0			500	incl. in concession storage
	Vending Machines: space for 3-4 vending machines for sales when concessions are closed										Included in concourse SF
Eating Areas	The following space types are optional:										
	Food Court - space for tables and chairs located close to a cluster of concession stands	2	1,000	2,000	1	1,000	1,000	0	0	2,000	View to ice?
	Restaurant - may be open to public	0	5,000	0	0	5,000	0	0	0		Alumni Club? Includes kitchen. 3k sf seating = 200 patrons
Kitchens	Kitchen - to support Concession Stands and catering to Suites.	0	2,500	0	0	2,500	0	1030	800		If restaurant not in program,will need a kitchen.
Kitchen areas	Commissary - storage for paper goods and food supplies, including climate-controlled storage rooms.	1	1,000	1,000	1	1,000	1,000	0	200		
	Cold Food Storage	2	400	800	2	400	800	0	200	800	
	Beverage cooler(s) Note: determine if: a) kegs of beer will be distributed and stored in each concession stand, or b) if beer will be pumped to POS through a piped system.	0	400	0	0	400	0	0	400	800	No alcohol in the building
	Kitchen/Bar - Club Lounge.	0	750	0	0	750	0				Utilize the main kitchen
	Suite Serving Pantries - to assist food service to the Suites after it comes from the Central Kitchen.	1	350	350	1	350	350				
	Suite Warming Pantries - to assist food service to the Suites after it comes from an off-site prep kitchen.	0	500	0	0	500	0				Food Prepped on-site
	Club Lounge Warming Pantry - to assist food service to the Club Lounge.	1	350	350	1	350	350				
Vendor Staff	Event Day Office(s)	1	100	100	1	100	100				
	Staff Lockers / Toilets	0	500	0	0	500	0				
	Uniform Distribution	0	150	0	0	150	0				
Retail Sales	Team Store for sale of souvenirs, team memorabilia and novelty items.	1	1,200	1,200	1	1,200	1,200			1,200	
	Pro shop	0	1,500	0	0	1,500	0	800	1,100	0	At Aux Rink
	Novelty Stands							400	400	200	
	Video Game Room							300	0	400	
	General Storage	1	250	250	1	250	250			250	
	Secure Storage	1	125	125	1	125	125			125	
	Transaction Room	1	125	125	1	125	125			125	
	Permanent Novelty Sales stands to supplement novelty sales on event days. 5 LF counter space per POS, with 12' depth for storage and display.	0	60	0	0	60	0				
	Storage for bulk materials and carts (25% of retail area).	1	250	250	1	250	250				
SUB-TOTAL (NET AREA)				10,710			9,410	4,765	5,704	11,250	

CLASSIFICATION 3: CIRCULATION											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
Lobbies	Arena Lobby	1	2,500	2,500	1	2,500	2,500	5480	3000	2500	includes vestibule
	Recreation Rink Lobby	1	500	500	1	500	500	1100	500		includes vestibule
	Ticket Lobbies	1	250	250	1	250	250				
	Team Entrances	1	250	250	1	250	250				Access to both rinks
	V.I.P. / Private Entrances	1	250	250	1	250	250	500	1000		
	Entrance to Adminstrative Office Suite	1	250	250	1	250	250				
Concourses	Main Level Concourse	6000	3.4	20,400	5000	3.4	17,000	19530	20398	22000	
	Upper Level Concourse	0	3.0	0	0	3.0	0				
Corridors	Service Corridor on Event Floor Level	1	9,000	9,000	1	9,000	9,000	5000	0	0	10' min. width
	Suite Corridor on Suite Level	1	2,000	2,000	1	2,000	2,000	3000	0	0	8' min. width, 200' long. On one side only. Phase 2 another2,000
Vertical Circulation	2500 lb. Passenger Elevators	2	80	160	2	80	160				
	3500 lb. Passenger Elevators	0	95	0	0	95	0				
	4500 lb. Passenger/Service Elevators	0	110	0	0	110	0				
	5000 lb. Passenger/Service Elevators	0	125	0	0	125	0				
	6000 lb. Freight Elevators	1	145	0	0	145	0				
	Stairwells	0	0		0	0					in net-to-gross factor
	Escalators	0	0		0	0					in net-to-gross factor
SUB-TOTAL (NET AREA)				35,560			32,160	34610	24898	24500	

CLASSIFICATION 4: EVENT FACILITIES											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
Event Floor	Possible Floor Configurations: Arena Football - 85' x 200' and 90' x 204' clear (18,360 sf) Basketball 50' x 94' playing court; 70' x 134' clear (9,380 sf) Basketball Practice - retractable bleachers allow 2-3 courts Concert / Stage Shows / Circus - 85' x 200' NCAA/ International Hockey - 100' x 200' rink (20,000 sf) Indoor Soccer - 15-25 m wide x 25-42 m long Volleyball Competition - 30' x 60' playing court; 60' x 120' Wrestling Matches - (1) 42' x 42' mat										
	NHL Hockey - 85' x 200' rink (17,000 sf)	1	17,000	17,000	1	17,000	17,000	17000	20100	17000	
	Other	0	0	0	0	0	0				
	Player Benches - Hockey	2	180	360	2	180	360	360	360	0	
	Penalty Benches - Hockey	2	30	60	2	30	60	60	60	0	
	Penalty Timekeeper Box - Hockey	1	30	30	1	30	30	30	30	0	
	Goal Judges Box - Hockey	1	30	30	1	30	30	30	30	0	
	Video Replay Room - Hockey	1	80	80	1	80	80	80	80	0	
	Player Benches - Arena Football	0	225	0	0	225	0	0	0	0	
	Basketball practice gymnasium (2 courts)	0	15,000	0	0	15,000	0				
Practice Facilities	Ice Rinks - (85' x 200')	1	18,000	18,000	1	17,000	17,000	17000	20075	17000	Incl. Benches, etc.
	Studio Rink (85' x 100')	0	8,500	0	0	8,500	0	0	0	0	
	Figure Skating - Skill Development Area	0	400	0	0	400	0	0	0	0	
Recreation	Rental office and Skate Storage	1	500	500	1	500	500	1000	1300	1000	
and Skating	Changing area	1	400	400	1	200	200	0	0	2500	Area to lace-up rental skates. Adjacent to Food Court
	Skate Sharpening	1	100	100	1	100	100	150	200	100	
	Rental party rooms. Sized for 20.	2	400	800	2	400	800	1000	400	1000	Divider walls
	Storage Lockers	1	250	250	1	250	250			0	Room with storage cages for Intramural hockey equipment; 24" cages for rent. 100-200 lockers, for rent. No benches, no showers, concrete floor.
	Video Game Room	0	400	0	0	400	0				
Meeting Rooms	Meeting Rooms	0	750	0	0	750	0				Party rooms double as meeting rooms
	Pre-Function Space (ratio - 1:4)	0	0	0	0	0	0				
	Toilet Rooms	0		0	0		0				
Hall of Fame	Space for display of memorabilia featuring the home team(s). NOTE: May be combined with the Retail Store, Club Lounge, or Concourses.	0		0	0		0				
SUB-TOTAL (NET AREA)				37,610			36,410	36710	42635	38600	

CLASSIFICATION 5: TEAM FACILITIES											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
Hockey Team Suite	The Home Team locker room suite includes the following spaces:										
Men	Players Lounge	1	250	250	1	250	250	400	500	250	
	Internet Room/Study Area	1	200	200	1	200	200	100	200	0	
	Dry Locker Room (18" lockers)	28	20	560	28	20	560	500	560	300	
	Locker Room (24) 36" lockers + (2) 48" lockers for Goalies	28	60	1,680	28	60	1,680	1,000	1,680	600	
	Showers	14	30	420	14	30	420	300	420	480	
	Drying Area	7	20	140	0	20	0	0	140	0	
	Grooming area with (5) lavs and cont. mirror	7	45	315	7	45	315	80	315	0	
	Toilet Room (2) w.c. + (3) urinals	5	45	225	5	45	225	120	225	250	
	Meal/Multipurpose Room	35	15	525	0	15	0	0	580	0	Use party roomsfor Training Table
Hockey Team Suite	The Home Team locker room suite includes the following spaces:										
Women	Players Lounge	1	250	250	1	250	250	0	0	250	MO & ND women club teams use visitor lockers
	Internet Room/Study Area	1	200	200	1	200	200	0	0	0	
	Dry Locker Room (18" lockers)	28	20	560	28	20	560	0	0	300	
	Locker Room (24) 36" lockers + (2) 48" lockers for Goalies	28	60	1,680	28	60	1,680	0	0	600	
	Showers	14	30	420	14	30	420	0	0	480	individual stalls
	Drying Area	7	20	140	7	20	140	0	0	0	part of stalls
	Grooming area with (5) lavs and cont. mirror	7	45	315	7	45	315	0	0	0	
	Toilet Room (6) w.c.	5	45	225	5	45	225	0	0	250	
	Meal/Multipurpose Room	35	15	525	0	15	0	0	0	0	Use party roomsfor Training Table
Field Hockey Team Suite	The Home Team locker room suite includes the following spaces:										Located west side of arena, adjacent to Field Hockey Pitch
	Players Lounge	1	250	250	0	250	0	0	0	0	
	Internet Room/Study Area	0	200	0	0	200	0	0	0	0	
	Locker Room (24) 18" lockers	0	20	0	0	20	0	0	0	0	
	Showers	0	30	0	0	30	0	0	0	0	individual stalls
	Drying Area	0	20	0	0	20	0	0	0	0	
	Grooming area with (5) lavs and cont. mirror	0	45	0	0	45	0	0	0	0	
	Toilet Room (6) w.c.	0	45	0	0	45	0	0	0	0	
	Meal/Multipurpose Room	0	15	0	0	15	0	0	0	1,200	Use Party Room?
Training	Training Room (taping and treatment tables)	1	800	800	1	800	800	780	800	600	
	Trainers Offices	2	120	240	2	120	240	120	240	0	
	Hydrotherapy	1	200	200	1	200	200	380	400	0	
	Exam Room	1	200	200	1	200	200	140	200	150	
	Exam Room Toilet	1	80	80	1	80	80	50	80	0	
	Secure Storage	1	200	200	1	200	200	40	200	0	
	Cardio Room	1	400	400	1	1,500	1,500	0	1,800	3,000	
	Weight Room	1	5,000	5,000	1	4,500	4,500	400	4,200	2,000	
	Hydration Bar Station	1	80	80	1	80	80				
Hockey	Coaches/Staff Locker Room	8	50	400	8	50	400	80	400	0	
Coaches Men	Coaches Locker Room (toilet/shower)	3	150	450	3	150	450	150	450	0	
	Coaches Lounge	0	240	0	0	240	0	225	0	0	
	Steam Room	0	180	0	0	180	0	100	180	0	
Hockey	Coaches/Staff Locker Room	8	50	400	8	50	400	0	0	0	Must accommodate male & female coaches

CLASSIFICATION 5: TEAM FACILITIES (cont.)											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
Coaches Women	Coaches Locker Room (toilet/shower)	3	150	450	3	150	450	0	0	0	Must accommodate male & female coaches
	Coaches Lounge	0	240	0	0	240	0	0	0	0	
	Steam Room	0	180	0	0	180	0	0	0	0	
Field	Coaches/Staff Locker Room	0	50	0	0	50	0	0	0	0	
Hockey	Coaches Locker Room (toilet/shower)	0	150	0	0	150	0	0	0	0	
Coaches								0	0	0	
Team Service	Commercial Grade Laundry	5	80	400	5	80	400	365	400	400	Gas or electric dryers.
Facilities	Equipment Distribution	2	500	1,000	2	500	1,000	200	500	0	women in aux?
	Equipment Storage	2	500	1,000	2	500	1,000	200	500	750	
	Skate Sharpening	2	200	400	1	200	200	100	200	0	share if possible
	Stick Room	2	300	600	1	300	300	115	300	0	share if possible
Visitor	The locker room suite includes the following spaces:										
Lockers -	Locker Room with (26) lockers	1	400	400	1	400	400	945	600	600	
men	(10) Showers + (3) w.c.+ (3) urinals	1	350	350	1	350	350	225	650	730	
	Goalies Room	0	250	0	0	250	0	225	0	0	
	Grooming area with (4) lavs and cont. mirror	1	200	200	1	200	200	0	0	0	
	Coaches Office	0	350	0	0	350	0	0	0	0	
	Coaches Locker (6 lockers)	0	1,500	0	0	1,500	0	0	0	1,500	
	Treatment Room	0	300	0	0	300	0	0	0	0	
	Work Room / Storage	0	200	0	0	200	0	0	0	0	
Visitor	The locker room suite includes the following spaces:							0	0	0	Location to be determined
Lockers -	Locker Room with (26) lockers	1	400	400	0	400	0	0	0	0	
women	(10) Showers + (6) w.c.	1	350	350	0	350	0	0	0	0	
	Goalies Room	0	250	0	0	250	0	0	0	0	
	Grooming area with (4) lavs and cont. mirror	1	200	200	0	200	0	0	0	0	
	Coaches Office	0	350	0	0	350	0	0	0	0	
	Coaches Locker (6 lockers)	0	1,500	0	0	1,500	0	0	0	0	
	Treatment Room	0	300	0	0	300	0	0	0	0	
	Work Room / Storage	0	200	0	0	200	0	0	0	0	
Auxiliary Lockers	Additional locker rooms for Tournaments, Concerts and recreation.							2523	3,200	0	
	taping/treatment space or concert make-up	0	150	0	0	150	0				
	Arena Tournament Locker (20) 24" lockers	4	150	600	4	150	600			3000	Usable for Field hockey visitors? Double doors between lockers allow for 2 large lockers
	Auxiliary rink Tournament lockers	4	150	600	4	150	600				Usable for Field hockey visitors? Double doors between lockers allow for 2 large lockers
	6 Showers + 2 w.c. + 2 urinals + 3 lavs	8	350	2,800	8	350	2,800			3,650	Each locker will have a wet area
	Public Lockers	0	600	0	0	600	0	760	1200		Use Tournament
	Intramural Lockers	0	1,000	0	0	1,000	0	3700	2000		Use Tournament
	Collegiate Skating							2500	0	0	
Ice Officials Lockers	The ice officials locker rooms include the following spaces:							550	500		Double as star dressing rooms
	(4) 36" lockers plus stretching area	3	150	450	3	150	450			250	one in each rink, plus one female
	2 Showers + 1 w.c. + 1 urinal + 1 lav	3	150	450	3	150	450			230	
	Meeting Room	0	150	0	0	150	0				
SUB-TOTAL (NET AREA)				27,980			25,690	17,373	23,620	21,820	

CLASSIFICATION 6: ADMINISTRATION											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
Athletic Offices	Athletic Department Offices relocated from BJC	0	4,000	0	0	4,000	0				Give consideration to the view
Arena Mgmnt Offices	General Manager's Office	1	150	150	0	150	0	0	0	0	By Aux rink
	Asst. Manager's Office	1	120	120	0	120	0	0	0		By Aux rink
	Accounting Suite			0			0				
	Marketing Suite			0			0				
	Reception / Waiting	1	150	150	0	150	0	0	0	0	
	Conference Room	0	400	0	0	400	0				In Administrative Area for team, Athletics
	Break Room			0			0	0	0		
	Work Room / Copy Room	0	400	0	0	400	0	0	0		
	Breakroom	0	150	0	0	150	0	0	0		Refer to Rec Rink
	Toilet	0	40	0	0	40	0	0	0		
	Files	0	400	0	0	400	0	0	0		
	Storage	1	200	200	0	200	0	0	0		
	Administrative Assistants	3	50	150	0	50	0	0	0	0	2 up, 1 at aux
Ticket Office	Box Office. Number of Ticket Windows: 4	8	50	400	8	50	400	160	360	200	Number can be adjusted
	Office for Ticket Manager	1	150	150	1	150	150	0	0	150	
	Office for Assistant Manager	1	150	150	1	150	150	0	0	150	
	Work Areas for Staff	1	100	100	1	100	100	0	0	0	
	Vault/Ticket Storage	1	100	100	1	100	100	0	100	100	
	Counting Room	1	150	150	1	150	150	0	80	150	
	Toilet	1	40	40	1	40	40	0	80	40	
Hockey Offices	Offices and support areas for intercollegiate hockey.										
	Reception Area	1	250	250	1	250	250	590	550	300	Can be trophy area
	Head Coach Men	1	250	250	1	250	250	350	300	400	
	Head Coach Women	1	250	250	1	250	250	0	0	400	
	Assistant Coaches Offices Men	3	150	450	3	150	450	230	300	300	at Locker area
	Assistant Coaches Offices women	3	150	450	3	150	450	0	0	300	at Locker area
	Toilet	0	150	0	0	150	0	80	160	0	
	Administrative Assistants	2		2	0		0	120	0	0	SF in reception area
	Work Rooms / Copy Rooms / Mail	1	120	120	0	120	0	50	120	0	Shared
	Conference Rooms	1	300	300	0	300	0	455	0	400	
	Kitchenette	0	120	0	0	120	0	0	120	0	
	Film Room/ Hockey Operations	0	100	0	0	100	0	230	300	0	Part of studio

CLASSIFICATION 6: ADMINISTRATION (cont.)											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
	Auditorium	0	800	0	0	800	0	0	810	0	
	Public Relations	0	120	0	0	120		120	0	0	
	Open Offices	2	120	240	0	120	0	275	480	0	
	Facility manager	0	180	0	0	180	0	150	200	0	
	Asst. Facility Manager	0	120	0	0	120	0	115	120	0	
	Break Room	0	150	0	0	150	0	182	150	0	
	IT/Server Room	1	150	150	1	150	150	100	150	0	
	Coat Closet	1	100	100	1	100	100	0	0	0	
	Storage	1	200	200	1	200	200	80	120	200	
Operations Offices	Offices and support areas for recreational skating and intramural hockey.										
	General Manager	1	200	200	1	200	200	0	0	200	
	Asst. Manager	1	150	150	1	150	150	0	0	150	
	Staff Supervisor		150	150		150	150	0	0	150	
	Skate Director	0	150	0	0	150	0	0	0	150	
	Asst. Skate Director	0	100	0	0	100	0	0	0	100	
	Office	1	150	150	1	150	150	0	0	150	
	Office	1	100	100	1	100	100	0	0	100	
	Conference	1	300	300	0	300	0	0	0	300	
	Workroom	1	150	150	1	150	150	0	0	400	
	Breakroom	0	150	0	0	150	0	0	0	150	
	Lockers	2	150	300	2	150	300	0	0	300	
	Toilet/Shower/Dry	2	150	300	2	150	300	0	0	300	
	Files/Storage	1	400	400	1	400	400			400	
								0	0		
SUB-TOTAL (NET AREA)				6,822			5,090	3287	4500	5940	

CLASSIFICATION 7: MEDIA FACILITIES											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
Press	Work Room (at ground level or booth)	1	150	150	1	150	150		250	250	Able to cater food to the room
Support	Dark Room / Digital Editing	1	60	60	1	60	60	0	0	60	
	Dining Area	0	200	0	0	200	0				in work room
	Toilets	0	50	0	0	50	0		240		Small?
	Media Check-In and Accreditation	0		0	0		0		120		Media entrance, guard checks credentials. Just a door with a security person.
	Secured Storage	0	200	0	0	200	0		80		
Press Box	Writing Press Room	1	200	200	1	200	200		200		At opps level, Access to both Rinks. Tables, chairs, internet.
	Writing press in the seating bowl	6			6			0	0	0	In the seating bowl, includes writng counter. Sf in bowl.
	TV Broadcast Booth(s)	2	200	400	1	200	200	0	240	100	2 if Wm play in Aux. space for camera, they need box with 2 triax, 6 coax, 2 DDT-12's; CA TV
	Radio Broadcast Booth(s)	4	100	400	2	100	200	0	360	200	4 if Wm play in Aux. 3 people ideal
	Off-Ice Officials Booth	0	200	0	0	200	0	0	0	0	in score keepers box
	Statisticians Booth	0	120	0	0	120	0	0	0	0	in coach booth
	Coaches Booth(s)	4	150	600	2	150	300	180	300	0	2 if Wm play in Aux. 3 people each, home & away
	Secured Storage	0		0	0		0				
Control Rooms	Scoreboard Operator Booth	2	100	200	1	100	100	100	100	100	2 if Wm play in Aux.PA in score keepers booth
	Sound and Light Booth	2	120	240	1	120	120	120	200	120	2 if Wm play in Aux.
	Video Board Control Room	2	250	500	1	250	250	0	800	0	stadium, hockey, live in-game control. Does not have to have sight, but preferred. Operates like a truck. Includes 50 sf for stor.Additional room for Beaver Stadium.
	Equipment Room (audio system, television)	1	100	100	1	100	100	100	100	100	
	Patch Panels/Broadcast Connections	2	150	300	1	150	150	0	120		2 if Wm play in Aux.
	Internet/Web	2	100	200	1	100	100	0	200		2 if Wm play in Aux.
								0			
Video Production	Studios	1	400	400	1	400	400	0	400	400	Rubber floor, Double as a team film room. Also serve as Big 10 mini studio. Access from Aux Rink if Wm Play at Aux.
	Control Room	1	250	250	1	250	250	0	0	0	
	Offices	1	120	120	1	120	120	0	0	0	
	Tape Storage	1	100	100	1	100	100	0	0	0	Sees Hockey Operations Office
	Equipment Storage	1	100	100	1	100	100	0	200	0	

CLASSIFICATION 7: MEDIA FACILITIES (cont.)											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
	Interconnectivity room for media trucks	1	50	50	1	50	50	0	300	0	trucks connect to tie lines. Tie lines connect to control room. Access from dock and from inside.
Sports Information	Office Suite for use by college in-house staff	0		0	0		0	0	0	0	Housed in BJC
Camera Locations	Fixed camera boxes/platforms shall be located at the following positions:	8	60	480	8	60	480	0	0	0	High center ice needs most space. Two cameras. Ask Jim exactly where are preferred. Consider locations if Wm play in Aux Rink
	Ice-level positions										
	Low-level Center										
	Mid-level Center + Mid-level Reverse										
	Mid-level Corner + High-level Corner										
	Mid-level End										
	Low-level Slash										
	Unmanned Fixed Camera Positions										remote controlled from control room
Follow Spots	Spot light platforms shall be located at the following positions:										SF in the seating bowl
	Cross Court										
	Corners										
	End zones										
Catwalks	Catwalks - included in net-to-gross factor										
SUB-TOTAL (NET AREA)				4,850			3,430	500	4210	1330	

CLASSIFICATION 8: OPERATIONS SUPPORT											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
	Office(s) for use by outside show personnel	0	150	0	0	150	0				
Event Staff	Lockers for use by event staff	2	250	500	2	250	500	0	0	500	Consider staff access to Aux Rink for Wm Hockey
	Dining Area	0	600	0	0	600	0	0	0	0	
	Uniform Storage/Distribution	1	100	100	1	100	100	0	0	100	Consider staff access to Aux Rink for Wm Hockey
	Storage	1	100	100	1	100	100	0	0	100	
Building Staff	Operations Supervisor office	3	150	450	3	150	450	0	0	450	Opps, Custodial service
	Reception Area	0	200	0	0	200	0	0	0	0	
	Staff Break Room	0	240	0	0	240	0	200	400	0	
	Staff Lockers	0	600	0	0	600	0	200	500	0	
Event	Hockey Equipment Storage (dasherboards)	1	800	800	1	800	800	1590	1200	0	
Storage	Concert and Other Event Equipment Storage (tables, chairs and platforms)	1	2,500	2,500	1	2,500	2,500	0	700	2500	
	Technical Equipment Storage (microphones, etc.)	1	100	100	1	100	100	0	500	0	
Dock /	Staging Area	1	1,500	1,500	1	1,000	1,000	0	0	0	
Staging	Loading Docks	4	250	1,000	4	250	1,000	0		500	(recommend 3 doors + 1 drive-through, 2 800 sf if concerts. Accommodate 2 TV trucks @ 25' x 75'
	Office	1	100	100	1	100	100	200	250	100	
Ice Support	The following spaces are needed in an Ice Hockey arena:										
	Zamboni / Ice Equipment / Ice Dump	3	500	1,500	3	500	1,500	900	900	600	One at Aux

CLASSIFICATION 8: OPERATIONS SUPPORT (cont.)											
Space Type	Room Description	Wish List			Must Have			Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
		Units	SF	Total SF	Units	SF	Total SF				
	Ice Control Office	1	100	100	1	100	100	0	0	0	
	Ice Plant	1	2,000	2,000	1	2,000	2,000	1300	2000	1500	2 separate plants
	Paint Storage Room	1	80	80	1	80	80	0	0	100	
	Water Treatment	1	200	200	1	200	200	200	200	200	Using Jet Ice?
Security	Security Office	1	250	250	1	250	250	0	100	100	
	Detention Rooms	1	80	80	1	80	80	0	0	120	
	Toilet	1	80	80	1	80	80	0	0	340	
	Lockable Storage	1	150	150	1	150	150	0	0	100	
	Fire Command Center	1	150	150	1	150	150	220	250	0	
Maintenance	Maintenance Shops	1	400	400	1	400	400	1700	1500		
	Maintenance Storage	1	400	400	1	400	400	500	500	200	
	General Building Storage	0	2,500	0	0	2,500	0		1000		Under "Event Storage"
Janitorial	Office/Main	1	125	125	1	125	125			125	
	Central Janitorial Supply Storage	1	250	250	1	250	250	220	700	250	
	Secure Storage	1	125	125	1	125	125	0		125	
	Distributed Janitor Closets	4	80	320	4	80	320	400	600	320	
	Building Laundry	0	300	0	0	300	0	0	0	0	Use Team Laundry?
	Trash Collection Rooms	1	150	150	1	150	150	0	200	0	Chutes?
	Recycling Rooms	1	150	150	1	150	150	0	200	0	
M/E/P	Main Mechanical Room	1	1,200	1,200	1	1,200	1,200	1170	1,200	2,000	Throughout bldg, dehumidification, etc.
	Satellite Mechanical Rooms	9	400	3,600	9	400	3,600	4790	3,600	7,500	incl above
	Office/Work	1	250	250	1	250	250	0	0	250	
	Main Electrical Room (switchgear)	1	1,000	1,000	1	1,000	1,000	1200	1,500	1,000	
	Emergency Generator Room	1	200	200	1	200	200	0	400	200	
	Electrical Closets (distribution)	6	150	900	6	150	900	835	900	400	
	Show Power panels	1	200	200	1	200	200	0	200	0	
	Main Tele/data Room	1	400	400	1	800	400	400	400	0	
	Tele/data Closets	6	150	900	6	150	900	575	900	400	
	Fire Command and Pump Room	1	250	250	1	250	250	0	250	0	
	Elevator Equipment Room(s)	2	200	400	2	200	400	200	400	0	
SUB-TOTAL (NET AREA)				22,960			22,460	16800	21450	20080	

SUMMARY						
Space Classifications	Wish List	Must Have	Miami Ohio (3000)	Notre Dame (4000)	1999 PSU Option 5 (6000)	Comments
	Total SF	Total SF				
SUB-TOTAL PART 1: SPECTATOR FACILITIES	59,256	54,756	41,353	46,565	69,495	
SUB-TOTAL PART 2: FOOD and RETAIL FACILITIES	10,710	9,410	4,765	5,704	11,250	
SUB-TOTAL PART 3: CIRCULATION	35,560	32,160	34,610	24,898	24,500	
SUB-TOTAL PART 4: EVENT FACILITIES	37,610	36,410	36,710	42,635	38,600	
SUB-TOTAL PART 5: TEAM FACILITIES	27,980	25,690	17,373	23,620	21,820	
SUB-TOTAL PART 6: ADMINISTRATION	6,822	5,090	3,287	4,500	5,940	
SUB-TOTAL PART 7: MEDIA FACILITIES	4,850	3,430	500	4,210	1,330	
SUB-TOTAL PART 8: OPERATIONS SUPPORT	22,960	22,460	16,800	21,450	20,080	
BUILDING NET TOTAL	205,748	189,406	155,398	173,582	193,015	
subtract seating bowl	162,002	149,910	127,548	139,732	144,815	
subtract event floor	127,002	115,510	93,548	99,557	111,215	
subtract circulation	91,442	83,350	58,938	74,659	86,315	
subtract strength training	86,442	78,850	58,538	70,459	84,315	
+ NET-TO-GROSS MULTIPLIER (25%)	21,611	19,713	14,635	17,615	21,079	
Note: the net-to-gross multiplier is an allowance for interstitial space, plumbing chases, wall thickness, etc. It is not applied to the seating bowl, circulation elements, the event floor, or the strength training facility.						
		Total (Range)				
BUILDING GROSS TOTAL	227,359	198,663	170,033	191,197	214,094	Total Area Per Level
		to 219,574				

PROGRAM

Notes

CLASSIFICATION 1:: SPECTATOR FACILITIES

Spectator Seating Overview

- Approximately 6,000 seats total
- 4000 seats with fixed seating
- 1000 seats with bench seating
- 500 club seats with fixed seating
- 12 suites @ 12 seats per suite.
- Expandable for an additional 12 suites

Spectator Seating Notes

- Provisions for standing room should be considered.
- Overall seating capacity for hockey is to be approximately 6,000 seats.
- General seating shall be approximately 4,000 seats.
- Approximately 1,000 seats will be considered for students and university band seating.
- Club seating for 500 patrons will be considered.
- Approximately 60 spaces for wheelchairs and 60 adjacent spaces for removable seats for companion seating are to be provided with enhanced sightlines.
- Seating spaces for patrons with disabilities will be distributed to provide a variety of seating options including spaces at the ice.
- The required number of seats with movable arms at ends of aisles will be provided for mobility impaired spectators.
- Fixed stadium chairs are to be plastic backs and seat pans with 19 inches from center of arm to center of arm for general seating.
- Bleacher seating shall be based on 19 inch widths for design considerations.
- Fixed stadium chairs with padding on plastic and padded seat pans 20-21 inch (center of arm to center of arm) may be considered for club seating.
- Fixed seats shall have self-rising chairs and armrests.
- Tread depths shall be 33 inches except for 36 inches for first and last rows.
- Equal riser heights will be considered in lieu of variable risers heights.
- Sightlines shall be maximized for viewing of hockey using the back edge of the bottom of the net used as the focal point.
- Sight line clearance at any given row is to be a minimum of 2-1/4" above the eye level of a spectator in the preceding row.

- Aisle widths are to be 48 inches with center handrails or other code prescribed minimums.
- Aisle lighting or other stair notification system shall conform to code minimums.
- Structural system shall be based on fixed platform systems supported off existing concrete structures.
- A sub-ceiling system that relates to the size and shape of the new ice sheet and seating area shall be developed.

Club Lounge / V.I.P. Hospitality Room

- Direct access from Arena Club to club seating areas will be considered.
- A coat room is to be located near the entrance to Arena Club.
- Separate men's and women's toilets shall serve the Arena Club.
- Separate stairs and a dedicated access to elevators from a main facility entrance are to be considered for club patrons.
- Access to a service elevator shall be provided near the food service pantry area.
- Arena Club dining area is to be based on 15 square feet per person for 300 club patrons.
- Food service areas are to include fixed bar, portable bars, buffet service, catering (food holding) pantry area, and storage areas.
- Four points of sale at a fixed bar will be provided.
- Separate secure beverage storage area is to be provided.
- Hand wash sinks and a three (3) compartment sink with grease trap will be provided at panty as required by local health department jurisdictions
- Non permanent equipment such food warmers, beverage dispensers, refrigerators, ice machines, freezers, beverage coolers and other equipment as necessary to provide a workable operation will be part of a separate equipment package.
- Food preparation equipment will not be provided in food pantry area.
- Dry storage area is to be provided adjacent to the pantry.
- Kitchen or other food preparation requiring special exhaust systems for such items as pizza ovens or grills will not be provided at pantry area.
- Club food and beverage service areas will be provided with general lighting, sanitary drains, cold and hot water, electrical service and ventilation.
- All food and beverage provisions will be reviewed with Food Service Operations.

Restrooms

- The ratio of number of toilet fixtures to number of spectators will be based on 50 percent men and 50 percent women. Discussions are required to determine what should be considered for future toilet expansion if temporary or permanent seating is added. Subject to specific code requirements, the following program assumptions have been made:

Fixture Type	Fixture Per Seat
Drinking Fountains	1:1000
Lavatories - Women	1:150
Water Closets - Women	1:60
Lavatories - Men	1:200
Urinals - Men	1:90
Water Closets - Men	1:300

- Family toilets will be provided at appropriate locations.
- Accessories in toilets for women include mirror and shelf units, floor mounted toilet partitions, wall-mounted plumbing fixtures, lavatories mounted in counters, soap dispensers, diaper changing facilities, purse holders, and sanitary napkin dispensers and receptacles.
- Accessories in toilets for men include mirror units, floor mounted toilet partitions, wall mounted urinal partitions, wall-mounted plumbing fixtures, lavatories mounted in counters, soap dispensers, and diaper changing facilities.
- Toilets will be fully accessible and compliant with codes and regulations.
- Janitor closets will be located to conveniently service and maintain toilets and will include hot and cold water, mop sink, and shelving for general supply storage.
- Square footage of toilets is to be based on 50 square feet per water closet/urinal plumbing fixture.
- Toilets shall include general lighting, hot and cold water supplies, exhaust ventilation, and floor drains.
- Some facilities can be open for Football and Field Hockey game days

CLASSIFICATION 2:: FOOD and RETAIL FACILITIES

Concession Stands

- The ratio of number of points of sales for concessions to number of spectators will be based on one permanent point of sale per 200 spectators.
- Provide approximately five (5) lineal feet of serving counter for each point of sale and twenty two (22) feet deep for concessions and storage areas.
- Each concession stand will be provided with general lighting, sanitary drains, cold and hot water, electrical service and ventilation.
- Front counter tops, front overhead counter door and rear countertops will be provided.
- Non permanent equipment such food warmers, beverage dispensers, refrigerators, freezers, beverage coolers and other equipment as necessary to provide a workable operation will be part of a separate equipment package.
- Food preparation equipment will not be provided in concession stands.
- Kitchen or other food preparation requiring special exhaust systems for such items as pizza ovens or grills will not be provided at concessions stands.
- Storage at the rear of each concession stand is to be provided.
- Appropriate area on public concourses shall be considered for portable concessions stands with locations to be determined in future discussions.
- All provisions will be reviewed with Food Service Operations.
- Provide 6 feet (minimum) of queuing area at concessions and novelty stands
- Some facilities can be open for Football and Field Hockey game days

Eating Areas

- Food Court - space for tables and chairs located close to a cluster of concession stands

Kitchens

- Suite Serving Pantries - to assist food service to the Suites after it comes from the Central Kitchen.
- Club Lounge Warming Pantry - to assist food service to the Club Lounge.

Retail Sales

- Include a team store/pro shop and remote portable stands
- Storage and transaction facilities.

CLASSIFICATION 3: CIRCULATION

Lobbies

- Provide infrastructure for wireless ticketing systems at entrance gates.
- Provide space for pre-game bag checking.
- Provide power near main entries to support promotional equipment to be identified.
- Provide canopy or cover over entrances.
- Provide provisions for future installation of security cameras.

Concourses

- Provide open, barrier free circulation on concourses from facility entrances to and exits from all seating areas.
- Provide aesthetically pleasing, maintainable materials within the public concourses. Material selection shall be selected with life cycle cost consideration.
- Provide sealed, colored concrete, tile or terrazzo floors.
- Ground faced (or burnished) block on the walls.
- Provide drinking fountains adjacent to public toilet rooms.
- Provide covered outlets at 10 feet on center, 30 amp service, for housekeeping and maintenance.
- Provide a location for an ATM machine in close proximity of the Box Office and Retail Store
- Provisions for future security magtrometers shall be included.
- Provide storage space with floor sink at entries for maintenance operations.
- Provide space for distribution of promotional material.
- Provide adequate power at locations for portable concessions at locations to be determined.
- Provide space for tables for security checking operations.
- Provide area adjacent to security check points for items confiscated during security checking.
- Provide provisions for future installation of video monitors or other electronic display systems to be determined in future.
- Provide space for Automated Teller Machines near interior ticket windows, concessions or retail.

Corridors

- Service level corridor
- Suite mezzanine corridor

Vertical Circulation

- Stairs are to provide generous, easy and direct access to all levels.
- Passenger elevators will provide access to all levels.
- Two Passenger Elevators (lift) provided– 2,500 lb capacity with manual control capability.
- Consider one Service (Freight) Elevator.
- No escalators provided.
- Exiting from seating areas and other spaces shall conform to current building code requirements.
- Exit widths will be determined for aisles, access to concourses, and stairs, for appropriate egress.

CLASSIFICATION 4: EVENT FACILITIES

Event Floor

- Hockey – Main Arena (85 feet x 200 feet)
- Each event floor will be designed to accommodate a 350 p.s.f. live-load capacity.
- At each floor, provide maximum Flatness as required for NCAA Competition
- Glass at side ice is to be 8 feet high and glass at end ice is to be 8 to 10 feet with netting provided above glass.
- Consider dasher glass with full height mullions or seamless glass systems.
- An ice and water dump pit will be provided at the end of the ice sheet with ice melt capability.
- Ice resurfacer area large enough to accommodate two Zamboni machines will be located with easy access to the ice sheet.
- An area for a jet ice system shall be located immediately adjacent to the ice resurfacer area.
- Ice chiller plant shall be provided with capacity for 2 ice sheets. Triple redundancy is desired.
- Hockey game equipment such as hockey goals and nets, and other game equipment shall be provided.
- Off season storage space and utilities for game equipment will be provided.
- Both home and visiting team benches may be directly accessible to home and visiting team locker rooms.
- Bench areas will have benches with appropriate risers, protective floor covering, and other items provided.
- Two separate penalty boxes and a box for officials shall be provided at center ice on the opposite side from the team benches.

- Two additional boxes for the goal officials will be provided at the center of each end of the ice.
- Box areas for officials shall be equipped with all necessary cabling and communications.
- The ice sheet shall be surrounded by a dasher board system that is capable of being leveled within the system.
- Provide glass system that minimizes glass breakage during an event.
- Further discussions are required to determine any special requirements of the dasher board system based on alternate uses of the hockey facility.
- Sports lighting (at minimum automated shuttered fixtures) shall be provided to meet required light levels.
- Provide ¾ inch (1.9cm) hose bib connections and floor drains at two (2) floor vomitories, diagonally placed.
- Provide 1 ½ inch (3.81cm) hose bib connection at ice resur-facer entrance.
- Provide access at cable tray. Included will be provisions for electrical power and telephone connections. Cable tray to connect to television trucks and communication risers which feed to Media Facilities.
- Add Alternate- Consider providing Electric Show Power: Typical split evenly each side of stage right and left, a total of (2) 400 Amp, 208V, 3 Phase and (2) 200 Amp, 208V, 3 Phase. (1) 100 Amp, (1) 800 Amp, 208V, 3 Phase on stage right, and (1) 600 Amp, 208V, 3 Phase stage left.
- Provide catwalk and platform system over the arena floor to provide access to arena lighting, strobe lighting, and spotlight platforms. Catwalks should be located so that fixtures can be aimed to achieve illumination criteria for television illumination. The flooring shall be checkered plate steel.
- Provide rigging safety line, ¾ inch plastic sheathed aircraft cable located at 6 feet above rigging grid. The safety line configuration shall match rigging layout and tie back to cat-walk system.
- Provide stair access to catwalk level.

Alternate Considerations

- Concerts (end and center stage) – provide rigging as outlined in “Additional Notes and Requirements.”.
- Flat Floor Exhibitions (Temporary Floor Covering Required – no floor boxes)

Practice Facilities

- Ancillary Sheet of Ice (85 x 200). Provide approximately 300 bleacher seats with unobstructed sightlines.

Recreation and Skating

- Rental office and skate storage
- Area to lace up rental skates, adjacent to food court if possible.
- Rental Party Rooms to double as training table
- Storage lockers with cages for Intramural hockey players.

CLASSIFICATION 5: TEAM FACILITIES

Home Hockey Team – Men

- Dry locker room shall have lockers for 28 players.
- Main team locker room shall include space for 2- 4 lockers for goalies and 24 lockers for other players.
- Main locker shall have provisions to add media wall with smart marker board, game clocks, video monitors, and video analy-sis equipment feeds.
- Consider including small storage areas and hydration support bar.
- Dehumidification systems to support drying of equipment shall be included.
- Toilets and shower facilities are to be provided adjacent to main locker room and dry locker room
- Consider space for ice plunge tank for 6 players.
- Lockers, toilets and showers for 4 coaches shall be provided.
- Consider steam room facilities.
- A Players Lounge shall have space for players for private ca-sual non-game time activities and include couches and chairs in informal arrangements and space for game tables and vid-eo monitors.

Home Hockey Team – Women

- Dry locker room shall have lockers for 28 players.
- Main team locker room shall include space for 2- 4 lockers for goalies and 24 lockers for other players.
- Main locker shall have provisions to add media wall with smart marker board, game clocks, video monitors, and video analy-sis equipment feeds.

- Consider including small storage areas and hydration support bar.
- Dehumidification systems to support drying of equipment shall be included.
- Toilets and shower facilities are to be provided adjacent to main locker room and dry locker room
- Consider space for ice plunge tank for 6 players.
- Lockers, toilets and showers for 4 coaches shall be provided.
- Consider steam room facilities.
- A Players Lounge shall have space for players for private ca-sual non-game time activities and include couches and chairs in informal arrangements and space for game tables and vid-eo monitors.

Training

- Include space for ice machine, provisions for game clock, tap-ing tables, hot plunge tank, whirlpool tank, etc.
- Weight Room to be planned in conjunction with coaching staff

Hockey Coaches

- Must accommodate men and women coaches

Team Service Facilities

- Equipment storage and support area with skate sharpening equipment, glove dryers, travel trunk storage, and players travel bags shall be provided.
- Humidity controlled stick storage area shall be provided.
- Hockey equipment storage and distribution area shall include shelving, counter at corridor, overhead coiling counter door, and space for equipment manager desk and support space.

Auxiliary & Tournament Lockers

- Consider using for Field hockey visitors.
- Double doors between lockers allow for 2 large lockers

Ice Officials Lockers

- Double as Star dressing rooms
- One in each rink, plus one female.

CLASSIFICATION 6: ADMINISTRATION

Ticket Office

- Provide at least four ticket windows directly accessible from the exterior of the hockey entry for general ticket sales and will-call.
- Provide two interior ticket windows off one of the main entries.
- Ticket window spacing is to be approximately 5' 0" wide.
- Front ticket work area shall include ticket window stations, work counters, cash drawers, electrical outlets, shelf for ticket computer equipment, telephone rough-in, data rough-in and future ticker panel at each window.
- Back counter work area shall include work counter, ticket cubicles above the counter and storage cabinets below the counter.

Hockey Offices

- A single toilet for visitors shall be in close proximity to the reception area.
- Adjacent to office for Head Coaches shall be a private toilet and shower facility.

Operations Offices

- Offices and support areas for Arena management, recreational skating and intramural hockey.

CLASSIFICATION 7: MEDIA FACILITIES

Press Support

- Able to cater food to the room
- Media entrance, guard checks credentials.

Press Box

- Writing Press Room at press box level, access to both rinks. Provide data and telecom.
- Writing Press in the seating bowl, includes writing counter.
- TV Broadcast Booth, space for camera, they need box with 2 triax, 6 coax, 2 DDT- 12's; CA TV
- Radio Broadcast Booths (2)
- Coaches Booths (2)

Control Rooms

- Scoreboard Operator Booth
- Sound and Light Booth
- Video Board Control Room: stadium, hockey, live in-game control. Does not have to have sight, but preferred. Operates like a truck. Includes 50 sf for storage. Additional room for Beaver Stadium shall be provided as well..
- Consider equipment such as: 24 input mixing console, compact disc player, cassette tape player, cart machine or computer based digital storage system, patch panels for signals entering or leaving the control room, signal processing equipment for program enhancement.

Video Production

- Studios: Rubber floor, doubles as a team film room. Also serve as Big 10 mini studio. Access from Aux Rink if Women Play at Auxiliary Rink.
- Control Room
- Offices
- Interconnectivity room for media trucks: trucks connect to tie lines. Tie lines connect to control room. Access from dock and from inside.

Camera Locations: To be determined

Follow Spots: See notes in Event Facilities

CLASSIFICATION 8: OPERATIONS SUPPORT

Event Storage

- Consider 100 square feet of game day promotional storage area next to main entries.
- Consider general promotional storage area.
- Consider 100 square feet of confiscation storage at main entries.
- Separate hockey and general storage

Dock/Staging

- 3 doors + 1 drive-through, 2 800 sf if concerts.
- Accommodate 2 TV trucks @ 25' x 75'

Ice Support

- Zamboni / Ice Equipment / Ice Dump (for 2 zamboni's)
- Ice Control Office
- Ice Plant: 2 rinks
- Paint Storage Room
- Water Treatment

Security Office

- Office
- Detention Room
- Toilet
- Lockable Storage
- Fire Command

Maintenance Shops and Storage

Janitorial

- Office and Storage
- Distributed Closets
- Trash and Recycling Collection: Consider chutes

M/E/P

- Building Management Systems (BMS) to provide master control for telephones, event lighting control (this function also occurs at Sound/Lighting Control), building systems monitoring, and televisions.
- Provide generators to cover all statutory requirements.
- Provide pre-cabled television camera locations – Cable by network (s) – To be verified.
- Provide closed circuit television to concessions, concourses, performers and star dressing rooms, team and officials' locker rooms, offices and all media facilities. All closed circuit televisions shall be tied to the Head End Room.
- Provide Security closed circuit cameras at the loading dock, box office windows, box office vault, concessionaire money room vault, arena bowl, concourses and all entries/exits. The Security closed circuit cameras shall be monitored in the control/security booth. The equipment shall have videotaping capabilities.

ADDITIONAL NOTES AND REQUIREMENTS

Rigging Grid

- If considered, will be at end stage and center stage locations. End stage rigging covers an approximate area of 120 feet wide by 80 feet long; the center stage rigging covers an approximate area of 125 feet wide by 160 feet long.
- The total allowable rigging load for either a center stage or an end stage setup shall be 120,000 lbs (in addition to video/ matrix/scoreboard(s) and/or speaker clusters). Loads on individual rigging beam spans marked with a “5” shall not exceed 5,000 lbs; the 5,000 lbs. may be a single point load or distributed in any way on the rigging beam. Point loads in excess of 5,000 lbs shall be bridled such that the load on an individual rigging beam shall not exceed 5,000 lbs.
- Members designated as rigging members on the plan shall be identified with 2 ½ inch tall letters painted on each side of the beam at the center of the span as follows:
- RIGGING BEAM – TOTAL MAX LOAD = 5,000 LBS. --- Consider 60 KIPS.
- Rigging will not be allowed from any part of the catwalks.
- Safety cables for riggers to tie off to will be provided along all rigging beams.

Scoreboards, Clocks and Displays

- Main scoreboard – Two end configuration video/ scoreboards are assumed in the initial cost model. Center hung board may be considered at a cost premium. If center hung is required, provisions to retract the board into the roof structure shall also be evaluated.
- Consider video replay display.
- Consider auxiliary scoreboards and advertising displays as determined by Operator.
- Officials time (4)
- Team entrance/exit displays.
- Concourse and concession displays – provide power and conduit for back-lit displays.
- Automobile display locations on Event Floor only.
- Telephone center advertising. Provide conduit and cable back to head end room.
- Concourse/concession area TV monitors.

Signage

- Code compliant signage/ wayfinding shall be provided.
- Off site directional – major roadway approaches (Not in scope)
- Parking management and vehicle directions for staff and service vehicles.
- Club and concessions.
- Primary entrance ID marquee (Not in Scope- to be determined).
- Pedestrian directionals.
- Team Store retail shop identification.
- Box Office ID with ticket window reader boards.
- Illuminated entry ID.
- Loading dock ID and information.
- Major interior directionals.
- Physically challenged signage to meet or exceed applicable codes.
- Room identification.
- Statutory signage.
- Seating related ID.
- Special theming, sponsorship, naming rights media, graphics and signage is not included in this scope of work.

Acoustics and Sound

- Main reinforcement system's primary emphasis shall be to reinforce live and recorded programs to spectators in the fixed and movable seating locations. It is assumed that the arena's house sound system shall not be used for reinforcement of musical concerts and shall only rarely be used for lecture type or end stage concerts. The system shall be designed to provide high level, full range speech and music to all seats in the arena.
- The main speaker system will be exploded cluster style with satellite array (or combination thereof) suspended from motorized winches – or a distributed sound system. The speaker system will be designed to provide sound levels in excess of 100 dBA with a uniformity of coverage of no more than +/- 2.5 dBA at any fixed seating position. Consider supplemental speakers to provide coverage to spectators located in the first few rows behind the dasher board glass.

- Provide production intercom system.
- Speakers shall be provided in Arena concourses, and public toilet rooms.
- Team locker rooms, star and performer's rooms will have a sound system and a local volume control.
- Box office windows and entry gates shall be provided with looped tape message system with PA override.

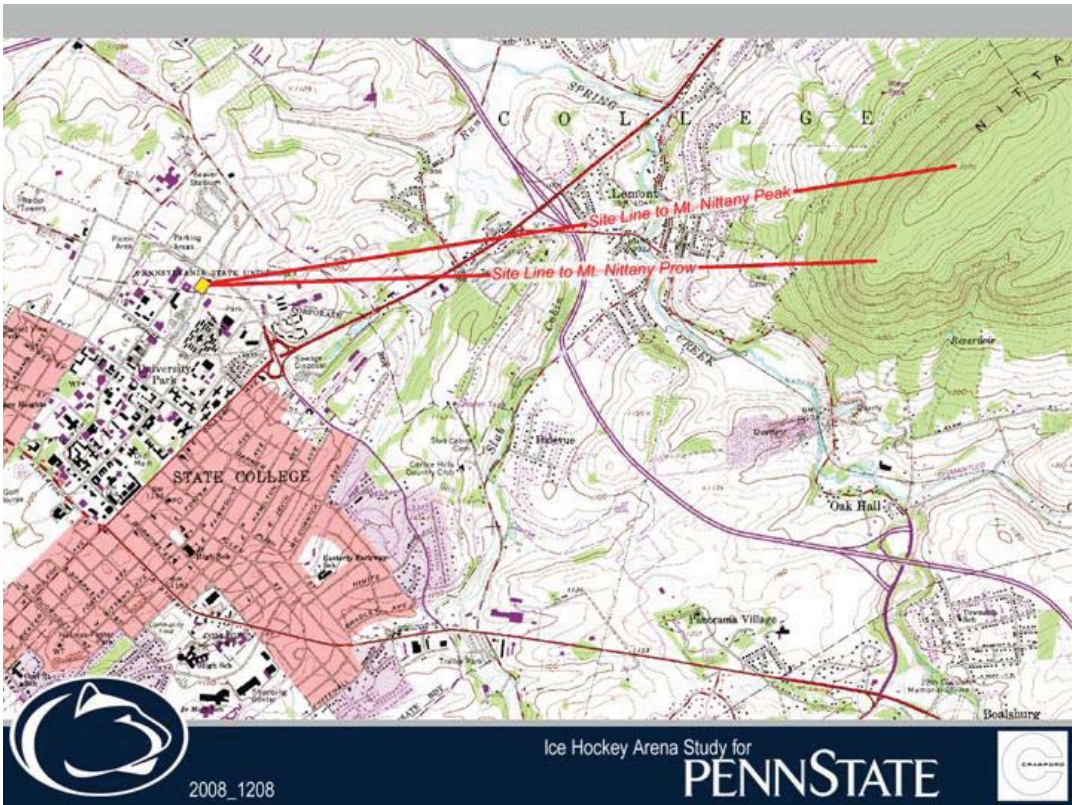
Exterior

- Provide flagpoles if required
- Provide exterior hose bibbs, one each corner.
- Exterior lighting to meet codes and provide feature lighting for events.
- Provide roof top access, as well as power and hose bib connection at high roof.
- Hardscape Plazas
- Vegetation and landscaping irrigation.

Parking Areas

- Provide parking for 50 cars on site
- Passenger drop-off area at main entrance to include covered disabled drop-off provisions.

SITE ANALYSIS



The proposed site is bordered by the Curtin Road, the Shields Building and parking lot to the north, the existing Field Hockey Field to the west, Holuba Hall to the south and University Drive to the east. Consisting of approximately 8.8 acres, the proposed site is a gateway opportunity with high visibility and good access – both pedestrian, transit and vehicular.

Our focus has been related to confirming that a 6000 seat arena with multiple sheets of ice fit on the site.

Key Considerations

The following goals and site issues have been considered in developing the Preferred Concept Plan:

1. 350 parking spaces exist on site. Minimize the displacement of existing parking to the fullest extent possible.
2. Provide 50 parking spaces minimum for staff, visitors and ADA parking.
3. Provide vehicular drop off zones for 365 day a year use @

Ancillary Ice Facility. This drop off will mostly be used by parents dropping their children off for recreational, competition and educational use of the facility.

4. Based on historical modal splits, Penn State suggests that 3.5 people per car should be considered as a basis for parking demand. Assume that 1,000 students will attend an event on average. This leaves 5,000 spectators as a basis for this analysis. The Township requires 1 space per 6 spectators as an alternate basis for parking demand. A detailed parking and transportation plan will be conducted later in the process – not in this scope of work.
5. Maintain parking immediately adjacent to the Shields Building to the fullest extent possible.
6. Do not remove, relocate the existing utility duct bank that is located immediately adjacent to the Shields Building unless it is absolutely necessary
7. Any new curb cuts from University Drive should be located as far away from the intersection with Curtin Road as possible. Any



new and/or relocated curb cut is subject to the review and approval of PENNDOT.

8. Maintain a 'snow zone' immediately to the north of Holuba Hall to accommodate piling snow from the roof of Holuba Hall.
9. Maintain pedestrian circulation routes at the north and south corridors of the site.
10. The existing Field Hockey Facility should be preserved. Provide connections to, and share concession/ toilet facilities with the existing Field Hockey Facility if possible.
11. The existing Indoor Tennis Building must be preserved in the initial phases of development. This facility may be demolished in the future depending on final design of a new indoor tennis facility.
12. Consider view corridors from the Bank of America Building to the site.
13. Consider view corridors to/from Beaver Stadium and to/from Mount Nittany.
14. Major signage elements will not be allowed by the Township.

QUESTIONNAIRE

Ice Arena
University Park

The following items of information must be supplied to the University. We have made no attempt to provide sufficient space below for you to fill in blanks but expect that you will provide the information requested on your own letterhead paper. **Failure to answer all questions will be reason for disqualifying your team from further consideration.** Please provide **twenty-one copies** of all material submitted. The deadline for submission is **September 30, 2010 at Noon.**

1. Please describe your approach to this project. Include a description of the scope of work your team will provide.
2. Describe your firm's vision of what, beyond purely functional issues, constitutes the essence of this type of facility. To indicate to the Screening Committee your understanding of the uniqueness of this project, discuss some of the issues that are important in the design of a project of this type.
3. We would like to see further evidence of your firm's ability to translate design intentions into a meaningful project (including the site). Therefore, please discuss in detail, but in no more than two pages, an example from your portfolio, relevant to our project, that best indicates the appropriate resolution of an understanding of the uniqueness of a project, design intentions, and translation of those design intentions into a meaningful and synthesized final solution.
4. Qualifications and experience of the lead design team members, **including consultants**, to be assigned to this project. Provide a clear indication of the **roles** to be performed by each **individual**. Please be very specific regarding the personal involvement and on-site participation of each lead design **individual**. When listing previous project experience for the personnel, please indicate the specific role of the individual for the particular project listed.
5. Consultant firms, if any, proposed for this project:

<u>Firm</u>	<u>No. of Projects Worked With Your Firm</u>	<u>Total Amt. Value</u>
Structural Engineers		
Mechanical Engineers		
Electrical Engineers		
Landscape Architects		
Interior Designers		

Cost Estimators
Lighting
Acoustical
Sport Venue
Others

6. Experience of the firm and any consultants in the design of facilities similar to the ones proposed (college and other), completed or under construction during the past ten years. List for each the completion date, final construction cost and gross square feet provided, and be very specific about the services provided by your firm. Identify those specific projects included in the proposed design team experience listed in #4 above.
7. Experience of the firm and any consultants in the design of college and university buildings (not already included in # 6 above) completed or under construction during the past ten years. List for each the completion date, final construction cost and gross square feet provided, and be very specific about the services provided by your firm. Identify those specific projects included in the proposed design team experience listed in #4 above.
8. Experience of the firm and any consultants in the design of LEED certified buildings.
9. List five client references for similar scope projects completed during the past ten years, giving name and telephone number. In order to give us an indication of your cost control track record, please **provide accurate and complete data indicating the gross square foot area, the design estimated cost, the bid cost, the final total construction cost and the bid date for each project.** Please explain the reason for any major discrepancies between estimated, bid and final construction costs. Please make sure the telephone number of each client reference is current.
10. Graphic examples of selected projects **personally** designed by **the lead design architect**, including brief description and completion date.
11. Please provide a proposed design schedule in graphic form allowing two weeks for any necessary Penn State University review. Assume the design process will start December 1, 2010.
12. List errors and omissions insurance coverage.
13. Number of personnel in present firm(s): Architects _____ Engineers _____
Interior Designers _____ Landscape Architects _____ Others _____

How many of the above are professionally registered?

14. Include the name of your firm's contact person with telephone number and E-mail address.

PENNSTATE



NON-BINDING ARCHITECT AND ENGINEER FEE SCHEDULE

Project: Ice Arena, University Park

Firm Name: _____

	<u>Hours</u>	<u>Fee</u>
Programming/Site Analysis (confirmation)	_____	_____
Schematics	_____	_____
Design Development	_____	_____
Construction Documents	_____	_____
Bids	_____	_____
Construction Administration	_____	_____
Subtotal	_____	_____
Reimbursements (allowance)	_____	_____
Total	=====	=====

Please include a listing of your billable rates that will be used for this project.

Please return completed form by September 30, 2010 @ Noon to:

David Zehngut
University Architect
The Pennsylvania State University
200 Physical Plant Building
University Park, PA 16802-1118
Phone (814) 863-3158, fax (814) 863-7757

Note: Include any costs for consultants within amounts listed, not separately.

Form of Agreement 1-P

THE PENNSYLVANIA STATE UNIVERSITY

OWNER AND PROFESSIONAL

AGREEMENT

THIS AGREEMENT made this _____ day of _____

in the year Two Thousand _____, by and between THE PENNSYLVANIA STATE UNIVERSITY, a non-profit corporation and an instrumentality of the Commonwealth of Pennsylvania, having its principal offices at University Park, Centre County, created and existing under the laws of the Commonwealth of Pennsylvania, hereinafter called the "Owner," and

hereinafter called the "Professional," for the following Project:

(Title of Project should match the documents, must include project number)

In consideration of the promises set forth herein, and with intent to be legally bound, the parties agree to the terms set forth within this Agreement.

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- 9.1 Compensation and Payment
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ARTICLE 12: MISCELLANEOUS PROVISIONS

- 12.1 Dispute Resolution/Applicable Law
- 12.2 Successors and Assigns
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- 12.5 Third Party
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ARTICLE 13: SCHEDULE OF EXHIBITS

DEFINITIONS:

Contract Documents consist of the General Conditions of the Contract, Drawings, Specifications, Addenda issued prior to receipt of Trade Contract bids, Form of Proposal, other documents listed in the Agreement and those modifications to the Contract as follows: Owner's written authorization to the Contractor for changes to the Scope of Work, a Change Order, and a written order for a minor change in the Work issued by the Professional.

Contractor means the person or entity retained by the Owner to perform Work for the project and includes the Contractor's Representative.

Construction Budget means the project construction cost limit established by the Owner.

Construction Cost Estimate means a detailed breakdown of all costs associated with the scope of work required to meet the project requirements projected to the mid-point of construction.

Final Completion means the point at which the project is fully completed in accordance with the Contract Documents (this includes *all* physical/construction obligations, administrative obligations, and punch list obligations).

The **Owner** is The Pennsylvania State University, a non-profit corporation created and existing under the laws of the Commonwealth of Pennsylvania, and an instrumentality of the Commonwealth of Pennsylvania; this term shall include the Owner and/or the Owner's authorized representative.

The **Pennsylvania State University Design and Construction Standards** means those design and construction standards as set forth at: http://www.opp.psu.edu/construction/standards/design_standards.cfm.

The **Professional** is the person lawfully licensed to practice architecture or engineering, or the firm employed to provide architectural or engineering services, for the referenced project. The term "Professional" shall mean the Professional or the Professional's authorized representative.

The **Project** shall comprise the Work defined by the Contract Documents and may include work by the Owner or other Separate Contractors, Trade Contractors, Sub-Trade Contractors or the Professional.

The **Scope of Work** means the work reasonably contemplated, required, implied, or reasonably inferable by the Contract Documents or normal standards of the building trades, whether or not explicitly contained in the Contract Documents.

Services means the services provided by the Professional and/or by consultants retained by the Professional for the Project.

Substantial Completion shall mean that stage in the progression of the Work when the Work is sufficiently complete in accordance with this Contract that the Owner can enjoy beneficial use or occupancy of the Work and can utilize the Work for its intended purpose.

Work means the construction and services necessary or incidental to fulfill the Contractor's or Professional's obligations for the Project in conformance with the agreement between the Owner and Contractor or the Owner and Professional.

ARTICLE 1: PROFESSIONAL'S RESPONSIBILITIES

1.1 General Responsibilities

1.1.1 The Professional shall furnish or provide the architectural and engineering services as outlined herein, and any other relevant data, specifications or documents, as necessary for a complete project. The Professional shall expeditiously perform said services in a manner consistent with professional skill, care, and the orderly progress of the work. In carrying out all obligations pursuant to this Agreement, including the furnishing of Construction Documents, the Professional shall in all respects conform to the applicable professional standard of care.

1.1.2 By executing this Agreement, the Professional represents to the Owner that the Professional possesses the requisite skill, expertise, and credentials to perform the required services, and that Professional is licensed to practice by all public entities having jurisdiction over the Professional and the Project. The Professional further represents to the Owner that the Professional will maintain all necessary licenses, permits, or other authorizations necessary to act as Professional for the Project until the Professional's remaining duties hereunder have been satisfied. The Professional assumes full responsibility to the Owner for the negligent acts and omissions of the Professional's consultants or others employed or retained by the Professional in connection with the Project.

1.1.3 Execution of this Agreement by the Professional constitutes a representation that the Professional has become familiar with the Project site and the local conditions under which the Project is to be implemented.

1.1.4 The Professional shall provide the services required by this agreement in conformance with the most recent project schedule approved by the Owner.

1.1.5 The Professional shall provide Professional Services, per Exhibit A and per this agreement, in accordance with The Pennsylvania State University Design and Construction Standards referenced in Exhibit C.

1.1.6 The Professional is responsible for additional submission and presentation requirements as outlined for Board of Trustee approval or other administrative approval.

1.1.7 If a Construction Manager is hired by the Owner it will be the responsibility of the Professional to collaborate and work in concert with the Construction Manager throughout the duration of the project. Furthermore, the Professional shall reconcile all cost estimates with the Construction Manager.

1.1.8 Payment of the Professional's fees, as per in Article 9, is contingent upon completion of the documents per the attached schedule.

1.1.9 Adherence to Time Schedule. The Professional shall strictly adhere to submission schedules as set forth in this Agreement. Should the Professional become aware that he will be unable to meet any of the dates set forth in this Agreement, the Professional shall immediately notify the Owner in writing.

- The Professional shall include in the notice the reason(s) for the Professional's inability to meet the date(s) and a request that the Owner amend the time schedule.
- The Owner shall review the Professional's notice and determine whether or not to amend the time schedule.

If the Owner determines that the delay is **due to the fault of the Professional**, the Owner may amend the schedule and direct the Professional to expeditiously proceed with the design of the project, in which case **the Owner may hold the Professional responsible for any costs attributable to the delay**, or

terminate the Agreement for default of the Professional, in accordance with the provisions of this Agreement.

If the Owner determines that the delay is not due to the fault of the Professional, the Owner may amend the time schedule. The Professional agrees that such an amendment of the time schedule is his exclusive remedy for a delay and that he may not make any claims against the Owner for increased costs due to the delay.

1.1.10 Building Information Modeling (BIM). The project will be designed using Building Information Modeling (BIM). Professionals shall use BIM application(s) and software to develop project designs. Digital modeling information shall be provided to the Owner and Construction Manager for the following building systems: ALL DISCIPLINES. This may include, but is not limited to, architectural, site, civil, structural, mechanical, electrical, safety and security, controls, fire suppression and alarms, building automation and other systems. This includes relevant model element information to be used for future integration into the Owner's facilities management system. This may include, but is not limited to, hyperlinks to O&M manuals, preventative maintenance schedules, and analysis data. The Professional shall develop the Facility Data consisting of a set of intelligent elements for the Model (e.g., doors, air handlers, electrical panels). This Facility Data shall include all material definitions and attributes that are necessary for the Project facility design and construction.

Professional shall use the Model to derive accurate Construction Documents. All submitted BIM Models and associated Facility Data shall be fully compatible with Autodesk Revit 9.0 or higher. The Professional shall be responsible for updating the model during design, pre-construction, construction and post-construction record documentation (including change orders, RFI and submissions). A read-only, coordinated model shall be delivered to the Construction Manager for pre-construction coordination services and as required during construction. Collaboration with the Construction Manager is of utmost importance and attendance (co-location or web teleconference) at periodic coordination meetings will be required.

The level of detail, model content, information exchange format, and party responsible for modeling and information input will be decided upon during contract negotiations. The basis for these negotiations will be the Penn State BIM Project Execution Plan template (PSU BIM Template), which is available on the OPP website.

The Professional shall develop a project specific BIM Execution Plan (BIM Plan) documenting the collaborative process in which BIM will be implemented throughout the lifecycle of the project. The BIM Plan shall utilize the requirements identified here and in the PSU BIM Template. It shall be submitted for approval by the Owner and Construction Manager prior to the schematic design phase.

Implement quality control (QC) parameters for the Model, including the procedures described in section I of the PSU BIM Template. As a minimum, provide the following: model standards checks, CAD standards checks, and other parameters.

The following uses of BIM are required: design authoring, design reviews, 3D design coordination, energy analysis, building envelope analysis, and architectural renderings. Reference Section D.2 of the PSU BIM Template.

The Professional shall perform design and construction reviews at each submittal stage to test the Model to ensure the design intent has been followed and that there are no unintended elements in the Model.

The Professional shall locate conflicting spatial data in the Model where two elements are occupying the same space. Log hard interferences (e.g., mechanical vs. structural or mechanical vs. mechanical overlaps in the same location) and soft interferences, (e.g., conflicts regarding equipment clearance, service access, fireproofing, insulation) in a written report and resolve.

The Professional shall implement a process in which BIM software uses the model and energy attributes to determine the most effective engineering methods based on design specifications. These analysis

tools and performance simulations can significantly improve the energy consumption during lifecycle operations.

The Professional shall provide submittals in compliance with BIM Plan deliverables at stages as described in section B.8 of the PSU BIM Template.

At each Design Stage, The Professional will provide PSU with the following:

- The Model (Revit) and Facility Data (various).
- A 3-D interactive review format of the Model in Autodesk Navisworks, Adobe 3D PDF 7.0 (or later), or other format per Plan requirements. The file format for reviews can change between submittals.
- A list of all submitted files. The list should include a description, directory, and file name for each file submitted. For all CAD sheets, include the sheet title and sheet number. Identify files that have been produced from the submitted Model and Facility Data.

All costs associated with BIM, including model updates during construction, shall be included in the base contract price (contract Article 9.1.1). An as-built BIM model shall be submitted by the Design Professional to the Owner upon Final Completion of the Work for the agreed upon building systems listed in this agreement. The BIM digital information is to be considered the Architect's work product and as such, under Article 7 of the contract, is ultimately the Owner's property.

Any questions or variations from this shall be discussed and agreed upon with the OPP BIM Manager or Manager of Design Services.

~~1.1.11 Contractor Design Assist. The Owner anticipates utilizing contractor/vendor design assist on some aspects of the project. If utilized, the Professional will assume the responsibility for incorporation of the design assist information into the overall design.~~

1.1.12 LEED Responsibility for Project. The Professional shall design the project to meet the LEED target certification level and shall undertake all reasonable and necessary efforts to bring about implementation of the design specifications in a manner that will meet the LEED target certification level, including coordination with the Contractor(s) and subcontractors. The Professional shall be primarily responsible for identifying the listing of credits to be achieved during the project in an effort to meet the certification level. The Professional shall also be responsible for preparing all documentation required for submission. The Professional shall use as a guide The Pennsylvania State University LEED Policy to be provided by the Owner.

1.2 Schematic Phase

The Professional shall review and comply with the Project program and The Pennsylvania State University Design and Construction Standards, both as furnished by the Owner, and shall conduct appropriate visits to the Project site. The Professional shall then provide to Owner a preliminary evaluation of the program and schedule and a preliminary construction cost estimate. The Professional shall review with the Owner alternative approaches to project design and construction, as may be required.

After the Owner has approved the Project scope, cost estimate and schedule as submitted by the Professional, the Professional shall prepare and submit to the Owner, for approval, Schematic Design Documents and any other documents required by the Owner. Refer to the Design Phase Submittal Requirements document available on the Office of Physical Plant web page for a listing of submission requirements for the Schematic Phase.

Following approval of Schematic Design Documents and any other documents required at such phase by the Owner, The Professional shall submit a Construction Cost Estimate. The estimate shall be determined by the Professional using the most accurate means available.

1.3 Design Development Phase

After approval by the Owner of the Schematic Design Documents, and any Owner-authorized changes in Project scope or construction budget, the Professional shall prepare and submit, for approval by Owner and any government authorities, Design Development drawings and any other documents required by the Owner for said approval. These drawings and other documents shall fix building size, delineate and describe the various construction materials to be used, and indicate the structural, mechanical, and electrical systems upon which the design is based. Refer to the Design Phase Submittal Requirements document available on the Office of Physical Plant web page for a listing of submission requirements for the Design Development Phase (noted as Preliminary and Design Phase in the document).

The Professional shall provide an update of the Construction Cost Estimate and schedule and advise the Owner immediately of any adjustments.

1.4 Construction Document Phase

After approval by the Owner of the Design Development Phase documents, and any further Owner-authorized changes in Project scope or construction budget, the Professional shall prepare and submit to the Owner, for approval, Construction Drawings and Specifications/Project Manual (hereinafter referred to as the "Construction Documents") required by the Owner for said approval. These Construction Documents shall delineate, detail, and completely specify all materials and equipment required to fully complete construction of the Project in every respect, consistent with current standards of the profession. The Construction Documents shall completely describe all work necessary to bid and construct the Project. Refer to the Design Phase Submittal Requirements document dated August 2006 (or any subsequent updates), available on the Office of Physical Plant web page, for a listing of submission requirements for the Construction Document Phase.

Any review and approval by the Owner of the Construction Documents shall not be deemed to diminish the Professional's obligations under this Agreement.

The Professional shall provide an update of the Construction Cost Estimate and schedule and shall advise the Owner immediately of any adjustments.

The Professional shall be responsible for completing all of the appropriate planning modules, soil and erosion control plans, and other documents which may be required.

The Professional shall be responsible for obtaining, on behalf of the Owner, whatever approvals are necessary to connect to non-Owner-owned utility lines.

The Professional shall coordinate the Construction Documents for all of the separate Prime Contracts or trade packages, as required, to protect against omissions, conflicts, overlaps, or duplications of any items of work or materials on the Project.

The Professional shall coordinate the services of all design consultants for the Project, including those retained by the Owner.

1.5 Bidding Phase

After approval by the Owner of the Construction Documents, the Professional shall prepare and distribute all necessary bidding correspondence and documents, evaluate bid proposals, attend pre-bid or pre-award meetings, clarify the scope or intent of the Construction Documents, evaluate proposed subcontractors, and assist in the preparation of construction contracts.

1.6 Construction Phase

The Professional shall issue a set of construction documents that incorporate all bidding documents and revisions per addenda prior to the start of construction.

The Professional's responsibility under this Agreement for Construction Phase services commences with the execution of the Contract(s) between the Contractor(s) and the Owner and terminates no earlier than the expiration of the Contractor's one-year guarantee period against defective materials, equipment, and/or workmanship. This paragraph is not intended to, and shall not be construed as, affecting in any way the calculation of any applicable legal statutes of limitation.

Administration, by the Professional, of the construction contract(s) shall be as outlined below and in accordance with the General Conditions of the Contract for Construction. The Professional agrees to perform all of its obligations under this Agreement consistent with said General Conditions. The extent of the Professional's duties and responsibilities and the limitations of its authority as specified thereunder shall not be modified without written agreement between the Owner and the Professional.

The Professional shall not be responsible for the Contractor's construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the work. However, if the Professional has actual knowledge of safety violations, the Professional shall immediately alert the relevant Contractor or Subcontractor and shall give prompt written notice to the Owner.

The Professional shall not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Professional shall not be deemed to have control over or charge of acts or omissions of the Contractor, Subcontractors, or their agents or employees, or any other persons performing portions of the Work. However, the Professional shall provide all required assistance to the Contractor, Subcontractors and/or agents and employees in order to facilitate the appropriate and timely performance of the Work. Furthermore, Professional is responsible for notifying the Owner and the Contractor of the Contractor's failure to carry out the Work in accordance with the Contract Documents upon observing such failure by the Contractor.

1.6.1 Schedule of Values. Upon receipt, the Professional shall carefully review and examine the Contractor's Schedule of Values, together with any supporting documentation or data which the Owner or the Professional may require from the Contractor. The purpose of such review and examination will be to protect the Owner from an unbalanced Schedule of Values which allocates greater value to certain elements of the Work than is indicated by such supporting documentation or data or than is reasonable under the circumstances. If the Schedule of Values is found to be inappropriate, or if the supporting documentation or data is deemed to be inadequate, and unless the Owner directs the Professional to the contrary in writing, the Schedule of Values shall be returned to the Contractor for revision or supporting documentation or data. After making such examination, if the Schedule of Values is found to be appropriate as submitted or, if necessary, as revised, the Professional shall sign the Schedule of Values thereby indicating the Professional's informed belief that the Schedule of Values constitutes a reasonable, balanced basis for payment of the Contract Price to the Contractor. The Professional shall not sign such Schedule of Values in the absence of such belief unless directed to do so, in writing, by the Owner. The Professional shall provide the Owner with a signed copy of the Schedule of Values after approval.

1.6.2 Access to Work. The Professional and its authorized representatives shall have full and safe access to the work at all times.

1.6.3 Visits to the Site/Inspection. The Professional and any consultants retained by the Professional, or an authorized and qualified representative, shall visit the Project periodically as required by the Owner during periods of active construction in order to review the progress of the work, and take such actions as are necessary or appropriate to achieve the requirements of the Construction Documents in the work of the responsible Contractors, including advising the Owner's representatives as to particular matters of concern. It shall also be the duty of the Professional to have its Consultants visit the site periodically as required during their respective Phases of the work, at such intervals as may reasonably be deemed

necessary by the Owner and the Professional, to review their respective Phases of the work in order to achieve the requirements of the Construction Documents.

The purpose of such site visits and reviews will be to determine the quality, quantity, and progress of the Work in comparison with the requirements of the Construction Documents. In making such reviews, the Professional shall exercise care to protect the Owner from defects or deficiencies in the Work, from unexcused delays in the schedule, and from overpayment to the Contractor. Following each such review, the Professional shall submit a written report within (5) calendar days of such review, together with any appropriate comments or recommendations, to the Owner.

Whenever, in the Professional's opinion, it is necessary or advisable, the Professional shall require special inspection or testing of the Work in accordance with the provisions of the Construction Documents whether or not such Work is fabricated, installed, or completed. The Professional shall advise the Owner of all such occurrences requiring special inspection or testing of the Work and shall obtain prior approval from Owner before any funds are committed for inspection, beyond what has already been budgeted.

1.6.4 Approval of Payment to Contractors. Based on the Professional's review of the Project, the Professional will recommend, within seven (7) calendar days after receipt, approval or rejection of payment on the Application-Certificate of Payment. Approval of the Certificate of Payment shall constitute a representation by the Professional to the Owner that the work has progressed to the point indicated on the Application, and that to the best of the Professional's knowledge, information, and belief, the quality of the work is in accordance with the Contract Documents.

The Professional shall make recommendations to the Owner for the withholding of any payment, or portion thereof, due to inadequate progress and/or performance of the Contract.

The Professional agrees that time is of the essence with respect to this provision.

1.6.5 Interpreter. The Professional will be, in the first instance, the interpreter of the requirements of the Contract Documents. The Professional will, within a reasonable time as determined by the Owner, render such interpretation as it may deem necessary for the proper execution or Progress of the Work. All interpretations by the Professional shall be defined in writing and/or by drawing and shall be consistent with the intent of the Contract Documents.

In addition to the above, the Professional shall be required to attend, at the determination of the Owner, any and all Project site conferences dealing with interpretation of the Contract Documents.

The Professional's decisions, with Owner's prior approval, shall in matters relating to aesthetic effect be final if consistent with the intent of the Construction Documents.

1.6.6 Review of Contractor's Shop Drawings and Materials. The Professional shall review, approve, and process, subject to the right of review by the Owner, Shop Drawings to verify compliance with the Contract Documents and all product data, samples, materials, and other submissions of the Contractor required by the Contract Documents for conformity to and in harmony with the design concept of the Project and for compliance with the requirements of the Contract Documents. The Professional shall not approve any substitution of specified materials and/or equipment without first obtaining the Owner's consent. Approval by the Professional of the Contractor's submittal shall constitute the Professional's representation in accordance with Article 5 of the General Conditions of the Contract for Construction to the Owner that such submittal is in conformance with the Contract Documents.

When the Contractor is required by the Contract Documents to provide professional certification of performance characteristics of materials, systems, or equipment, the Professional shall be entitled to rely upon such certification to establish that the materials, systems, or equipment will meet performance criteria required by the Contract Documents.

Based on the priorities of the construction schedule, the Prime Contractor(s) shall submit a shop drawing submittal schedule on or before the Second Regular Job Conference. The Professional shall review and check the shop drawing submittal schedule within fourteen (14) calendar days of receipt from the Contractor.

The Professional shall return the approved shop drawings, or detailed notation for resubmission, if required, within fourteen (14) calendar days after receipt from the Contractor unless mutually agreed otherwise by the Professional, Owner, and Contractor. The Professional shall act on any resubmissions within seven (7) calendar days of receipt thereof unless mutually agreed otherwise by the Professional, Owner, and Contractor. A detailed log shall be maintained by the Professional as to time of receipt of the shop drawings and time of return, with adequate notes as to their disposition.

Refer to 1.6.12 for electronic scanning and submission requirement of approved project shop drawings at the completion of the project.

The Professional is responsible to incorporate into the shop drawings comments by the Owner or Owner's authorized representative prior to the shop drawings being returned to the Contractor.

The Professional agrees that time is of the essence of this provision.

1.6.7 Job Conference Reports. The Professional shall take and retain an accurate and complete record of the biweekly Job Conference meetings and shall prepare and distribute summary minutes in a format approved by the Owner of each meeting within five (5) calendar days to the Owner, the Contractors, and all other interested parties.

1.6.8 Change Orders. The Professional shall review all Change Order requests within seven (7) calendar days and shall advise Owner, in writing, with respect to the necessity or advisability of same. The Professional shall also determine whether the cost is fair and reasonable for the additional work associated with the Change Order. In so doing, Professional shall provide all pertinent documents and data to the Owner, who shall make all decisions regarding approval or rejection of Change Order requests. The Professional shall maintain an appropriate Change Order log. The Professional may, after consultation with the Owner, authorize minor changes in the Work which do not involve an adjustment in the Contract sum or an extension of the Contract time and which are consistent with the intent of the Contract Documents.

1.6.9 Rejection of Work. The Professional is authorized and obligated to reject work which does not conform to the Contract Documents and shall immediately notify the Owner to stop a Contractor's work whenever, in the Professional's reasonable opinion, such action is necessary for the proper performance of the Construction Contract Work. The Professional shall not be liable to the Owner for the consequences of any recommendation made by the Professional in good faith, and in the exercise of due care in recommending to stop or not to stop the work.

1.6.10 Substantial Completion, Final, and One-Year Guarantee Inspections. The Professional and its consultants shall participate in Substantial Completion and Final Inspections to affix the dates of Substantial and Final Completion and shall concur in the report of Final Completion to the Owner prior to approving the Contractor's application for Final Payment. The Professional shall produce the punch list document and provide any direction, coordination or follow-up that may be necessary to correct any deviation from the specifications and requirements set forth in the Contract Documents and Construction Documents. The Professional shall also acquire for Owner the Certificate of Occupancy.

The Professional and its consultants shall participate in an inspection prior to the expiration of the one (1) year guarantee period against defective materials, equipment, and/or workmanship to determine any defects in materials, equipment, and/or workmanship since the date of Substantial Completion. The Professional shall produce the (1) year guarantee period punch list document for distribution to the Contractor(s) and provide follow-up to verify all items are completed to the satisfaction of the Owner.

1.6.11 Operations and Maintenance Data. At the time of Substantial Completion of the Project, the Professional shall review and approve all required close-out documentation required per the Specifications including, but not limited to, manufacturers' operating instructions, maintenance instructions, certificates, warranties, guaranties, and other pertinent operating and maintenance data.

The Professional shall electronically scan all reviewed and approved Operation and Maintenance data being returned to the Contractor and provide a complete set of Operation and Maintenance data for the Project in electronic .pdf format (organized by building system) to the Owner within (1) month after receipt from the Contractor.

1.6.12 Record Drawings. At the time of Final Completion of the Project, the Professional shall collect from the Prime Contractor(s) their complete sets of as-built drawings and will, within 30 days after receipt from the Contractors, transpose all the changes recorded by the Contractors, onto a full set of reproducible drawings which shall become the record (as-built) drawings of the Project. The record drawings must also be put on electronic media compatible with the Owner's ACAD system. The Professional shall submit the as-built drawing set to the Owner in both ACAD dwg format and electronic pdf format (if project is utilizing Building Information Modeling an additional record drawing format shall be required and approved by the Owner).

The Professional shall electronically scan all approved shop drawings being returned to the Contractor and provide a complete set of the approved shop drawings for the Project in electronic pdf format (organized by CSI division) to the Owner within (1) month after Substantial Completion of the project.

1.6.13 Corrections. The Professional shall, without additional compensation, promptly correct any errors, omissions, deficiencies, or conflicts in its work product.

1.6.14 Errors and Omissions. If it becomes necessary during the course of construction to issue change orders which increase the cost of the Project and which are due to an error or omission by the Professional in providing plans, drawings, specifications or coordination for the Project, the Professional shall be assessed in an amount equal to the difference between the amount of the change order and what the Owner would have paid had the error or omission not occurred. Where applicable, the assessment shall include any administrative costs incurred by the Owner and costs associated with removal or replacement of work necessary in order to implement the change order. An omission change order is one which results from the Professional's breach in the applicable professional standard of care, resulting in a failure to include required features, items or design elements in the plans, drawings or specifications. An error change order is one which results from the Professional's breach in the applicable professional standard of care, resulting in mistakes or deficiencies in the plans, drawings or specifications.

At the completion of the project, the parties shall exercise good faith in seeking to amicably resolve any disputes that may exist regarding change orders. In the event that the parties are unable to reach an amicable resolution, the dispute resolution provision of Article 12.1 shall apply.

ARTICLE 2: ADDITIONAL RESPONSIBILITIES OF PROFESSIONAL

2.1 Compliance

The Professional is responsible for the compliance of the Construction Documents with all applicable permits, laws, regulations, and ordinances of all commissions, agencies and governments, federal, state and local, insofar as they are applicable to, and have jurisdiction over, the Project. The Professional shall make all required submittals with the advance knowledge of the Owner to, and shall obtain all required approvals from, the applicable agency in a timely manner so as not to cause delays to the Project. The Professional shall also attend all hearings/meetings required for securing necessary approvals and permits.

The Professional shall be responsible for producing a submission document set for approval by Labor and Industry as required by the Commonwealth of Pennsylvania to obtain the necessary building permit.

The Professional shall also be responsible for additional submissions as required by the Labor and Industry Building permit processes and procedures throughout the project design and construction.

2.2 Cooperation With Local Bodies

During the design of the Project, the Professional shall keep informed and comply with the requirements of all local zoning, planning, and supervisory bodies. Should these requirements substantially increase the cost of the Project, or should any required approvals be withheld by the local bodies, the Professional shall immediately notify the Owner.

2.3 Proprietary Items, Copyrights, Patents

The Professional shall not include in the design of the Project unless directed by the Owner any equipment, material, or mode of construction which is proprietary or which contains a copyright or patent right relating to designs, plans, drawings, or specifications, unless the equipment, material, or mode of construction is different and fairly considered superior in quality and performance. If the Professional includes in the design of the Project any equipment, material, or mode of construction which is proprietary, it shall have prior approval by the Owner and it shall only be because the item is different and fairly considered superior in quality and performance, and not for the purpose of preventing or restricting competitive bidding.

2.4 Steel Products Procurement Act

The Professional is responsible for compliance with the Pennsylvania Steel Products Procurement Act, 73 P.S. § 188, *et. seq* ("the Act"). In the event that Professional selects and/or approves any steel products (as defined in the Act) for use in the Project, Professional shall delineate, list and approve as acceptable only steel products that are in compliance with the Act. If Professional determines that any steel products are not produced in the United States in sufficient quantities to meet the requirements of the Project or Contract Documents, Professional shall notify the Owner.

ARTICLE 3: OPTIONAL ADDITIONAL SERVICES

Unless required by the Project Scope, the services performed by the Professional, Professional's employees, and Professional's consultants as outlined in this Article are not included in Basic Services and shall be paid for by the Owner as provided in this Agreement in addition to the compensation for Basic Services.

None of these services shall be provided by the Professional, whether they are requested by the Owner or required due to circumstances unknown at the time of the execution of the Agreement, until approval in writing has been given by the Owner.

3.1 Project Representation

If more extensive representation at the site by the Professional is required by the Owner than is provided for under Basic Services, Paragraph 1.6, Construction Phase, the Professional shall provide one or more Project representatives to assist in carrying out such additional on-site representation.

Additional Project representative(s) shall be selected, employed, and directed by the Professional with the approval of the Owner, and the Professional shall be compensated therefore as mutually agreed, in advance, between the Owner and the Professional. Such supplemental agreement letter shall also delineate the duties and responsibilities of the additional Project representative(s).

3.2 Revisions to Approved Drawings and Specifications Prior to Construction Phase

3.2.1 Making revisions to the drawings and specifications requested by the Owner subsequent to the Owner's approval of the Construction Documents as outlined in Paragraph 1.4, Construction Document Phase, unless required to keep the estimated Construction Costs within the amount budgeted for same.

3.2.2 Making revisions to the drawings and specifications required by the enactment or revisions of codes, laws, or regulations subsequent to the completion of the Construction Documents as approved by the Owner.

3.3 Preplanning

Providing special analysis of the Owner's needs such as selection, planning, and development of the site; economic, demographic, and/or financial feasibility; preliminary design criteria and budget estimates; or other special studies except as herein provided as part of Basic Services.

3.4 Specialized Consultants

Providing unusual or specialized Consultant services other than those consistent with the inherent requirements of the Project scope and required to meet the functional needs of the Project.

3.5 Surveys

Providing a complete topographic survey and/or related aerial photography, ground control, photogrammetric plotting, property boundary survey, and the preparation of a metes and bounds legal description and a related plot.

3.6 Special Studies

Providing services related to the preparation of Environmental Assessments and/or Environmental Impact Statements, Energy Impact Statements, Analysis, or Feasibility Studies as may be required by local, state or federal government agencies, provided such services are in addition to the Project scope requirements.

3.7 Other Services

Providing services mutually agreed to that are not otherwise included in this Agreement.

ARTICLE 4: INDEMNIFICATION

To the fullest extent permitted by law, The Professional shall indemnify and hold harmless the Owner and the Owner's respective officers, directors, trustees, agents, servants, and employees from and against any and all liability, claims, losses, costs, expenses or damages, including reasonable attorneys' fees, costs and expenses, for property damage, bodily injury or death, that may arise as a result of the performance or failure to perform services and duties pursuant to this Agreement, but only to the extent caused by a failure to conform to the applicable professional standard of care by the Professional or Professional's agents, employees or consultants, or anyone employed directly or indirectly by any one of them or by anyone for whose acts any of them may be liable. Nothing in this indemnity section shall be construed to limit the insurance obligations agreed to herein.

ARTICLE 5: OWNER'S RESPONSIBILITIES

5.1 Basic Information

The Owner shall provide the Professional all information available at the time regarding requirements for the Project. Such information shall include:

5.1.1 A Project Program setting forth the Owner's objectives, space requirements and relationships, special equipment, and systems and site requirements.

5.1.2 A Project Budget including the amount allocated for the Construction Cost and all other anticipated costs and expenses.

5.1.3 A Project Schedule setting forth the times allotted for the Design and Construction Phases of the Project.

If the information furnished is not sufficient for the process of initiation of design solutions, the Professional shall notify the Owner immediately.

5.2 Surveys

The Owner shall furnish to the Professional, as available, surveys describing (as applicable) grades and lines of streets, alleys and pavements; the location of all rights-of-way restrictions, easements, encroachments, zoning classification, boundaries and contours of the site; location, dimensions and other necessary data pertaining to any existing buildings, other improvements and trees; information concerning existing utilities throughout the site, including inverts and depth; and shall establish a Project benchmark.

5.3 Geotechnical Engineering Services

The Owner shall pay the costs of all geotechnical engineering services required for the Project and requested by the Professional and Owner. Such services shall include, but are not limited to, tests borings, samples, field and laboratory reports, final soil reports and logs, and foundation engineering evaluations and recommendations.

5.4 Miscellaneous Tests, Inspections, and Reports

The Owner shall furnish, at the Owner's expense, air and water pollution, hazardous material, environmental, and any other miscellaneous laboratory tests, inspections, and reports as may be required.

5.5 Approval or Disapproval of Design Work

Any approval or failure of the Owner to disapprove or reject design work submitted by the Professional shall not constitute an acceptance of the work such as to relieve the Professional of his full responsibility to the Owner for the proper and professional performance of all design work on the Project.

5.6 Owner Response

The Owner shall act with reasonable promptness on all submissions from the Professional, which require action by the Owner, in order to avoid unreasonable delay in the progression of the Project through the various Phases outlined in Article 1.

5.7 Notice of Nonconformance

The Owner shall notify the Professional immediately if the Owner becomes or is made aware of any fault or defect in the Project or nonconformance by any party with the Contract Documents.

5.8 Copies of Owner's Documents

The Owner shall supply the Professional with copies of the Owner's Form of Agreement between Owner and Contractor and General Conditions of the Contract for Construction for inclusion, by the Professional, in the Bidding Documents. It shall be the Professional's responsibility to access, review, and implement The Pennsylvania State University Design and Construction Standards information provided by the Owner on the Office of Physical Plant web page. Refer to web page content listing in Exhibit C.

5.9 Preconstruction Services

The Owner intends to independently retain a Construction Management firm to provide preconstruction and construction services. The Professional will assist the Owner in reviewing proposals and allow for two full days of meetings to interview and rank prospective construction management firms.

ARTICLE 6: CONSTRUCTION COST

6.1 Project Cost Determination

The Construction Cost for all work described in the Construction Documents, as approved by the Owner shall be determined as outlined below, with precedence in the order listed:

6.1.1 For completed construction, the total cost to the Owner for such construction work less the amount of any change order work necessary because of errors or omissions on the part of the Professional as defined in Subparagraph 1.6.14 Errors and Omissions.

6.1.2 If the Project is not constructed, the sum of the lowest bona fide bids(s) received for all of the work, providing said bids do not exceed the fixed limitation of Construction as defined in Paragraph 9.1.4 or as amended by written agreement by the Owner and Professional as the basis for design. If such bids exceed the limitation previously agreed upon, said limitation shall become the basis of cost.

6.1.3 If bids are not received, the latest Construction Cost Estimate prepared by the Professional, provided such estimate does not exceed the fixed limitation of construction as defined in Paragraph 9.1.4 or as amended by written agreement by the Owner and Professional as the basis for design.

6.2 Notification

It shall be the Professional's responsibility to promptly notify the Owner if, in the Professional's opinion, the Project cannot be designed and constructed within the fixed limitation on the cost of construction as authorized by the Owner. It is the Professional's responsibility to so notify the Owner as soon as such a situation becomes, or should have become, apparent to the Professional.

6.3 Owner Options

If, without written acknowledgment by the Owner, the Professional permits the Construction Contracts to be bid, and if the fixed limitation on the cost of Construction is exceeded by the lowest bona fide bid(s) or negotiated proposal, the Owner may: (1) give written approval of an increase in such fixed limit; (2) authorize rebidding or renegotiating of the Project; (3) terminate the Project and this Agreement in accordance herewith; or (4) cooperate in revising the Project scope or quality, or both, as required to reduce the construction cost. In the case of (4), the Professional, without additional charge to the Owner, shall consult with the Owner and shall revise and modify the Construction Documents as necessary to achieve compliance with the fixed limitation on construction cost. Absent negligence on the part of the Professional in making its estimates of probable construction cost, such modifications and revisions shall be the limit of the Professional's responsibility arising from the establishment of such fixed limitation of construction costs, and having done so, the Professional shall be entitled to compensation for all other services performed, in accordance with this Agreement.

If, after notification to the Owner by the Professional that the Project cannot be designed and constructed within the fixed limitation on the cost of construction, the Professional is by written authorization by the Owner instructed to proceed without a change in the Project program, design, or in the fixed limitation on the cost of construction, the Professional shall not be responsible for the cost of any subsequent redesign.

ARTICLE 7: OWNERSHIP AND USE OF DOCUMENTS

All preliminary studies, Construction Documents, as-built documents, record drawings, special requirements, cost estimates, and all other data compiled by the Professional under this Agreement shall become the property of the Owner and may be used for any purpose desired by the Owner except to use for the construction of an identical facility not covered by this Agreement. The Professional shall not be liable for any reuse of these documents by the Owner.

ARTICLE 8: PROFESSIONAL'S EXPENSES

8.1 Billable Hourly Rates

8.1.1 Direct personnel expense is defined as the direct salaries of the principals, associates, and employees of the firm who are assigned to and are productively engaged on the Project, including clerical employees.

8.1.2 Billable hourly rates for this project are included in the personnel listing in Exhibit B. Billable hourly rates shall be the direct personnel expense rate for any principal's time and a multiple of a maximum of (2.5) times the direct personnel expense per hour for the Professional's employees which shall include mandatory and customary benefits such as employment taxes, statutory employee benefits, insurance, sick leave, holidays, vacations, pensions, and similar contributions and benefits.

8.1.3 The billable hourly rates set forth in Exhibit B may be adjusted annually, subject to the Owner's approval, in accordance with generally accepted salary review practices of the profession. Payroll certification shall be provided by the Professional to the Owner upon demand.

8.2 Reimbursable Expenses

Reimbursable expenses are in addition to compensation for Basic and Additional Services and include those expenses as follows for which the Professional shall be reimbursed a not-to-exceed amount for his direct "out-of-pocket" costs (no mark-up allowed on reimbursable expenses). Reimbursable expenses shall be submitted with supporting documentation. Where requested or authorized by the Owner, the following shall be reimbursable:

8.2.1 Out-of-town and out-of-state travel expenses and any necessary fee or permit payment required and paid to any governing body or authority having jurisdiction over the Project. Air travel expenses shall be approved in advance by the Owner. Maximum individual per diem expenses for travel to the job site shall be based on the Owner's allowable per diem for lodging and meals for that location.

8.2.2 Expense of reproductions including reproductions of record drawings, postage and handling of Drawings, Specifications, and other documents including the preparation and distribution of all necessary bidding correspondence and documents, receipt of bid proposals, and construction contract preparation. Reproductions made for the Professional's own use or review shall not be included.

8.2.3 Expense of renderings, models, mock-ups requested by the Owner, and/or discs for electronic format submissions of record drawings.

8.2.4 Expenses of specialized consultants identified as optional additional services in Article 3 of this Agreement.

8.2.5 Reimbursable expenses for individual travel, meals, and lodging expenses are limited to individuals under the direct employ of the Professional or their approved consultants.

8.3 Cost for Consultants (consultants not included in the Basic Services proposal/procured after award)

The Professional shall be reimbursed on a multiple of one and one-tenth (1.1) times the amounts billed to the Professional for such services.

ARTICLE 9: COMPENSATION AND PAYMENT

9.1 Compensation and Payment

9.1.1 The Owner agrees to pay the Professional as compensation for those Basic Services described in Article 1, Article 2, and any other agreed upon services described in Article 3:

an amount not-to-exceed _____ Dollars (\$) _____
for the Professional's Personnel Expense as defined in Paragraph 8.1 and cost for Consultants.

9.1.2 Payment for Basic Services will be made monthly by the Owner in proportion to the service actually performed, but not to exceed the following percentages at the completion of each Phase.

Schematic Phase	15%
Design Development Phase	20%
Construction Document Phase	35%
Bidding Phase	5%
Construction Phase/Close-Out	25%

The close-out portion of the project refers to the development of the punch list and required follow-up, the submission of the as-built documents and other close-out document requirements, ongoing commissioning support, ongoing support of design-related project issues, and the performance of the (1) year bond inspection and punch-list development.

9.1.3 Reimbursable Expenses

The Owner agrees to pay the Professional as compensation for the Professional's Reimbursable Expenses, as defined in Paragraph 8.2, an amount not-to-exceed _____ Dollars (\$) _____).

9.1.4 Cost of Construction

The fixed limitation on the cost of construction as defined by this Agreement shall be _____.

9.2 Optional Additional Services Compensation

If approved, the Owner agrees to compensate the Professional for Optional Additional Services beyond Basic Services, as defined in Article 3 in accordance with the rates defined in Exhibit B and as approved by the Owner.

9.3 Payment Procedures

9.3.1 Payments are due and payable forty-five (45) days from the date that the Professional's invoice is approved by the Owner.

9.3.2 Submission of the Professional's invoice for final payment and reimbursement shall further constitute the Professional's representation to the Owner that, upon receipt from the Owner of the amount invoiced, all obligations of the Professional to others, including its consultants, incurred in connection with the Project will be paid in full.

9.3.3 Documentation accurately reflecting the time expended by the Professional and its personnel and records of Reimbursable Expenses shall be maintained by the Professional and shall be available to the Owner for review and copying upon request.

9.4 Owner's Right to Withhold Payment

In the event that the Owner becomes credibly informed that any representation of the Professional provided pursuant to Articles 8 or 9 is wholly or partially inaccurate, the Owner may withhold payment of sums then or in the future otherwise due to the Professional until the inaccuracy, and the cause thereof, is corrected to the Owner's reasonable satisfaction.

ARTICLE 10: INSURANCE

10.1 Professional Liability Insurance

The Professional shall secure and maintain, at its sole cost and expense, Professional Liability Insurance to protect against loss resulting from design errors and omissions, failure to coordinate the Construction Documents of the Project, and failure to execute the construction administration duties for the Project.

10.1.1 Unless otherwise specifically provided in this Agreement, the Professional shall secure and maintain Professional Liability Insurance with limits not less than \$1,000,000, or the total of the Professional's fee, whichever is greater.

10.1.2 The Professional shall secure and maintain Professional Liability Insurance, as required above, up to and including one year after the date of the (1) year guarantee inspection of the contracts under the Project.

10.2 General Liability Insurance

The Professional shall secure and maintain, at its sole cost and expense, adequate General Liability Insurance to protect the Owner and the Owner's respective officers, agents, servants, and employees against claims arising out of the Professional's services during the design and construction of the Project for damages in law or equity for property damage and bodily injury, including wrongful death. The Owner shall be named as an additional insured in the policy, and the Professional shall submit a Certificate of Insurance to the Owner prior to execution of the Agreement. The limits of coverage shall be not less than \$1,000,000, or the total of the Professional's fee, whichever is greater. The Professional is required to secure and maintain General Liability Insurance, up to and including one year after the date of the (1) year guarantee inspection of the contracts under the Project.

10.3 Certificate of Insurance

The Professional shall furnish to the Owner annually, unless otherwise requested, during the active terms of this Agreement, a Certificate from an Insurance Carrier authorized to do business in Pennsylvania indicating: (1) the existence of the insurance required under this Article; (2) the amount of the deductible; and (3) the amount of coverage of such insurance. The Professional shall submit a Certificate of Insurance covering the Professional Liability Insurance requirement up to and including one year after the date of the (1) year guarantee inspection of the contracts under the Project.

10.4 Failure to Comply with Insurance Requirements

During any period in which the Professional is not in compliance with the terms of this Article, no compensation shall be paid by the Owner to the Professional.

ARTICLE 11: TERMINATION, ABANDONMENT, SUSPENSION, REACTIVATION

11.1 Termination by Owner

The Owner shall have the right at any time, for any reason, to terminate this Agreement upon not less than seven (7) calendar days' written notice to the Professional. The Professional shall comply with all reasonable instructions of the Owner then or subsequently given relating to such termination, including but not limited to: instructions concerning delivery of drawings, sketches, and other architectural/engineering data to the Owner; discontinuance of the work on outstanding contracts; and furnishing to the Owner information concerning all actions to be taken respecting outstanding agreements with consultants, contracts, awards, orders, or other matters.

Copies of Construction Documents and any other materials in existence as of the date of termination will be furnished to the Owner as requested.

11.2 Compensation in the Event of Termination

In the event of termination, the Professional shall be compensated for its services to the termination date based upon services performed on any Phase to the termination date in accordance with the Compensation and Payment schedule contained herein at Article 9.1.2.

Such compensation shall be the Professional's sole and exclusive remedy for termination.

11.3 Suspension of Work

The Owner may, at any time, direct the Professional to suspend all work on the Project, or on any part thereof, pending receipt of further notice from the Owner. In all such cases the Owner and the Professional shall agree upon an appropriate phasing-out of the work in such a manner that the work may be resumed with a minimum of added cost to the Owner, but in no event shall the work be continued beyond the completion of the portion of the project then in progress. The Professional shall be compensated as if the Agreement had been terminated at the completion of the agreed Phase. If work is suspended during the Construction Phase, compensation shall be paid for all Professional services provided to the date of suspension, but no additional compensation shall be paid during the period of suspension.

11.4 Reactivation Compensation

When a Project has been suspended or terminated for a longer time than six (6) months and is subsequently reactivated using the same Professional, the Owner and the Professional shall agree, prior to the beginning of the reactivation work, upon a lump sum, or other basis, of reimbursement to the Professional for its extra start-up costs occasioned as a result of the work having been suspended or terminated.

ARTICLE 12: MISCELLANEOUS PROVISIONS

12.1 Dispute Resolution / Applicable Law

After Final Completion of the Project, any and all claims, disputes or controversies arising under, out of, or in connection with this Agreement, which the parties shall be unable to resolve within sixty (60) days of the time when the issue is first raised with the other party, shall be mediated in good faith. The party raising such dispute shall promptly advise the other party of such claim, dispute or controversy, in writing, describing in reasonable detail the nature of such dispute. By not later than five (5) business days after the recipient has received such notice of dispute, each party shall have selected for itself a representative who shall have the authority to bind such party, and shall additionally have advised the other party in

writing of the name and title of such representative. By not later than ten (10) business days after the date of such notice of dispute, the parties shall mutually select a Pennsylvania-based mediator, and such representatives shall schedule a date for mediation, not to exceed one (1) day in length, and less where applicable. The mediation session shall take place on the University Park Campus of The Pennsylvania State University, or upon the campus where the Work was performed, at the option of the Owner. The parties shall enter into good faith mediation and shall share the costs equally.

If the representatives of the parties have not been able to resolve the dispute within fifteen (15) business days after such mediation hearing, the parties shall have the right to pursue any other remedies legally available to resolve such dispute in the Court of Common Pleas of Centre County, Pennsylvania, jurisdiction to which the parties to this Agreement hereby irrevocably consent and submit.

Notwithstanding the foregoing, nothing in this clause shall be construed to waive any rights or timely performance of any obligations existing under this Agreement.

In all respects, this Agreement shall be interpreted and construed in accordance with the internal laws (and not the law of conflicts) of the Commonwealth of Pennsylvania.

12.2 Successors and Assigns

This Agreement shall be binding on the successors and assigns of the parties hereto.

12.3 Assignment

Neither the Owner nor the Professional shall assign, sublet, or in any manner transfer any right, duty, or obligation under this Agreement without prior written consent of the other party.

12.4 Extent of Agreement

This Agreement, including any and all schedules, proposals and/or terms and conditions attached hereto, represent the entire and integrated agreement between the Owner and the Professional and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both the Owner and the Professional. In the event of a conflict between the provisions of this Agreement and those of any other document, including any that are attached hereto, the provisions of this Agreement shall prevail. Furthermore, any provision, terms or conditions contained within any documents attached as exhibits hereto are void and lacking in any force or effect, with the exception of entries which define the Professional's scope of work for the Project, Professional's billable hourly rates, and project schedule.

12.5 Third Party

Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Owner or the Professional.

12.6 Hazardous Material

Unless otherwise provided in this Agreement, the Professional and its consultants shall have no responsibility for the discovery, presence, handling, removal, or disposal of, or exposure of persons to hazardous materials in any form at the Project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (PCB), or other toxic material.

If the Professional encounters or suspects hazardous or toxic material, the Professional shall advise the Owner immediately.

12.7 Promotional Material

The Professional shall not issue or disclose to third parties any information relating to the Project without prior written consent of the Owner, except to the extent necessary to obtain necessary permits or governmental approvals, coordinate the Work with the Owner's agent, Contractors, Subcontractors, etc. The Professional may, with written consent of the Owner, include design representation of the Project, including interior and exterior photographs, among the Professional's promotional and professional materials.

12.8 Terms/General Conditions

Terms contained in this Agreement and which are not defined herein shall have the same meaning as those in the Owner's Form of Agreement between Owner and Contractor and the Owner's General Conditions of the Contract for Construction, current as of the date of this Agreement.

ARTICLE 13: SCHEDULE OF EXHIBITS

The attached Exhibits are part of this agreement:

Exhibit A: Professional's proposal dated _____ **NOTE:** Professional's proposal is attached solely for purposes of defining Professional's scope of work. As per Article 12.4 of this Agreement, additional terms and conditions that may be included in the Professional's proposal, beyond those relating to scope of work, are void, without effect, and not considered to be part of this Agreement.

Exhibit B: Professional's Billable Hourly Rates.

Exhibit C: The Pennsylvania State University Design and Construction Standards listing (screen print from the Office of Physical Plant web page).

Exhibit D: Project Schedule outlining design submission dates to be followed per Article 1, Section 1.1.9.

THE PENNSYLVANIA STATE UNIVERSITY
OWNER

Title

ATTEST, Secretary

(PROFESSIONAL COMPANY NAME)
PROFESSIONAL

Title

ATTEST, Secretary

Attachments