PENNSTATE

DATE: November 11, 2010

SUBJECT: Intramural Building Addition and Renovation,
University Park

TO: Long listed firms

BLTa/Populous
Cannon Design/WTW
CFB/Hastings+Chivetta
H2L2/Hastings+Chivetta
Hughes Group/Hoffman Architecture
Ikon.5
Moody Nolan/APA
Perkins+Will/WMF
RDG/IKM
Sasaki

Congratulations, your firm has been selected as one of the firms on a long list for the design of the above referenced project. The Screening Committee will review responses to this Request for Proposals and select a short list of three firms who will be interviewed by the Architect/Engineer Selection Subcommittee of the Board of Trustees.

It is necessary that you provide us with the information requested in the enclosed questionnaire no later than **December 7, 2010 at Noon.** Please answer all of the questions in the order requested. This will provide uniform information on all firms for evaluation and ultimate presentation to the Board of Trustees. We encourage you to be as brief as possible without sacrificing accuracy and completeness. Please submit to my office **fifteen copies** of all materials. I encourage you to visit the site and discuss the project with representatives from Intercollegiate Athletics and Student Affairs in order to understand our goals and the major issues driving this project. To schedule your site visit please contact Marv Bevan, Jr., the Project Manager at 814-865-3474 or mxb61@psu.edu. Please contact me if you have any campus planning or process questions.

In addition to the questionnaire, in order to help you formulate a response, I am enclosing a site map of the area, information regarding our thoughts on some future athletic facilities near the site and excerpts from the Moody Nolan feasibility study. I am also 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 $18,150,000 and an FF&E budget of

$1,400,000. Finally, 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.

A decision regarding the firms to be interviewed by the Board Subcommittee on Architect/Engineer Selection will be made by December 22, 2010 and posted to our web site. Interviews with the short-listed three firms will be held during the week of January 17, 2011. Results of the interviews will be announced at the Board of Trustees meeting on January 21, 2011 and posted to our web site.

We appreciate your cooperation and interest in preparing this material. If the Board selects your firm, we will be looking forward to working with you on the development of this important project.

Please do not hesitate to call me if you have any other questions.

Sincerely,

David Zehngut
University Architect
207 Physical Plant
University Park, PA 16802
(814) 863-3158, fax (814) 863-7757
E-mail dxz3@psu.edu

Enclosures

cc: Screening Committee Members
A. G. Horvath

QUESTIONNAIRE

Intramural Building Addition and Renovation
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 **fifteen copies** of all material submitted. The deadline for submission is **December 7, 2010 at Noon.**

1. Please describe your approach to this project. Include a description of the scope of work your team will provide.

2. In addition to any further thoughts you might have on the essence of this project, 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 one or 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.

3. 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.**

4. Consultant firms, if any, proposed for this project:

Firm	No. of Projects Worked With Your Firm	Total Amt. Value
Structural Engineers		
Mechanical Engineers		
Electrical Engineers		
Landscape Architects		
Interior Designers		
Cost Estimators		
Others		

5. 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 #3 above.

6. Experience of the firm and any consultants in the design of college and university buildings (not already included in # 5 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 #3 above.

7. Evidence of the team's commitment to sustainable design.

8. 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, 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.

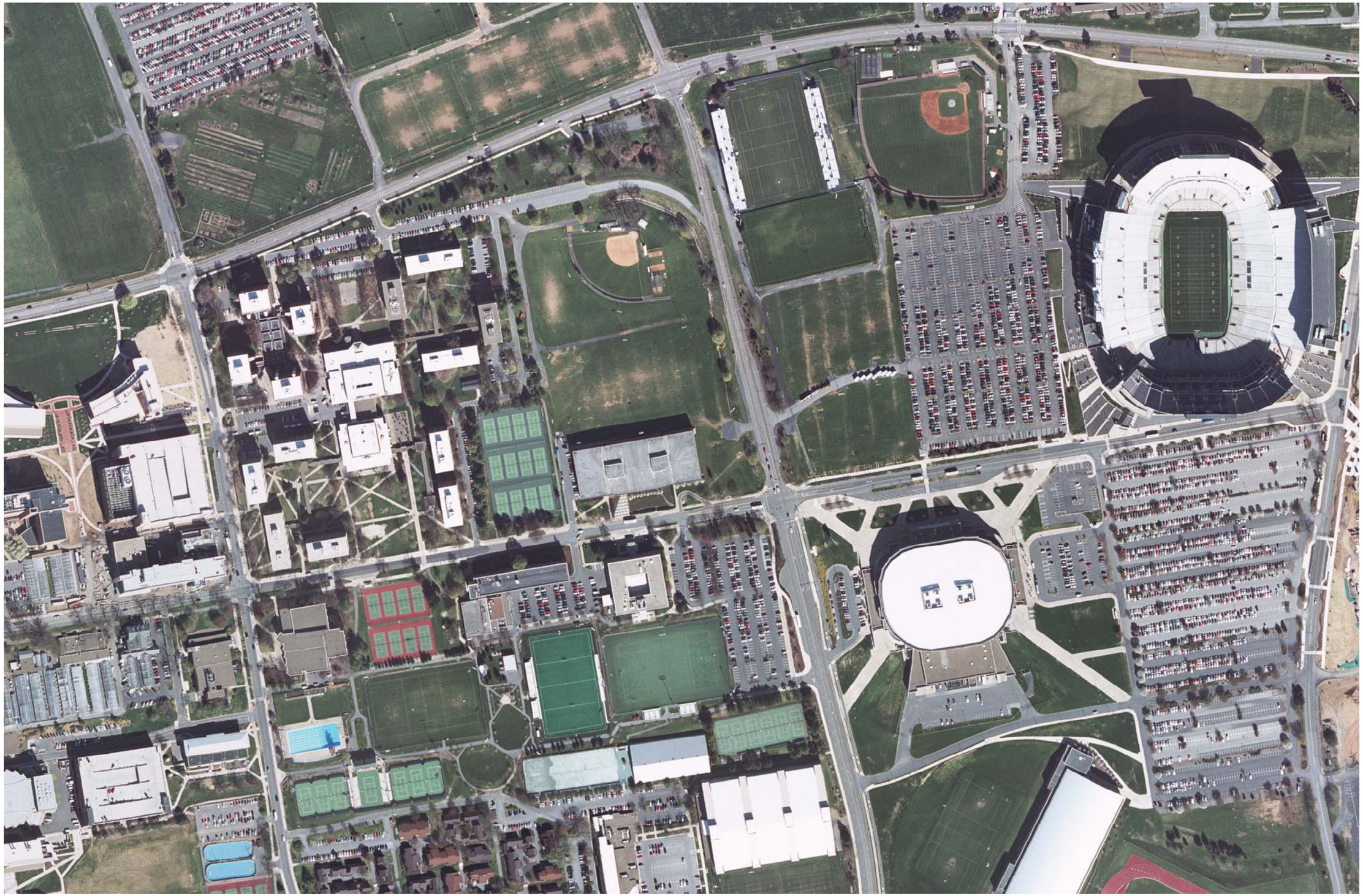
9. Graphic examples of selected projects personally done by **the lead design architect**, including brief description and completion date.

10. Please provide a proposed design schedule for each component of this project in graphic form allowing one week for any necessary Penn State University review. Assume the design process will start in February, 2011.

11. List errors and omissions insurance coverage.

12. Number of personnel in present firm(s): Architects _____ Engineers _____
Interior Designers _____ Landscape Architects _____ Others _____

Which of the above are professionally registered?



East Parking Deck
1,225 spaces

EAST
HALLS

IM
Building

Beaver
Stadium

CURTIN ROAD

50 Meter Pool
with Diving Well

Wagner Building

Shields
Building

McCoy
Natatorium

Major Electric Ducttbank

Bryce Jordan Center

Planned
Generator

Indoor Tennis Center
10 Courts

Field
Hockey
(to remain)

Practice
Ice Rink

Ice Arena
6000 Seats

UNIVERSITY DRIVE

BIGLER ROAD

Outdoor
Pool

Eisenhower
Parking Deck
976 spaces

Major Electric Ductbank

Service /
Parking

Sarni Tennis
Facility

Outdoor Tennis
5 Courts
Possible Reuse of Existing Clay Courts

East
Area
Locker
Room

Holuba
Hall

College Township
State College Borough

NITTANY
APARTMENTS

Lacrosse
Stadium

Multi-Sport
Indoor Facility

100'

POTENTIAL ATHLETIC FACILITIES AT BIGLER FIELDS
CONCEPTUAL SITE STUDY

Executive Summary

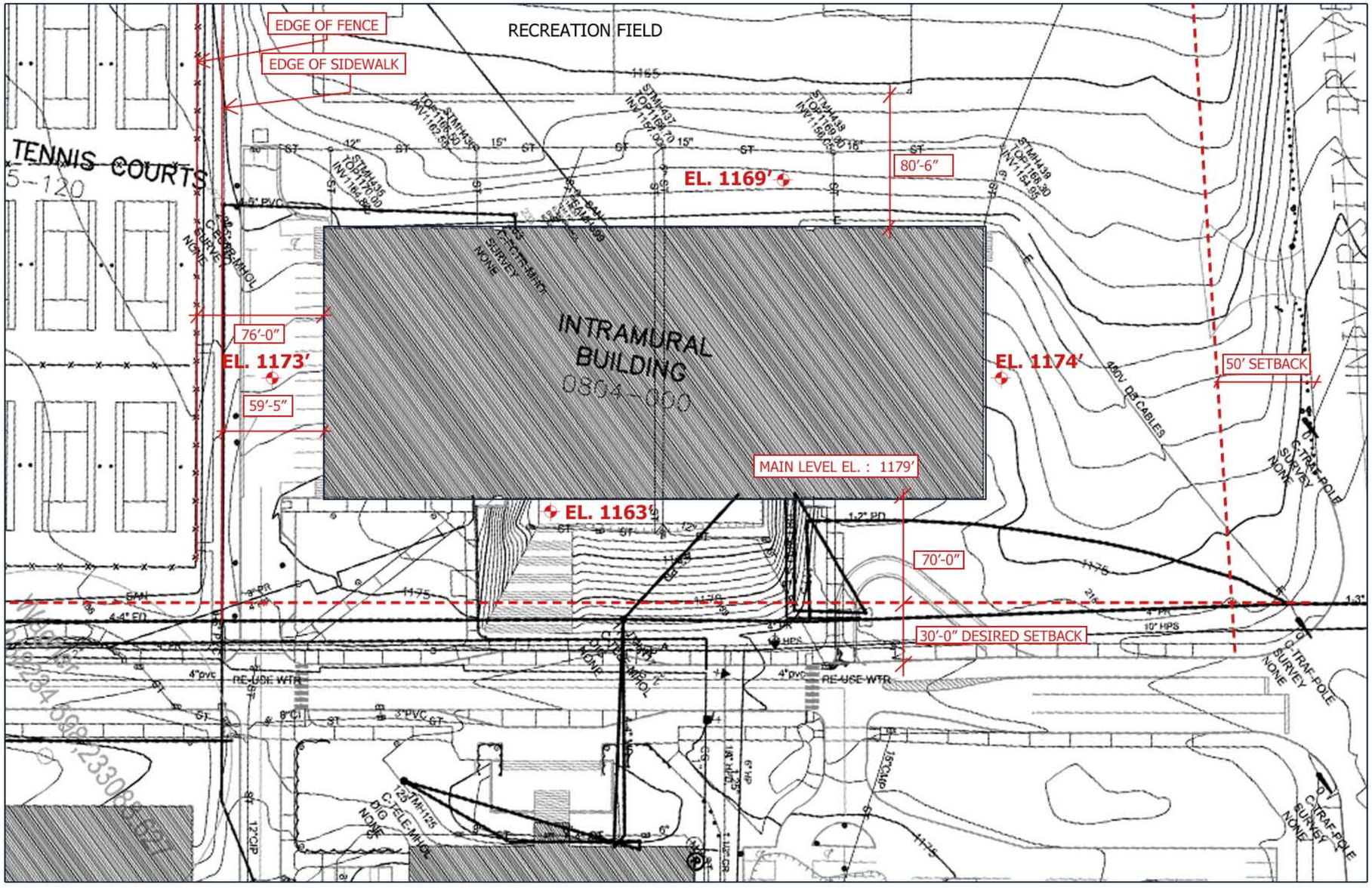
As potential college students evaluate college campuses, they are looking increasingly at the quality of life as a key component in their college selection process. One of the key attributes students investigate is the quality of recreation facilities. More and more college campuses are recognizing the importance of strong recreation facilities in student recruitment, retention, and alumni involvement. Current students are concerned about recreation for enjoyment, stress reduction, weight management aspects, as well as developing a balance of health/wellness in their everyday lives.

The existing IM Building at Penn State is located at northeast portion on campus directly across the intersection from the Bryce Jordan Center. Despite its higher profile location as a potential gateway to the campus, this solid brick box building offers little to the passer-by of the significant amount of student recreational activity that takes place within its walls. The building, whose primary program spaces are basketball / volleyball courts, racquetball courts, fitness space, and a multipurpose room, lacks enough recreational programming to accommodate all students currently using the facility. In addition, the building lacks necessary security control point, support spaces, ADA access/circulation, code upgrades, as well as many other mechanical and architectural upgrades. Furthermore, the building lacks connection to campus community and is disconnected from natural light.

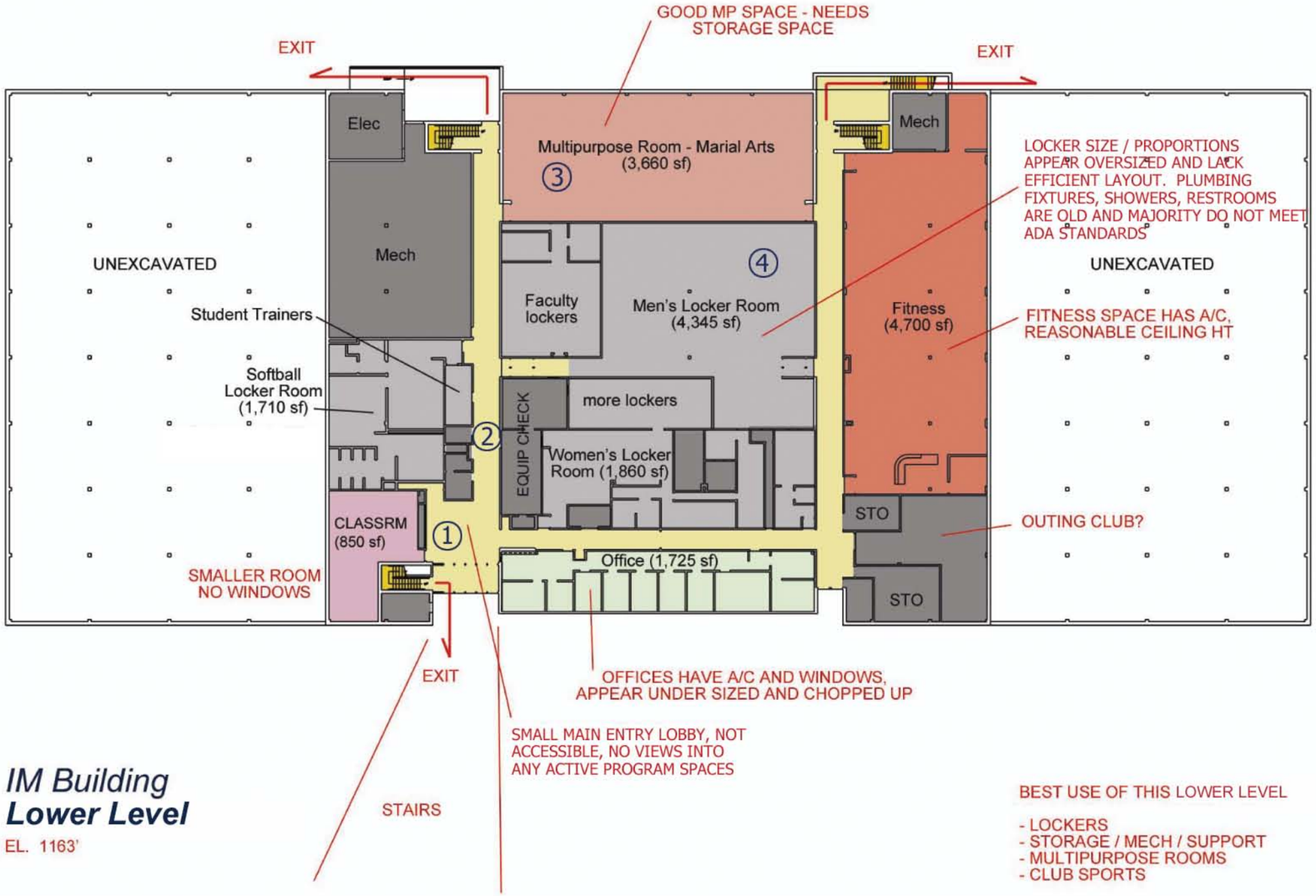
The Programming and Masterplan Design Study recommends that a new multi-phased addition be designed to expand / wrap around the existing building on the south and east facades to maximize the creation of new open/active building image as well as conserve the existing recreation field (and football parking areas). This addition provides the opportunity to create a new open/inviting/secure entrance to the facility with more appropriate proximity to student and visitor traffic flow (directly across street from Shields Administration Bldg). The new entrance will also serve to improve both interior and exterior pedestrian circulation and provide for space for graphics and signage for a welcoming feel to existing students, alumni, and visitors to the University. The new construction wrap provides the potential to improve the visibility to all active spaces from the exterior of the building, and to create an identity for the student fitness center.

Goals for project:

- To maximize efficient and master-planned reuse / expansion of existing building.
- To enhance building image/openness to the intersection - broadcast activit
- To create a new main entry/front door image and secured building control point
- To generate clear circulation organization / way-finding / accessibility to all spaces
- To open all spaces to controlled daylight to maximize views as much as possible (campus connectivity) and reduce energy use
- To focus on Interior ‘openness’ – expose/promote visual overlap of active spaces.
- To plan for future flexibility



Utilities / Site Clearances / Key elevation points



IM Building
Lower Level
EL. 1163'

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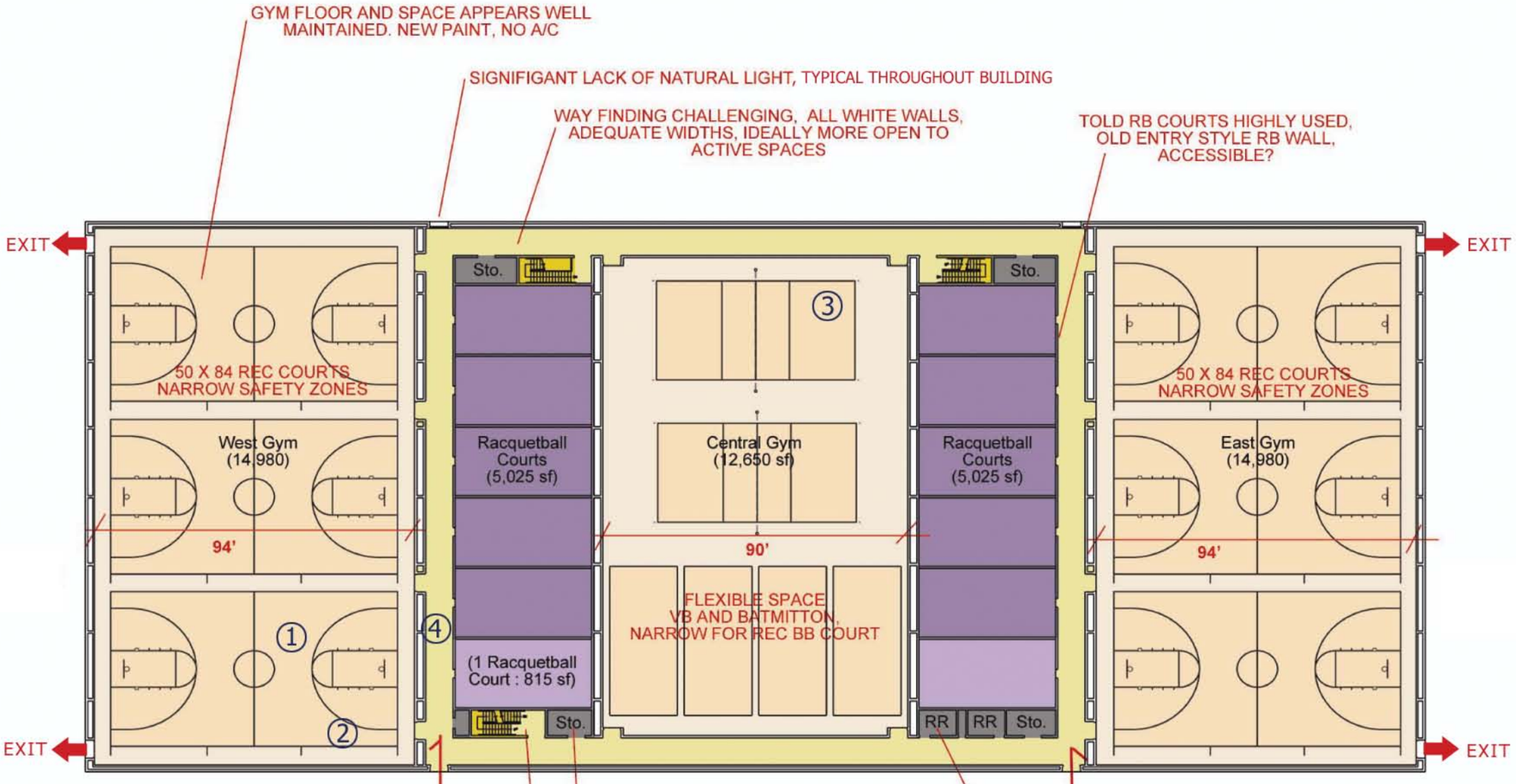
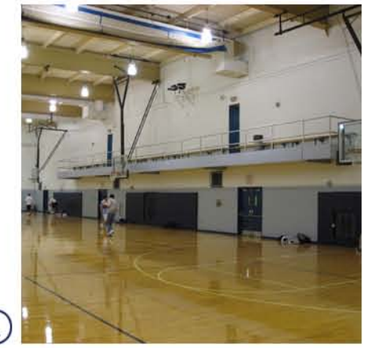
③ 

④ 


GYM FLOOR AND SPACE APPEARS WELL MAINTAINED. NEW PAINT, NO A/C
SIGNIFIGANT LACK OF NATURAL LIGHT, TYPICAL THROUGHOUT BUILDING
WAY FINDING CHALLENGING, ALL WHITE WALLS, ADEQUATE WIDTHS, IDEALLY MORE OPEN TO ACTIVE SPACES
TOLD RB COURTS HIGHLY USED, OLD ENTRY STYLE RB WALL, ACCESSIBLE?
EXIT
EXIT
50 X 84 REC COURTS NARROW SAFETY ZONES
West Gym (14,980)
94'
Sto.
Racquetball Courts (5,025 sf)
(1 Racquetball Court : 815 sf)
Sto.
③
Central Gym (12,650 sf)
90'
FLEXIBLE SPACE VB AND BATMITTON, NARROW FOR REC BB COURT
Sto.
RR
RR
Sto.
50 X 84 REC COURTS NARROW SAFETY ZONES
East Gym (14,980)
94'
①
②
④
EXIT
EXIT
MULTIPLE ACCESS POINTS = LACK OF CONTROL / SECURITY
SIGNIFIGANT LACK OF STORAGE ON THIS LEVEL
NARROW ENCLOSED STAIRS FOR BLDG CIRCULATION
NO ELEVATOR
MULTIPLE ACCESS POINTS = LACK OF CONTROL / SECURITY
SIGNIFIGANT LACK OF RESTROOM FACILITIES ON THIS LEVEL
BUILDING USED BY BOTH STUDENTS AND COMMUNITY
IM Building
Entry Level
EL. 1179'

① 

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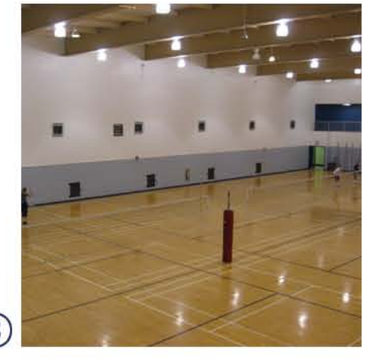
③ 

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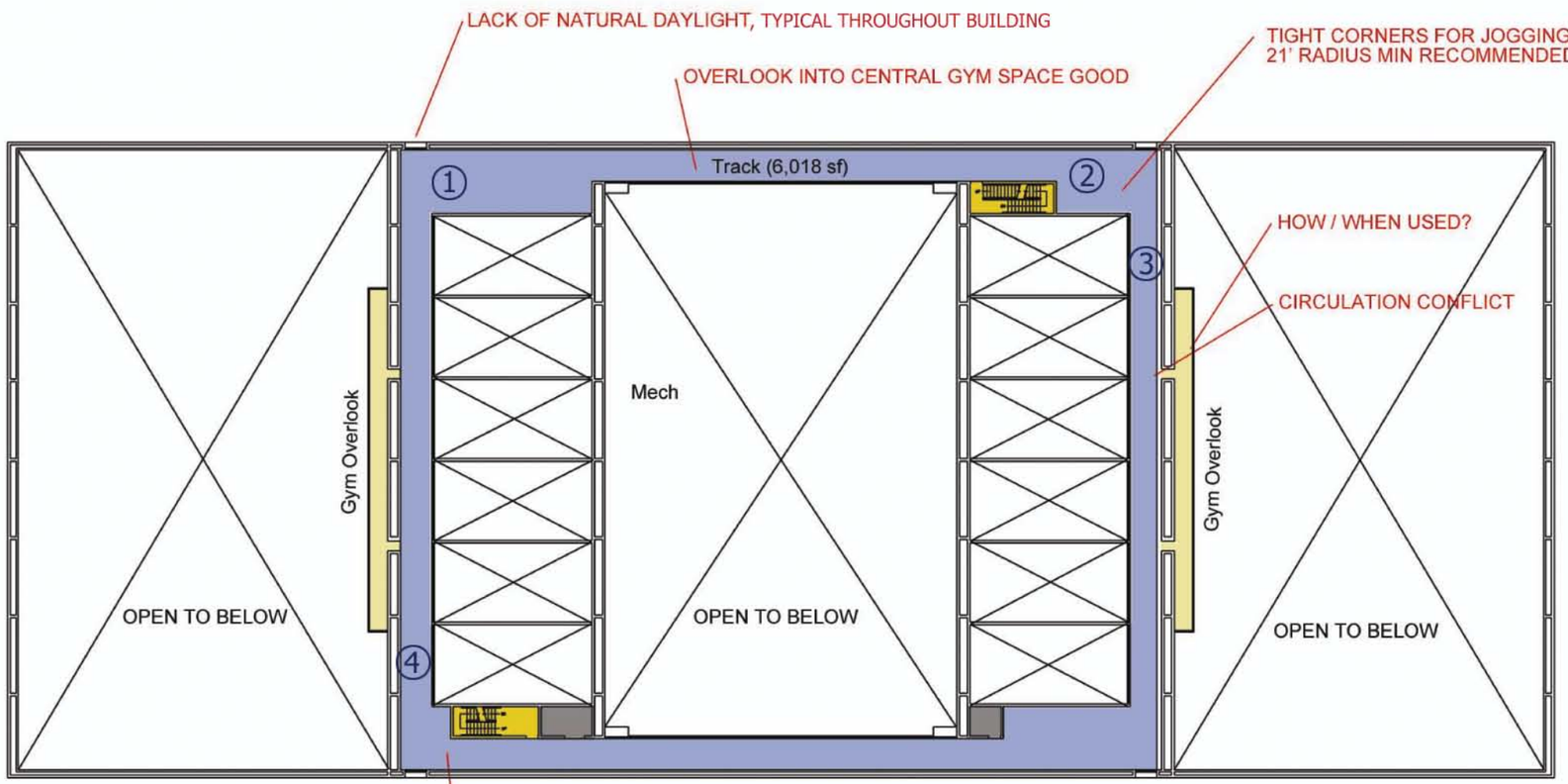
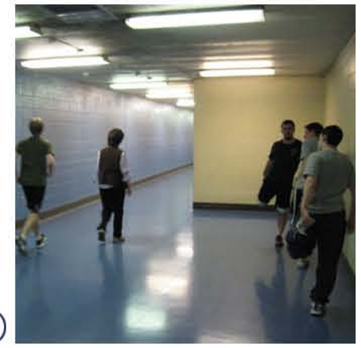
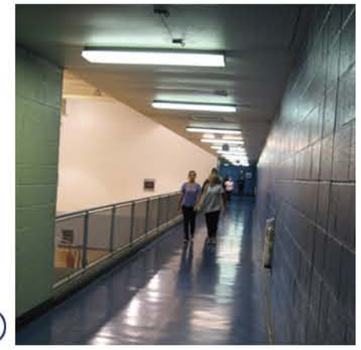
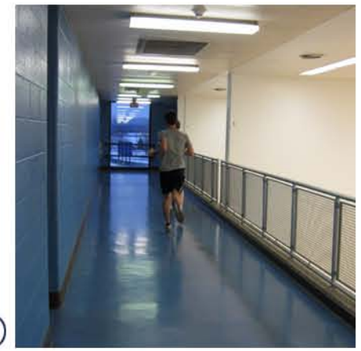


IM Building
Mezzanine Level

EL. 1190'-4"

① 

② 

③ 

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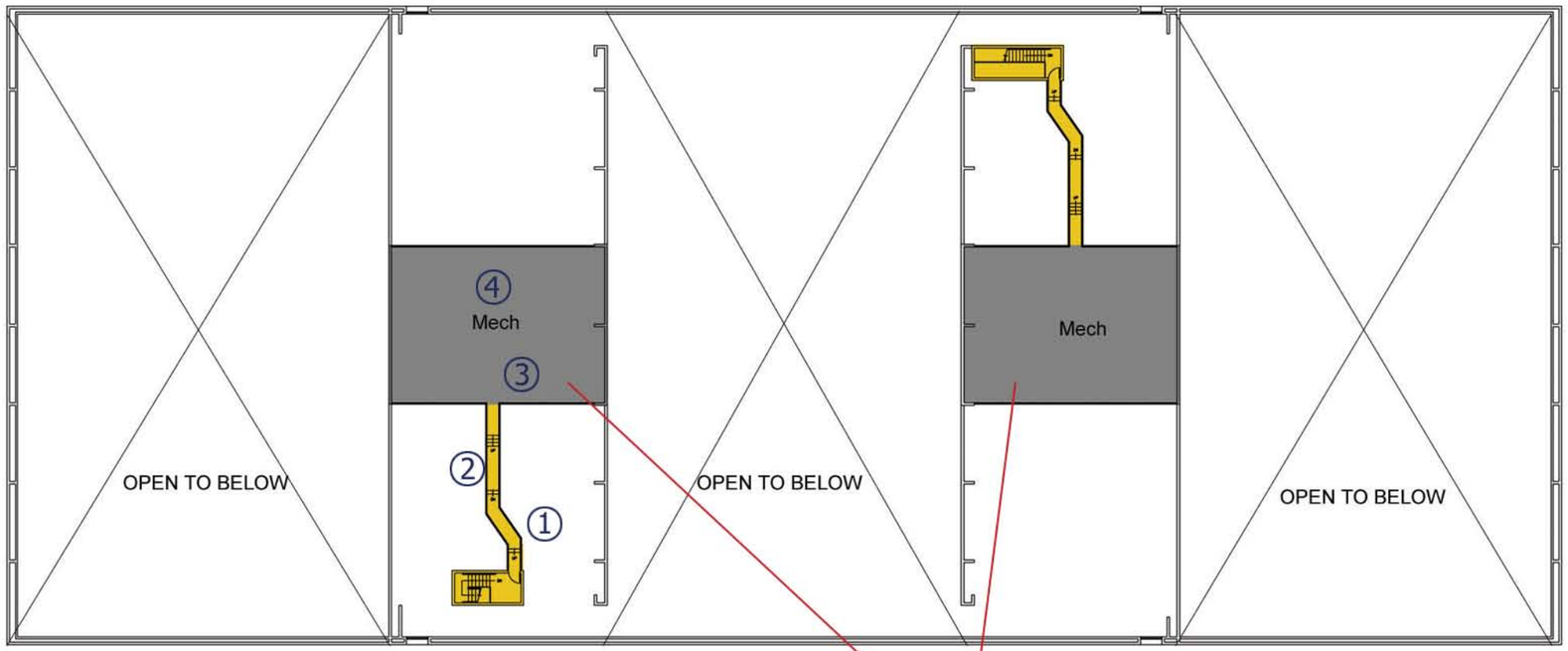
RECEIVED INTERNAL STUDY TO ADD A/C TO IM BUILDING: JANUARY 2008

FIRST REPLACE HVAC UNITS IN EXISTING
PENTHOUSE MECHANICAL ROOMS WITH NEW

POSSIBLY SUPPLEMENT WITH MECHANICAL SPACE WITH
ADDITIONAL AREAS (EXTEND PLATFORMS, REUTILIZE BASEMENT
AREAS, OR ADD NEW S.F.)

CONFIRM REUSE OF EXISTING DUCTWORK (APPEARS
DUCTWORK IS INSULATED). NEED TO CONFIRM DISTRIBUTION
TO NEW S.F.



EXISTING MECHANICAL ROOMS ARE LARGE
SPACES AND APPEAR TO HAVE ENOUGH ROOM FOR
RENOVATED / NEW HVAC EQUIPMENT. ACCESS TO
THESE AREAS TO REMOVE / INSTALL EQUIPMENT
WILL REQUIRE CUT AND REBUILDING OF EXISTING ROOF.

IM Building
Penthouse Level

EL. 1202'-4"

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③ 

④ 

Penn State University IM Building Renovation & Addition

Preliminary *(V5)* Program Space List Worksheet

23-Apr-09

Program Item	Qty	Square Foot Size	NSF	WORKSHOP 1 Original - no Rec Input Appendix C - future addition	WORKSHOP 2 with Rec Input	WORKSHOP 3 MN Recommended Full Masterplan NEW	 RENOVATION	$ Cost Basis	Budget Cost	PHASING PHASE 1 Program	 Cost	 PHASE 2 Program	 Cost	 PHASE 3 Program	 Cost	Notes
Entry Lobby Areas																
Vestibules	1	250	250		250	250		$328	$82,000	250	$82,000					
Welcome / Control Desk	1	500	500		500	500		$328	$164,000	500	$164,000					#? workstations at control desk
Lobby/ Guest Seating	1	1,000	1,000		100	1,000		$328	$328,000	1,000	$328,000					
Subtotal			1,750	0	850	1,750			$574,000	1,750	$574,000					
CONTROL ZONE																
Activity Spaces																
Gymnasium - 3 Court (8' Clearance)	1	18,300	18,300	18,200	18,300	18,300		$328	$6,002,400			18,300	$6,002,400			84' x 50' + safety zones
Gym Storage - 3 Court	1	500	500		500	500		$250	$125,000			500	$125,000			84' x 50' + safety zones
Spectator Seating	1	1,050	1,050		1,050	1,050		$328	$344,400			1,050	$344,400			based on 150 people (7sf/person)
Gymnasium - 2 Court (8' Clearance)	1	13,600	13,600		13,600	13,600		$328	$4,460,800					13600	$4,460,800	84' x 50' + safety zones
Gym Storage - 2 Court	1	250	250		250	250		$250	$62,500					250	$62,500	
MAC Gym - Synthetic Floor	1	14,980	14,980		11,000		12,400	$100	$1,240,000						$1,240,000	size varies on program use. possible renovate existing gym area - 80' x120' full play area + benches - middle area. Perhaps better define all finishes changed to lower number.
~~MAC Gym Storage~~	~~1~~	~~400~~	~~400~~		~~400~~		~~250~~	~~$245~~	~~$61,250~~							align with secured building storage
~~MAC - Indoor Turf~~	~~1~~	~~21,130~~	~~21,130~~		~~21,130~~			~~$0~~	~~$0~~							~~Desire to do elsewhere on campus?~~
~~MAC - Indoor Turf Storage~~	~~1~~	~~400~~	~~400~~		~~400~~			~~$0~~	~~$0~~							
Jogging Track - Indoor / extended	1	4,000	4,000	5,582	4,000	4,000		$328	$1,312,000	3,200	$1,049,600	3,600	1,180,800			3 Lanes could be 30"-36"
Jogging Track - Existing / Elevated	1	6,018	6,018	6,018	6,018		6,018	$100	$601,800			2,400	$240,000			paint renovation.
Subtotal			80,628	29,800	76,648	37,700	18,668		$14,210,150	3,200	$1,049,600	25,850	$7,892,600	13,850	$5,763,300	
Specialized Activity Spaces																
Fitness	1	21,000	21,000	17,000	21,000	16,000		$328	$5,248,000	**16,000**	**$5,248,000**	0	0			50 sf @ workout station +/- = (300 - 340)
Fitness - Existing /Kinesiology	1	4,500	4,500			4,500		$175	$787,500					4,500	$787,500	50 sf @ workout station +/- = (300 - 340)
Fitness Storage / Workrm	1	600	600		600	600		$328	$196,800	600	$196,800					
Group Exercise MP Studios	3	2,500	7,500	6,100	7,500	7,500		$328	$2,460,000	7,500	$2,460,000			5,000	$1,640,000	50 - 75 sf @ participant = phase 1 -3 rooms / phase 2 - 2rooms
Group Exercise MP Studio Storage	3	250	750		750	750		$250	$187,500	750	$187,500			250	$62,500	shared storage increases flexibility of MP rooms
~~Club Sports/ Multipurpose Space~~	~~1~~	~~2,500~~	~~2,500~~	~~4,000~~	~~4,000~~			~~$0~~	~~$0~~							include as part of MAC space
Climbing Center	1	2,000	2,000	5,000	3,000	2,000		$245	$490,000					2,000	$490,000	
Climbing Wall/Bouldering - Allowance	LS								$250,000						$250,000	actual wall surfaces - custom design/build
Resource Room	1	300	300				300	$245	$73,500					300	$73,500	shared with climbing wall
Secure Storage	1	200	200				200	$245	$49,000					200	$49,000	
Service Counter	1	100	100				100	$245	$24,500					100	$24,500	
Classroom	1	800	800				800	$245	$196,000					800	$196,000	
Subtotal			39,450	32,100	36,850	31,350	600		$9,766,800	24,850	$8,092,300	0	$0	13,150	$3,573,000	
Administrative Office Suite					2,000											
Director's Office	1	180	180			180		$328	$59,040	180	$59,040					
Associate Director's Office	1	150	150			150		$328	$49,200	150	$49,200					
FT Recreation/Intramural Staff	4	120	480			480		$328	$157,440	480	$157,440					Existing 7 offices
FT Recreation/Intramural Staff	4	65	260			260		$328	$85,280	260	$85,280					Workstations
PT Staff	4	65	260			260		$328	$85,280	260	$85,280					Shared work area
Student Staff	5	40	200			200		$328	$65,600	200	$65,600					Shared work area
Reception/Guest waiting	1	180	180			180		$328	$59,040	180	$59,040					serves main office suite
Conference Room	1	350	350			350		$328	$114,800	350	$114,800					capacity 15+/-
Work Room	1	250	250			250		$328	$82,000	250	$82,000					office equip, mailboxes
Office Storage	1	75	75			75		$250	$18,750	75	$18,750					associated w/work areas
Break Room /Pantry	1	250	250			250		$328	$82,000	250	$82,000					serves FT/PT staff
Subtotal			2,635	0	2,000	2,635	0		$858,430	2,635	$858,430					
Locker Areas																
Locker Rooms Men's	1	3,600	3,600		3,600		3,400	$250	$850,000					3,400	$850,000	ADA, code upgrades - 850 lockers half ht lockers
Locker Rooms Women's	1	3,600	3,600		3,600		3,700	$250	$925,000					3,700	$925,000	ADA, code upgrades - 850 lockers half ht lockers
Faculty Locker Room Men's	1	600	600		600		600	$250	$150,000					600	$150,000	ADA, code upgrades - 55 full ht lockers
Faculty Locker Room Women's	1	800	800				800	$250	$200,000					800	$200,000	ADA, code upgrades - 55 full ht lockers
Companion Locker Rooms	2	180	360				360	$250	$90,000					360	$90,000	ADA, code upgrades - lockers out in hall
Personal Daylockers	3	260	780			780		$175	$136,500	380	$66,500	380	$66,500			distribute through building
Subtotal			9,740	0	7,800	780	8,860		$2,351,500	380	$66,500	380	$66,500	8,860	$2,215,000	
Building Support																
Maintenance/Receiving/Custodial	1	500	500			500		$245	$122,500					500	$122,500	
Vertical Circ Core - Elevator - Main						2,000		$245	$490,000	2,000	$490,000					
Equipment Checkout	1	800	800				800	$245	$196,000					800	$196,000	

Penn State University IM Building Renovation & Addition

Preliminary *(V5)* Program Space List Worksheet

23-Apr-09

Program Item	Qty	Square Foot Size	NSF	WORKSHOP 1 Original - no Rec Input / Appendix C - future addition	WORKSHOP 2 with Rec Input	WORKSHOP 3 MN Recommended Full Masterplan NEW	WORKSHOP 3 MN Recommended Full Masterplan RENOVATION	$ Cost Basis	Budget Cost	PHASING PHASE 1 Program	PHASE 1 Cost	PHASE 2 Program	PHASE 2 Cost	PHASE 3 Program	PHASE 3 Cost	Notes
Secure Building Storage	1	1,500	1,500				1,500	$245	$367,500	750	$367,500			750	$183,750	
Subtotal			2,800	0	0	2,500	2,300		$1,176,000	2,750	$857,500	0	$0	2,050	$502,250	
Total Net (Assignable) Building Area			137,403	61,900	124,148	76,715	30,828		$29,034,880	35,565	$11,498,330	26,230	$7,959,100	37,910	$12,053,550	99,705
Building Efficiency												23,620		19,700		New s.f. in phase only
Mechanical/Structural/Circulation/RR @ 25% = 75% efficiency				15,475	41,383	25,572		$328	$8,387,507	11,855	$3,888,440	7,817	$2,563,867	6,367	$2,088,267	calculated on expansion NEW CONST area **only**
Total Square Footage				**77,375**	**165,531**	**102,287**	**30,828**			**47,420**		**34,047**		**44,277**		
$/sf				$452		$352	$245									
Total Project Size Renovated & New Construction									**$37,422,387**	**Phase 1**	**$15,386,770**	**Phase 2**	**$10,522,967**	**Phase 2**	**$14,141,817**	
Project Development Costs $ TBD																
Code Upgrades: Sprinkler Existing Building							102,380	$5.00	**$511,900**		$ 360,000		50,000		100,000	Perhaps phase this by adding to areas connected to with each phase.
Add A/C to existing building									$ 900,000				450,000		450,000	Requires upgrading existing Penthouse Mechanical equipment - assumes reusing most in wall ductwork. Phase II renovates East penthouse. Phase III renovates the west penthouse. Will require some level of new construction separation.
Chiller Plant											$ 130,000		130,000		90,000	Assuming water cooled
Upgrade existing building Elec Switchgear systems									$ 250,000		$ 50,000		200,000		50,000	Possible amperage left to use with Phase I. replace in Phase II. Add on in phase III.
Add separate Mechanical space in Phase I.											$ 150,000					NOT as efficent if MEP rooms done separately - approx. **$150,000 premium** to new construction.
Project Phasing premium													150,000		150,000	reworking phasing edges that connect
Demolition, Excavation, Site Prep									$ 1,400,000		$ 900,000		350,000		150,000	
Site Utility Relocations									$ 450,000		$ 200,000		150,000		100,000	
Landscape & Hardscape									$ 300,000		$ 200,000		50,000		50,000	
Subtotal									$ 41,234,287		$ 17,376,770		$ 12,052,967		$ 15,281,817	
Contingencies (Design 8% & Construction 7%)			15%						$ 6,185,143		$ 2,606,516		$ 1,807,945		$ 2,292,273	
Total Building and Site									**$ 47,419,430**		**$ 19,983,286**		**$ 13,860,912**		**$ 17,574,089**	
Escalation		yr	total													escalation % are estimates.
per year	2009	2%	2%						$ 948,389		$ 399,666		$ 277,218		$ 351,482	
	2010	3%	5%						**$ 2,370,971**		$ 999,164		$ 693,046		$ 878,704	
	2011	4%	9%						$ 4,267,749		**$ 1,798,496**		$ 1,247,482		$ 1,581,668	Assume 2011 for Phase 1
	2012	5%	14%						$ 6,638,720		$ 2,797,660		$ 1,940,528		$ 2,460,372	
	2013	5%	19%										**$ 2,633,573**		$ 3,339,077	Assume 2013 for Phase 2
	2014	5%	24%												**$ 4,217,781**	Assume 2014 for Phase 3
Total Building and Site +Escalation									**$ 50,738,790**		**$ 21,781,781**		**$ 16,494,485**		**$ 21,791,871**	
Soft Costs	**18%**								**$ 9,132,982**		**$ 3,920,721**		**$ 2,969,007**		**$ 3,922,537**	
Architect & Engineer Fees																
Construction Manager Fees																
Office of Physical Plant Support Cost																
Phasing/Moving Costs																
FF& E																
TOTAL PROJECT COSTS									**56,552,412**		**$ 23,904,006**		**$ 16,829,919**		**$ 21,496,626**	

4/2005 - Rec Hall Project
$352 Total Project Cost
$285 Constuction Cost

15% Escalation - $43
$328 per s.f. new
$250 per s.f. renovation

Note 1: Phasing based on funding availability (in approximately $7 million increments) and program priority.

Note 2: This program / cost summary spreadsheet is a working informational document/tool. This print represents the program and planned phasing at the completion of this study based on the design committee's priorities/recommendations at this time. It is necessary to note that there are other possible phasing refinement options depending on future priorities, funding, etc.

Description of Program Spaces

ENTRY AREA SPACES:

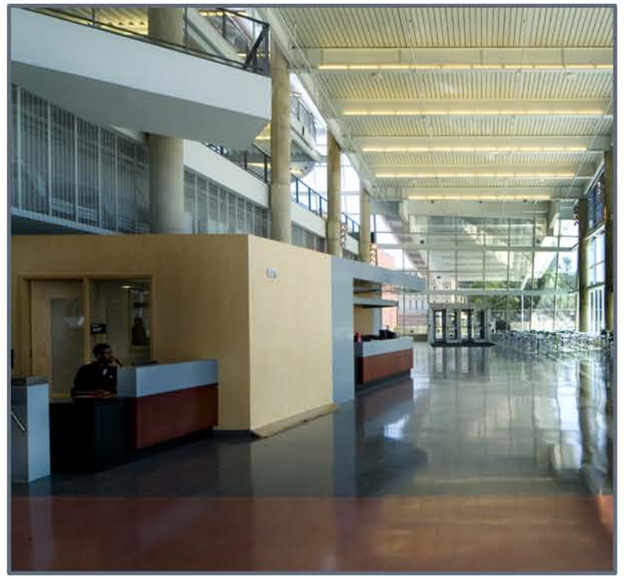
Entry/Vestibules: As one approaches the IM Building from Curtin Road, the new entry facade is clearly visible, easily recognizable, and well-lit, which will promote a sense of safety and security to students and other visitors. ***Free Zone entry level***

Lobby/ Lounge: The lobby/lounge will welcome and inform regular users and the first time visitor from both the free zone and within the control zone, as well as provide generous circulation paths (including a new stairwell and an elevator for vertical access to upper and lower levels). The use of glass and windows will allow the entry and lobby to "glow" with the energy of the activity inside after dark. Comfortable, casual, moveable furniture, flat screen monitors and wireless capacity with ample outlets for laptops will be provided. Attention will be given to graphic and directional way finding reflecting the multitude of activities and services housed in the expansive complex. ***Free Zone & Control Zone entry & lower levels***

Welcome Desk: Immediately visible as you enter the center will be the open Welcome or Control Desk located in the lobby. The central control point for access to the IM Building can accommodate multiple computer workstations, including point-of-sale computer cash drawer and user pass verification. The counter has visual connection to the entry doors, the lobby, The Multi-Activity Court, recreation gyms, the climbing wall and the new fitness activity spaces in the control zone area. The Control Desk connects to the administrative office. ***Free Zone entry level***

Administrative Suite & Support Offices: The IM building staff will be housed in an office suite located off the entry lobby area with access to the **welcome desk**. There will be a reception area with guest seating and staff to greet and direct visitors. The Recreation Director, assistant director, and full-time intramural staff will have offices and student staff will have defined workspaces in an open office area with modular furniture systems. Part-time student employees will have assigned lockers large enough to hold computers and backpacks in a secure area. A workroom for office equipment, storage, pantry (counter space, sink and refrigerator), and break room will be part of the suite. A conference room may accessed from both the ***Free Zone and Control Zone entry level***

Example images for reference:



OSU RPAC - lobby

West Virginia Recreation Center - lobby

UIC - control desk

University of Oklahoma - control desk

FITNESS ACTIVITY SPACES:

Fitness Area Access Counter: Located at the entry to the fee-based Fitness Area on the east side of the lobby proximate to the grand stair vertical circulation. ***Control Zone entry level***

Fitness Area: The new 21,000 square foot two level fitness area will have views into the various activity spaces both inside and outside the center. The large open spaces with an open stair for vertical circulation within the controlled zone will be organized into niches and areas of fitness equipment to allow users to find their own comfort zone. Cardio equipment located primarily on the mezzanine level; selectorize machines, core cable machines, free weights and stretching areas will be arranged for logical circuit training. TV Monitors with user supplied headphones will be located in the cardio area. Mirrors will be along the walls to ensure users are observing proper form in the free weight area. ***Control Zone entry & mezzanine levels***

Fitness Maintenance Room: A space located on the entry level proximate to the Fitness Area with access to a freight size elevator is a storage room/workshop for routine maintenance of equipment and storage of parts and equipment in need of repair. ***Control Zone entry level***

Fitness/Kinesiology Studio (Existing): Located on the lower level, the existing fitness area will be shared with academics during the day and open to members during non-class times. ***Control Zone lower level***

Racquetball Courts (Existing): There are currently twelve racquetball courts located on the lower level of the IM Building. These courts are used for both recreation and instruction.
Phase One construction of this project will eliminate the south court located in the west bank for a grand stair connecting all three levels of the improved IM Building.
Phase Two construction may eliminate the south court in the east bank and reconfigure the space into a **Climbing Wall.**

Example images for reference:

OSU RPAC - multilevel fitness

West Virginia Recreation Center - fitness

University of Akron - control desk

Miami University Recreation Center - fitness

GYMNASIUMS & MULTI-ACTIVITY COURT

Gymnasiums (Existing): Two of the existing gymnasium will each have three basketball courts at 84' x 50' with 5' safety zones around each court for a total of 6 basketball courts, with 26' clear height to the bottom of the structure. Other sport activities that can be played in the gymnasium include volleyball and badminton. The space will be dividable with a drop down curtains. **Elevation 1179'; *Control Zone entry level***

Gymnasiums (New): will expand the IM building to the north and west to include **five** additional basketball courts at 84' x 50' with minimum 8' wide safety zones around. All but one of the new gymnasiums will be 6' lower in elevation (**Elevation 1173')** than the entry level. ***Control Zone entry level***

MAC: The existing central gymnasium currently used for volleyball and badminton will be converted to a Multi-Activity Court (MAC) with a 75' X 115' synthetic sport flooring playing surface. ***Control Zone entry level***

Gymnasium Storage: Multiple new and reconfigured storage areas will be located proximate to both existing and new gymnasiums and the MAC. ***Control Zone entry level***

Elevated Walk/Jog Track: The existing elevated track will be expanded and widened, around the existing and expanded the gymnasiums to physically and visually connect multiple spaces within the center. The three-lane track will be both an active physical space as well as a social space. The track's length will be approximately 1/10 of a mile. ***Controlled Zone separated from the Fitness Area mezzanine level***

Example images for reference:

OSU RPAC -basketball courts

Miami University Recreation Center - basketball courts

OSU ARC - turf MAC gyms

West Virginia Recreation Center - jogging track & climbing wall

MULTIPURPOSE ROOMS:

Multi-Purpose Group Exercise Studios (New): Three new general group exercise/multi-purpose studios will be located on the lower level under the new entry, administrative offices and fitness area. They may have resilient wood floor systems or synthetic resilient sport flooring, good sound systems, mirrors on two walls, cubbies for personal items, and an acoustical separation from the rest of the fitness area. Activities in this multi-functional space can range from Step and Latin Aerobics to Yoga and Tai Chi. ***Control Zone lower level***

Multi-Purpose Group Exercise Studio (New): Two new general group exercise/multi-purpose studios will be located on the lower level under the new northwest gymnasium. They may have resilient wood floor systems or synthetic resilient sport flooring, good sound systems, mirrors on two walls, cubbies for personal items, and an acoustical separation from the rest of the fitness area. Activities in this multi-functional space can range from Club Sports and Martial Arts to dance and aerobic group exercise programs. ***Control Zone lower level***

Multi-Purpose Room (Existing): This large multi-purpose studio is located on the lower level. The space has a synthetic sports floor, good sound systems, mirrors on two walls, cubbies for personal items and an acoustical separation from the rest of the fitness area. The space will not be customized specifically, so as popularity of various recreational activities change over time, the space can be utilized as needed. ***Control Zone lower level***

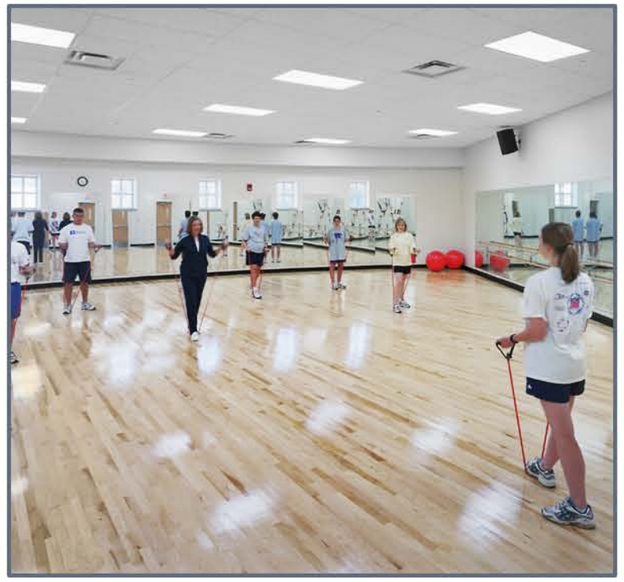
Multi-Purpose Room Storage: Each Multi-Purpose Room (I, II, III) will have 250 sf of storage. Ideally, the Group Exercise Studios will have double door access to the stored equipment in order to maximize the use and flexibility of the rooms by storing various accessories nearby. The sound system rack and various exercise equipment will be secured in the storage area.

Recreation Equipment Check-out: Located adjacent to the terminus of the grand stairs, proximate to the locker rooms It will be the place where equipment is stored and issued to users of the multi-purpose rooms, gymnasiums and future Climbing Wall. ***Control Zone lower level***

Example images for reference:

Hocking Student Center - multipurpose room

OSU RPAC - multipurpose room



Dublin Recreation Center - multipurpose room

University of Akron - multipurpose room

LOCKER ROOMS:

Men's & Women's Student Locker Rooms: The existing student locker rooms located on the lower level will have all plumbing upgraded and reconfigured for better efficiency and ADA compliance. A new entry sequence for the rooms will be created to make them more visible and convenient for access to the all controlled activity areas. ***Control Zone lower level***

Men's & Women's Faculty Locker Rooms: The existing student locker rooms located on the lower level will have all plumbing upgraded and reconfigured for better efficiency and ADA compliance. A new entry sequence for the rooms will be created to make them more visible and convenient for access to the all controlled activity areas. ***Control Zone lower level***

Unisex/Companion Assist Changing Room: One - two ADA compliant unisex/companion assist changing rooms with a shower, sink, and toilet and changing table will be configured from the existing lower level locker room space. ***Control Zone lower level***

Personal Lockers: Small ¼ high day lockers will be located throughout the IM building and the Fitness Center proximate to drop-in activity areas such as gyms and the fitness area. ***Control Zones all levels***

CLASSROOMS:

Classroom: This "smart" classroom will be located on the lower level adjacent to the large existing Multi-Purpose Room and will be utilized for a multitude of activities including academic classes, large group meetings, and staging for summer youth camps. Adjoining the classroom will be a storage space for equipment and supplies. ***Control Zone lower level***

Example images for reference:

Daylockers

Locker Room

Classroom

Classroom

BUILDING SUPPORT:

Receiving and Shared Building Storage: With the addition of the new gymnasiums and the conversion of in both phases 1,000 square feet of storage will be for athletic and recreation equipment. Due to an elevation change, a portion of the space will be used for a ramp in order to move and store large equipment in the space as well as to provide for ADA access and compliance. ***Building Support entry level***

Spectator Bleachers: Low rise sections of bleacher seating will be installed at the perimeter of the new three court gymnasium to allow for spectators to watch intramural activities or pick-up games in the gym. Storage cubby areas will be designed into the areas to provide space to leave personal items while participating in activities inside the Recreation Gym. ***Building Support first level***

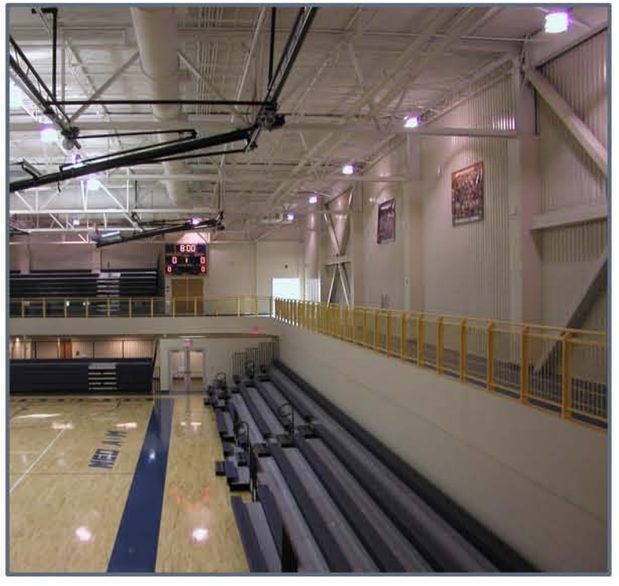
Mechanical and Back-of-House Spaces: Adequate and appropriate mechanical spaces will be distributed throughout the center to maintain comfort and safety of students, staff and visitors. Janitor closets and housekeeping electrical outlets will be planned for ease of facility management. Existing mechanical systems will be upgraded for HVAC and energy efficiency.

Example images for reference:

Various support spaces

Mechanical room

Copy / office areas



Bleacher seating

PHASE I

HVAC

In Phase I, the new construction will be served by a new HVAC system that is sized to feed both the new construction and small portions of the existing building. The new system will include the following:

- Dedicated air handling unit(s) in space set aside in the new construction. This may be in the form of an air handling unit or units on the roof (enclosed penthouse) or of units in a dedicated mechanical room. These units would most likely be constant volume units equipped with heating and cooling coils and would be ducted to the spaces they serve.

- A new water-cooled chiller and associated fluid cooler to provide chilled water to the air handling units. The idea would be to install a chiller that has only the capacity that it needs to serve the areas described above. The fluid cooler would be the first cell of what would ultimately become a two-cell piece of equipment. The chiller would be located either in mechanical space created in the new construction or, if possible, in the existing mechanical room in the northwest corner of the lower level. The fluid cooler would be installed at grade in as inconspicuous a location as possible, possible near the northwest corner of the building.

- An extension of the existing steam system in the building and a heat exchanger for the steam to warm the heating coil water within the new units.

- New DDC controls that would form the foundation of the controls system that will be throughout the entire building at the end of all three construction phases. For the time being the controls would be arranged so that the existing and new portions of the building could “talk to each other”, with the new system becoming the main connection point for CCS interface with the entire building.

- Ductwork distribution and equipment sized to feed the new addition and areas of existing building renovation where the new addition interfaces with the existing building. This will likely necessitate the erection of some temporary partitions or something similar to ensure that the area of the existing building that the new HVAC system will feed is not left open to the remaining portion of the existing building, which is currently not air-conditioned.

In Phase I the existing HVAC system in the existing building will be left basically unchanged and will continue to serve the bulk of the spaces within the existing building. The only change to the existing system that is anticipated is reconfiguration where the new addition interfaces with the existing building along the south side of the building. It is expected that most of the reconfigured areas will be fed from the HVAC system in the new addition so the overall load on the existing HVAC system would be reduced.

FIRE PROTECTION/PLUMBING

In Phase I the new construction and the areas of the existing building that are renovated to interface with the new construction will be fully sprinklered. This system will require the existing water service to the building to be substantially increased in size to accommodate not only the sprinkler system that will be installed in Phase I but the demands of the building when the entire facility will need to be sprinklered by the end of Phase III. Since the idea is to open the building up to the extent possible and avoid the use of fire walls and building separations, it is possible that the Authorities Having Jurisdiction will require the entire existing building to be sprinklered as soon as the new addition is built and opened to the existing building. The hope is, however, that addition of sprinklers in the existing building would be allowed to proceed in phases with the knowledge that every stage makes the building safer and the ultimate plan is to have sprinklers throughout the facility.

The approach to plumbing in Phase I would consist of doing whatever is necessary to properly equip the new addition while minimizing the intrusion on the existing building. Avoiding as much re-work of the plumbing system until Phase III will keep the cost down until the major work associated with the locker room renovations has to be done. As mentioned earlier, it is expected that a new water service to the building, sized for the upgraded fire protection needs and for the projected plumbing needs for the entire facility when it’s complete, will be installed in Phase I. The same would be expected for the main sanitary lateral from the building, which will need to be upgraded to accommodate the much larger building. This work would be done in Phase I and be sufficiently sized so than no further upgrade will be required throughout the remaining construction phases.

ELECTRICAL

It is anticipated that the existing electrical service is likely to have the spare capacity to accommodate the electrical load that will be imposed by the new construction in Phase I. With that as the working theory the idea would be to leave the service in place for Phase I and simply extend new electrical feeders from the existing service to service the new areas. This would almost certainly require the addition of a new circuit breaker or breakers to the existing switchboard and the extension of a feeder to a new electrical room somewhere in the new construction.

The electrical work in the area of the existing building that will be renovated during Phase I would be dealt with differently than the HVAC and fire protection. In this case the existing electrical systems that feed the renovated areas would simply be reconfigured and reused to the extent possible rather than building extra capacity into the distribution system for the new construction that would also be used to serve the renovated areas.

The low voltage systems (fire alarm, telecommunications, etc.) serving the existing building should have sufficient capacity to be extended into the new construction without substantial re-work. Therefore, it is anticipated that nothing more than the extension of these systems into the new building areas, with only minor upgrade of the existing systems will be required.

PHASE II

HVAC

In Phase II the plan is to not only serve the new additions but to begin the two-phased introduction of air-conditioning into the existing building. The idea would be to start with the renovation of the east penthouse and would include the following:

- Removal of all existing air handling units and associated equipment in the east penthouse. The bulk of the existing internally lined ductwork that serves the existing building from the existing air handling units would remain in place, be thoroughly cleaned, and be prepared for connection to new air handling units.

- The installation of a second chiller sized to accommodate the remainder of the building (Phases II and III) and the second cell of the fluid cooler, also sized to accommodate the remainder of the building. The chiller would be specified with multiple stages so that it can run effectively during the time that it serves only half of the existing building by using only a portion of its stages. It will be able to feed the remainder of the building when all stages are activated. This chiller would be located either in one of the existing penthouses (if possible) or in the mechanical room in the northwest corner of the lower level.

- Installation of new air handling units that have both heating and cooling coils in the penthouse. These units would be specified and configured in such a way that they could be connected to the existing ductwork that was left in place when the existing air handling units were removed and could have new ductwork extended from the penthouse into the new construction that will be part of the Phase II work.

- This work may require the expansion and/or reconfiguration of the penthouse if possible and may include the routing of ductwork outside of the building envelope if necessary to reach the new construction.

- Many or all of the existing air devices (diffusers and return grilles) fed from the air handling units that will be removed from the penthouse may need to be replaced to account for the different quantities and velocities of air that will be a by-product of adding cooling to the existing spaces.

FIRE PROTECTION/PLUMBING

The hope is that, in addition to needing to include sprinklers in all new Phase II construction, the Authorities Having Jurisdiction will allow for the continued phasing of the addition of sprinklers to the existing building. The hope is that, once again, the only existing areas that will need sprinklers added in this phase are those that are directly impacted by, and opened up to, the new additions.

Like it was in Phase I, the approach to the plumbing in Phase II will be to accommodate the needs of the new construction that's being added while minimizing the reconfiguration and re-work of existing conditions. Because of the work that was done in Phase I, no changes to the water or sanitary services to the building would be expected.

ELECTRICAL

Because of its age and the ultimate size of the facility, the existing electrical system will not be sufficient in the long run. Therefore, the main electrical service will be replaced in Phase II. This change will include:

- The installation of new, larger emergency and normal power circuits from the University's distribution grid to the building.

- The installation of a new medium voltage pad-mounted transformer somewhere in the vicinity of the existing transformer.

PHASE III

HVAC

The approach to the HVAC systems in Phase III will be essentially the same as that in Phase II, except in this case the equipment in the west penthouse will be removed and replaced. Because the bulk of the additions to the building will be along the south and east sides, it's possible that the equipment in the west penthouse will not end up serving as much new square footage as the new equipment in the east penthouse but to balance the load between the penthouses it may be possible to use the west penthouse to serve a larger portion of the area that will be renovated than it did before the renovation. The chiller that was installed in Phase II would serve the air handling units that are installed in this phase.

FIRE PROTECTION/PLUMBING

Phase III will include the addition of sprinklers not only to the areas of new construction but to the remaining areas in the existing building that didn't have sprinklers added in Phases I or II. When this phase is complete, the entire facility will be equipped with a properly zoned fire protection system. Depending upon the ultimate configuration of the architectural elements and spaces in the building there may be some portions of the system that are dry but it is expected that the largest percentage of the system will be wet.

The plumbing work will be substantial in Phase III, with not only the installation of all that is necessary to serve the spaces in the new construction but the major renovation of the plumbing intensive areas (locker rooms, bathrooms, etc.) on the lower level. This work will likely include the removal of most, if not all, of the existing plumbing piping in that section of the building and a substantial amount of saw-cutting of existing slabs and interior trenching to get the new systems installed.

ELECTRICAL

In Phase III the new electrical service that was installed in Phase II will be extended as necessary to accommodate the needs of the building expansions. In addition, the existing branch circuit panelboards and the feeders to those panelboards that remain after Phases I and II will be replaced to ensure that the electrical system in the expanded and renovated facility are almost completely new. It is anticipated that much of the branch circuit wiring that remains would be maintained and reused unless closer inspection indicates that it should be replaced.

The approach to the low voltage systems in Phase III will mirror the approaches described for Phases I and II. The goal in this phase will be to not only provide adequate services to all areas of the building but to leave the low voltage systems as robust and up-to-date as possible to minimize the need to upgrade them again anytime soon.

PENNSTATE

1855

NON-BINDING ARCHITECT AND ENGINEER FEE SCHEDULE

Project: Intramural Building Addition and Renovation,
University Park

Firm Name: _____

	Hours	Fee
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 December 7, 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.

TABLE OF CONTENTS

12.8 Terms/General Conditions

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 RESPONSIBILTIES

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