

Integrating Real Estate Professionals into the Classroom



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**CHAIRMAN, DEPARTMENT OF REAL ESTATE
AND
DOUGLAS AND CYNTHIA CROCKER
ENDOWED DIRECTOR**

**THE REAL ESTATE CENTER
DEPAUL UNIVERSITY**

**ERES EDUCATION SEMINAR
ZURICH, SWITZERLAND
DECEMBER 3-4, 2010**

Real Estate Curriculum at DePaul



- Historically grounded in Finance
- Traditional core courses: Investment, Finance, Valuation, plus occasional special topics
- Department of Real Estate
 - New course opportunities
 - Control

Real Estate Center Connections to Chicago



- Sponsors
- Interns and placement
- Mentoring
- Classroom

Who they are



- **Service Providers**

- Accounting
- Architect/Design
- Bank
- Brokerage (Leasing, Sale, Property Management)
- Construction
- Consultant (Appraisal, Market Research, Strategic & Planning)
- Corporate Real Estate
- Finance
- Insurance/Title
- Law

- **Owner/Investors**

- Development
- Institutional Investor
- Individual
- REIT
- **Non Profits**
 - Association
 - Foundation
- **Extras**
 - Hospitality
 - Health Care
 - Marketing/Public Relations

Faculty



- Tenured, tenure track
- Full time non-tenure track senior professional
- Adjuncts teaching a full course
 - Introductory Course
 - Specific Content Expertise for Special Topics
 - ✦ Affordable Housing
 - ✦ Retail Real Estate and Retail Development

Traditional Use of Professionals in the Classroom



- Adjuncts
- Juried competitions and presentations
 - Urban Plan, Capital Committee
- Occasional Guest speakers
 - True Life Adventures
 - Highly specialized expertise

Evolving Approach to Professionals in the Classroom



- **Team Teachers**
 - Institutional Investment 3 week module
- **Case Development**
 - GE Capital
- **Coordinated Series of Presentations**
 - Real Estate Development and Repositioning
 - Management of Design and Construction
 - Multifamily Housing Policy and Finance

Institutional Investment



Topics

- Project Valuation, Analysis, Structure, Limited Partnerships and LLCs
- The Role of Consultants in the Institutional Decision Process
- The Institutional Real Estate Investment Market; a multi-disciplinary approach
- CAPM and Portfolio Construction (Susanne Cannon)
- Pension Funds: Global Markets and their Portfolio Role
- Pension Funds Portfolio Strategy
- *Henderson Global (DePaul Case)* Charlie Wurtzebach
- Public and Private Real Estate Portfolios I
- *REIT Valuation and Merger*
- *EQR Case/Merryland (DePaul Case)*
- Publicly Registered, Privately Traded REITS
- Public and Private Real Estate Portfolios II
- Flowers Residential Case
- Raising Capital: Public (long short hedge funds) and Private (Pensions) Funds, Foundations and Endowments)

Speakers

- Lee Harkleroad, Ernst and Young, Tax Partner
- Will McIntosh, Chief Investment Officer, Fund Evaluation Group
- Ray Milnes, Jr., Partner, National Industry Sector Leader-Real Estate, KPMG
- Jacques Gordon,, Global Strategist, LaSalle Investment Management
- David Neithercut ,CEO, EQR
- George Pandaleon, Managing Director ,Inland Management Company
- Allan Sweet, AMLI
- Denise Olsen, GEM Realty Capital

Real Estate Development and Repositioning



Topics

- Financing Issues and Foreclosures
- Roosevelt Hotel Discussion

- Feeling the Love – Deals of the Heart
- Field Trip: Chicago French Market

- Financial and Partnership Restructuring

- Urban Infill – What does the future hold?

- Affordable Housing: Stateway Gardens to Park Boulevard

- Marketing, Branding and Leasing Multi-family/residential

Speakers

- Neil Freeman – Aries Capital

- Michael Tobin, US Equities

- Robb Bolhoffer and Richard Hurd - Strategic Capital

- Robert Flannery - JRG Capital

- James Miller and Robert Koerner

- David Hooks – Hooks Marketing

Planning and Public Policy



Topics

- **THE STRUCTURE AND PRACTICE OF CONTEMPORARY PLANNING:**
- **THE LEGAL BASIS OF PLANNING**
THE TOOLS OF LAND USE PLANNING

- **THE STRUCTURE AND PRACTICE OF CONTEMPORARY PLANNING:**
- **PLANNING AND POLITICS**
THE SOCIAL ISSUES
THE COMPREHENSIVE PLAN

- **FIELDS OF PLANNING:**
URBAN DESIGN
- **URBAN RENEWAL AND COMMUNITY DEVELOPMENT**
- **TRANSPORTATION PLANNING**
- **ECONOMIC DEVELOPMENT**

- **FIELDS OF PLANNING:**
GROWTH MANAGEMENT, SMART GROWTH AND SUSTAINABLE DEVELOPMENT
ENVIRONMENTAL AND ENERGY PLANNING

- **LARGER QUESTIONS:**
- **PLANNING FOR METROPOLITAN REGIONS**
- **NATIONAL PLANNING IN THE UNITED STATES**
- **PLANNING IN OTHER NATIONS**

Speakers

- **PLANNING/ZONING GUEST SPEAKER:**
- **STEVE LENET, LCT DESIGN**

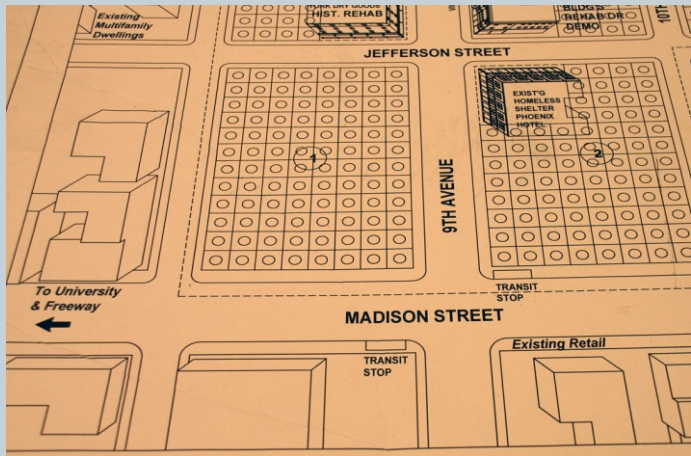
- **HOUSING POLICY GUEST SPEAKER:**
- **JACK MARKOWSKI,**

- **PRESIDENT, COMMUNITY INVESTMENT CORPORATION**
URBAN DESIGN/THE BURNHAM PLAN GUEST SPEAKER :
- **LAUREN FISCHER, CHADDICK INSTITUTE**

- **BROWNFIELD DEVELOPMENT GUEST SPEAKER :**
- **MARK GEALL, TANESAY DEVELOPMENT**

- **REGIONAL PLANNING/CHICAGO 2040 GUEST SPEAKER:**
ERIN ALEMAN, CMAP

Urban Plan



Management of Design and Construction



- Commercial Building Design
- Construction Management
- Feasibility Pro Forma Development
- Office Building Development Case done in teams of three using Google SketchUp and R. S. Means Cost Data
- Industry Experts as Guest Speakers

Design and Construction Guest Speakers



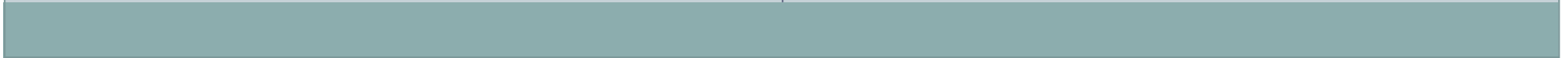
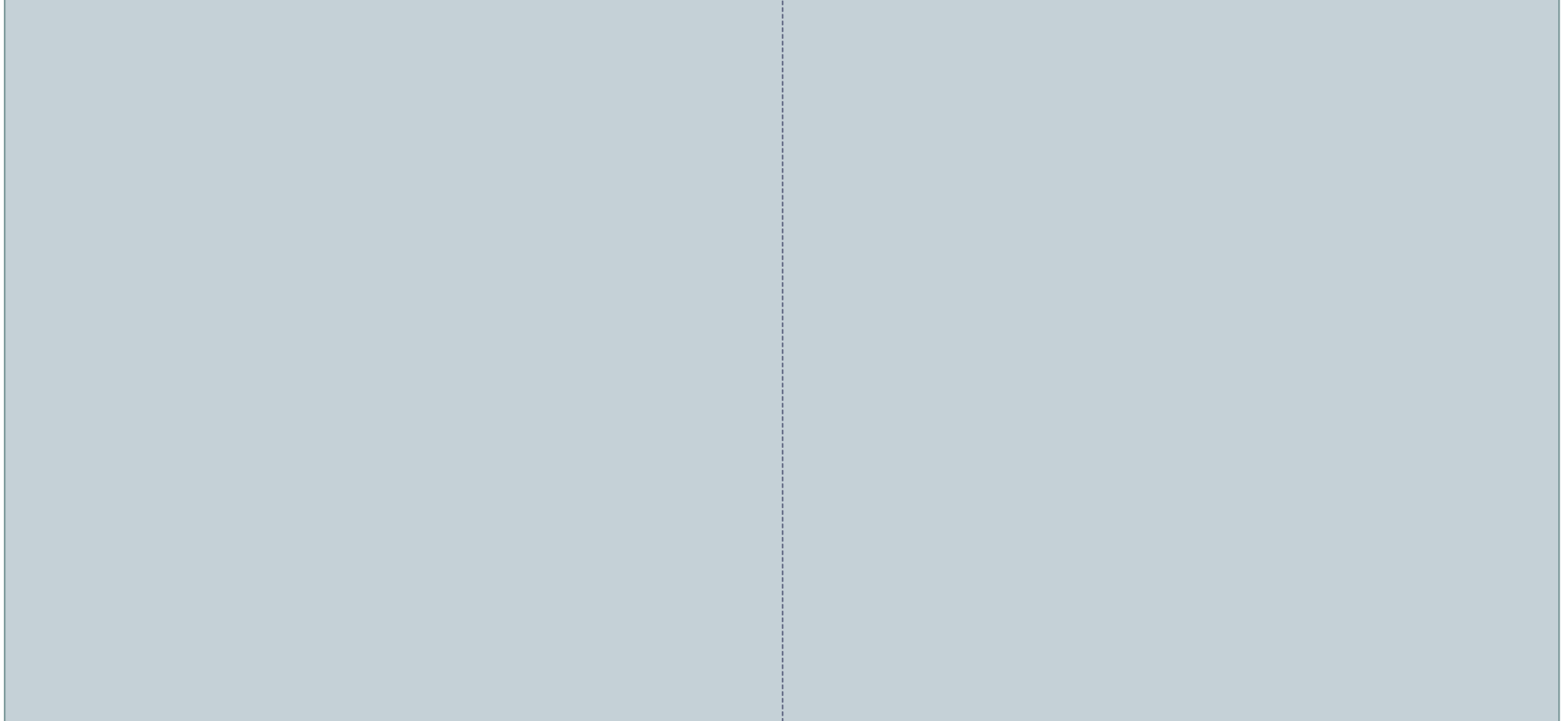
Topics

- **Architectural and Engineering Design**
 - Architecture
 - .HVAC
 - Structural
 - Sustainable Design and LEED
- **Construction**
 - Design and Construction Insurance
 - Design and Construction Law
 - Owner's Construction Representative
 - General Contractor/Construction Manager
 - Development

Speakers

- Michael Kaufman, Goettsch/Lohan
- Bud Spiewak, Cosentini Assoc
- David Weihing, Thorton Tomasetti
- Craig Sieben, Sieben Energy Assoc.
- Melissa Roberts, Euclid Insurance,
- Laurie Randolph, Hinshaw & Culberson
- Michael Cannon, Arch Consultants
- John Hamilton, Walsh Construction
- Ed Woodbury, McCaffery Interests

Student Presentations





*1500 McConnor Parkway
Schaumburg, Illinois*

Project Information:

- **Building:** 1500 McConnor Parkway
- **Building Owner:** CannonBell Investments, LLC
- **Building Class:** A
- **Size/Stories:** 90,000 gross square feet / 75,000 net rentable square feet; Three stories
- **Year Built:** Projected Spring 2007



*1500 McConnor Parkway
Schaumburg, Illinois*



Project Information (cont'd):

- **Parking Ratio:** Approximately three stalls per 1,000 usable square feet
- **Net Rental Rate:** \$20 per net rentable square feet (NNN)
- **Estimated Operating Costs:** In addition to the net rental rate, Tenant shall be responsible for its share of operating expenses and real estate taxes for the building. Underwriting assumed operating expenses of \$7/sf and \$3/sf.
- **Typical Floor Plate:** Approximately 30,000 square feet
- **Amenities:** Fitness facility, on-site day care, and deli.



*1500 McConnor Parkway
Schaumburg, Illinois*





*1500 McConnor Parkway
Schaumburg, Illinois*

Project Neighborhood:

Retail Shops:

- Woodfield Mall 1.0 miles
- Ikea Furniture Store 0.5 miles

Lodging:

- Spring Hill Suites 0.2 miles
- Hyatt Regency Woodfield 1.2 miles



*1500 McConnor Parkway
Schaumburg, Illinois*

Project Neighborhood:

Restaurants:

- Mortan's Steakhouse 0.2 miles
- Webber Grill 0.6 miles

Airports:

- O'Hare Airport 14.4 miles
- Midway Airport 31.2 miles

Major Cities:

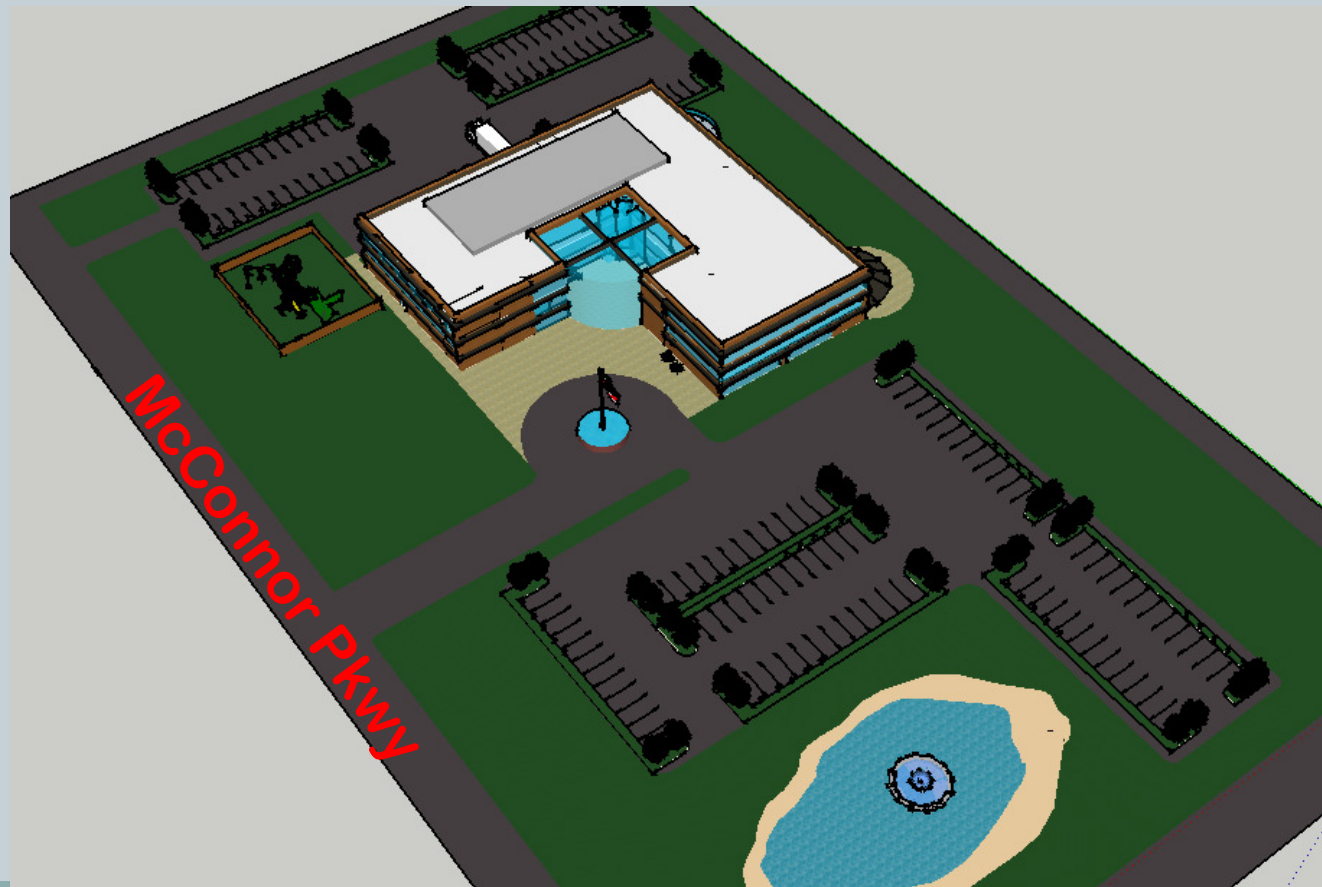
- Downtown Chicago 25 miles



*1500 McConnor Parkway
Schaumburg, Illinois*



Site Plans

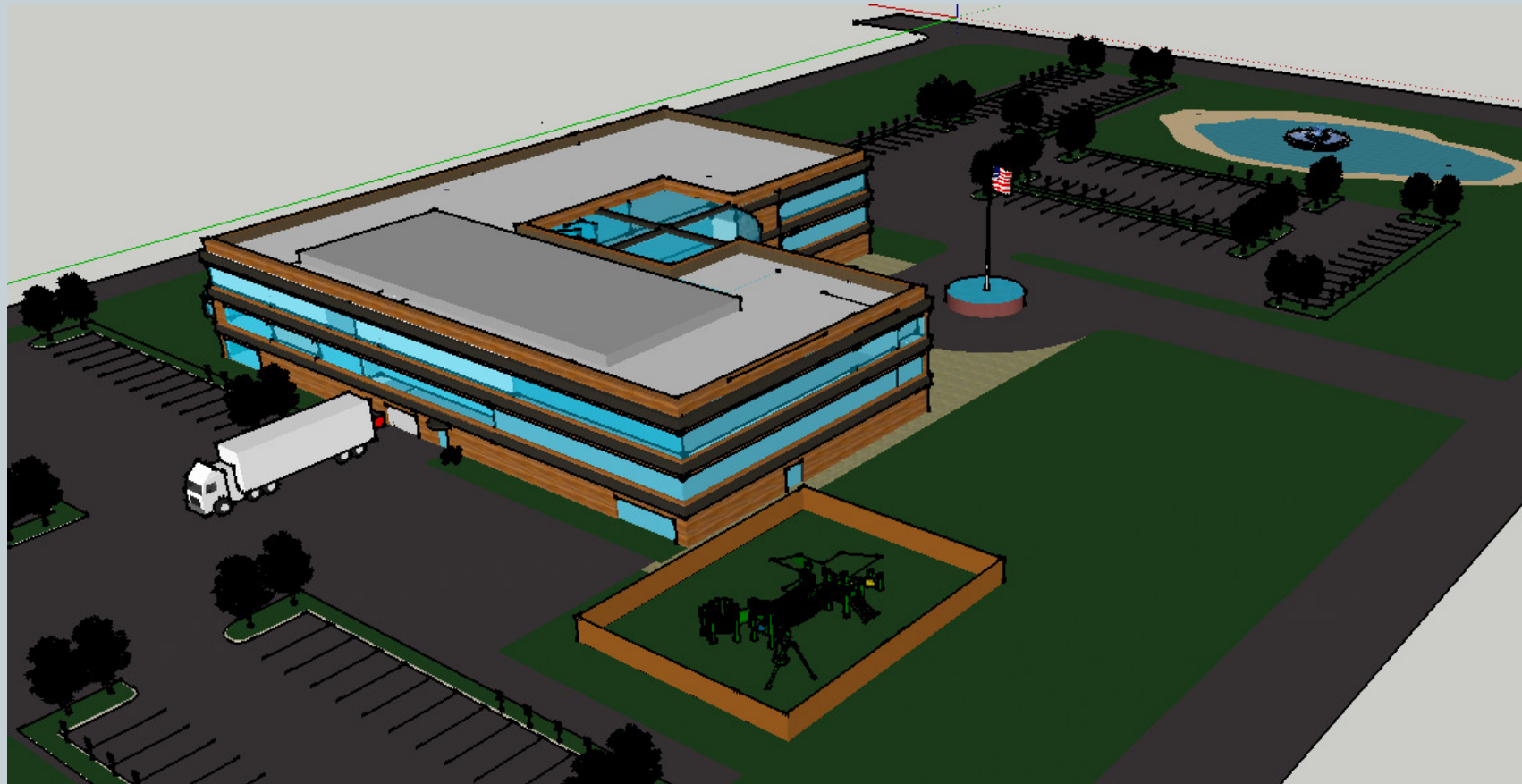




*1500 McConnor Parkway
Schaumburg, Illinois*



3-D Renderings / Project Photos:

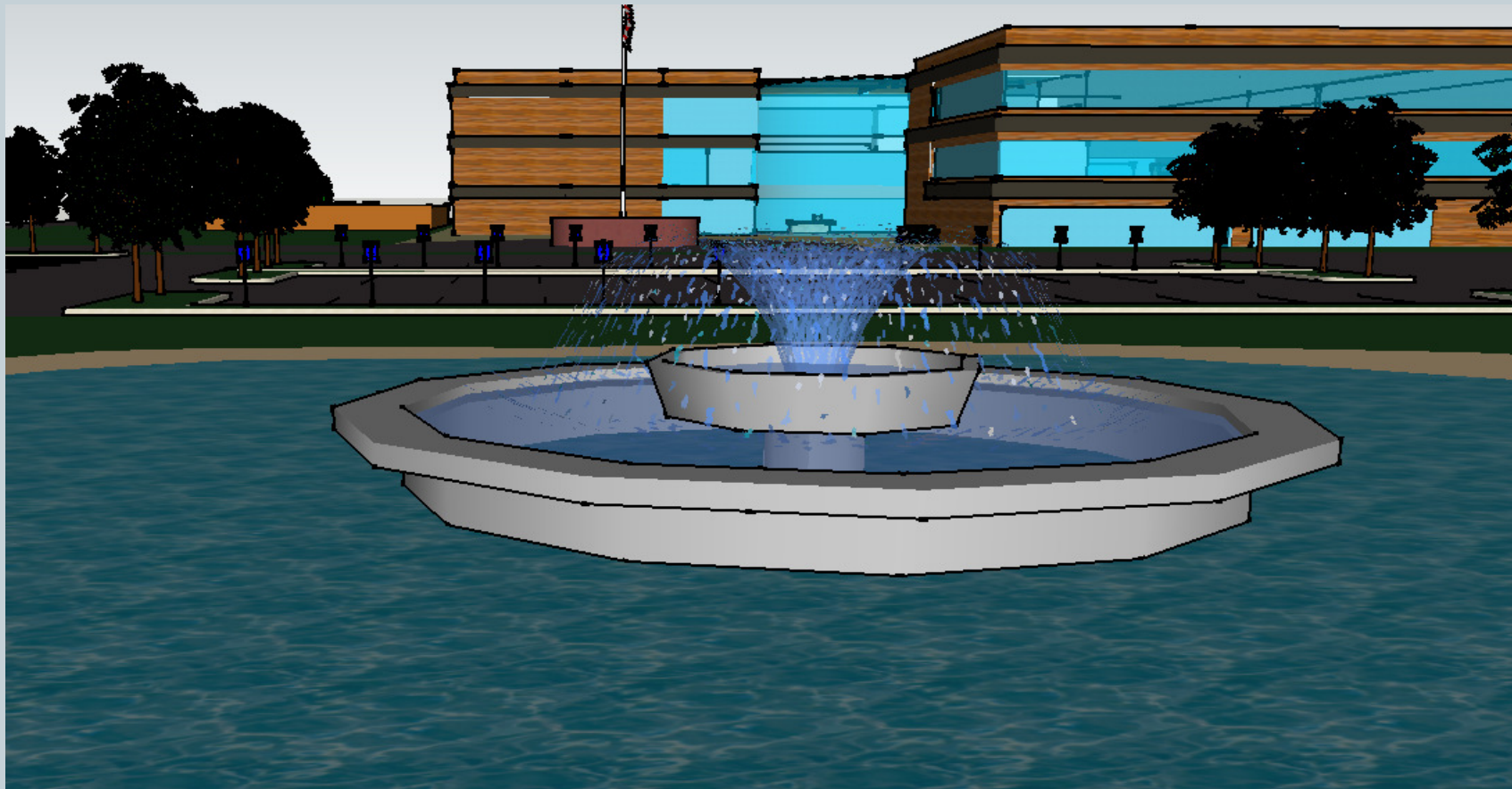




*1500 McConnor Parkway
Schaumburg, Illinois*



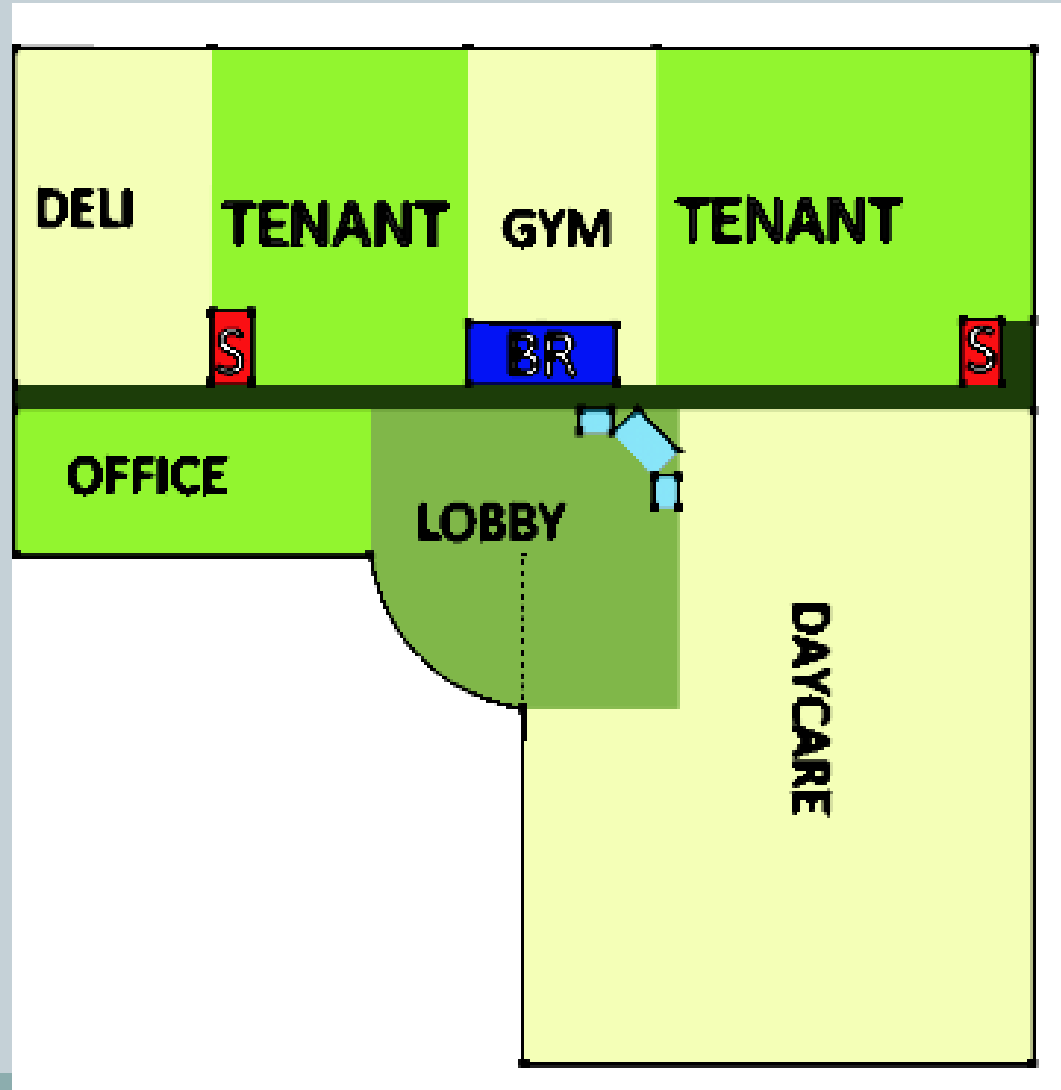
3-D Renderings / Project Photos:





*1500 McConnor Parkway
Schaumburg, Illinois*

Floor Plans – 1st Floor

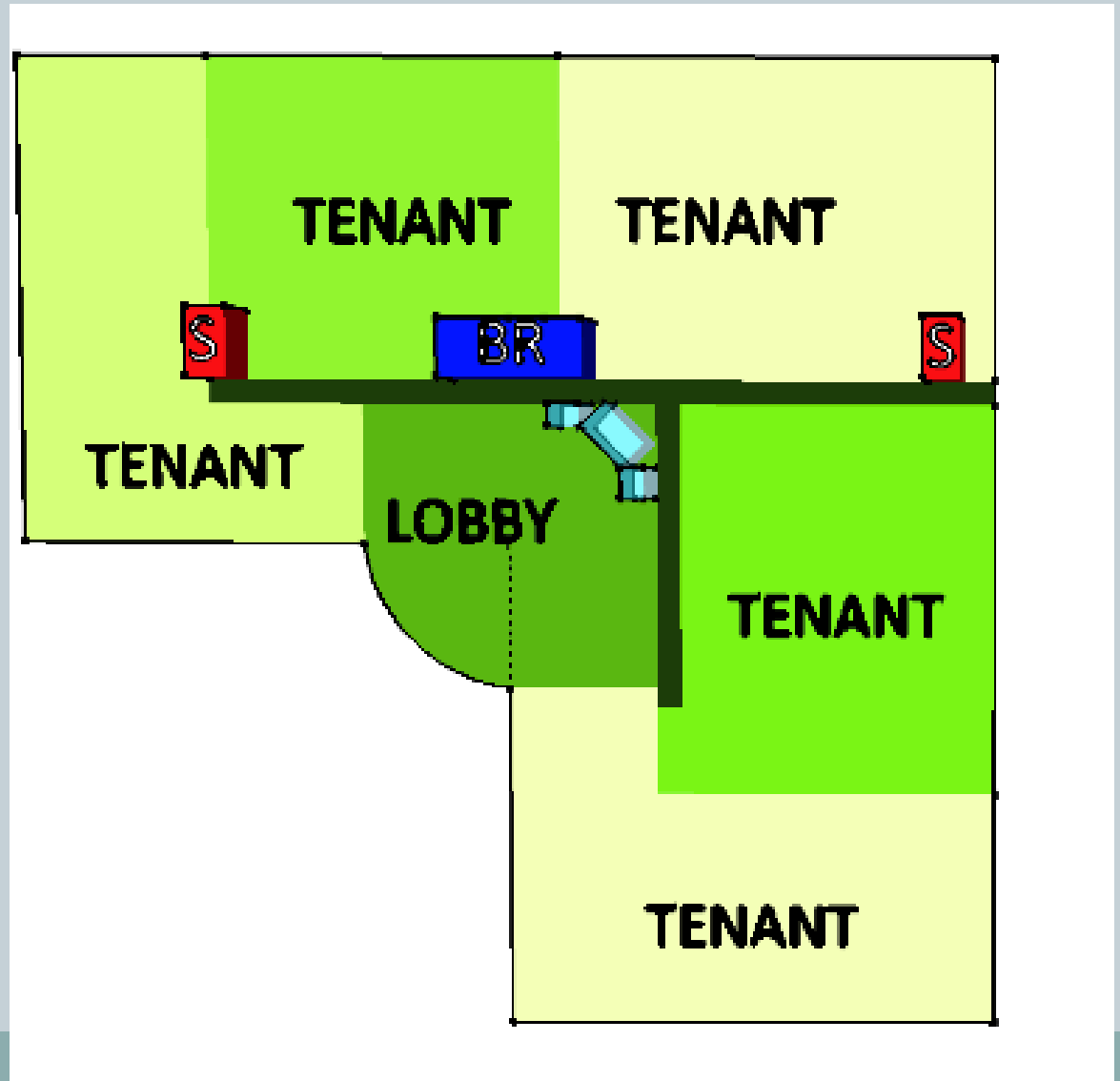




*1500 McConnor Parkway
Schaumburg, Illinois*



Floor Plans – 2nd Floor

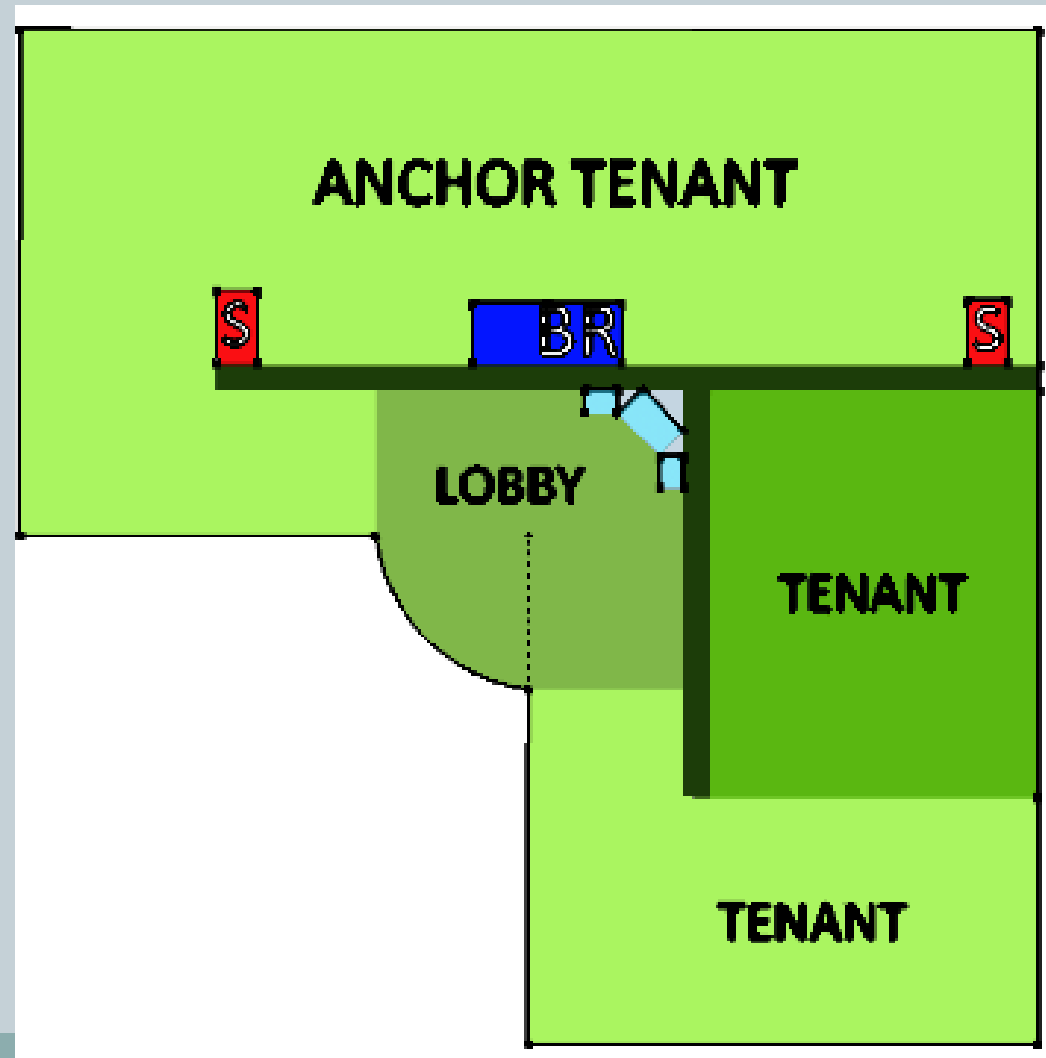




*1500 McConnor Parkway
Schaumburg, Illinois*



Floor Plans – 3rd Floor





*1500 McConnor Parkway
Schaumburg, Illinois*

Outline Specifications:

- Foundation: Reinforced concrete footings and foundation walls
- Structure: Steel frame
- Exterior: Metal panels, teak, and glass.
- Roof: Built-up rubber membrane
- Floors – Large travertine tiles in lobby, elevator bank, and bathrooms. Office build-out per lease structure (TI \$'s)



*1500 McConnor Parkway
Schaumburg, Illinois*



Outline Specifications (cont'd):

- Elevator: Three glass-enclosed Otis passenger elevators with 3,500 lb capacity.
- HVAC: Rooftop AC units
- Washrooms: Two per floor (mens & women's). Four toilet fixtures and four basins in each. Black granite counter tops and polished stainless steel fixtures.
- Stairwell: Two interior stairwells located within the central core.



1500 McConnor Parkway Schaumburg, Illinois



<u>90,000</u>		Gross Square Feet		\$13,217,372	\$146.86
Construction Contract:		Size	Cost Per	Total Costs	\$/gsf
I. Fencing		290 linear ft	\$60.50	\$17,545	\$0.19
II. Site Work		5.58 acres	\$20,000	\$111,570	\$1.24
III. Concrete		30,000 SF	\$2.94	\$88,200	\$0.98
IV. Travertine		3,200 SF	\$25.00	\$80,000	\$0.89
V. Wire Reinforced Glass		12,500 SF	\$35.00	\$437,500	\$4.86
VI. Pavement		10,000 SY	\$15.45	\$154,500	\$1.72
VII. Exterior Glass		10,500 SF	\$6.65	\$69,825	\$0.78
VIII. Exterior Aluminum		8,100 SF	\$3.97	\$32,157	\$0.36
IX. Brick		5,500 SF	\$6.75	\$37,125	\$0.41
X. HVAC		90,000 SF	\$10.25	\$922,500	\$10.25
XI. Plumbing		90,000 SF	\$5.15	\$463,500	\$5.15
XII. Electrical		90,000 SF	\$10.75	\$967,500	\$10.75
XIII. Roofing		30,000 SF	\$53.11	\$1,593,300	\$17.70
XIV. Grass		115,000 SF	\$0.41	\$47,150	\$0.52
XV. Land Costs		243,000 SF	\$15.00	\$3,645,000	\$40.50
Add for Extraordinary Costs: (List)					
	Elevators/Lifts	3 elevators	\$100,000	\$300,000	\$3.33
	Tenant Improvements	75,000 SF	\$30 - \$50	\$2,800,000	\$31.11
	Soft Costs		10%	\$1,350,000	\$15.00
XVII. Sub Total Cost Proposal				\$13,117,372	\$145.75
XVIII. Design/Architect Fee				\$100,000	\$1.11
XXI. TOTAL CONSTRUCTION PROPOSAL				\$13,217,372	\$146.86



1500 McConnor Parkway Schaumburg, Illinois



Pro-forma Rent Roll:

Tenant	SqFt	% of Total	Rent per SF	Annual Rent	Start Date	End Date	Length of Lease	Initial TI / SF	TI	Concessions
Day Care	10,000	13.33%	\$10.00	\$100,000	4/1/07	3/31/14	7	\$40.00	\$400,000	5 months
Anchor Tenant	20,000	26.67%	\$20.00	\$400,000	10/1/07	9/30/12	5	\$40.00	\$800,000	10 months
Tenant 1	5,000	6.67%	\$20.00	\$100,000	4/1/07	3/31/14	7	\$35.00	\$175,000	7 months
Tenant 2	5,000	6.67%	\$20.00	\$100,000	4/1/07	3/31/14	7	\$35.00	\$175,000	7 months
Tenant 3	5,000	6.67%	\$20.00	\$100,000	7/1/07	6/30/14	7	\$35.00	\$175,000	7 months
Tenant 4	5,000	6.67%	\$20.00	\$100,000	10/1/07	9/30/14	7	\$35.00	\$175,000	7 months
Tenant 5	5,000	6.67%	\$20.00	\$100,000	1/1/08	12/31/14	7	\$35.00	\$175,000	7 months
Tenant 6	5,000	6.67%	\$20.00	\$100,000	4/1/08	3/31/15	7	\$35.00	\$175,000	7 months
Tenant 7	5,000	6.67%	\$20.00	\$100,000	7/1/08	6/30/15	7	\$35.00	\$175,000	7 months
Tenant 8	5,000	6.67%	\$20.00	\$100,000	10/1/08	9/30/15	7	\$35.00	\$175,000	7 months
Tenant 9	5,000	6.67%	\$20.00	\$100,000	12/1/08	11/30/15	7	\$35.00	\$175,000	7 months
Office of the Building	N/A		\$0.00	\$0	N/A	N/A				
Fitness	N/A		\$0.00	\$0	N/A	N/A				
Deli	N/A		\$10.00	\$25,000	4/1/07	4/1/13	6			
Totals	75,000	100%		\$1,425,000		Average: ✓	7		\$2,775,000	

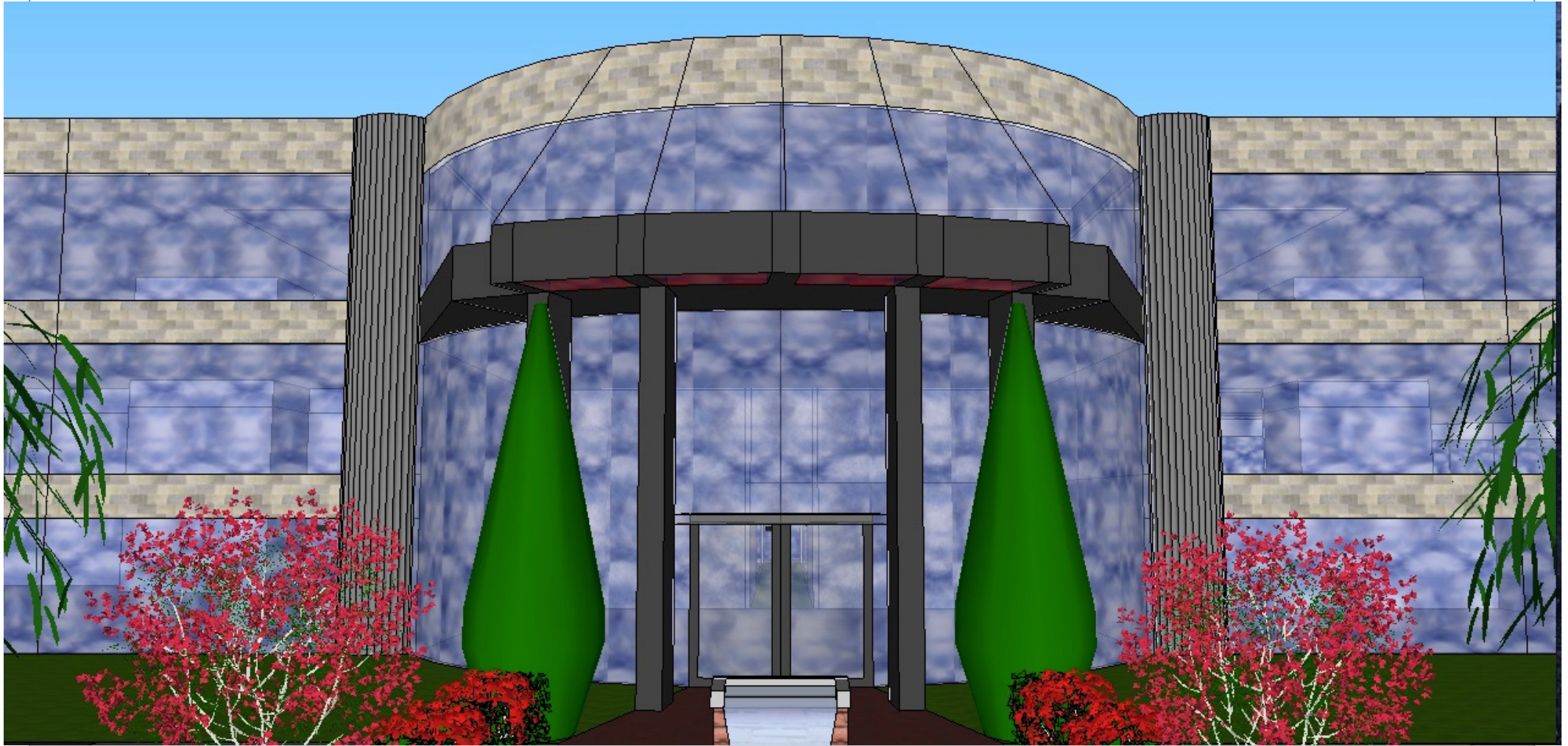


1500 McConnor Parkway Schaumburg, Illinois



Pro-forma Underwriting:

Projected Cash Flow	Assumptions	0	1	2	3	4	5
Gross Rents	3%		\$1,425,000	\$1,467,750	\$1,511,783	\$1,557,136	\$1,603,850
Vacancy	5%		(\$71,250)	(\$73,388)	(\$75,589)	(\$77,857)	(\$80,193)
Net Operating Income			\$1,353,750	\$1,394,363	\$1,436,193	\$1,479,279	\$1,523,658
Debt Service Payment			(\$672,069)	(\$672,069)	(\$672,069)	(\$672,069)	(\$672,069)
Cashflow after Debt Service			\$681,681	\$722,294	\$764,125	\$807,211	\$851,589
Initial Costs		(\$8,271,080)					
Sales Price							\$14,057,963
NPV (Assuming 12%)	\$3,998,331						
IRR (with financing):	25.58%						
IRR (all cash):	19.53%						
Financial Analysis:							
Cap Rate - Sale:	7.00%						
Cash-on-Cash Return Yr 1:	8.24%						
Cash-on-Cash Return Yr 1 (no debt):	10.24%						
Amortization Schedule							
			1	2	3	4	5
Ending Balance	\$8,591,292		\$8,434,701	\$8,268,714	\$8,092,769	\$7,906,266	\$7,708,574
Finance Charge			\$672,069	\$672,069	\$672,069	\$672,069	\$672,069
Interest Charge	6.00%		\$515,478	\$506,082	\$496,123	\$485,566	\$474,376
Amortization	25		\$156,591	\$165,987	\$175,946	\$186,502	\$197,693



**SCHAUMBURG PALACE CLASS A
OFFICE BUILDING**

EXECUTIVE SUMMARY

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- Land Size = 323,171 Square Feet, 7.419 Acres
- Land Cost = \$4,847,565

- Building Size = 96,385 Square Feet (Gross)
- Net Building Size = 83,772 SF (Net)
- 86.9% Efficient

- Total Development Cost (inc. Financing) = \$19,799,049

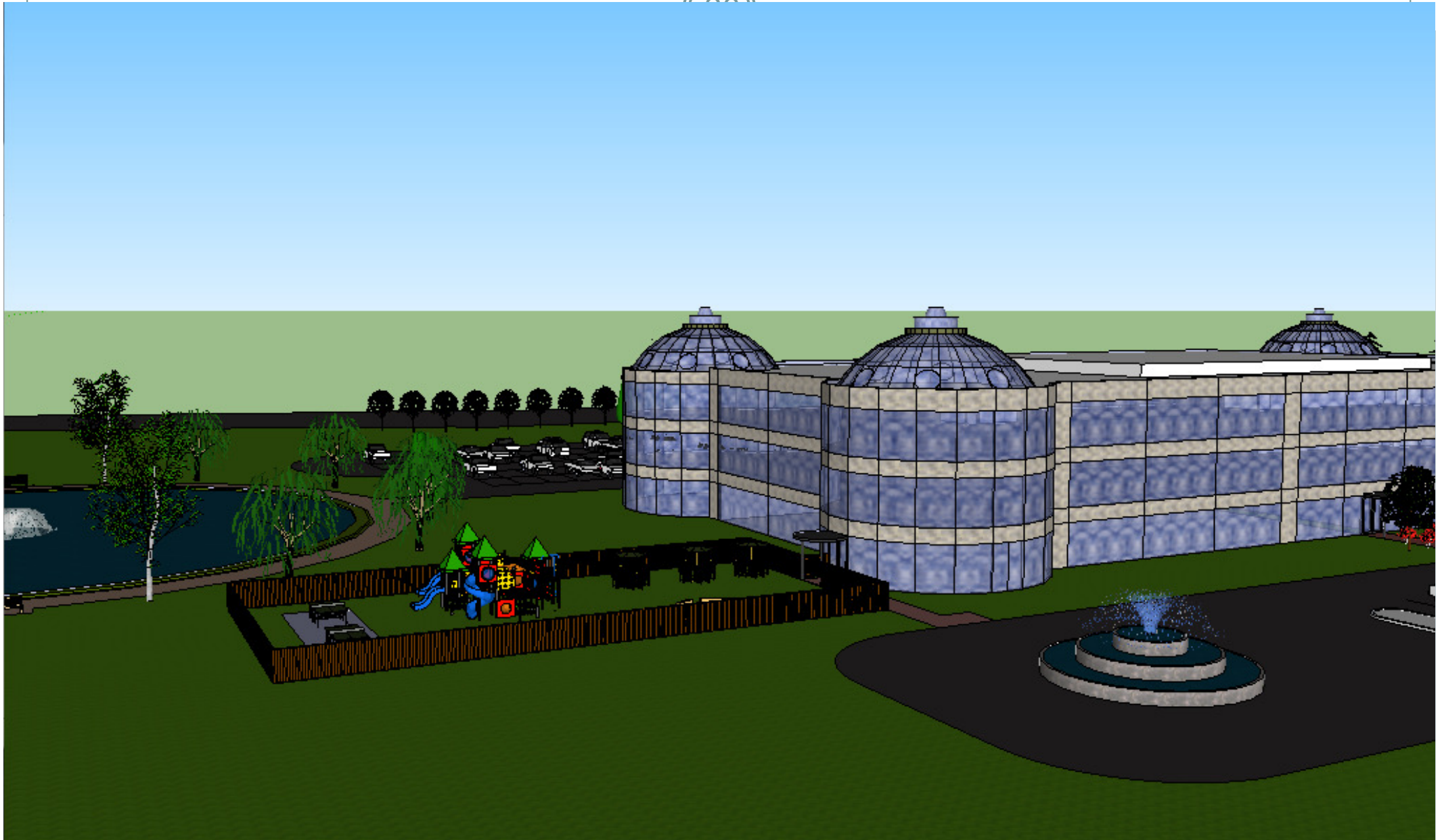
- 7 Year commitment – Project Internal Rate of Return is 15.3%

FRONT VIEW - NORTH

35

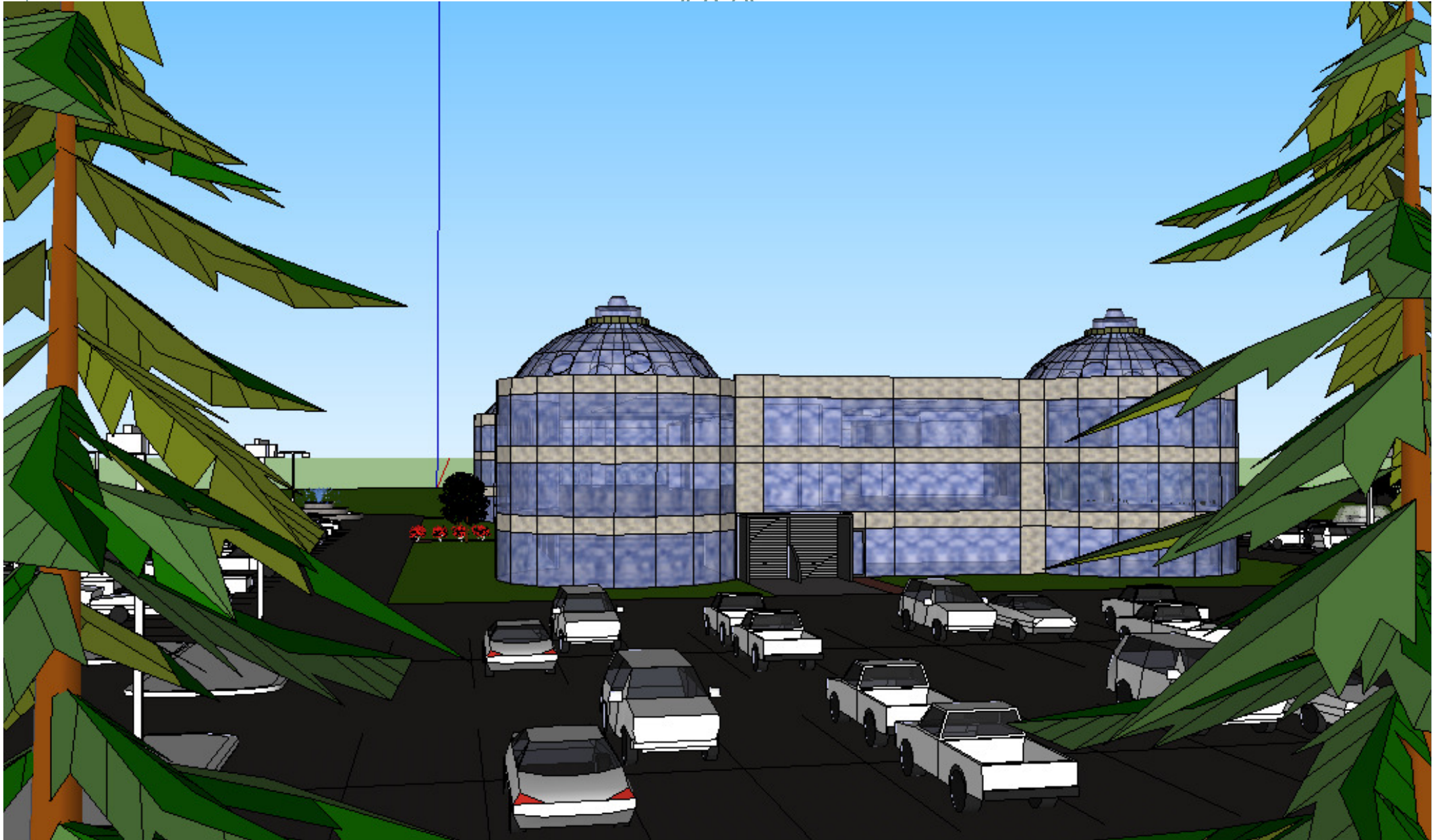


SIDE VIEW - WEST

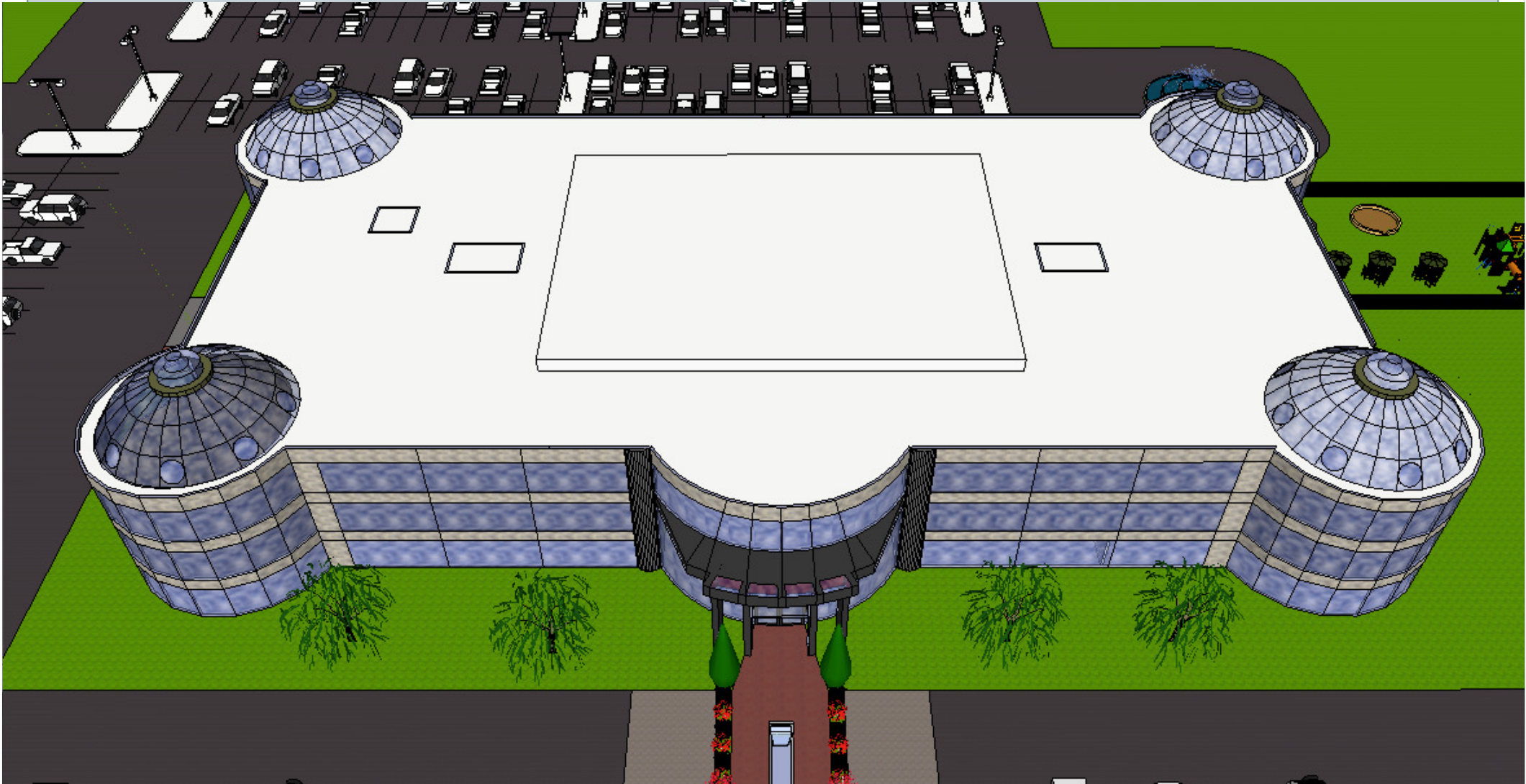


SIDE VIEW – EAST

07



ROOF VIEW

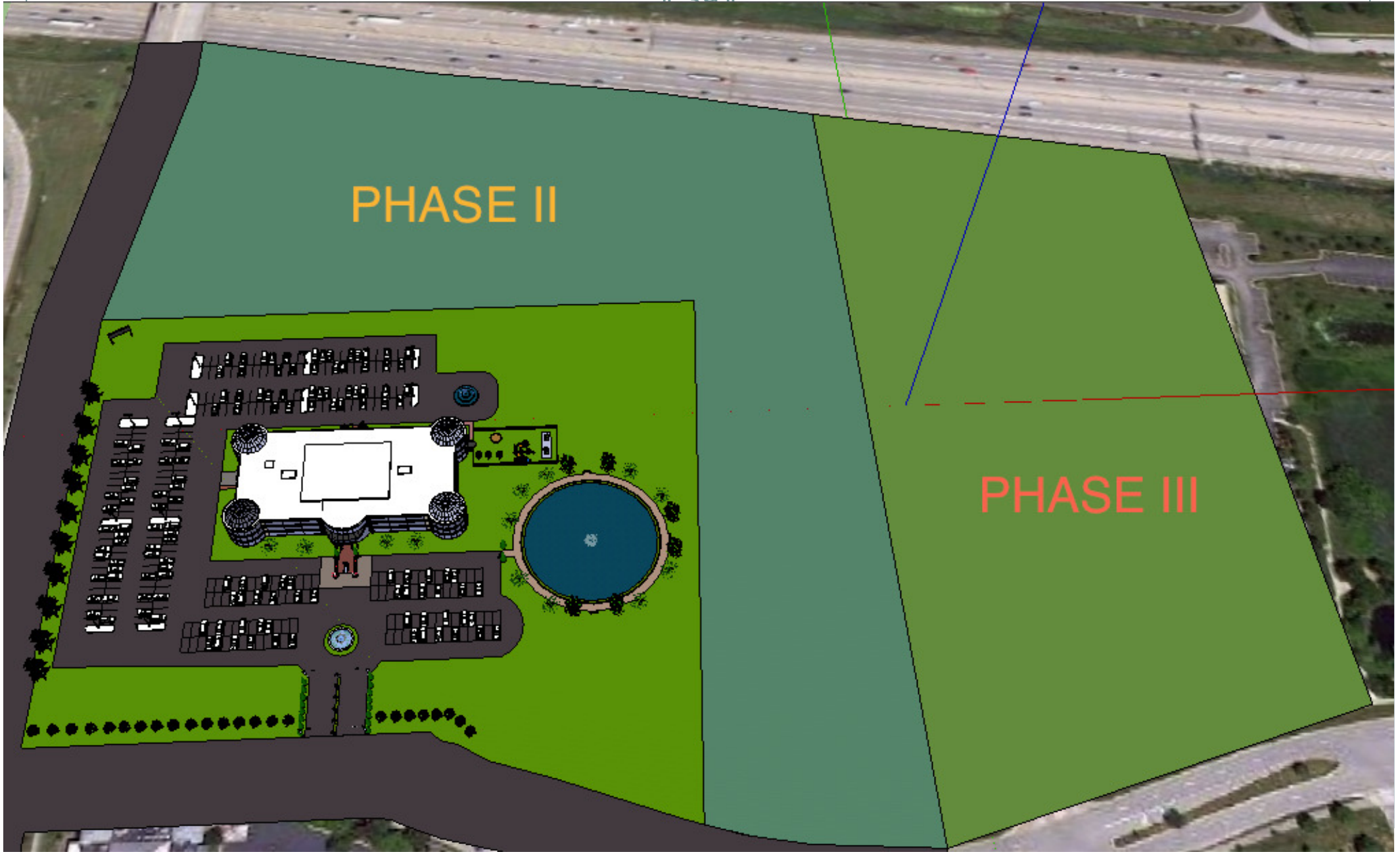


SITE PLAN

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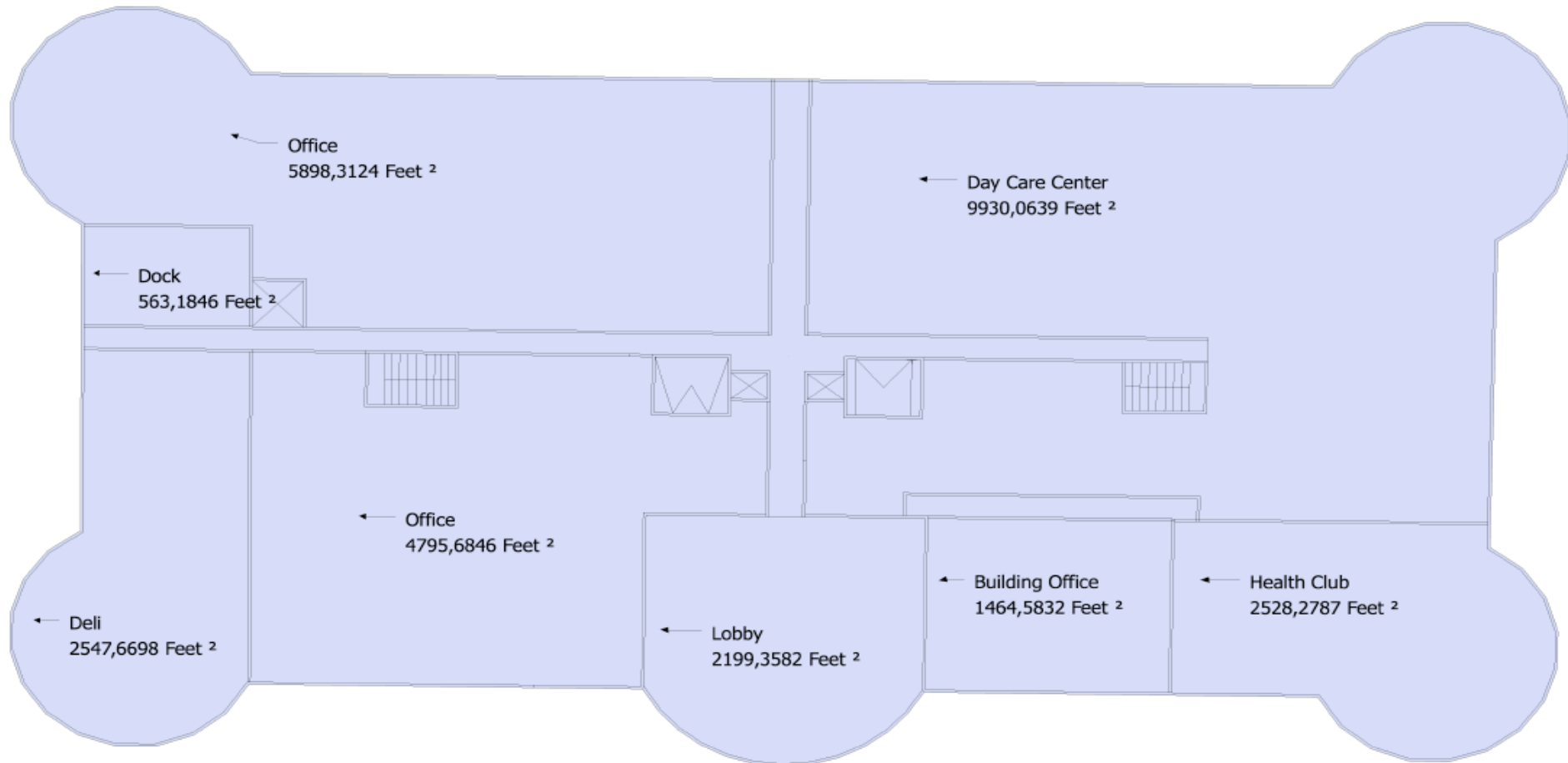
PHASE II

PHASE III

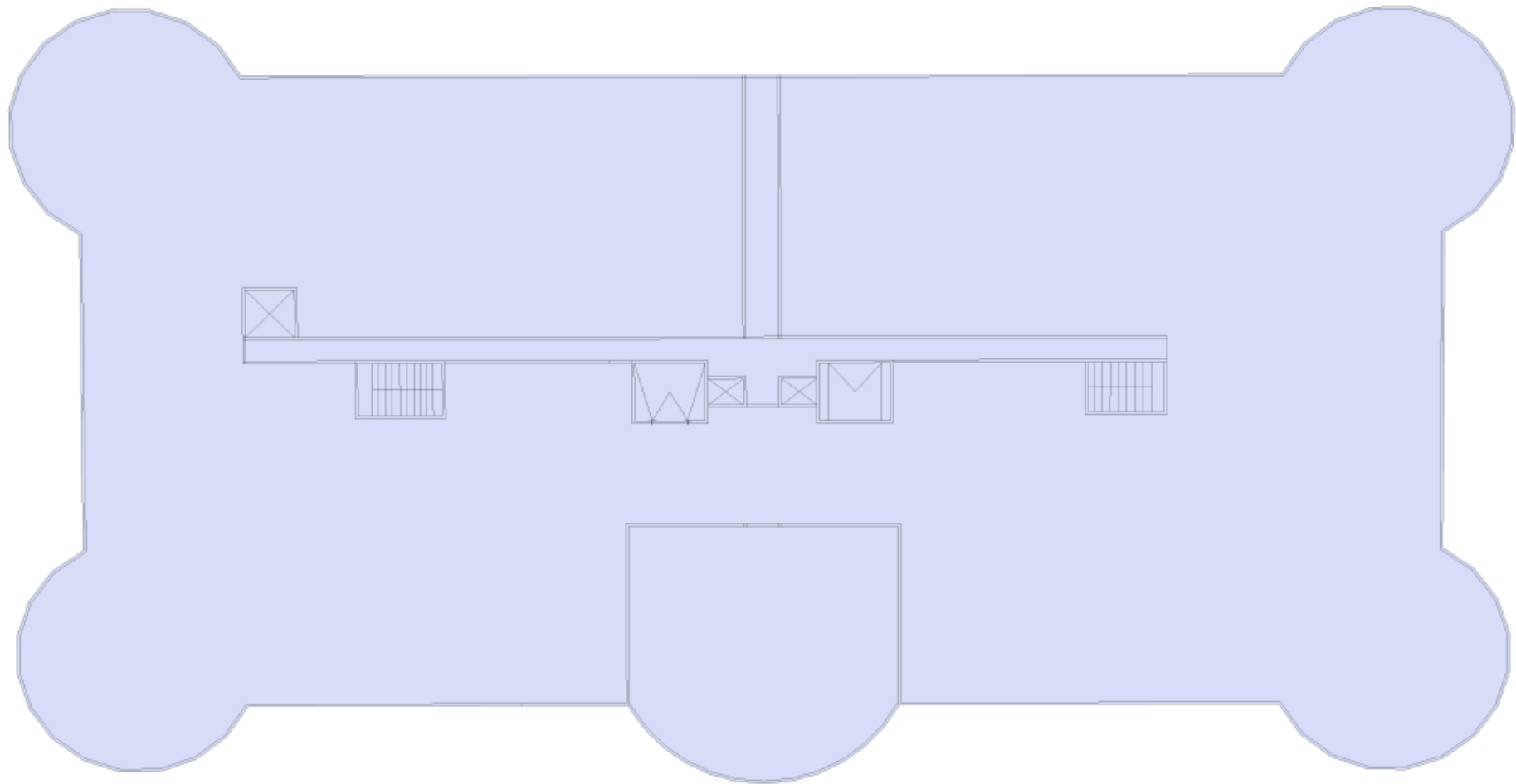


FLOOR PLAN – 1ST FLOOR

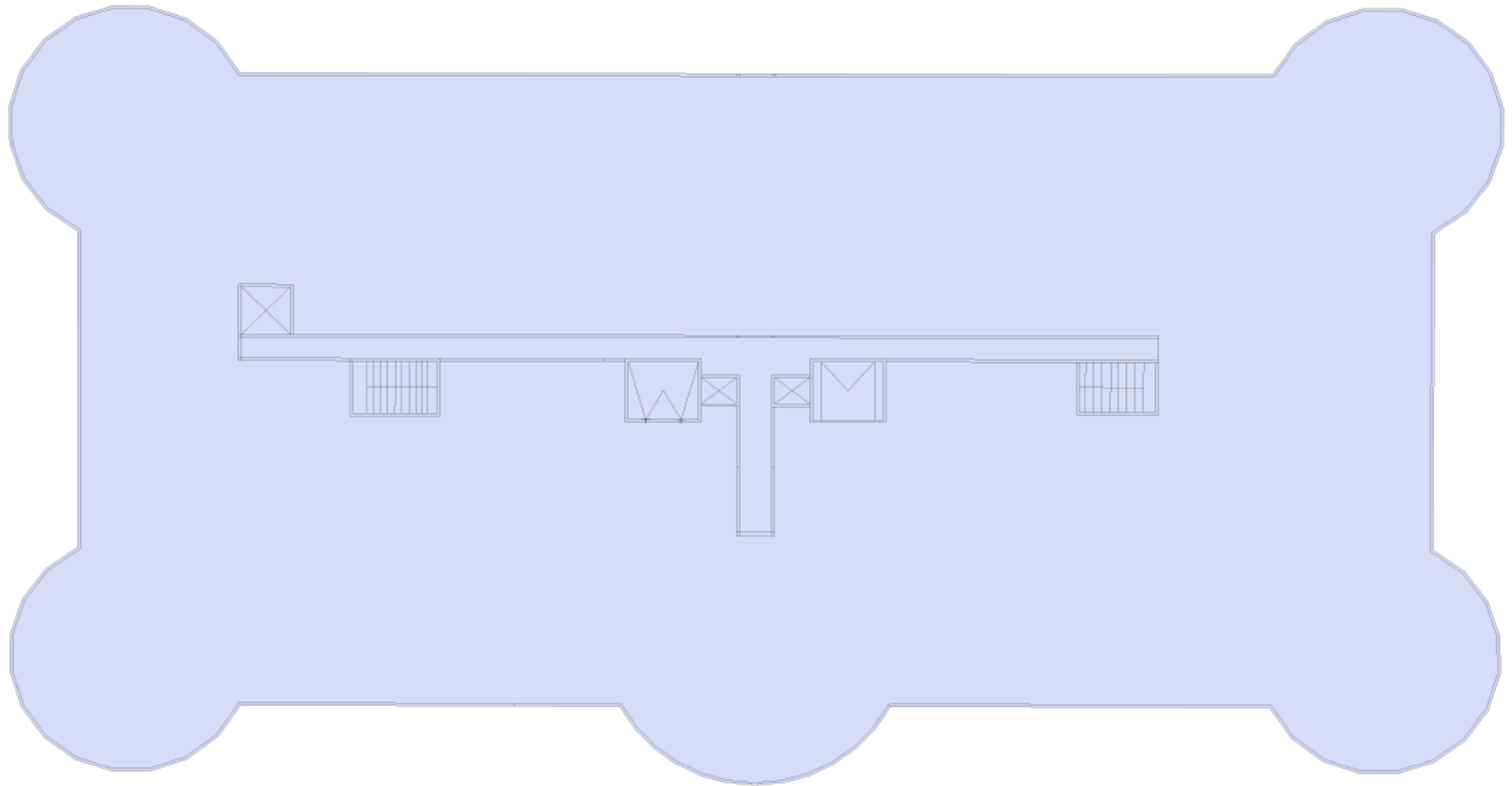
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FLOOR PLAN – 2ND FLOOR



SITE PLAN – 3RD FLOOR



Construction Specifications

- Shell - steel frame, glass curtain wall and aluminum panels
- Lobby – 2 stories with marble and millwork
- Glass Domes at each corner office

Construction Budget

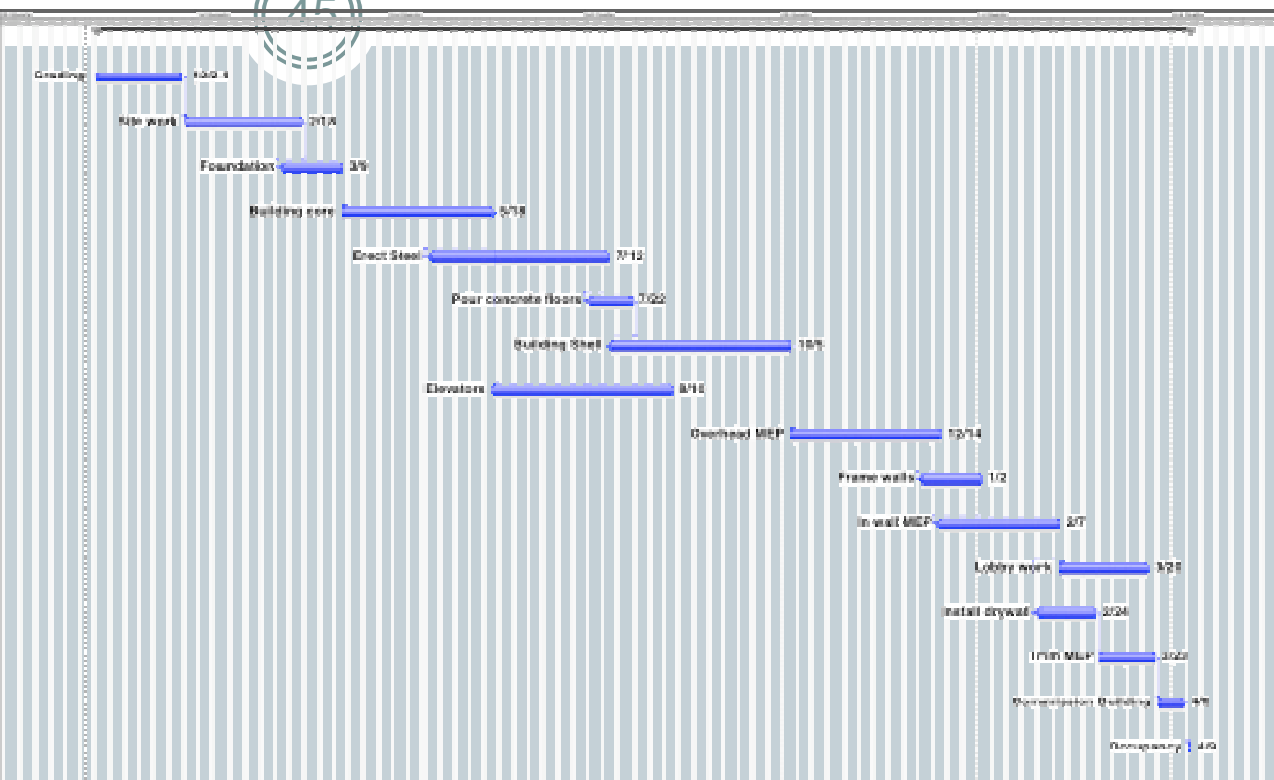
- Building Construction Cost - \$161/sf
- Building Core and Shell - \$101/sf
- Tenant Improvements Average - \$50/sf

Construction Schedule



Final schedule for project
 1500 West Campus
 2nd building of the 2nd
 45

Construction Schedule	365 days	Mon 11/15/10	Mon 4/9/12
Grading	6 wks	Mon 11/15/10	Fri 12/24/10
Site work	0 wks	Mon 12/27/10	Fri 2/10/11
Foundation	4 wks	Thu 2/10/11	Wed 2/9/11
Building core	10 wks	Thu 3/10/11	Wed 5/18/11
Erect Steel	12 wks	Wed 4/20/11	Tue 7/12/11
Pour concrete floors	3 wks	Mon 7/4/11	Fri 7/22/11
Building Shell	12 wks	Thu 7/14/11	Wed 10/5/11
Elevators	12 wks	Thu 5/19/11	Wed 8/10/11
Overhead MEP	10 wks	Thu 10/6/11	Wed 12/14/11
Frame walls	4 wks	Tue 12/6/11	Mon 1/2/12
In wall MEP	8 wks	Wed 12/14/11	Tue 2/7/12
Lobby work	6 wks	Wed 2/8/12	Tue 3/20/12
Install drywall	4 wks	Mon 1/30/12	Fri 2/24/12
Trim MEP	4 wks	Mon 2/27/12	Fri 3/23/12
Commission Building	2 wks	Mon 3/26/12	Fri 4/6/12
Occupancy	1 day	Mon 4/9/12	Mon 4/9/12



Summary of Results

46

- Land Size = 323,171 Square Feet, 7.419 Acres
- Land Cost = \$4,847,565

- Building Size = 96,385 Square Feet (Gross)
- Net Building Size = 83,772 SF (Net)
- 86.9% Efficient

- Building Cost (inc. Financing) = \$19,799,049
- Total Development Cost

Financial Analysis

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- Assumed the Land was equity; money for building was financed
- Office Rent = \$20/SF Net
- Kindercare Rent = \$10/SF Net
- Deli Rent = \$10/SF Net
- Absorption was 30% at open; lease up over a two year period
- Debt Coverage Ratio at Stabilization = 1.52

Other Assumptions

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- Rent and Expense growth at 3.00%
- Management Fee charged as a 15% surcharge on CAM
- Real Estate Taxes and CAM charges increase with occupancy
- Reversion – 5 year hold from stabilization (7 years in total)
- Going Out Cap Rate is 7.00%
- Project Internal Rate of Return (IRR) is 15.3%

PROFORMA SUMMARY

PROPERTY NAME : Schaumburg Palace
PROPERTY TYPE : Development

Land Purchase	\$4,847,565	\$15.00 Per SF
Construction Costs	\$14,278,588	
Construction Financing	6.00% \$672,896	
Total Development Costs	\$19,799,049	
Total Invested Cost	\$19,799,049	
Total Invested Cost/ Gross Square Feet	\$205.42	
Total Invested Cost/ Net Rentable Square Feet	\$236.34	

	1st Year Mo. 1-12 Proforma	2nd Year Mo. 13-24 Proforma	@ Maturity Proforma	Per Sq Ft @ Maturity Proforma
REVENUES				
Gross Rental Potential	\$1,550,660	\$1,550,660	\$1,550,660	\$16.09
Rental Income	\$693,920	\$1,240,528	\$1,473,127	\$15.28
Other Revenues	\$391,749	\$700,334	\$831,647	\$8.63
TOTAL REVENUES	\$1,085,670	\$1,940,862	\$2,304,774	\$23.91
EXPENSES				
Real Estate Taxes	(\$328,020)	(\$516,036)	(\$586,404)	(\$6.08)
CAM Charges	(\$140,580)	(\$221,158)	(\$251,316)	(\$2.61)
TOTAL EXPENSES	(\$468,600)	(\$737,194)	(\$837,720)	(\$8.69)
Net Operating Income	\$617,070	\$1,203,668	\$1,467,054	\$15.22
Debt Service	(\$963,154)	(\$963,154)	(\$963,154)	(\$9.99)
Income After Debt Service	(\$346,084)	\$240,515	\$503,900	\$5.23
SUMMARY				
Economic Occupancy	59%	95%	95%	
SQFT Occupancy	59%	95%	95%	
Board Rate \$/SQFT	\$1.54	\$1.54	\$1.54	
Actual (Net) Rate \$/SQFT	\$1.54	\$1.54	\$1.54	
Return on Investment After Management Fees	-1.7%	1.2%	2.5%	
Debt Coverage Ratio				1.52

Multifamily Housing Policy and Finance



Topics

- Market Rate Analysis and Underwriting (Cannon and Simon)
- Housing Policy (Cannon and Levavi)
 - History
 - Rationale
 - Evolution of programs and policies
- Senior Housing (Cannon, Keledjian, Helle)
 - Market
 - Affordable Assisted

Guest Speakers

- Neil Freeman
- Rick Cavanaugh

Participants and Their Roles



- Faculty Member(s)
- Speakers
- Adjunct Team Members
 - Multifamily-three modules plus guest speakers
 - Development-two phases plus guest speakers
- Juried Presentations

Impact



- Classroom
- Course
- Continuity
- Connections

Evaluations and Assessment



- Comments
- Evidence