



A&E PORTFOLIO

plus related Hi-Tech

JT Wunderlich PhD

A&E

BS Architectural Engineering, 1984, U Texas at Austin

Urban Design (39 credits of 2nd degree), 1986/87, U California at San Diego
in TX, CA, PA, Japan, and Italy

Taught 7 courses

Hi-Tech

M.Eng Engineering Science (Computer Engr track), 1992, Penn State

PhD Electrical & Computer Engineering, 1994, U Delaware
in TX, CA, DE, NY, PA, Japan, and Italy

Taught 31 courses

Full CV [HERE](#)



[MP4](http://users.etown.edu/w/wunderjt/Wunderlich_JT_Architecture_and_Urban_Design_PORTFOLIO.mp4) http://users.etown.edu/w/wunderjt/Wunderlich_JT_Architecture_and_Urban_Design_PORTFOLIO.mp4

[PPTx-w/audio](http://users.etown.edu/w/wunderjt/Wunderlich_JT_Architecture_and_Urban_Design_PORTFOLIO.pptx) and links: http://users.etown.edu/w/wunderjt/Wunderlich_JT_Architecture_and_Urban_Design_PORTFOLIO.pptx

[PDF](http://users.etown.edu/w/wunderjt/Wunderlich_JT_Architecture_and_Urban_Design_PORTFOLIO.pdf) with links: http://users.etown.edu/w/wunderjt/Wunderlich_JT_Architecture_and_Urban_Design_PORTFOLIO.pdf

[WEBSITE](http://users.etown.edu/w/wunderjt/) <http://users.etown.edu/w/wunderjt/>

[YOUTUBE CHANNEL](#) with PDF link in comments

JT Wunderlich PhD prior to 1999

(1999 to present at Elizabethtown College)



*Purdue University Assistant Professor
of Electrical Engineering Technology*



IBM S/390 Supercomputer Research & Development



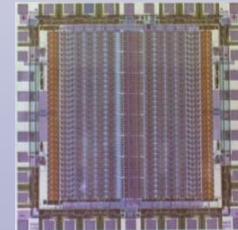
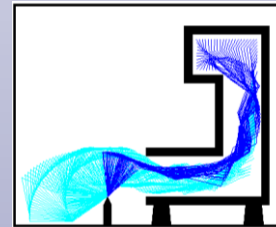
PhD Electrical & Computer Engineering

- *Rehabilitation Robotics (AI Dupont Children's Hospital)*
- *Robotic-arm designs*
- *Neural Network Processors*



M Eng Engineering Science

- *Neural Network Processors*



Coordinated all architecture, engineering, and construction of *\$100,000,000 of Hi-Tech office parks* in Texas and California, plus independently developed many small projects



39 credits of Urban Design (2nd Degree program)



BS Architectural Engineering



JT Wunderlich PhD A&E + *Hi-Tech*

* = exhibited in this portfolio

- * 1971-1975 Twenty-four balsawood designs (*Model railroad hobby, displayed in schools*) ages 10-14
- * 1977 3rd Prize, Philadelphia Municipal Building, PA, NJ, DE regional architectural design competition, age 16
- 1980 1st Prize, annual paper column & bridge contest, Penn State (*column held 33 bricks, a University record*)
- 1981 2nd prize, Modular Lunar Buildings design, Penn State / US Steel competition
- * 1981 Arts Interest House Design (*Penn State Architecture Studio III*)
- * 1981 Office Building (*Penn State Working Drawings course*)
- * 1981,82 Design/Builder, State College PA (*two intermittent employees*)
 - 1983,84 U Texas-Austin Senior Thesis on applying early beta-test spreadsheets, and mainframe, to real estate development feasibility analysis including project-risk assessments*
- * 1982-84 Construction Estimator, Austin TX, Owner
 - Negotiated contracts for computer quantity estimates generated using computer program I developed*
- 1984 BS Architectural Engineering, U. of Texas at Austin
- * 1984,85 Project-Manager/Designer, “West Lake Oaks” office complex, thirteen buildings
DDC Inc., Austin TX (*Developer*). *Worked under Registered Architect*
 - *Two buildings included IBM/360 raised-floor computer rooms*
 - *Fast-tracked one building (five weeks from slab to occupancy !) for a Computer Company*
 - *Used beta-test VisiCalc spreadsheets I developed for managing time and money*
- * 1985,86 Director of Projects/Designer, *100,000sf hi-tech “Cornerstone” office complex*
Also in charge of six other projects plus my own small property management business
JDC Inc., La Jolla CA (*Developer*). *Project nominated for San Diego “Orchid” award*
 - *Met with CEO’s and upper management of Hi-Tech companies*



JT Wunderlich PhD A&E + *Hi-Tech*

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1986 Architectural Designer, Del Mar CA upper-story addition, ocean-view, \$5000 commission for drawings

1986,87 39 credits in Urban & Environmental Design, U. of California San Diego (UCSD)

(2nd BS program) – *3 exhibits*: Campus Design, La Jolla Development, Urban-Design Theory paper

1986 Visited graduate Architecture programs, and participated in critiques, at Harvard, PENN, Columbia, and UVA

- *Allowed to sit in one week of Harvard 3D Architectural-modeling course (given 3D model of Robie House)*

1986,87 Urban Planner, San Diego County Local Agency Formation Commission (part of Planning Commission)

* 1987 Design/Builder, 1000sf Calivita House remodel, San Diego CA

* 1987,88 Architectural Engineer, Senior-Designer for San Francisco Bay Area, PSI inc, Lafayette CA

1987,88 Participated in UC Berkeley Architecture Critiques

* 1989,90 Design/Builder, 1500sf School Lane remodel, Wayne PA

* 1990 Large-scale model of brother's house (dollhouse for children)

1991 Design/Builder, 1000sf Chen remodel, Ambler PA (including rec-room, bar, cabinetry)

2000 Member, planning committee for \$12M Elizabethtown College Student Center

* 2000-present Founded what became the Elizabethtown College Scholarship and Creative Arts Day (SCAD):

To-date *11 Robotics & Machine Intelligence symposiums*, 5 Sustainability Symposiums, and 6 annual

Architecture Critiques with 5 to 12 judges. *2020 VIRTUAL CRIT for Covid-19, including Oculus Rift Virtual Reality*

- Internationally-competing robot navigation projects involved environmental modeling (like in Architecture)

* 2002-present: Design/Builder, 2000sf remodel + 1500sf new, Lancaster County PA

* 2004: Wrote Spec's for *Robotics & Machine Intelligence Lab* & Architecture Studio



JT Wunderlich PhD A&E + *Hi-Tech*

* = exhibited in this portfolio

- * 2004,2008,2009,(and 2011,2014,2017): Studied [ITALIAN ARCHITECTURE](#) and [LANGUAGE](#) while presenting and teaching in Italy
- * 2005 Began teaching: “Conceptual Architecture, from Habitats to Humanoids” then later “Conceptual Architecture”
- * 2006 Began teaching: “Architecture Research” *with Rhinoceros and Flamingo 3D modeling software I acquired*
2010’s Visited (and participated in some critiques) at U. Hawaii, CA College of Arts, UC Berkeley, UCLA, U Hawaii, PENN, U Florence, U Venice, Pantheon Institute (Rome), U. Trento (Italy), ASU, Arizona State, Frank Lloyd Wright School, and several small schools (Cal Baptist, Marywood, etc)
- * 2010 Created Architectural computer [SERVERS](#) (Minecraft) for College students, and guests world-wide
- 2011 Acquired Revit 3D Architectural Modeling software (with **Building Information Modeling** database) for studio
- 2011 Trial Lumion and 3D Studio Max software for animating, and solar-tracking, of Revit 3D Architecture models
- 2011 Established relationship with Pantheon Institute in Rome for Architecture
- 2011 Wrote [REPORT](#) for National BCA Study Abroad office for possible joint programs with six Italian Universities I visited
- * 2011 Created Elizabethtown Sustainable Design Engineering Major (later remade into Environmental Engineering)
2012 Judged Central-Pennsylvania United States Green Building Council (USGBC) Green-buildings awards
2012 Began teaching: “Green Architectural Engineering”
2013 Greencon at Dickenson College (including a Charette to organize all regional colleges and universities)
- * 2013 Created Elizabethtown Architectural Studies Minor
- * 2013 Studied [JAPANESE ARCHITECTURE](#) while traveling and presenting in Japan



Key-note Speaker:

Wunderlich, J.T. and Wunderlich, J.J. (2013). Green architecture and environmental design using rapid-prototyping social-networking sandbox tools, followed by professional architectural software. *Asian Conference on Sustainability, Energy & the Environment (ACSEE 2013)*, June 6-9, Osaka, Japan. [1 of 3 chosen from 250 for extended 45-minute key-note talk] [TALK PAPER](#)

2012 Began teaching: “Architecture Design Studio I and II”

- * 2014 Studied more European Architecture while presenting in Europe

Speaker and session Chair:

Wunderlich, J.T. and Wunderlich, J.J. (2014). Crowdsourced Architecture and Environmental Design. *2nd International Conference on Emerging Trends in Engineering and Technology (ICETET'2014)* May 30-31, London (United Kingdom). [TALK PAPER](#)

JT Wunderlich PhD A&E + *Hi-Tech*

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- * 2014,15 Founding Member of Elizabethtown Sustainability Committee; Authored REPORT to administration.
 - 2015 Architecture students (with other arts & architecture faculty) to Fallingwater
 - 2015 Sustainable Architecture and Urban Design talk at Franklin & Marshal Greencon
- * 2014,15 Primary-Investigator/Architecture-Supervisor for Elizabethtown Real-world projects:
 - Trucker Wellness Center Designs (~\$6000 in student awards) Sierra Leone Africa Health Clinic Designs
 - 2017 Began supervising first Elizabethtown Individualized Major in Architecture
- * 2017 Venice for fourth time (14th international trip) including viewing dozens of student architecture projects at U. of Venice, and given private tour of Italian National Architecture archives – with hundreds of drawings and models, including a model for a proposed Venice hotel by Frank Lloyd Wright
- 2017-2020 Member of Facilities, Planning, & Construction Committee with two Elizabethtown College Presidents, Senior VP's and Trustees for projects up to \$40M, including proposed P3's
- * 2018 Frank Lloyd Wight LECTURE SERIES
 - 2018 Began writing BOOK on Frank Lloyd Wright
 - 2019 *Acquired Lumion and 3D Studio Max software for animating, and solar-tracking, of Revit 3D models*
- * 2019 Architecture Theory LECTURE SERIES
 - 2019 Began teaching: "Architecture Design Theory"
- * 2019 Visited 31 Frank Lloyd Wright sites in Chicago area (VLOG Lecture)
 - 2020 Visited 11 Frank Lloyd Wright sites in Phoenix Arizona
- * 2020 *Acquired Oculus Rift Virtual Reality software to interact with Revit 3D Architecture Modeling software*
 - 2020 Began teaching course: "Architectural Materials & Methods"
 - 2020 Began teaching course: "Frank Lloyd Wright"
 - 202X Evolving Individualized Majors in Architecture into Architecture Major for all students



JT Wunderlich PhD Architecture and Urban Design Education 1979-1987

UCSD - The University of California (San Diego)
UT - The University of Texas (Austin)
PSU - Pennsylvania State University (University Park)

ENVIRONMENTAL PLANNING
WORKING DRAWINGS
SITE DESIGN
ARCHITECTURAL MATERIALS
3 ARCHITECTURAL DESIGN STUDIOS

URBAN DESIGN
RESIDENTIAL BUILDING CONSTRUCTION
ARCHITECTURAL HISTORY
URBAN PLANNING HISTORY
URBAN PLANNING INTRO
URBANIZATION (GROWTH OF CITIES)

STRUCTURAL ENGINEERING STEEL DESIGN
STRUCTURAL ENGINEERING REINFORCED CONCRETE DESIGN
STRUCTURAL ENGINEERING WOOD DESIGN
ENGINEERING GEOLOGY
MATERIAL SCIENCE

PHILOSOPHY OF STRUCTURES (CONCEPTUAL DESIGN AND TESTING)
STRUCTURAL ANALYSIS
ENGINEERING MECHANICS (DYNAMICS)
ENGINEERING MECHANICS (STATICS)
ENGINEERING MECHANICS (STRENGTH OF MATERIALS)
CIVIL ENGINEERING FLUID MECHANICS
WATER AND WASTE WATER
CIVIL ENGINEERING MEASUREMENTS LAB (SURVEYING)
ELECTRICAL ENGINEERING CIRCUITS AND MACHINERY DESIGN
ELECTRICAL POWER AND DISTRIBUTION/ILLUMINATION DESIGN
MECHANICAL ENGINEERING THERMODYNAMICS
HVAC, PLUMBING, HEAT TRANSFER AND PASSIVE SOLAR DESIGN
ACOUSTICAL ENGINEERING DESIGN
PROFESSIONAL ENGINEERING MANAGEMENT
CONTRACTS AND SPECIFICATIONS
COST ESTIMATING
CONSTRUCTION MANAGEMENT AND ENGINEERING COST ANALYSIS
PROJECT FEASIBILITY COMPUTER PROGRAMS (INDEPENDENT RESEARCH)
TECHNICAL REPORT WRITING
ENGINEERING EXPERIMENTS
ENGINEERING DESIGN GRAPHICS (2 COURSES)
FORTRAN PROGRAMMING
ENGINEERING CALCULUS (4 COURSES INCLUDING DIFFERENTIAL EQUATIONS)
STATISTICS
ENGINEERING PHYSICS (3 COURSES)
ENGINEERING CHEMISTRY (2 COURSES)

UCSD, USP 175
PSU, AE 222
PSU, LARCH 474
PSU, AE 221
PSU, ARCH 120A, B, C,
130A, B, C

UCSD, USP 174
PSU, AE 498A
UT, ARC 348
UCSD, USP 173
UCSD, USP 12
UCSD, USP 11

UI, CE 333
UT, CE 331
UT, ARE 362
UT, GEO 312
UT, CE 314K

PSU, AE 219
PSU, AE 308
UT, EM 12
PSU, EMCH 11
PSU, EMCH 13
UT, CE 354
UCSD, USP 117

UT, CE 113K
UT, EE 331
PSU, AE 352
UT, ME 320
PSU, AE 351
PSU, AE 309
UT, CE 373

UT, ARE 366
UT, ARE 358
UT, ARE 323
UT, ARE 377K
UT, E 317

PSU, ENG 005
PSU, EG10, EG11
UT, ASE 301

PSU, M161, 162, 240, 250
PSU, M 260
PSU, PHYS 201, 202, 203
PSU, CHEM 12, 14



JT Wunderlich PhD

Architecture and Urban Design Education 1979-1987

PREFACE to the fourth edition

In the Fourth Edition, The Gourman Report evaluated 1,845 colleges and universities in terms of its objectives, curriculum, faculty, faculty research and honors, administration, library, budget, resources, student scores on standardized tests, admissions policy, other desiderata, and that its objectives have been found to be clearly defined.

ARCHITECTURAL ENGINEERING

Leading Institutions — Rating of Undergraduate Program

(The Gourman Report evaluated and ranked 22 institutions granting a degree in Architectural Engineering)

Ten institutions with scores in the 4.0–5.0 range, in rank order

INSTITUTION	RANK	SCORE
Texas (Austin)	1	4.84
Penn State (U. Park)	2	4.75
Colorado (Boulder)	3	4.67
Kansas	4	4.60
Oklahoma State	5	4.51
Miami (Fla.)	6	4.44
Kansas State	7	4.41
California Polytech. State (SLO)	8	4.39
Tennessee State U.	9	4.28
North Carolina A&T	10	4.22

NOTE: Most of the technical and management oriented University of Texas Architectural Engineering curriculum requirements are civil engineering courses

CIVIL ENGINEERING

Leading Institutions — Rating of Undergraduate Program

(The Gourman Report evaluated and ranked 230 institutions in Civil Engineering)

Twenty-four institutions with scores in the 4.0–5.0 range, in rank order

INSTITUTION	RANK	SCORE
California, Berkeley	1	4.93
M.I.T.	2	4.91
Illinois (Urbana)	3	4.90
Texas (Austin)	4	4.86
Stanford	5	4.83
Cornell ¹	6	4.80
Northwestern	7	4.75
Purdue (Lafayette)	8	4.72
Michigan (Ann Arbor)	9	4.69
Wisconsin (Madison) ¹	10	4.65
Washington (Seattle)	11	4.61
Princeton	12	4.56
Minnesota (Minneapolis)	13	4.53
California, Davis	14	4.47
Brown	15	4.42
Lehigh	16	4.38
Colorado State	17	4.34
Texas A&M	18	4.30
Georgia Tech	19	4.22
Iowa (Iowa City)	20	4.18
Ohio State	21	4.14
Rice	22	4.07
V.P.I. & State U	23	4.05
Rensselaer (N.Y.)	24	4.03
Utah State	25	3.94
Colorado (Boulder)	26	3.92
Iowa State (Ames)	27	3.90
Penn State (U Park)	28	3.86
Duke	29	3.85
Massachusetts (Amherst)	30	3.80
North Carolina State (Raleigh)	31	3.74
Pennsylvania ²	32	3.71
Washington (St. Louis)	33	3.66
Missouri (Columbia)	34	3.62
Southern California	35	3.58
Kansas	36	3.56
Michigan State	37	3.55
Missouri (Rolla)	38	3.54

URBAN STUDIES

Leading Institutions — Rating of Undergraduate Program

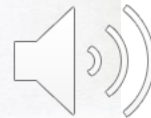
(The Gourman Report evaluated and ranked 256 institutions granting a degree in Urban Studies)

Seven institutions with scores in the 4.0–5.0 range, in rank order

INSTITUTION	RANK	SCORE
Pennsylvania	1	4.84
Michigan State	2	4.75
Minnesota (Minneapolis)	3	4.62
Maryland (College Park)	4	4.55
Rutgers (New Brunswick)	5	4.43
Pittsburgh	6	4.31
Washington (St. Louis)	7	4.24

Eight institutions with scores in the 3.5–3.9 range, in rank order

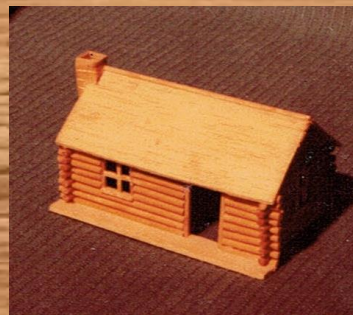
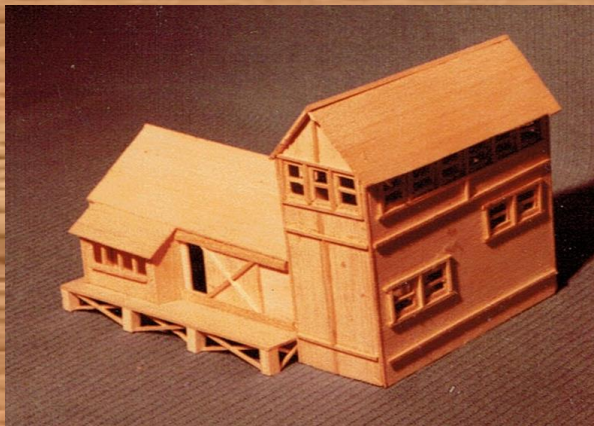
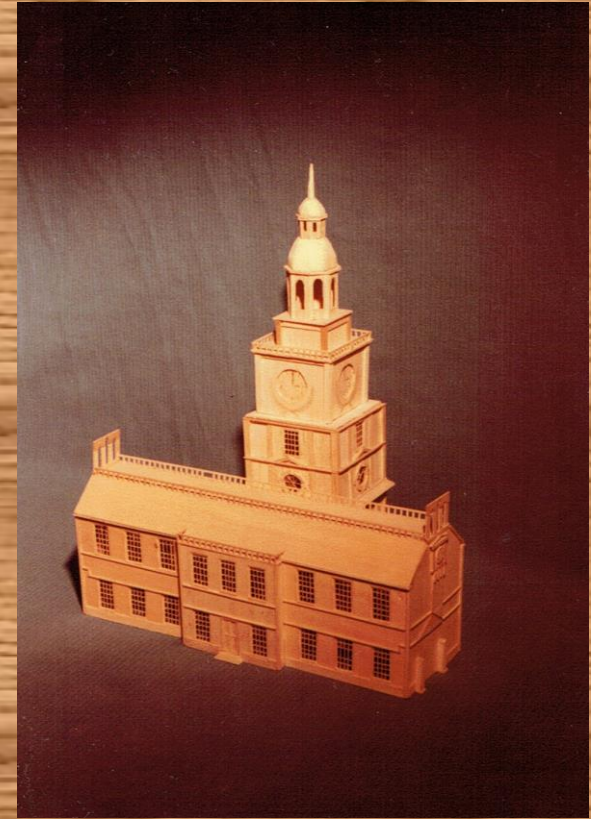
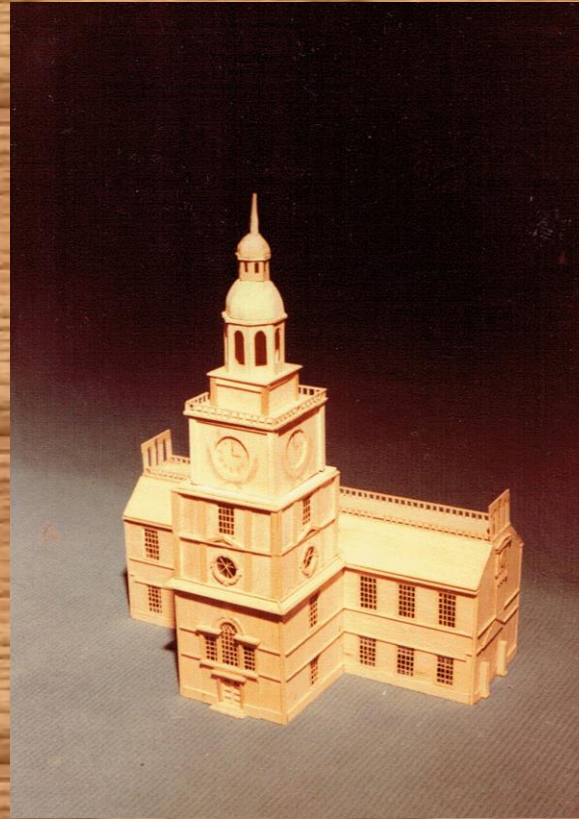
INSTITUTION	RANK	SCORE
Brown	8	3.92
California, San Diego	9	3.86
Indiana (Bloomington)	10	3.81
V.P.I. & State U.	11	3.75
Boston U.	12	3.74
St. Louis	13	3.69
N.Y.U.	14	3.63
Columbia	15	3.60



JT Wunderlich PhD 1971-1974 (ages 10 to 15)

Young hobbyist

Twenty-four balsawood buildings for model railroading hobby (displayed in private & public school)



JT Wunderlich PhD 1977 (age 16)

high school

student

3rd prize

Philadelphia Municipal Building

Pennsylvania, New Jersey, Delaware Regional Architectural Design Competition



Offices

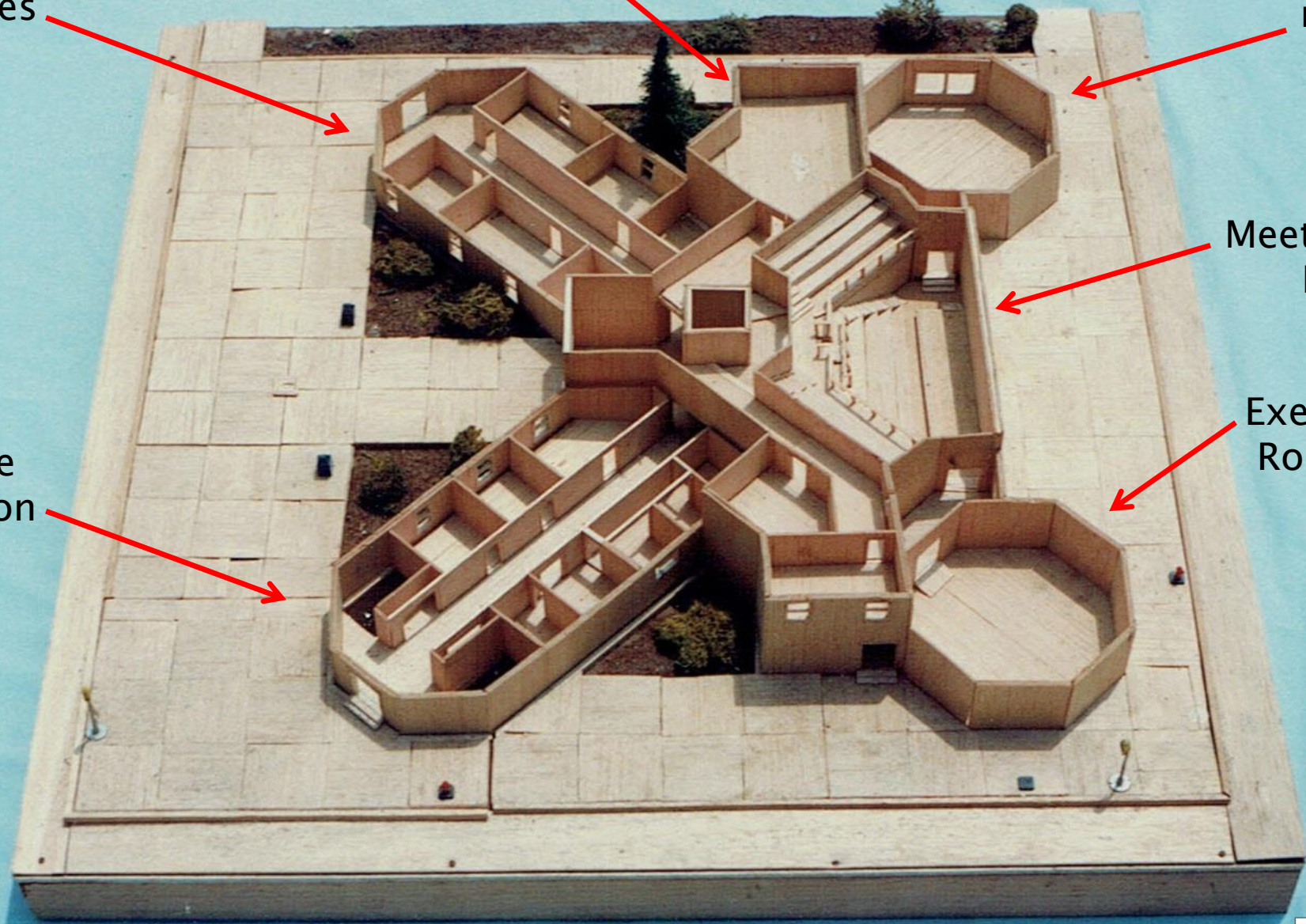
Mayor's Office

Multi-purpose room

Meeting Hall

Exercise Room

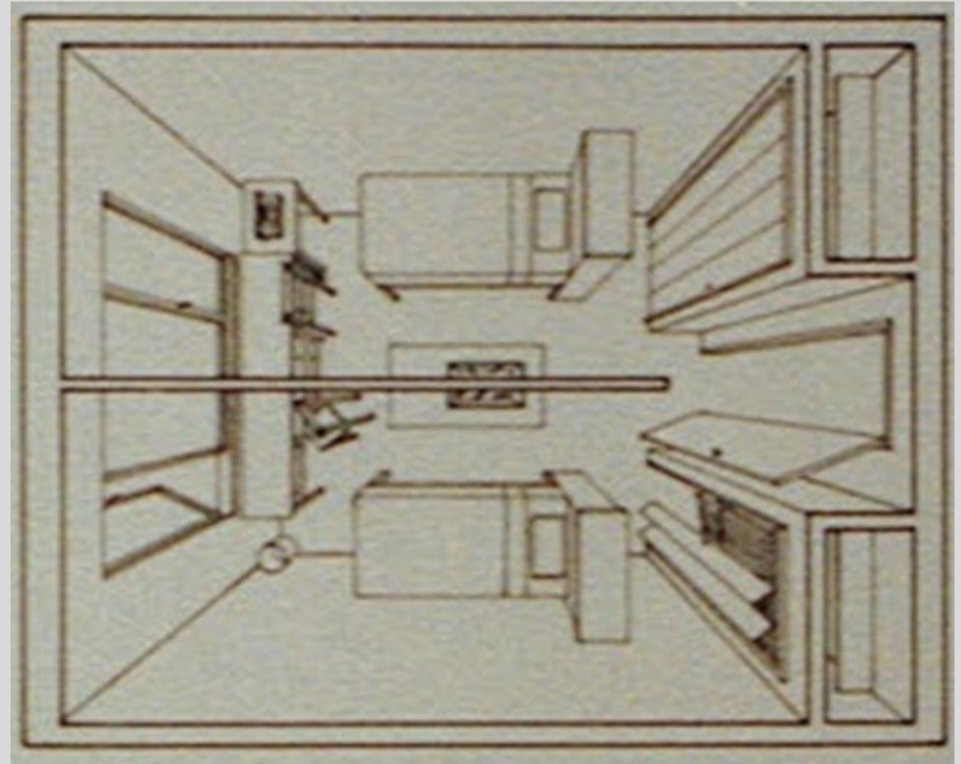
Police Station



JT Wunderlich PhD 1981

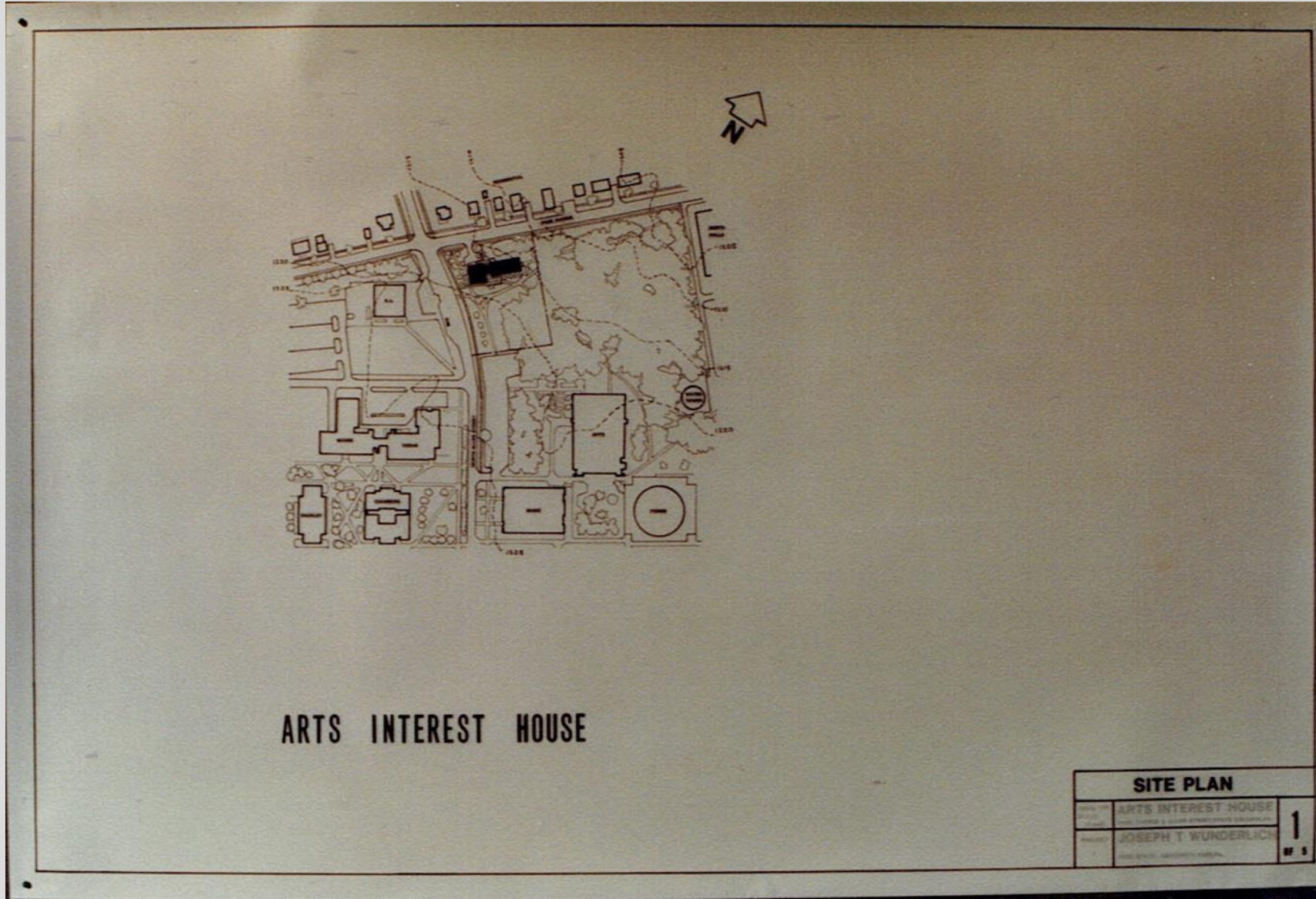
student

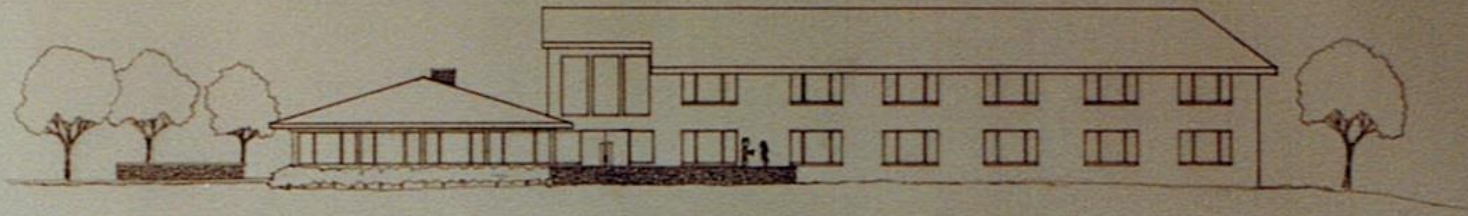
Arts Interest House, PSU Architecture Studio III



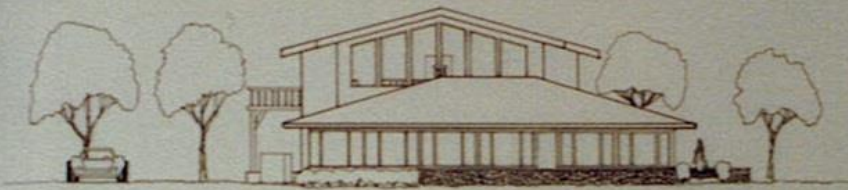


Ink Drawings on Mylar



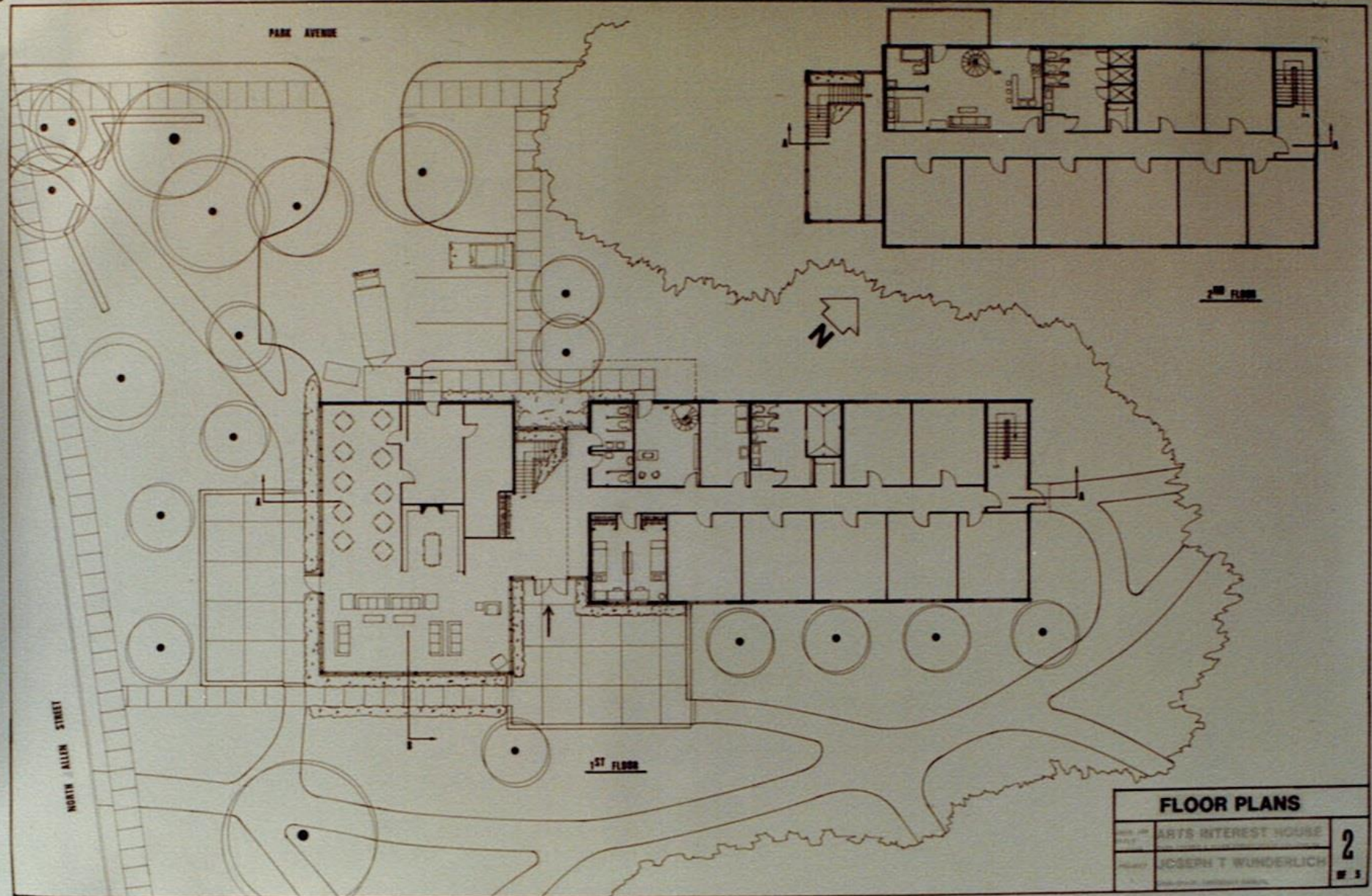


SOUTH-EAST ELEVATION

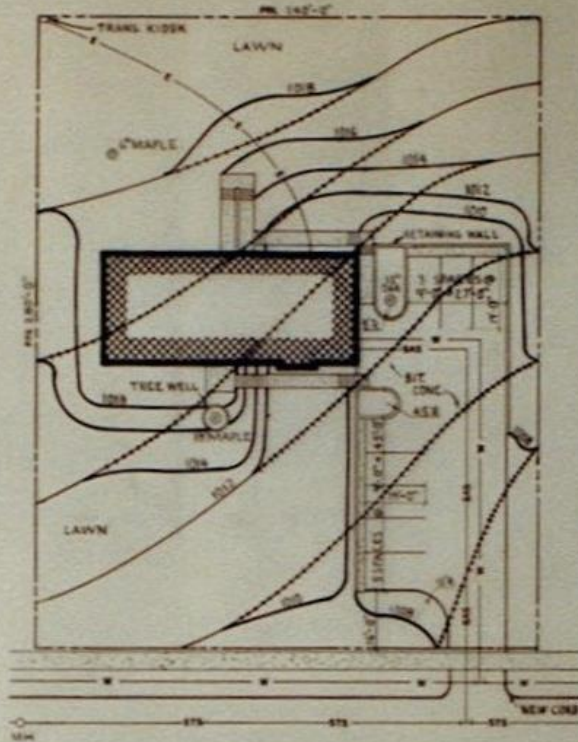


SOUTH-WEST ELEVATION

ELEVATIONS		
DATE OF DRAWING	ARTS INTEREST HOUSE	3
PROJECT BY	JOSEPH T WUNDERLICH	



FLOOR PLANS		
DATE	ARTS INTEREST HOUSE	2
DESIGNER	JCSERN T WUNDERLICH	
PROJECT NO.		13



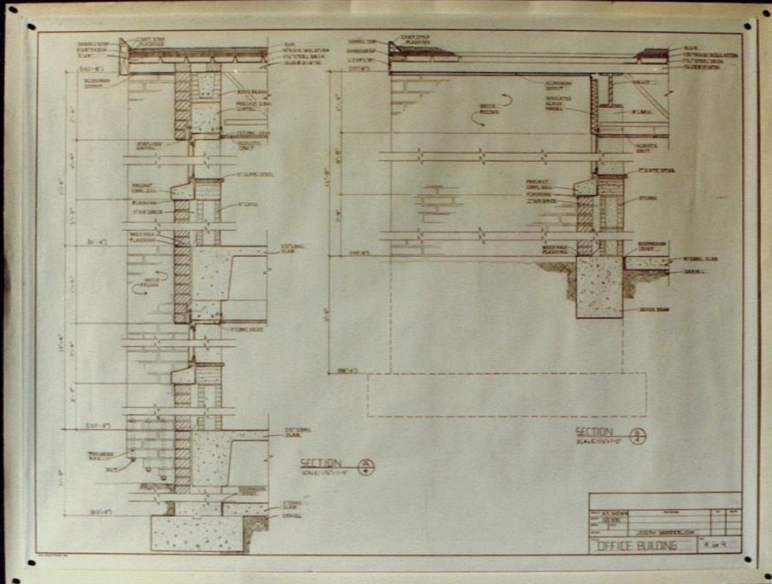
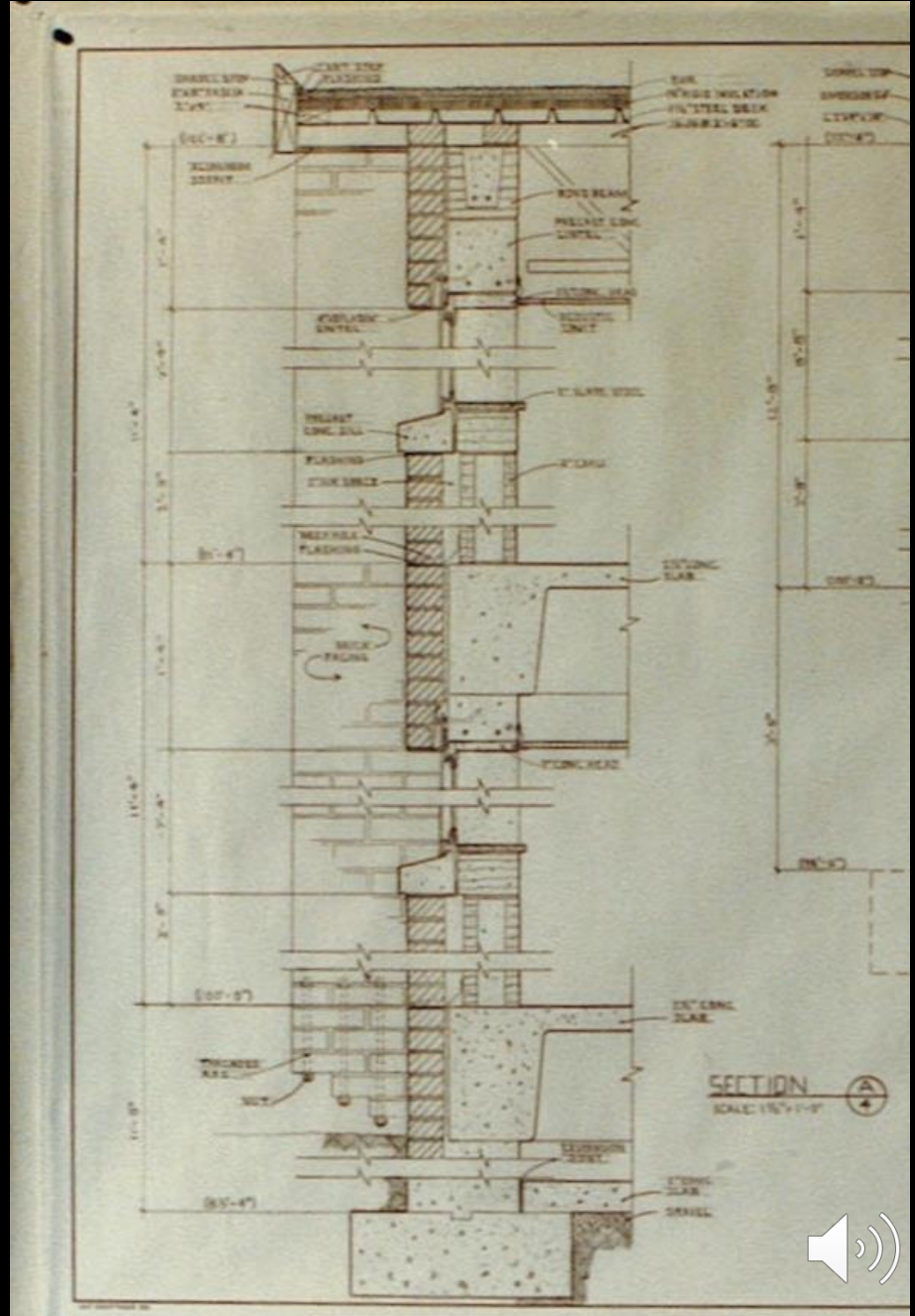
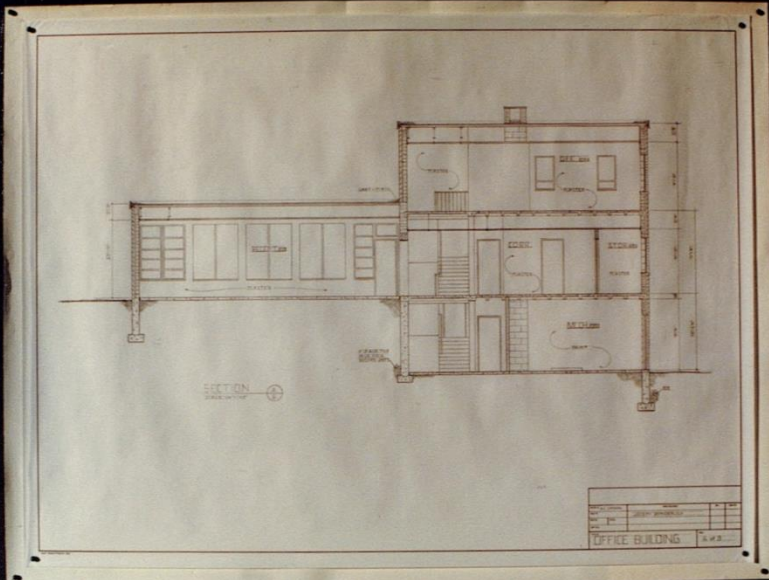
SITE PLAN
 SCALE: 1" = 12'-0"
 NOTE: ALL WALK-WAYS 4" (ON SITE)

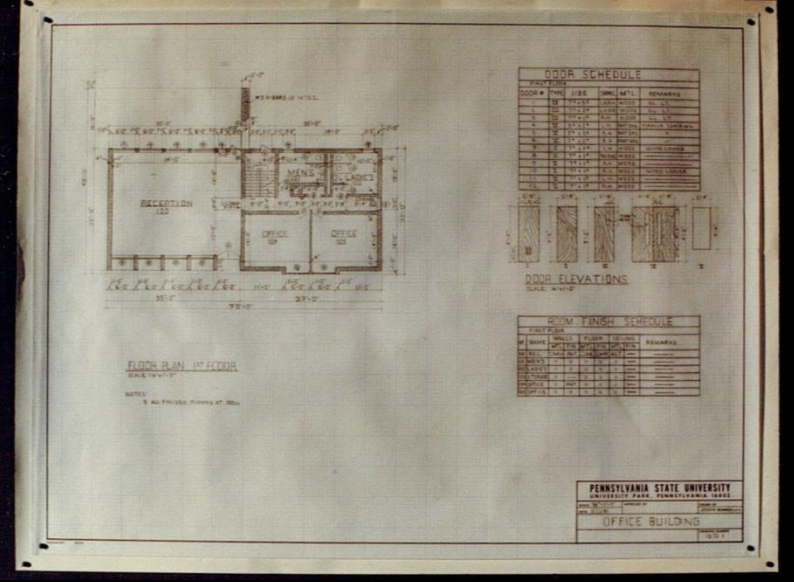
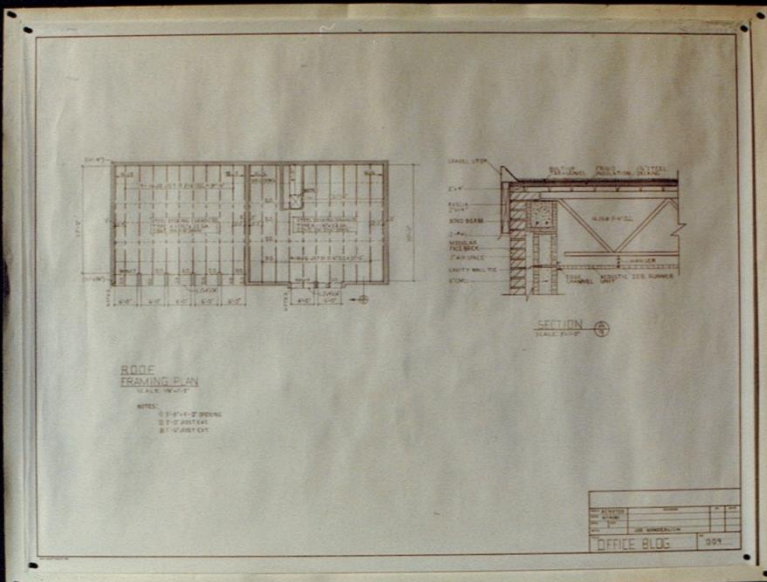
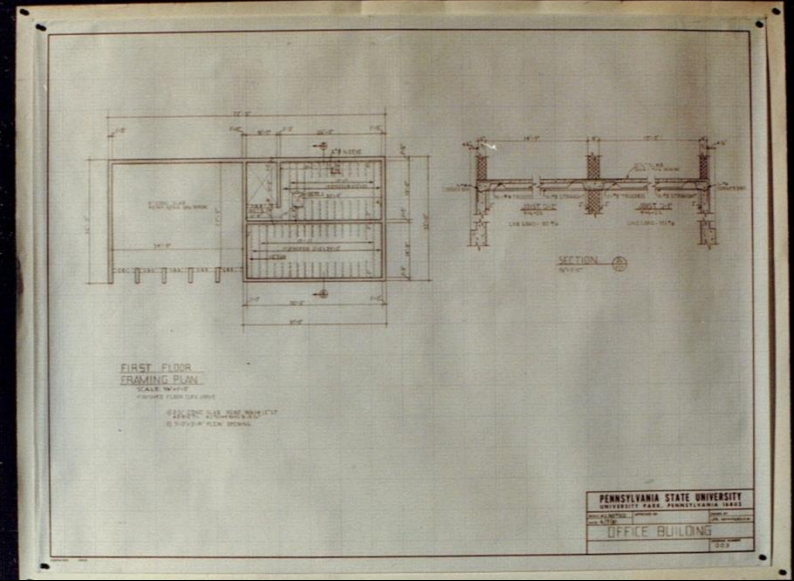
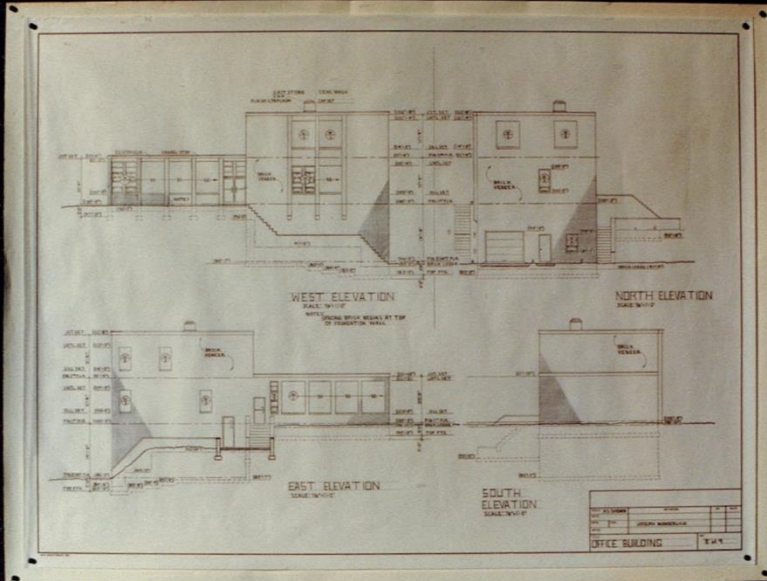
OFFICE BUILDING

SHEET INDEX	
SHEET	DESCRIPTION
10FB	TITLE SHEET + PLOT PLAN
2	FOUNDATION + BASEMENT FL. PL.
3	FIRST FL. PL. - SCHEDULES
4	WALL SECTIONS
5	ELEVATIONS
6	CROSS SECTION
7	FIRST FL. FRAMING PL.
8	ROOF FRAMING PL. + DETAILS

LEGEND	
• BM	BENCH MARK
• SPOT	EXISTING SPOT ELEV.
—	EXIST. CONTOUR TO CHANGE
- - -	EXIST. CONTOUR TO REMAIN
- - -	NEW CONTOUR
○	MANHOLE
- - -	PROPERTY LINE
- - -	SANITARY SEWER
- - -	STORM SEWER
- - -	WATER MAIN
⊙	EXIST. TREE TO REMAIN
⊗	EXIST. TREE TO BE REMOVED







Residential remodels
in State College, PA
(two intermittent employees)

RENOVATION OF
INTERIORS
(DESIGN-BUILD)



RENOVATION OF
INTERIORS
(DESIGN-BUILD)



DESIGN-BUILD OF
FRONTAGE LANDSCAPING
AND RETAINING WALL



Residential remodels
in State College, PA
(two intermittent employees)



TEAR OFF OLD ROOF,
NEW PLYWOOD SHEATHING,
FLASHING, SHINGLES, SOFFITS,
FACIA BOARDS, AND GUTTERS
(DESIGN-BUILD)



TEAR OFF OLD SHINGLES,
NEW SHINGLES, FLASHING
AND CRICKET



TEAR OFF ENTIRE ROOF
STRUCTURE, NEW SITE
FABRICATED TRUSSES,
PLYWOOD SHEATHING, AND
SHINGLES (DESIGN-BUILD)

*Also carpenter on
Dick Kummer AIA residence
(my Penn State Advisor)*



Estimating business in Austin TX,
(negotiated contracts with several contractors for
computer-generated quantity estimates)

Programmed HP41C calculator, and used beta-test
spreadsheets (*some of the first ever*)



Worked in "ABC" Plan Room used
by all contractors in Austin



Averaged \$60 per hour in 2015-dollars
(to pay for College)



<u>PROJECT</u>	<u>ARCHITECT</u>	<u>GENERAL CONTRACTOR AND/OR DEVELOPER</u>	<u>PROJECT</u>	<u>ARCHITECT</u>	<u>GENERAL CONTRACTOR AND/OR DEVELOPER</u>
United Way	Coffee & Crier, 478-0741	Crown Const. (St. Lewis) Super: Carl Stevens, 477-3950	Residence for Ted & Lynn (Glenn Lake)	J.A. Sullivan III	HEJL Builders, 476-2688
Heritage Condos	John Fitzpatrick	Kaywood Anderson, 458-5301 Project Eng.: Bob Dochraty Super: Dan Jahn	Residence (HEJL Builders) 38th Street Condo's	Shefelman and Nix Arch: Allison B. Perry Designer: Mimi Peri	HEJL Builders Brian Bourdages 478-6892
North Bluff Mini Warehouse	Shiflet Group, 472-9320	Enterprise Const.	J. Calender's (Brodie Oaks Shopping Center)	Melvin R. Fain Plano, TX, 214-422-4706	Lawson Corp.
Spicewood Summit			Residence for Mr. & Mrs. Buford W. Dike	Buford Dike	
U.T. Research Bldg. (Westlake)		J.C. Evans Const.	James & Marilynn Machin Custom Home	David J. Heckler & Assoc. 837-9548	
First National Bank (Georgetown)			Lake Austin Blvd. Lab II	AE: George Maxwell Engineers Inc.	
Thomas Greene Treatment Plant			Schwietzer Residence		
Hazardous Materials Bldg.	Linden & Assoc., 445-5751	Hardin Corpl, 346-0720	The Westrim	Evans Weaver & Assoc.	
Eans Elementary	Tribble & Stevens (San Antonio) 349-4422	Grinnel Const., 480-8034	Residence (Georgetown)	Don Bernhard	
Oroukes Rest.	Pfluger Assoc.	D & D Sylvester, 835-5923	Gerling Residence	John Fitzpatrick	
Seton Sister Bldg.	Page Southerland Page		Bethany Lutheran Church		
Kinney Ave. Baptist Church	Lasseter & Assoc.		The Commons (U.T.)		
Cranbury Middle School			Texas Military Institute	Dept. of Interior	G.C. Ayers Const./Rick Parke Co. 479-8110
Lampasas High School	Dewayne Manning		Spec House for Brougham Builders	The Architects Office	Brougham Builders
Centex Beverage	Ausland Architects		David Chasis Residence	The Architects Office	Brougham Builders
Cafeteria Addition	Page Southerland Page	Jatelou Const.	Pollack Residence	The Architects Office	
Gerhart Residence	Bernard Jason		N.P.C. Executive Home	Jim Frazier	
290 East Office Bldg.			Marsh & Box Office Expansion (Brett Beavers)		
U.T. Research Bldg.		G.C.A. Const.	Brett Beavers (for Bates Builders)	Clothier Sullivan & Assoc.	Bates Builders
U.T. Research Bldg.			Kirby Perry House	Kirby Perry, 454-5754	
Texas Retirement System Bldg.	Barnes, Landes, Goodman, Youngblood		Mr. & Mrs. Bill Bednar House	Leon Chandler & Assoc. 452-0229	William M. Aery
Golden Fried Chicken	Pfluger Associates	H.D. Brown	James Mobley Residence	James Mobley	James Mobley
The Echlon	Kinney & Stone Dave Cruis, 451-8410	Investcom Development, 454-5542	Gene & Rosalle Residence (Brett Beavers)	Boermer Assoc.	
The University Place Apartments			Robert Vasco Bldg.		Robert Vasco
The Circle Oaks Apt.	James Holland		Burkle Residence	Roger A. Conrad	
Crouch Residence	Holt, Fatter, Scott Inc.		Funeral Home		
Kern Residence	Daneshjou, Rad, Shrum Inc.		North Hills Club Townehouse Re-Roof	Langwith, Wilson, King & House, Houston	
Tom Clarke Residence			Shoal Creek Development	Enviroplan	Linear Properties
Brath Const. Bldg.			Spyglass Apartments		
Brath Const. Bldg.			Mueller Residence		
McKie Joint Venture (Spec. Bldg.)	Danze & Davis Architects	Harwood Pruett Nelson Pruett Realty	U.T. Chem Eng. Building		
Novi Cost. (Spec. House)		Novy Construction	Berkley Apartments		
Valley Side Condo's	Oteri, Tisdale, Dorsey 472-0245	O'Niel Const.	V.F.W. Post		
San Marcos Medical Park (Joint Venture)	Holt, Fatter, Scott Inc. 474-8101	H.D. Brown (Val Drumen)			
Bradford Executive Center	Daneshjou, Rad, Shrum	Gill Prather Const.			
Jenson Investment (Apt.)					



JT Wunderlich 1984,85

“Project Manager” / Architectural-Designer

West Lake Oaks Office Park (13 buildings)

Doerring Development Company

Austin TX



One of two IBM360 Computer Centers



JT Wunderlich 1984,85

West Lake Oaks Office Park

(13 buildings)

Doerring Development Company

Austin TX

- ▶ Wrote architectural and engineering specifications
- ▶ Helped Design Interiors (Tenant-Improvements)
- ▶ Worked under registered Architect at Doerring Development Corporation, one of the companies of Doerring & Associates
- ▶ Managed all construction (Doerring acted as General Contractor)

"Project Manager" / Architectural-Designer

In today's highly dynamic financial markets, investors require a real estate investment partner who is truly capable of managing their investment needs. One with a proven track record, a history of success, and the resources to provide expert personalized counseling and investment services.

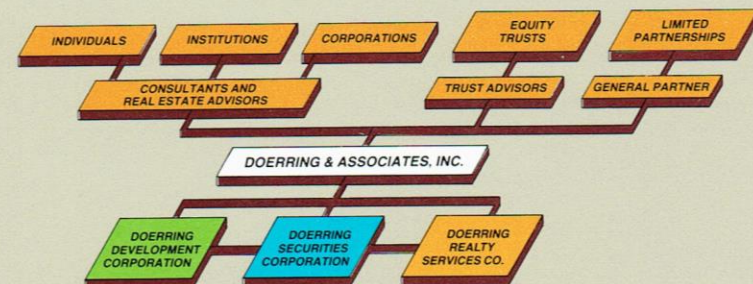
Based on those demands and qualifications, Doerring is the type of partner that institutional and individual investors can count on. In good times. And bad.

In recent years when few investments have preserved capital from the erosion of taxes, inflation and high interest rates, Doerring & Associates has consistently compiled an impressive record of performance through prudent acquisitions. Doerring's investment properties have provided the investor with outstanding capital growth and tax benefits. They still do today.



In every area of operation, the company provides expert personal service and investments of the highest caliber for a variety of sophisticated clients who require long-range programs for estate preservation and growth.

You will discover that Doerring shares your goals and professional objectives. More importantly, you'll see that Doerring has the resources to make your investment goals a reality.

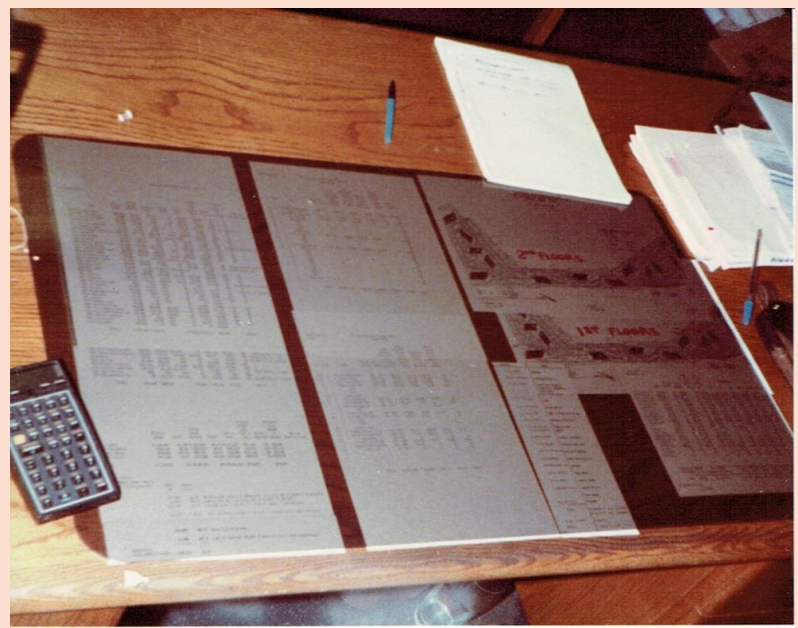
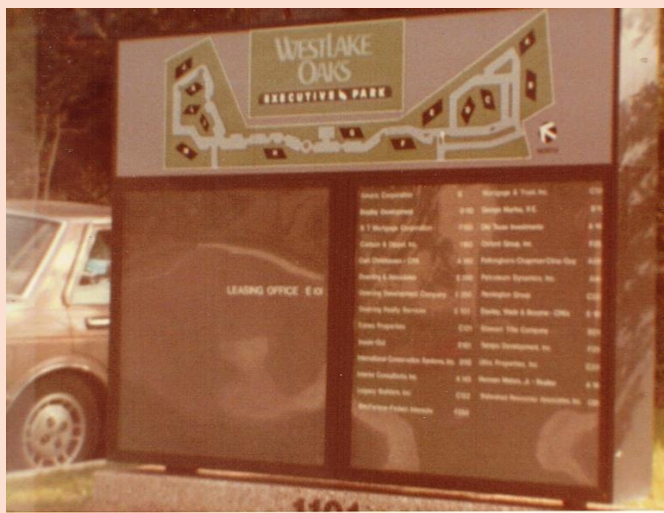


JT Wunderlich 1984,85

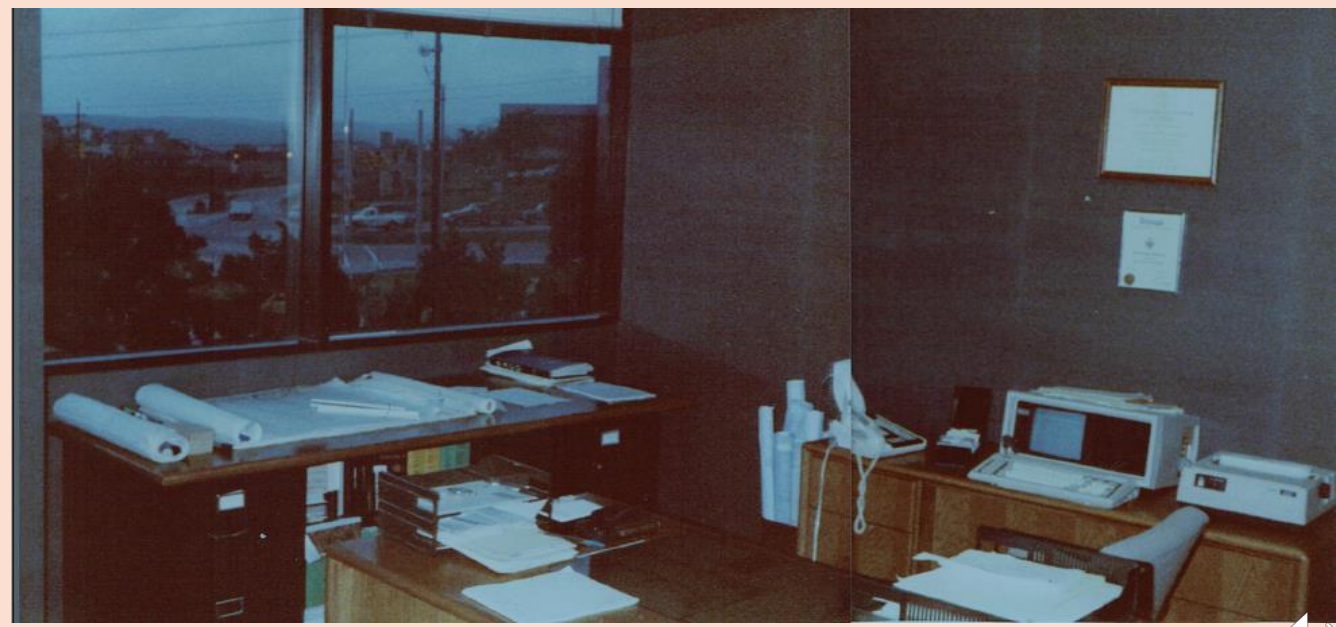
(13 buildings)

Austin TX

“Project Manager” / Architectural-Designer



Implemented project feasibility research from my University of Texas Senior Thesis



My office



JT Wunderlich 1985,86
High-tech office complex in San Diego CA
JDC inc (*Development Company*), La Jolla CA

"Director of Projects" / Architectural Designer

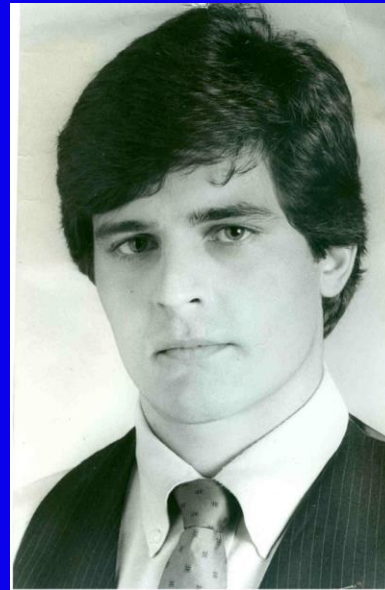
- On Architectural Design Team
(as Owner's Representative)
- Added significant Architectural Design
- Project nominated for annual
San Diego **"Orchid Award"**



JT Wunderlich 1985,86

La Jolla, CA

"Director of Projects" / Architectural Designer



Xscribe Corp., the nation's largest manufacturers of computer-aided court transcription systems, will occupy 60 percent of this complex.

Xscribe — currently housed in three separate locations at Kearny Mesa, Carroll Canyon and Torrey Pines — found a need to consolidate its facilities into one central headquarters.

The five-year built-to-suit lease contract calls for construction of a two-story, 60,000-square-foot structure. A compatible, three-story 44,000-square-foot office building will be erected adjacent to Xscribe's facility, surrounding a common courtyard.

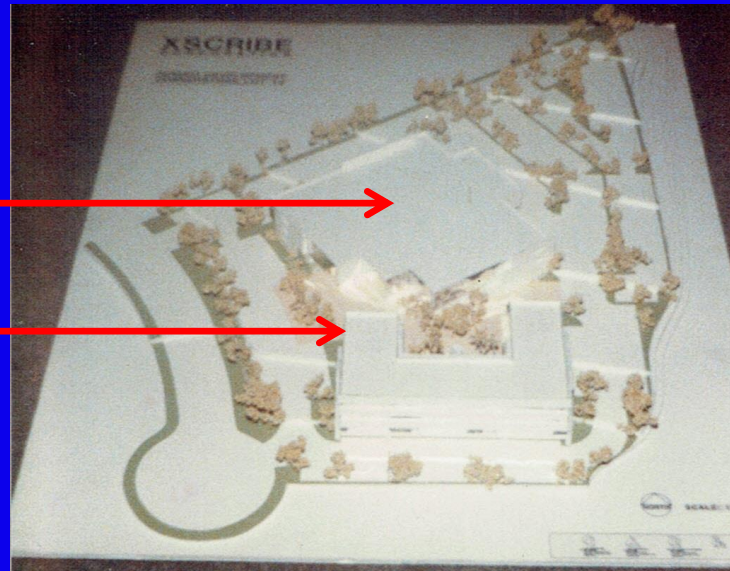


JT Wunderlich 1985,86

La Jolla, CA

"Director of Projects" / Architectural Designer

- ▶ 66,000sf hi-tech office and light manufacturing
- ▶ 44,00sf office building



JT Wunderlich 1985,86

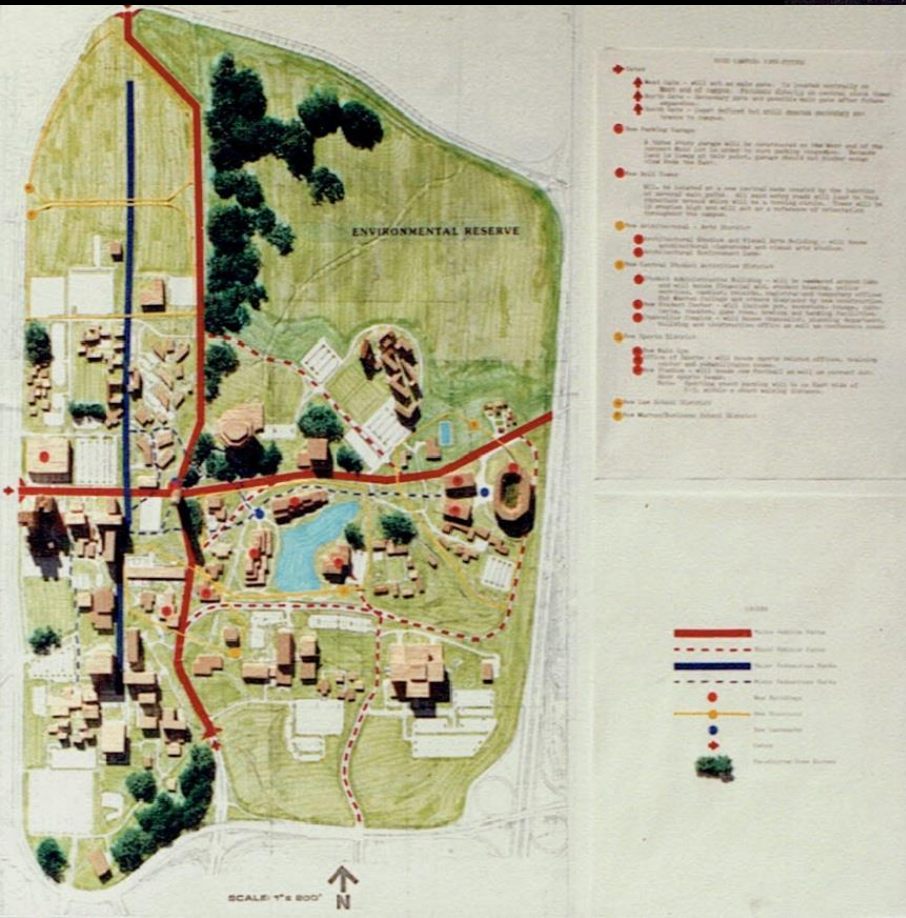
La Jolla, CA

"Director of Projects" / Architectural Designer



J T Wunderlich 1986 ,87 UCSD Campus Design Changes USP174 Urban Design Project

student



- PATHS
- EDGES
- DISTRICTS
- NODES
- LANDMARKS



J T Wunderlich 1986 87 Proposed La Jolla, California Development UCSD USP174 Urban Design Project

student

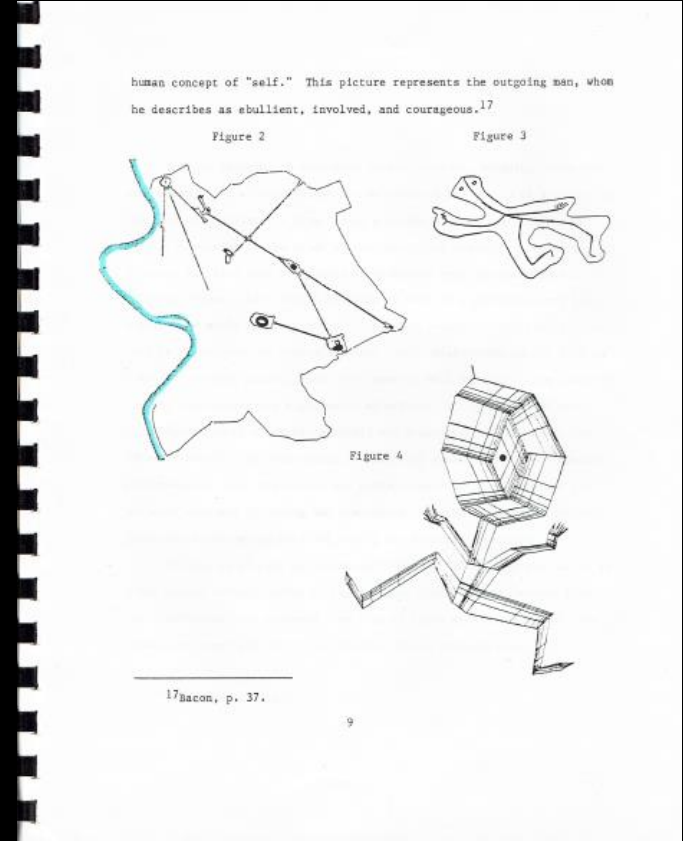
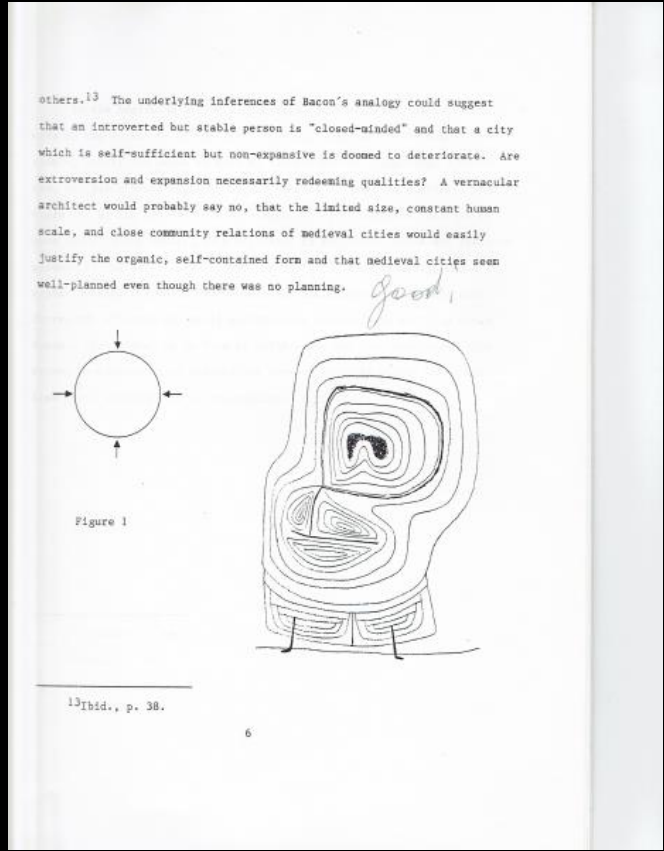
- PATHS
- EDGES
- DISTRICTS
- NODES
- LANDMARKS



Semester paper on Design Theory:

“The Evolution of City Boundaries in Western Civilization”

UCSD USP173 Urban Design History

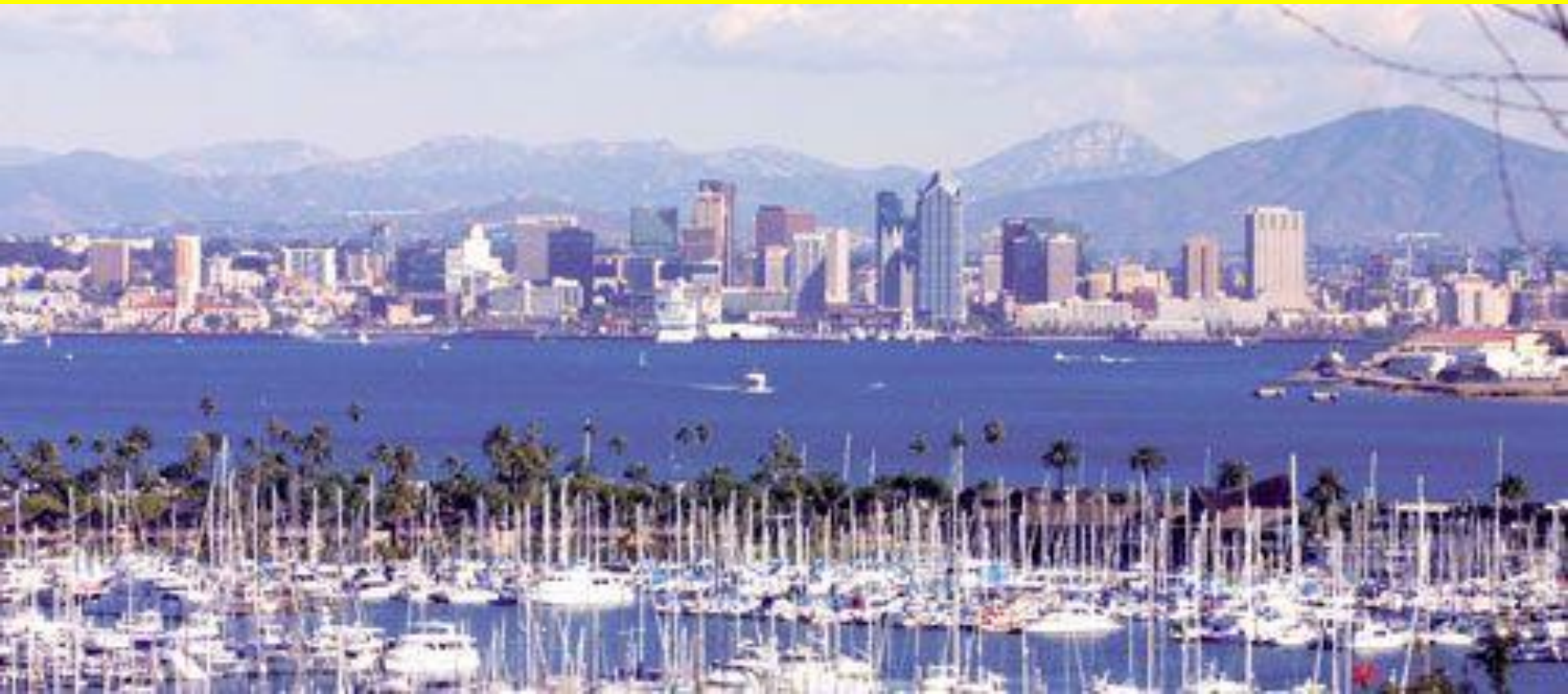


READ: <http://users.etaoin.edu/w/wunderjt/Urban%20Design%20City%20Boundaries%20Wunderlich%201987.pdf>



San Diego County Planning Staff (3/4-time) while full-time UCSD Urban Design student;
Local Agency Formation Commission (LAFCO) of San Diego Planning Commission

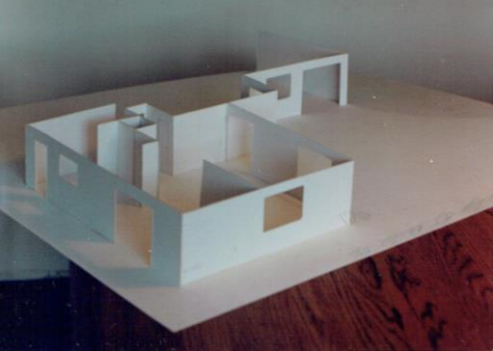
- Read Environmental Impact Reports for large planned developments and new city incorporations or annexations
- Wrote recommendations for elected officials on environmental and social impacts; and mitigating measures needed



JT Wunderlich 1987
1000sf Calivita Remodel
San Diego, CA

Design/Builder







*Also work in kitchen and bedrooms
- No pictures taken*



JT Wunderlich 1987,88

Architectural Engineer, Lead-Designer

Architectural Engineer, Lead-Designer for San Francisco Bay Area
PSI inc, Lafayette CA, *formerly Hall-Kimbell (Headquarters in Lawrence KS)*

Created Drawings and Specifications for Universities, high-schools, office buildings, and rapid-transit facilities (BART) for hazardous waste removal, structural reconstruction, HVAC reconstruction, and general Architectural redesign after abatement of hazardous materials

Earned two EPA
certifications:

Architectural Abatement
Designer
(3-week full-time course)

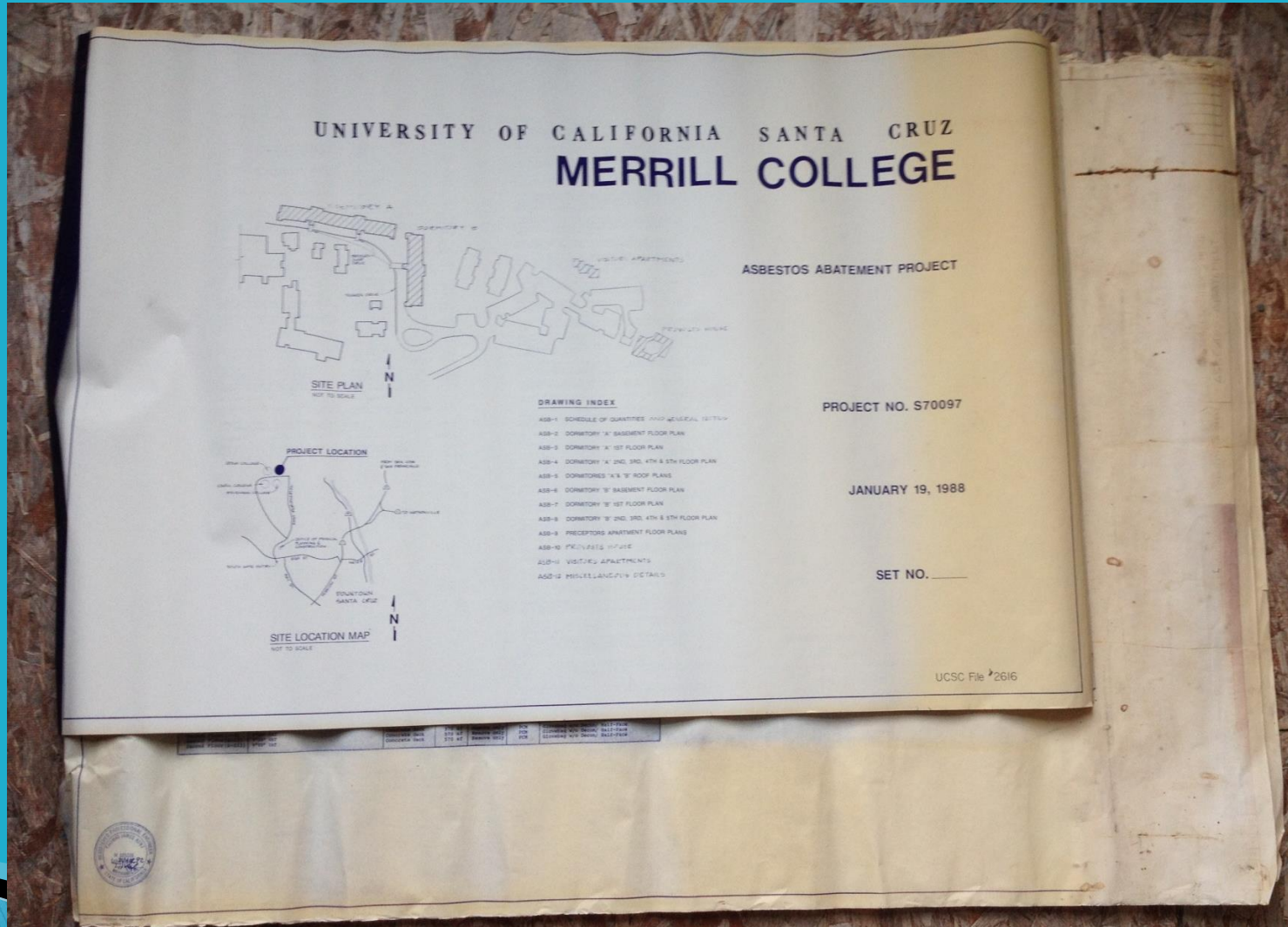
Field Industrial Hygienist
for hazardous waste
(1-week full-time course)



Sample Project: University of California Santa Cruz (UCSC) campus buildings

20 pages of drawings , 500 pages of specifications

\$1,000,000 of construction (~\$2.5M in 2015-dollars)



JT Wunderlich 1989,90
School Lane Remodel
Wayne PA

Design/Builder



JT Wunderlich 1989,90
School Lane Remodel
Wayne PA



Design/Builder



JT Wunderlich 1989,90
School Lane Remodel
Wayne PA



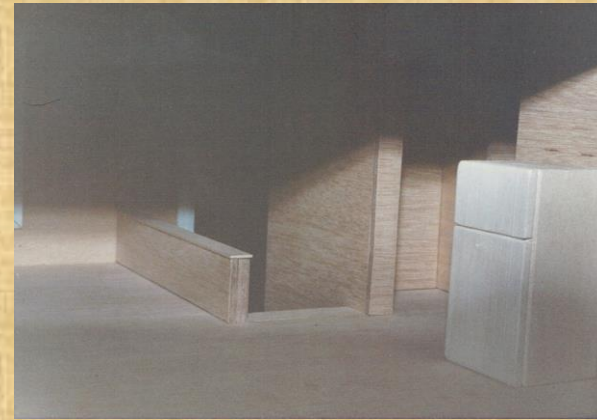
*Also, other work in bathrooms,
throughout house, and landscape.
- No photo's taken*



JT Wunderlich 1990

Modeler

Hobby project: Scale model of brother's house as doll house for children



JT Wunderlich 2002–present
Southeastern Pennsylvania
2000sf remodel +1500sf new

Design/Builder



Southeastern Pennsylvania

2000sf remodel + 1500sf new

- ▶ All Architecture and Engineering Design
- ▶ 4000 hours of construction
- ▶ Only contract was roof shingles and concrete mix truck





Before & After





THREE DESIGN CHOICES





DESIGN CHOICE 1
HEAD-SPACE TOO CRAMPED

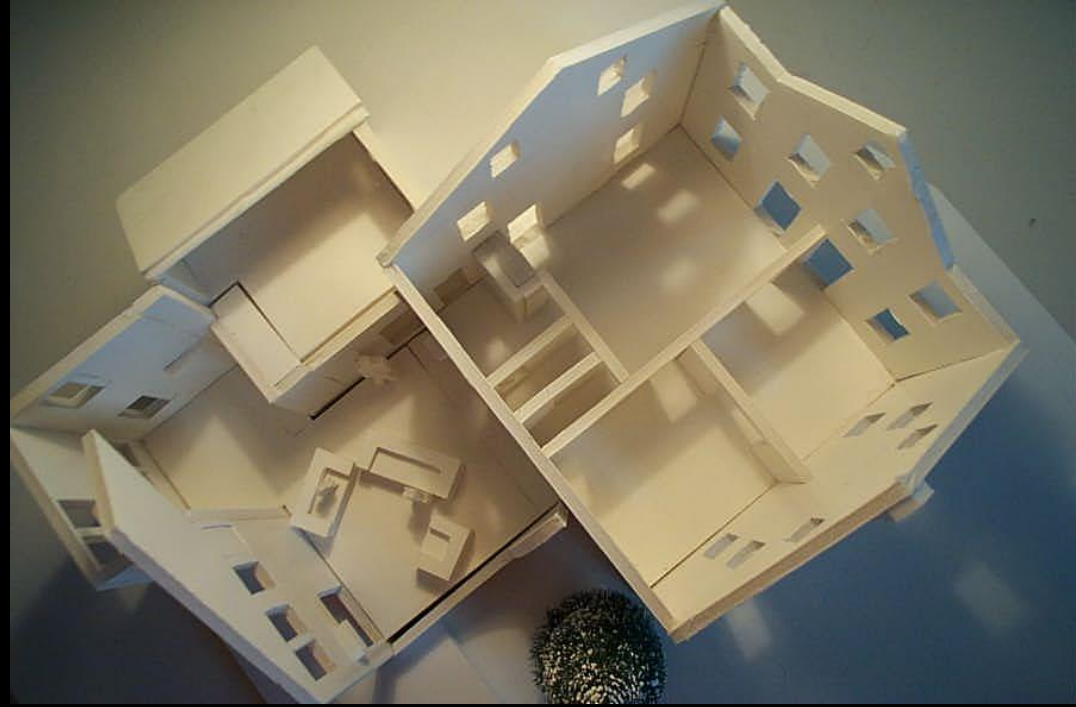


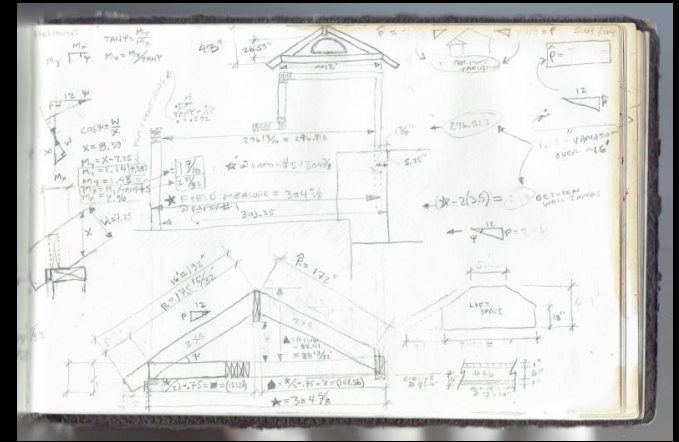
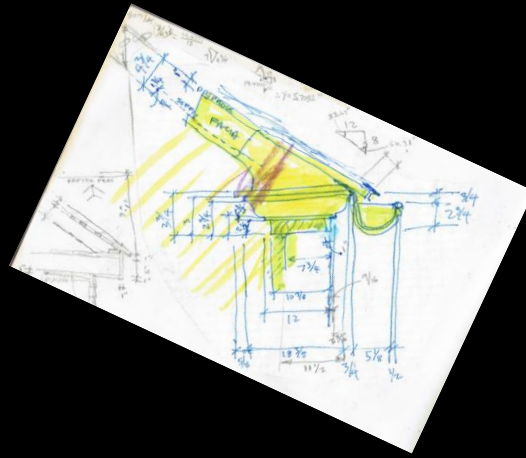
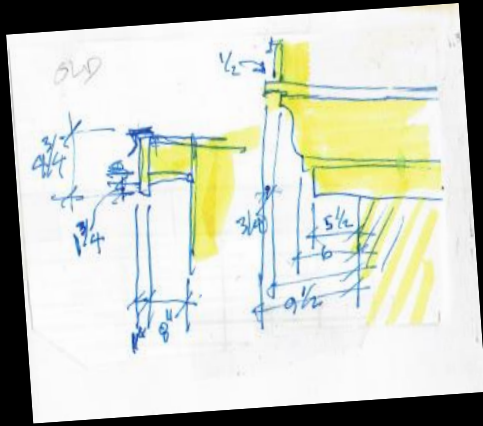
DESIGN CHOICE 2
Nice, but desire more floor space



selected design

DESIGN CHOICE 3

















FRAME VISTA'S

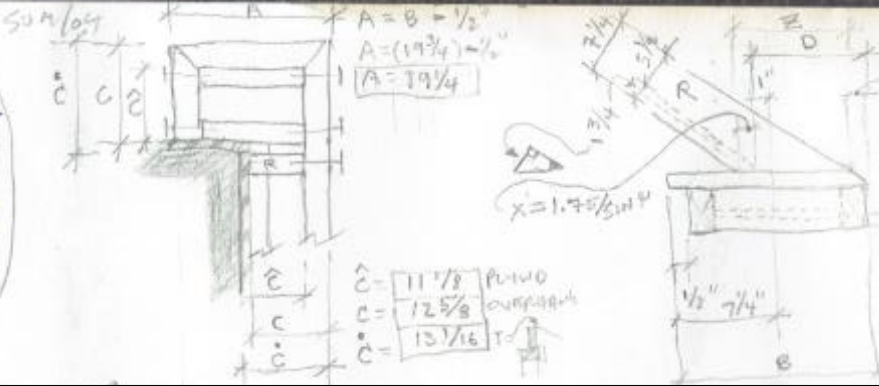


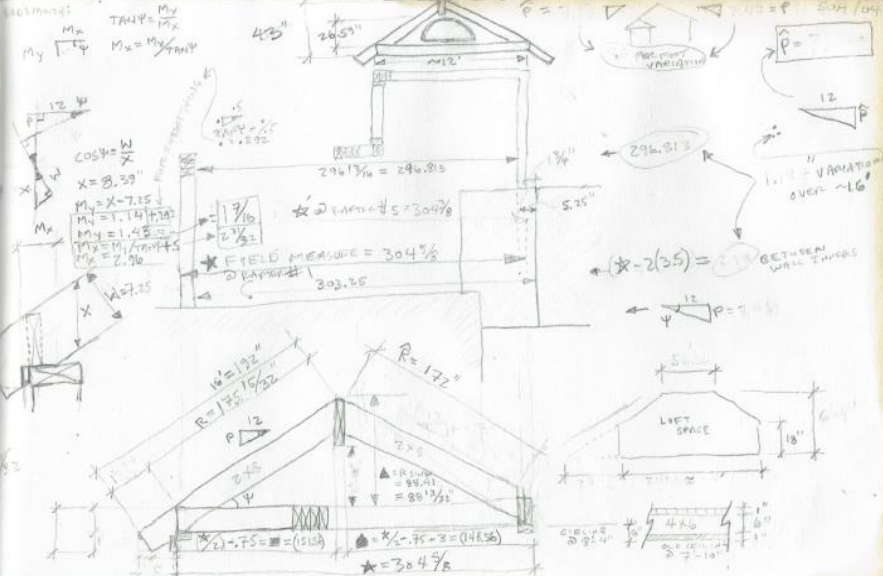
FRAME VISTA'S

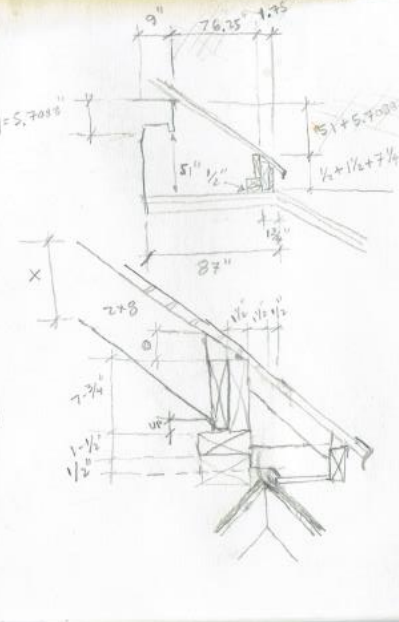


FRAME VISTA'S









(2012 LEED reflection)



LEED-NC v3.0 (2009) Preliminary Project Checklist
 "WUNDERCOLE EAST" (A Wunderlich Residence/Farmette, possible future Bed & Breakfast)
 Near Elizabethtown College, Pennsylvania

18-Oct-12
 Preliminary Review Only - Subject to Change

Yes	No	Points	Notes
11 Sustainable Sites 28 Points			
Prereq 1 Construction Activity Pollution Prevention Required			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 UNOBSTRUCTED SOUTHERN EXPOSURE, SHIELDED NORTHERN, ALL VIEWS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	2 COURTESIES PRESERVE FARM COMMUNITY AESTHETIC AND CULTURE
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	3 NOT APPLICABLE, BUT RESTORATION OF 150-YEAR OLD STRUCTURES
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	6 NOT APPLICABLE IN FARMING COMMUNITY
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 BIKES FOR EVERY FAMILY MEMBER
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	2 NOT YET - PLANNING HYBRID VEHICLE PURCHASE
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	3 NOT APPLICABLE IN FARMING COMMUNITY
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 212 TREES PLANTED, FENCED-IN WILDLIFE, BIRD SANCTUARY CREATED
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 EXTENSIVE - 3-1/2 Acres
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 FRENCH DRAINS AROUND NEW CONSTRUCTION
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	1 DRAINAGE SYSTEM BEING CONSIDERED
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	1 NOT APPLICABLE IN FARMING COMMUNITY
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	1 NOT APPLICABLE IN FARMING COMMUNITY
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 RECYCLE ALL PLASTIC AND PAPER, DONATE CLOTHES, ETC. TO POOR
3 Water Efficiency 10 Points			
Prereq 1 Water Use Reduction, 20% Reduction Required			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	2 to 4 MINIMAL IRRIGATION FOR TREES AND 3 TO 4 GARDENS PER YEAR
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	2 NEW DRAINFIELD
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	2 to 4 LOW-PRESSURE WELL, DISHES, HANDWASH + ENERGY-EFF DISHWASHER
7 Energy & Atmosphere 35 Points			
Prereq 1 Fundamental Commissioning of the Building Energy Systems Required			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 FUNDAMENTAL COMMISSIONING
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 FUNDAMENTAL REFRIGERANT MANAGEMENT
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 OPTIMIZE ENERGY PERFORMANCE
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 to 10 OIL + ELECTRIC ZONES WITH ARTIFICIAL INTELLIGENCE COMING
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 to 7 ACTIVE SOLAR, GROUND WATER LOOP, & WIND BEING CONSIDERED
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	2 NOT YET
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	2 NOT YET
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	2 NOT YET
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	2 NOT YET
11 Materials & Resources 14 Points			
Prereq 1 Storage & Collection of Reclaimables Required			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 EXTENSIVE - PRESERVATION OF 95% OF EXISTING STRUCTURES
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 EXTENSIVE - 90% MAINTAINED
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 EXTENSIVE - PRECISE MATERIAL ESTIMATES, NO DUMPSTERS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 EXTENSIVE - ALL ROOF & CEILING AND SIDING AND STONES
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	1 to 2 SOME, BUT UNCERTAIN PERCENTAGE
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 to 2 85% LOCAL BUILDING SUPPLIER w/ 10 miles, REUSE OF WOOD & STONE
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 90% WOOD CONSTRUCTION
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	1 POSSIBLY SOME - NEED TO CHECK RECORDS
11 Indoor Environmental Quality 15 Points			
Prereq 1 Minimum IAQ Performance Required			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 ATTIC TEMP-CONTROLLED FANS, PLENUMS FOR OPTIMAL AIR-FLOW
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 MASKS NEGATIVE PRESS CONTAINMENT, AND VENTILATION FANS ALWAYS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 CONTAINMENT AND VENTILATION
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 WATER-BASED WHEN POSSIBLE
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 LOW-VOCS (w/ no Solvent Compounds), PAINTS WATER-BASED
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 ALL-WOOD, MINIMAL VOCS
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	1 ALWAYS ATTEMPTED MINIMAL VOCS - NEED TO CHECK RECORDS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 RADON TESTED, CO2 MONITORED, INCREASED VENTILATION
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	1 NOT YET, BUT DAILY FAMILY LIGHTING-MINIMIZATION PLAN
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 SEVERAL PROGRAMMED ZONES (ARTIFICIAL INTELLIGENCE PLANNED)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 PROGRAMMED ZONES, DEHUMIDIFICATION
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	1 NOT YET
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 EXTENSIVELY OPTIMIZED
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 EXTENSIVELY OPTIMIZED
6 Innovation & Design Process 8 Points			
Prereq 1 Innovation in Design: Provide Specific Title Required			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 EXTRA INSULATION, KEEP & Measure BARRIERS, NORTH BUFFER SPACES
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 OVERALL BUILDING HAS LOW SURFACE-AREA TO VOLUME RATIO
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 STRUCTURAL REPAIRS OF OLD HOUSE WITH NEW FOUNDATIONS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 90% CONSTRUCT BY OWNER W/ HAND-TOOLS, TO YARDS DIRT W/ SHOVEL
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 212 NEW TREES, PASSIVE-SOLAR, WINDLOCK, NOISE-CONTROL, BIRDS
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	1 OWNER PREPARING TO TAKE LEED GA EXAM
2 Regional Priority 4 Points			
Prereq 1 Regional Priority: Provide Specific Title Required			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 PRESERVING EXISTING FARMHOUSES AND BARN
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1 3 TO 4 WORKING GARDENS PER YEAR - AGRICULTURAL ZONING
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1
60 Project Totals (pre-certification estimates) 110 Points			
ADD 16 POINTS WHEN SOLAR, WIND, & AI ZONE IS DONE			

Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points



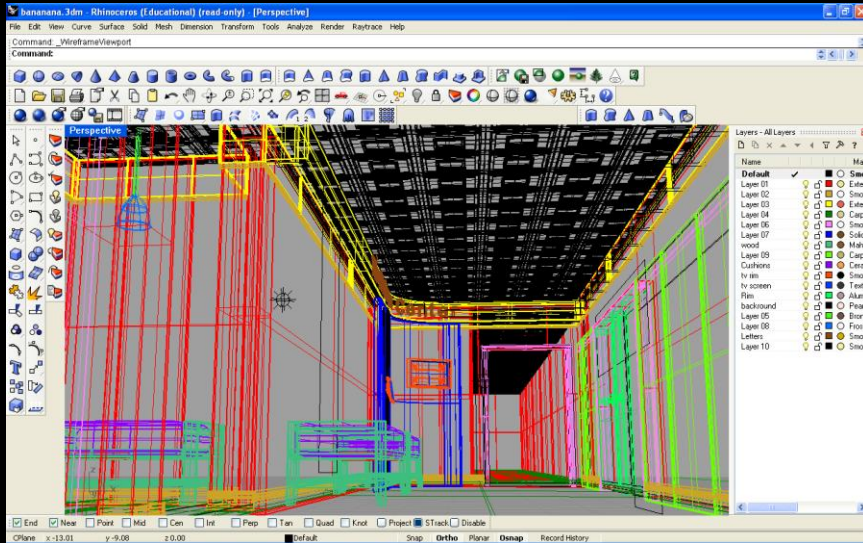






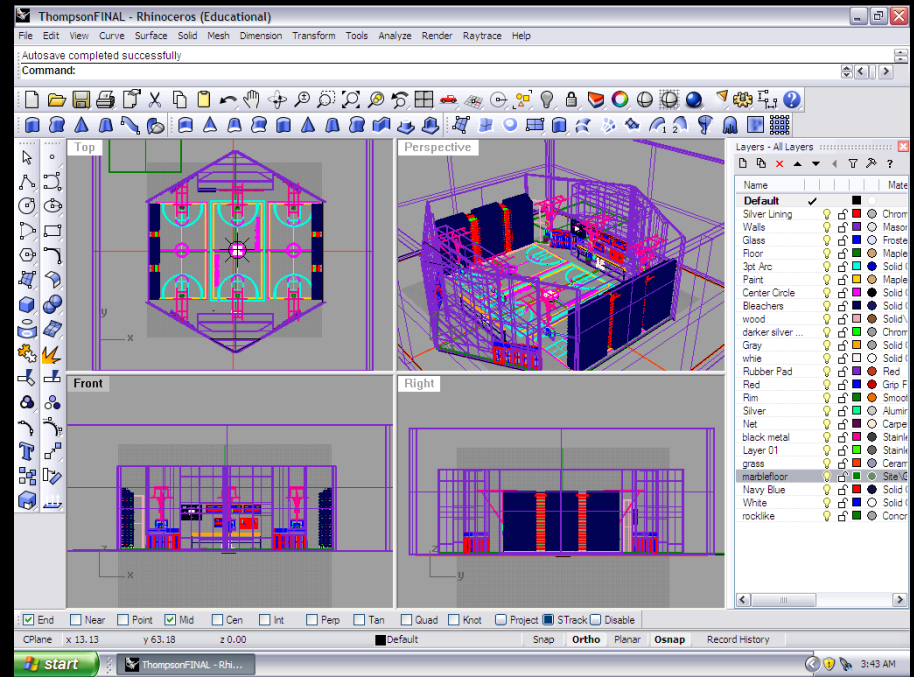
ETOWN Architecture 2006

Rhinoceros and Flamingo software supervised student projects



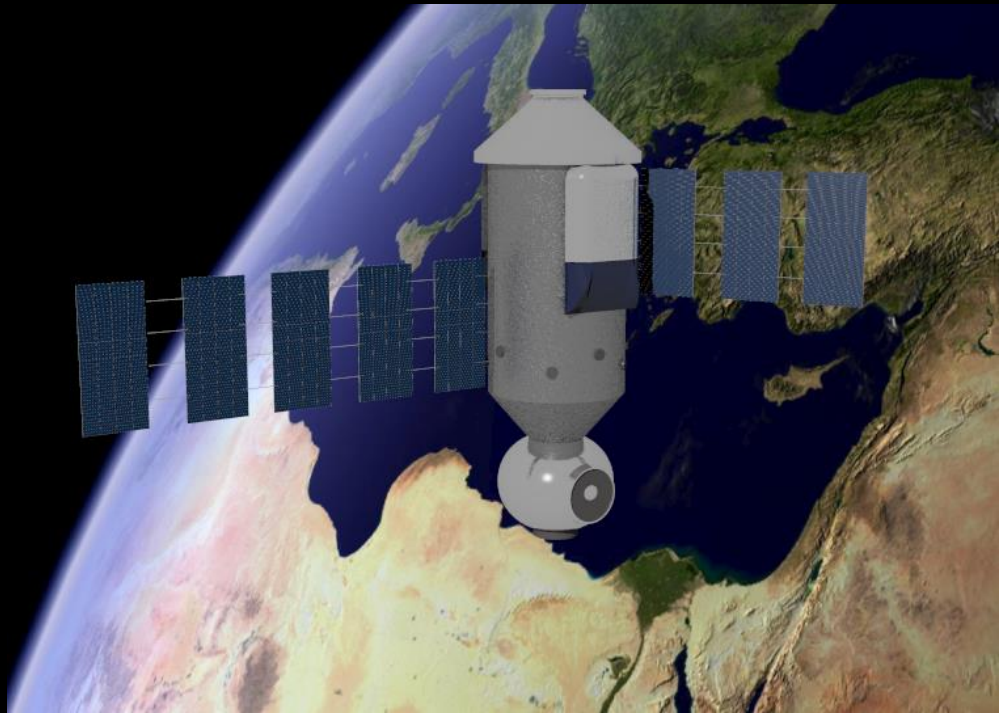
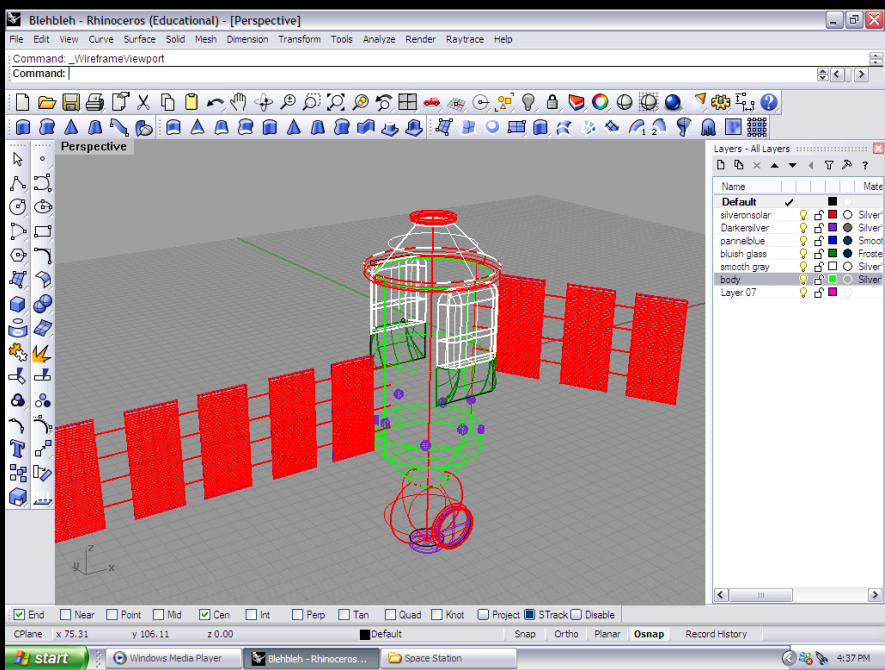
ETOWN Architecture 2006-2010

Rhinoceros and Flamingo software supervised student projects



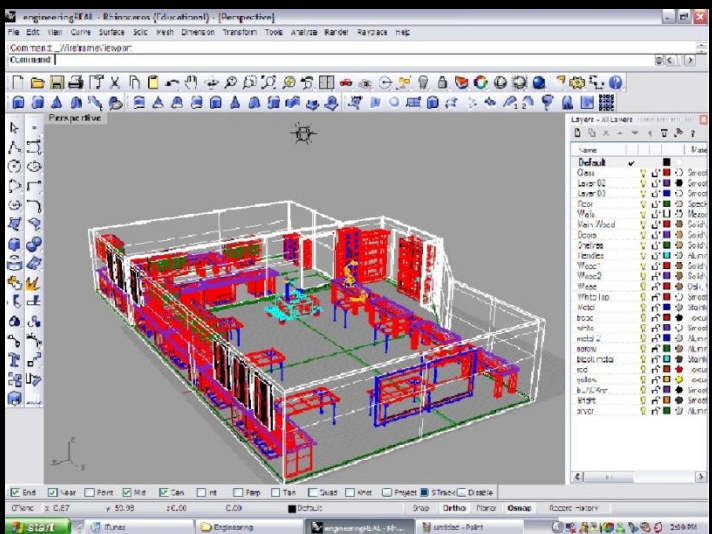
ETOWN Architecture 2006-2010

Rhinoceros and Flamingo software supervised student projects



ETOWN Architecture 2006-2010

Rhinoceros and Flamingo software supervised student projects



Wrote design specifications for my
Studio



JT Wunderlich 2004, 2008, 2009, 2011, 2014, 2017
Studied Italian Architecture
in Italy (*while presenting and teaching*)

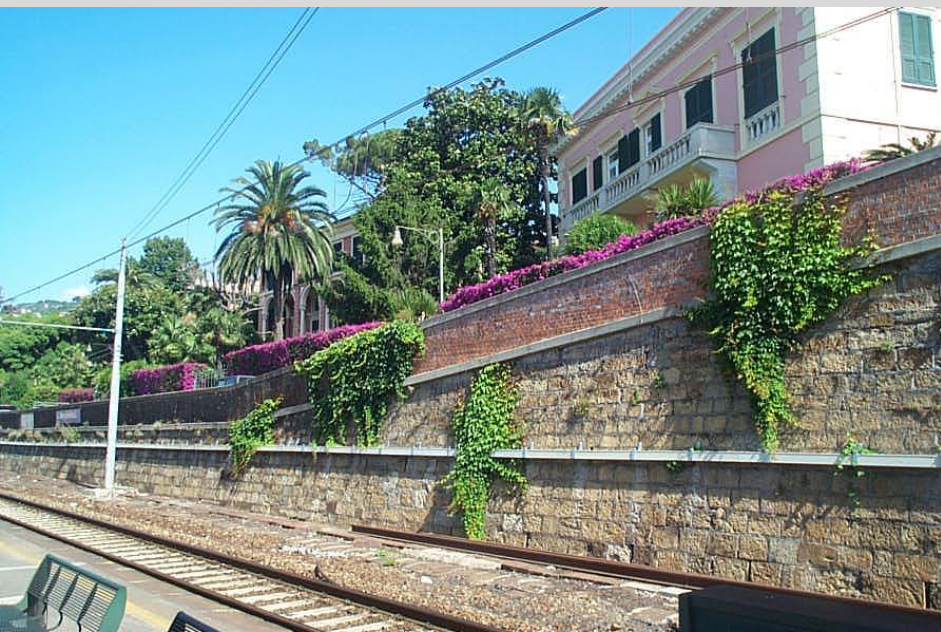
Professor

- Venice (four times)
- Padova (twice)
- Trento (twice)
- Roveretto
- Florence
- Tuscan county side
- Rome
- Genoa
- Porto fino
- Santa Magrietta





Studied Italian Architecture and language while presenting at a conference





Studied Italian Architecture and language while presenting at a conference



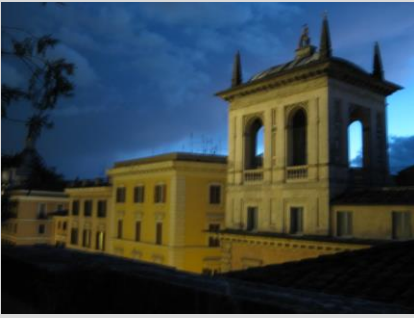
**University of Trento
Faculty of Engineering**



Visiting Professor at
University of Trento for a
PhD course

Studied Italian
Architecture and language
while teaching





Studied Italian Architecture and language while presenting at a conference





Studied Italian Architecture and language while presenting at a conference





Studied Italian Architecture and language while presenting at a conference





Studied Italian Architecture and language while presenting at a conference



more HERE



2017 Europe 9, Venice Apartment

13 views • 4 days ago



2017 Europe 10, Venice, Our Neighborhood

11 views • 4 days ago



2017 Europe 13, Venice At U of Venice Library

5 views • 4 days ago



2017 Europe 14, Venice With Decceco family

6 views • 4 days ago

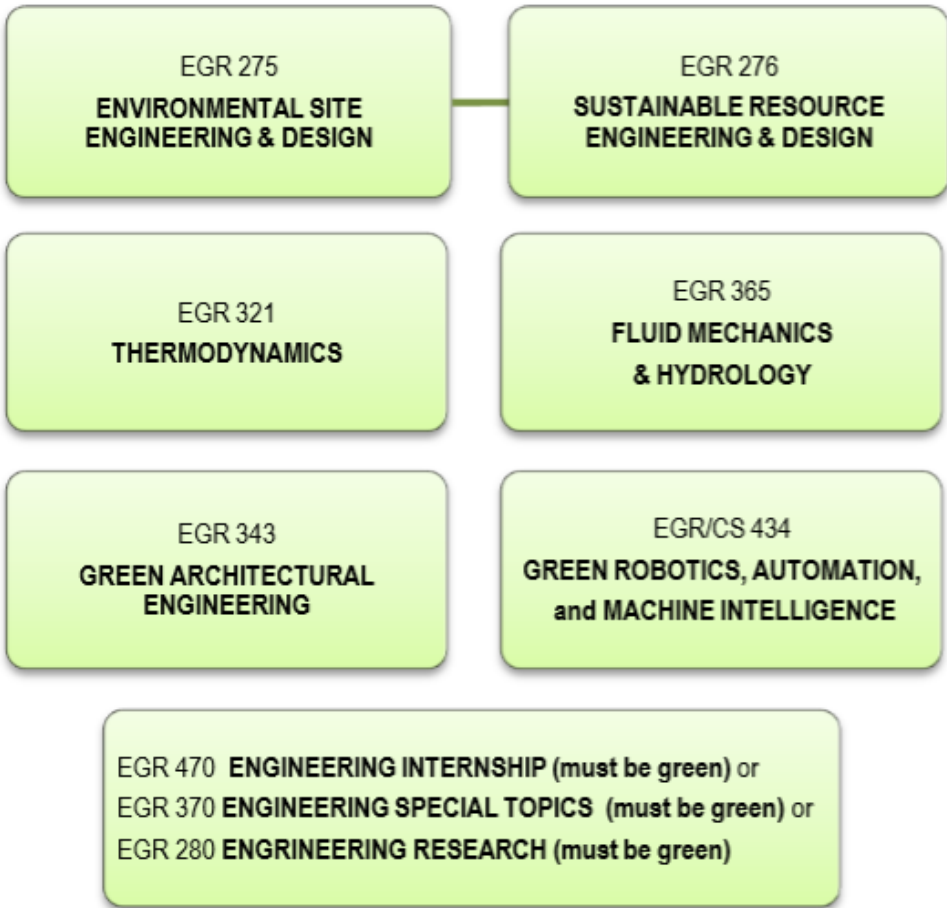
Studied [Italian Architecture](#) and [language](#) while presenting at a conference



more [HERE](#)

JT Wunderlich 2011
Created Sustainable Design
option for BS Engineering,
Elizabethtown College, PA

Green Engineering:



Special Core:



ETOWN Architecture 2012

First Revit software supervised student projects



See [Details](#)

Studied Japanese Architecture in Japan (plus keynote speaker at conference)

Kyoto
Osaka
Narita



Studied Japanese Architecture in Japan *(plus keynote speaker at conference)*

Kyoto
Osaka
Narita





more [HERE](#)

ETOWN Sustainability Symposiums 2012,13,14,15,16 organized Part of our Annual Scholarship And Creative Arts Day (SCAD)

2nd ANNUAL ELIZABETHTOWN COLLEGE SYMPOSIUM ON SUSTAINABILITY

Tuesday, April 23, 2013 Gibble Auditorium 9:30am to 12:30pm (Posters at 1:15pm in Lobby)

-----Session I-----



#1 9:30 AM “High-end Phoenix Contact Technologies for International Green Initiatives” by James Kelly

#2 9:40 AM “Reflections from 16 Months of Interdisciplinary/Multicultural Collaboration on a West African Social Business Start-Up”

by Jillian Casey, Jennifer Hughes, Eleanor McCarthy, Joshua Rowlands, Emily Vogel, Julia Ward, and Nicholas Young

#3 10:00 AM “Next Steps in Continuing Work Toward West African Social Business Start-Ups – New Product Development”

by Anthony Fraccica, Joshua Frey, and Courtney Warlick

#4 10:15 AM “Family EcoRise”

by Vaclav Hasik

#5 10:30 AM “Proposed Design to Replace a New Jersey Vacation Home Destroyed by Hurricane Sandy”

by Emily Vogel



ETOWN Sustainability Symposiums 2012,13,14,15,16 organized Part of our Annual Scholarship And Creative Arts Day (SCAD)



#6 11:00 AM “SWOT Analysis of a Sustainable Entrepreneurial Ecosystem in Costa Rica”

by Kyle McNulty and Derek Zmcic



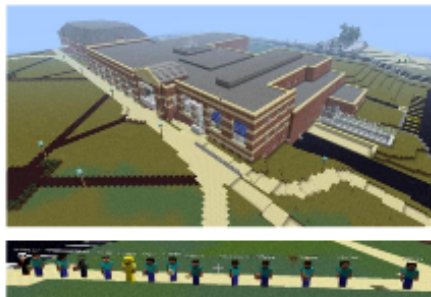
#7 11:15 AM “Computer Controlled Hydroponic Gardens”

by Sean Flannigan and Andrew Khela



#8 11:30 AM “Analyzing the Hydrological Impacts of a Proposed Sports/Recreation/Fitness Center at Elizabethtown College”

by Deborah Bartyczak, Josh Rowlands, Emily Vogel, and Nick Young



#9 11:45 AM “FEAST(Future Energies and Sustainable Technologies) Club Activities”

by James Annab, Jack Hess, Matt Klempa, and Anthony Fraccica

#10 12:00 PM “Social-networking, Crowd-sourcing Teamwork to Rapidly-Prototype Green Architecture and Communities”

by Ricky Sturz

#11 12:15PM “Solar Decathlon Charette” *by Vaclav Hasik*



-----Posters-----

(1:15PM in Lobby): “LEED (Leadership in Energy and Environmental Design) Architectural Design”

by Shane Weller, Kyle Wilt, Meghan Donahue, Emily Vogel, and Vaclav Hasik

Architectural Computer Servers (Minecraft)

For college students, and children worldwide

Crowdsourced Architecture and Urban Design

Servers configured & maintained on home machines and third-party hosting sites





2010 sample Architecture by my son:





2012 Architecture by College Freshman in many Majors;
Four sustainable towns with four students in each:





2012 Architecture by College students in Architecture, Engineering, Computer Science, Cognitive Science, and Philosophy:





2013 Architecture by College Freshman in many Majors.
Four Japanese towns with four students in each:





Judo course included designing Japanese towns

Course Syllabus

VIRTUAL REALITY JAPANESE HOME DESIGN AND COMMUNITY JAPANESE GARDEN (judged on-line)

- **Thoroughly research traditional Japanese homes and the culture of Japanese families in the late 1800's**
 - (use library, and reference class notes)
- Build a sustainable traditional-style Japanese home in **Tsojin2 (Dr. Wunderlich's Architectural Server)** in your designated town at whatever time you would like to be on the server (it will be running constantly).
- Your home must include:
 - **PASSIVE SOLAR:** Without the use of any electrical or mechanical devices, let light into your house to warm it in the winter, but not let in too much sun in the summer. Remember that the sun rises in the East, sets in the West, tracks across the sky at high angles during hot months, and at low angles during cold months (since our software doesn't yet have variable sun paths, just be aware of which way is South – figure it out from the trajectory of the sun). Create **OVERHANGS** on roofs to strategically shade windows (estimate dimensions), and note that too many western-facing windows may cause overheating. Also, have sun shine on interior **THERMAL MASS's** to absorb heat during the day, and release it at night. Assume thick masonry works very well, and water works even better, but may be more difficult to implement **NATURAL DAYLIGHTING:** Maximize the entrance of sun into the house while not overheating the house in summer months.
 - **MITIGATED COLD NORTHERN WIND:** Through site selection, possible placing of dirt & grass, and design of building's northern elevation (including wall thickness and materials chosen), shield the house from cold Northern winds; but consider letting some light in for natural daylighting and preserving views.
 - **AN OVERALL ARCHITECTURAL ESTHETIC:** House should not only be the ultimate sustainable habitat, it also needs to be livable, and visually pleasant (interior and exterior), so balance all other criteria above while creating beautiful Architecture. Your architecture should be complimentary to all else in your village and to the group harmony ("Wa") of the village.
- Build your own private Japanese garden with coy pond on your lot.
- Take at least three screen shots of yourself working on your house (ALT+PrintScreen, then paste into a word document with CTRL-V)
- Take at least four screen shots of your finished house and private Japanese garden (ALT+PrintScreen, then paste into a word document with CTRL-V)
- **The Community Japanese Garden must reference the new course text that I purchased four copies of, and are a part of the Lab (E273). I will use my database logger to see exactly who built what. Don't remove texts from Lab, and read with your teammates. TAKE THREE SCREEN SHOTS OF YOU WORKING ON THIS GARDEN WITH YOUR TOWN'S PEOPLE.**



course included designing
Japanese towns

2013 best paper about this,
by Sammi Eisdorfer



Creating a Minecraft Interpretation of Early Traditional Japanese Town Architecture, Drawing Additional Personal Inspiration From the Ideals of Judo (December 2013)

S. L. Eisdorfer
Elizabethtown College
575 Baugher Ave.
Elizabethtown, PA 17022 USA

Abstract—This is one student's reflection on her process, experiences, and research involved in creating a virtual minecraft town in the context of early traditional Japanese architecture. The project was a collaborative effort by a group of 4 within the First Year Seminar: Scientific Modeling for Sport instructed and facilitated by Dr. Joseph Wunderlich at Elizabethtown College. Important concepts for the project and the course as a whole include historical Japanese culture, sustainable and efficient architectural techniques, and "Wa"- group harmony.

I. INTRODUCTION

IN JapanTown1, we strived to create a community based entirely on the idea of group harmony—"wa." It is important to note that our own JapanTown1-specific idea of group harmony may differ from that of other groups or peoples. We decided that true harmony in a group setting comes not from uniformity and conformity, but from a relaxed and open ambiance created by universal freedom to be an individual. Our harmony would be disturbed if we tried too hard to be alike, as all four of us are distinctly independent in our own ways. Rather than fight this, we decided to embrace it. That's what group harmony means in JapanTown1—you will be loved and accepted as you are. Be that person. Our celebrated differences are what make us come together so well as a community. They are what make our *wa* so strong. A quote by author Steve Goodier depicting this mantra makes its home just outside our virtual Japanese Garden—"We don't

get harmony when everybody sings the same note. Only notes that are different can harmonize. The same is true with people."

II. MY ROLE WITHIN THE GROUP DYNAMIC

My natural tendency is to take up the leadership role from the beginning. This project was no exception. I was the first to send out an e-mail, taking the initiative to set up an early group meeting for town planning. The other members of the group were glad and relieved that I stepped up to the plate. We ended up meeting in the Myer lobby to discuss rudimentary plans for our town's intended dynamic and rules, layout for our house plots and gardens, and responsibilities that each group member should take charge of. This planning proved valuable and worked quite well for us, as it set us up in a way that each could work at their own pace and know what they needed to do.

A. My Architectural Identity and Inspirations

The Scientific Modeling for Sport FYS course for which this project was undertaken also teaches biomechanics and judo. I was fortunate enough to really make a connection to the sport, and in reading about its foundations was so inspired that I immediately wanted to incorporate it into every aspect of my life. After all, judo is not simply as a sport, but as a way of life. It is a physical manifestation of a deeper idea, a way to make an abstract concept tangible. At its core, judo



“Key” Japanese words
by Mahua Bhattacharya,
Professor of Japanese,
for J Wunderlich’s students

OMOIYARI – Considerate

ON - Duty

AMAE - Empathy

WA - Group Harmony

UCHI - Inner (or insider)

KENSON - Modesty

GIRI - Moral Obligation

SOTO - Outside (or outsider)

GARMAN - Persistence

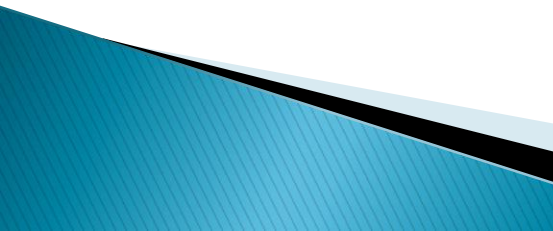
ENRYO - Restraint

HAJI - Shame

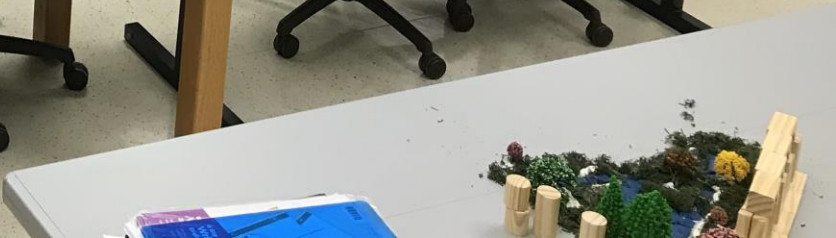
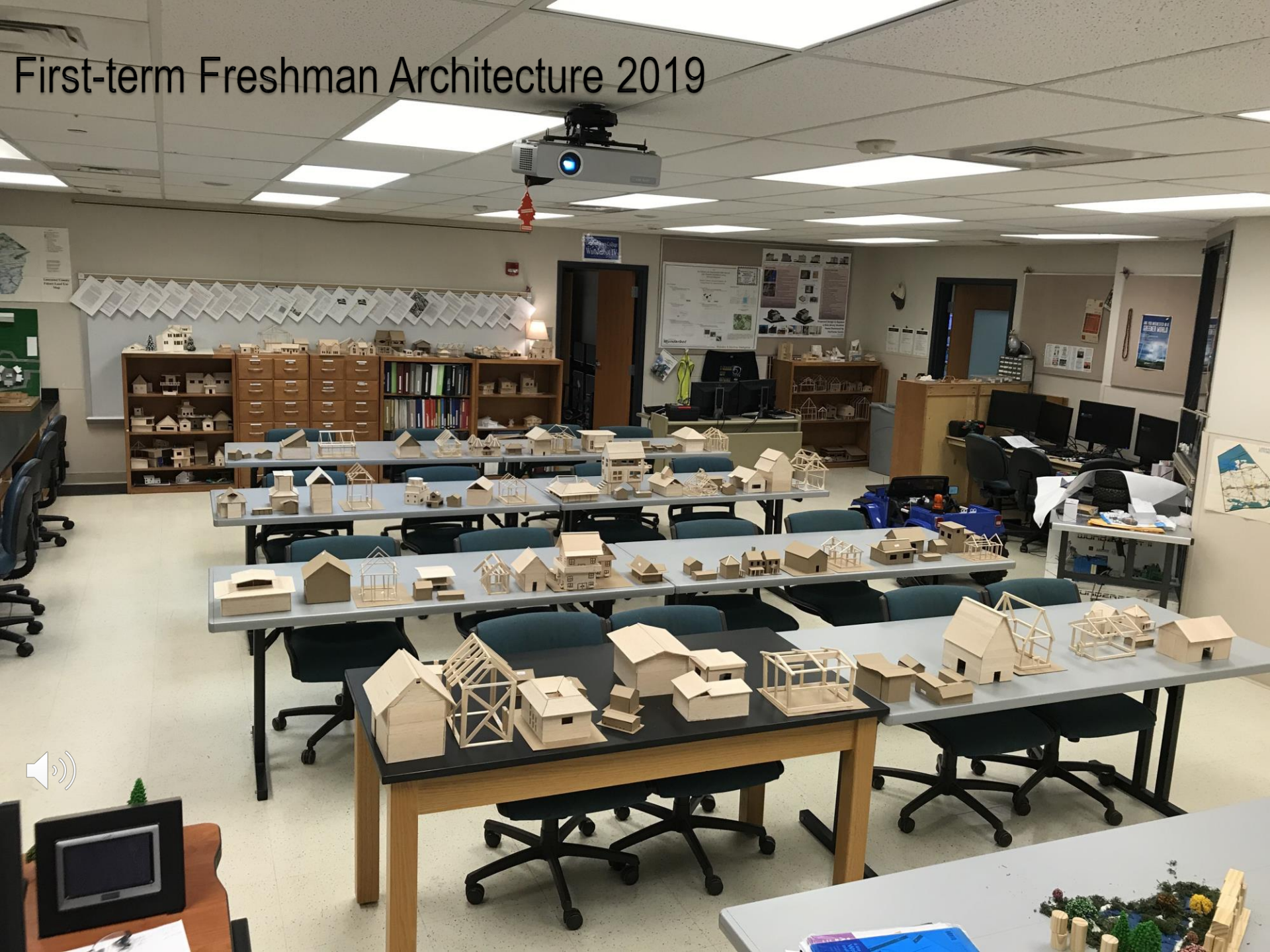


After teaching a course for 10 years on Judo and Japanese culture & architecture,
I began a course on conceptual architecture
including relating Frank Lloyd Wright designs to
Japanese architecture

Syllabus



First-term Freshman Architecture 2019





Elizabethtown College
Wunderbot IV

Site Specific
Elizabethtown College
Wunderbot IV
Elizabethtown College
Wunderbot IV
Elizabethtown College
Wunderbot IV

Poster: Lead City
Other projects: ...
- Green building ...
- Water saving ...
- Low-carbon ...
- ...



I NEED MY SPACE



As of 2020, taught seven different architecture courses, and often incorporate Japanese Architecture and Urban Design



ARCHITECTURE WEBSITE



FYS100 **CONCEPTUAL ARCHITECTURE**

- Architecture Theory intro; Mansions; Barns
- Architecture of JAPAN and ITALY
- FRANK LLOYD WRIGHT Ages: 0-19 (1867-86), 20-33, 34-41, 42-47, 48-62, 63-78, 79-91, V-Lecture of 31 Chicago Designs
- Assignments: 1 2 3 4 5 6 7 8 9 10 11 12

EGR353 **GREEN ARCHITECTURAL ENGINEERING**

- REVIT Lab1 and Lab2, "SWEETS" Catalog
- LEED Intro; LEED Project1 Neighborhood Design(ND), Etown Master Plan, LEED Project2 Building(BD+C) or Interior(ID+C); LEED Trips: SFW Center and SFW 2
- LEED Checksheets: ND Plan, BD_C New Cnstrct/MajorReno, ND Built, BD_C Core&Shell, BD_C Schools, BD_C Retail, BD_C Data Centers, BD_C Warehouse/DistrCenter, BD_C Hospitality, BD_C Healthcare, BD_C Homes&MultifamilyLowrise, BD_C Multifamily Midrise, ID_C Commercial Interiors, ID_C Retail, ID_C Hospitality, O&M ExistingBldg, O&M Schools, O&M Retail O&M Data Centers O&M Hospitality O&M Warehouse/DistrCenter
- Lectures: ; CH3 Thermodynamics Concepts ; CH4 Comfort ; CH5&11 Climate&Site Design ; CH6 Solar Geometry ; CH7 PASSIVE Solar Heating ; CH8 Active Solar ; CH9,10 PASSIVE Cooling ; CH12,13,14 Daylighting and Illumination Engineering ; CH15 Building Envelope ; CH16 HVAC; Acoustics
- AIA Graphics Standards; Guest-Speakers; 2018 FINAL EXAM

ART370 **ARCHITECTURAL DESIGN THEORY**

- Lectures: **PRIMARY ELEMENTS FORM FORM & SPACE ORGANIZATION CIRCULATION PROPORTION & SCALE PRINCIPLES**
- Assignments: 1.Japanese Bridges, 2.Massing Models, 3.Origami, 4.Kirigami Architecture, 5.Sacred Space, 6.Joyful Space, 7.Great-Window Inspired Residence
- Cedar Hill Housing

ART371 **ARCHITECTURAL MATERIALS & METHODS**

- 2020 PDF's of in-class Lectures before Coronavirus (also on "Canvas"): **STANDARDS STRUCTURAL FOUNDATIONS WOOD: 1, 2, 3 Masonry&Concrete: HISTORY, STONE,.....**
- 2020 PPTX Lectures with Audio due to Coronavirus (also on "Canvas"):
 - ... BRICK PPTX-audio PDF
 - BLOCK PPTX-audio PDF
 - CONCRETE PPTX-audio PDF CLOUDw/transcript VIDEO
 - STEEL&HIGH-RISES PPTX-audio PDF MP4 YouTube
 - SHELL/ENVELOPE PPTX-audio PDF MP4 YouTube CLOUD-w/transcript[Pswd:7f+IN4Z&]
 - INTERIORS PPTX-audio PDF MP4 YouTube CLOUD-w/transcript[Pswd:3e@g&9#3]
- Assignments: 1:Site1_Bridge&Creek 2:Site2,Revit1 3:Neighborhood,Revit2,LEED1 4:FINAL DESIGN (Residential Renewal, VR, etc.)
- Final Exam

ART/SOC371 **FRANK LLOYD WRIGHT**

EGR/ART495/496(499A&B) **ARCHITECTURE STUDIO I&II (Juried)**

- 2017 **Etown Library Cafe** from (1989 Library Drawings)
 - **ACOUSTICS**
 - Etown Solar Paths
 - LEED: Daylight, Views, Lighting, Acoustics, Raw materials, Material Ingredients
 - Revit Intro, Levels, Walls, High Library, Interior, Doors&Windows, Library acoustics
- 2018 **Etown Residential Renewal**
 - **LIGHTING:** Design, Solar, Feng Shui
 - LEED Daylight, Views, Lighting, Neighborhood Development; LEED ND rules
 - Etown Master Plan: 1999 Chapter 1 and seven site analysis maps, 2011 update; Etown 3d Google Map, and Topographical Map(Source) Overviews of: Human Vision, Color , and Illumination Engineering; Illumination Engineering Standards (IES): Eyes&Brain, NonVisual Effects, Performance&Perception, and Gallery Design
 - Revit assignments: 499A Perspective, 499B Perspective; 499A&B Perspective, 499A Solar, 499B Solar; 499A REVIT Intro, 499B REVIT Topo; 499A REVIT BIM (Building Information Managemnt), Doors&Windows, 499B REVIT Topo; ("SWEETS" Catalog); 499A&B Site Walks
 - Dorms by Cannon Design; Real Estate Development
- 2019 **Etown \$1M RACP Grant, and Cedar Hill Housing**
 - **SPECIFICATIONS**
 - Assignments: 1. Bridges, 2. Green Roofing Spec, 3. \$1M RACP Grant for Sports, Fitness, & Wellness, 4. Revit Great-Window Inspired Residence
 - Cedar Hill Housing





Website for many student and guest Architectures:

http://users.etown.edu/w/wunderjt/TSOJIN_ranks.pdf

YouTube videos for many student and guest Architectures:

https://www.youtube.com/channel/UC_kM_k93zrelu40CVwuHQzg?feature=watch

Elizabethtown College Architectural Servers

TSOJIN SERVER IP:174.54.14.202

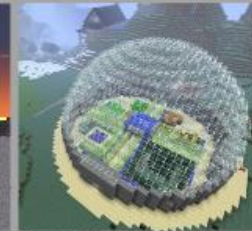


Including FYSworld for Etown College Freshmen

EARNED TSOJIN RANKS: Guest, Member, **Builder**, **Architect**, **Master**, **Admin**, **Grandmaster**



Robie House by Joseph (USA)
VIDEO



Four GREEN Towns in FYSworld
VIDEO VIDEO VIDEO VIDEO

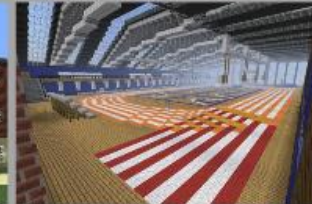


DigitalDesignWorld EGR332 Digital Circuit

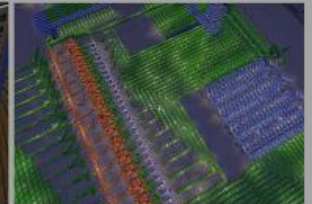
RICKY STURZ SERVER

 IP:199.188.100.104:25575

FYS Team-Build of Etown Housing
VIDEO



Ricky's new Etown Field House design, and FYS Team-Build of Masters Center
VIDEO



RedstoneWorld EGR332 Digital Circuit

NEWS (2012): United Nations uses Minecraft for Sustainable Design (300 sites)

Read more here:

<http://www.unhabitat.org/categories.asp?catid=9>

<http://informedinfrastructure.com/1775/un-habitat-taps-minecraft-for-urban-development/>

<http://www.learninggamesnetwork.org/imojang-un-block-by-block/>





Publications and talks given in Osaka Japan and London England:

http://users.etown.edu/w/wunderjt/Green_Social_Designs_Japan_paper_19.pdf

http://users.etown.edu/w/wunderjt/Green_Social_Designs_Japan_TALK_19_PLUS.pdf

http://users.etown.edu/w/wunderjt/CrowdSourced%20Architecture%20and%20Environmental%20Design_PAPER_15_TALK_SUBMITTED_EDITED_Wunderlich.pdf

http://users.etown.edu/w/wunderjt/CrowdSourced_Architecture_and_Environmental_Design_PAPER_15_FINAL_SUBMITTED_EDITED_Wunderlich.pdf



Created Architectural Studies Minor
Elizabethtown College, PA

Required Classes (23 credits)

	Credits
ART 105 - Drawing I (CE CORE)	4
ART 280 - World Architecture (NCH CORE)	4
ART 210 - Drawing II OR	4
ART 120 - CE Sculpture (CE CORE)	4
EGR 343 - Green Architectural Engineering	3
ART/EGR 471 - Internship in Architecture OR	4
ART/EGR 481 - Independent Study in Architecture OR	4
ART/EGR 371 - Special Topics in Architecture OR	4
EGR 280 (future number change to 281) - Engineering Research in Architecture OR	4
EGR 276 - Sustainable Resource Engineering & Design AND	3
EGR 396 - Spring Seminar	1
ART/EGR499A Architecture Design Studio	2
ART/EGR499B Architecture Design Studio	2



Primary Investigator for Elizabethtown College Social Enterprise projects:

[Trucker Wellness Center Designs](#), [Sierra Leone Africa Health Clinic Designs](#)

Trucker Wellness Centers (Psychological, Medical, Spiritual)

- Art/Egr499 was part of Spring 2014 design competition (14 students, 5 teams, 10 judges)
- A Social Enterprise Institute project (\$5780 of student awards), (PI: J Wunderlich PhD)

Primary Care Medical Clinics for 50 sites in Sierra Leone Africa

- Spring 2015 integration of Fall designs from EGR343 Green Architectural Engineering (19 students, 6 teams, 8 judges)
- A Social Enterprise Institute project (PI: J Wunderlich PhD)



Poster for Elizabethtown College Trustees

Art/Egr 499a&b Architectural Design Studio I & II

A Capstone Selected Learning Experience

Architectural Studies Minor

Joseph Wunderlich PhD, Associate Professor of Engineering

Patricia Ricci PhD, Associate Professor of Art History

Trucker Wellness Centers (Psychological, Medical, Spiritual)

- Art/Egr499 was part of Spring 2014 design competition (14 students, 5 teams, 10 judges)
- A Social Enterprise Institute project (\$5780 of student awards), (PI: J Wunderlich PhD)



Primary Care Medical Clinics for 50 sites in Sierra Leone Africa

- Spring 2015 integration of Fall designs from EGR343 Green Architectural Engineering (19 students, 6 teams, 8 judges)
- A Social Enterprise Institute project (PI: J Wunderlich PhD)



Art/Egr499a&b taught in Design & Technology-Transfer Studio



Crowd sourced Architecture and Urban Design on our computer servers

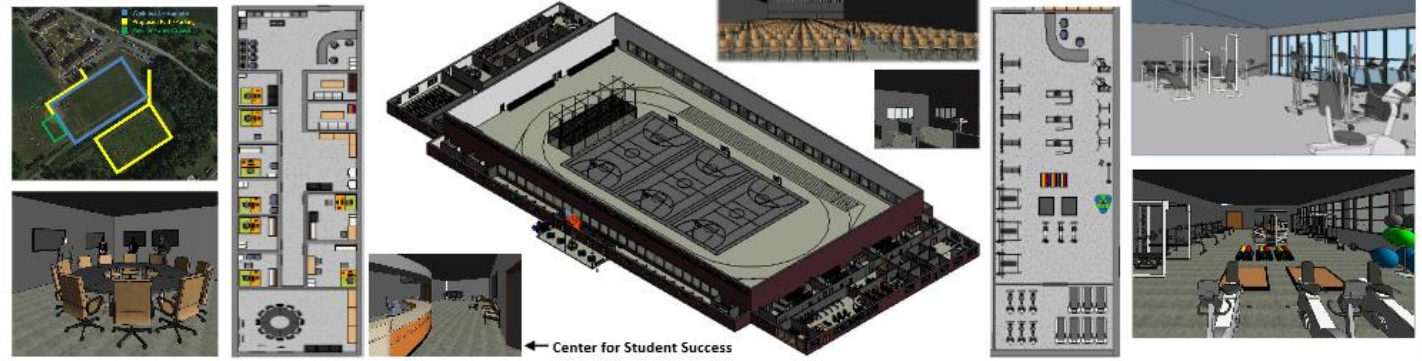


Field Trips to local projects



Campus Wellness Center (Mind, Body, Spirit)

- Spring 2015 integration of Fall designs from EGR343 Green Architectural Engineering (18 students, 6 teams, 22 judges)
- The 22 judges included many Faculty and Staff, and several outside professionals



← Center for Student Success



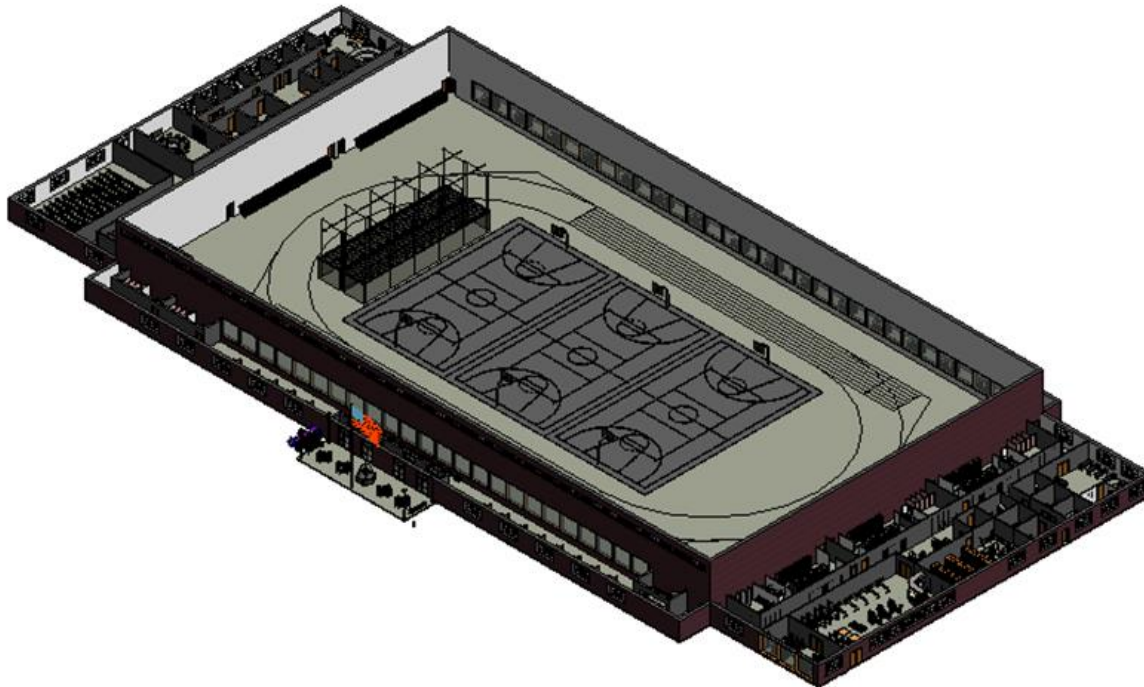
Student designs to help get a Campus Wellness Center built

SEE: http://users.eta.edu/w/wunderjt/home_student_ARCHITECTURE_EGR343_2_2014.html

One of six team designs (three students per team)

in Fall 2014 [EGR343 Green Architectural Engineering](#)

22 judges: (professional architects and engineers, senior staff and faculty of the college)



Elizabethtown College Sustainability Committee

My Report for our College Administration

http://users.etown.edu/w/wunderjt/Sustainability_Committee_Academics_Report_version_1_5.pdf



Etown Sustainability Subcommittee Report on Existing Academic Sustainability Efforts

Spring 2015 - version 1.5
(Updates to 2014 Committee Report are highlighted)

Sustainability Faculty Sub-committee:

David Bowne PhD, Ecology, Conservation Biology, Sustainable Development
E. Fletcher McClellan PhD, Political Science, US Government, Dean of Faculty
Sanjay Paul PhD, Economics
Brenda Read-Daily PhD, Environmental and Civil Engineering
Joseph Wunderlich PhD, [Architecture](#) & [Computer Engineering](#)

A. SUSTAINABILITY RELATED COURSES

- A.1 Art
 - ART 280 - World Architectures
 - ART 471 - Internship in Architecture
 - ART 499A&B - [Architectural Design Studios I & II](#)
- A.2 Biology/Environmental Science (All environmental science courses are within the BIO prefr)
 - BIO 103 - Living with the Environment
 - BIO/EN 170 - Ecology in Short Fiction
 - BIO 112 - Principles of Evolution, Ecology and Diversity of Life
 - BIO 225 - Geographic Information Systems
 - BIO 235 - General Microbiology
 - BIO 313 - General Ecology
 - BIO 317 - Aquatic Ecology
 - BIO 318 - Marine Biology
 - BIO 320 - Conservation Biology
 - BIO 335 - Microbial Ecology
 - BIO 362 - Ecotoxicology
- A.3 Business
 - BA 265 - Principles of Management (required for all business majors)
 - BA 372 - Sustainable Marketing (elective)
- A.4 Communications
 - COM 485 - Senior Seminar (two Etown Sustainability videos produced to-date)
- A.5 Economics
 - EC 102 - Principles of Microeconomics (required for all business majors)
 - EC 370 - Environmental Economics (elective)
- A.6 Education
 - ED 325 - Methods for teaching Science and Health in Early Childhood
 - ED 326 - Methods for teaching Science and Health in Elementary/Middle Level
- A.7 Engineering
 - EGR 275 - Environmental Site Engineering & Design
 - EGR 276 - Sustainable Resource Engineering & Design
 - EGR 280 - [Engineering Research in Sustainable Design](#)
 - EGR 280 - [Engineering Research in Architecture](#)
 - EGR 321 - Thermodynamics
 - EGR 365 - Fluid Mechanics and Hydrology
 - EGR 370 - Introduction to Environmental Engineering
 - EGR 353 - [Green Architectural Engineering](#)
 - EGR 434 - [Green Robotics, Automation, and Machine Intelligence](#)
 - EGR 471 - Internship in Architecture
 - EGR 491/492 - [Senior Design Project](#)
 - EGR 499A&B - [Architectural Design Studios I & II](#)
- A.8 Earth Science
 - ES 113 - NPS Earth in Space: Evolution of a Planet
 - ES 114 - NPS Geosystems: Landscapes, Oceans and Atmosphere
 - ES 117 - NPS Climate Change and the Fate of Civilization
 - ES 216 - Physical Geography
 - ES 175 - *New Course*
- A.8 History (Brian Newsome could add Urban Planning content)
 - HI 208 - Technology and Values in American Experience
- A.9 Philosophy
 - PH 255D - Advanced Ethics: Environmental
- A.10 Peace and Conflict Studies
- A.11 Political Science
 - PS 361 - Public Administration
- A.12 Religion
 - REL 151 - Life Meaning and Purposeful Work
 - REL 291 - Indic Religions: Hinduism, Jainism, and Sikhism
 - REL 292 - Buddhism
 - REL/SOC 364 - Amish Society
- A.13 Sociology and Anthropology
 - SSC 204 - Population and Global Issues

B. SUSTAINABILITY RELATED PROGRAMS

- B.1 [Architectural Studies Minor](#)
- B.2 Biology BS (environmentally-oriented students often choose Biology BS over Environmental Science BS)
- B.2 [Engineering BS- Sustainable Design Concentration](#) (restructured as "Environmental Engineering")
- B.3 Environmental Science BS - we need a multi-disciplinary environmental studies minor or major
- B.4 Environmental Management Masters (with Duke) No student has yet participated
- B.5 Forestry Management Masters (with Duke) No student has yet participated
- B.6 General Science BS
- B.8 Public Policy 5th year program (get BS or BA in any Major, then add a year of Policy Making – where is this in catalog?)
- B.9 Religious Studies BA

C. FACULTY EXPERTISE (Atwood, Blouch, Bowne, Ciocirlan, Degoede, Estrada, Kozimor-King, Kraybill, Long, McClellan, Murray, Newsome, Paul, Read, Ricci, Scanlin, Wheelersburg, Winnipenny, Wohl, Wunderlich, and others)

D. SUSTAINABILITY RELATED TEACHING & RESEARCH SPACES

- D.1 Art Studios - P. Ricci, M. Friedly
 - D.2 Architectural Computer Servers (virtual green architectures and towns) - J. Wunderlich
 - D.3 Biology Environmental Science Labs - D. Bowne, T. Murray, D. Wohl - [replace demolished greenhouse](#)
 - D.4 Campus (Lake, wetlands, much farmland across from quads, organic garden – 300 pounds per year harvested, etc)
 - D.5 Education Department classrooms and labs
 - D.6 Engineering Environmental Engineering Research Lab - B. Read-Daily
 - D.7 Engineering Geosciences Lab/Studio - M. Scanlin
 - D.8 Engineering [Design & Technology-Transfer Studio](#) - J. Wunderlich
 - D.9 Engineering Solar Cabin and Sustainability-electronics Lab - T. Estrada
 - D.9. Math Computer lab (E368). Has ArcGIS geographic information system (GIS) software. Popular in sustainability work.
 - D.10 Political Science spaces
 - D.11 Religious Studies – Young Center
 - D.12 Sociology and Anthropology spaces
- OFF-CAMPUS: We have use of Lancaster County Conservancy preserves for research & student projects. Closest one 3 miles away

E. SUSTAINABILITY RELATED SCHOLARSHIP

- E.1 Faculty research and publications (List to be compiled)
- E.2 Grants (Rick Basom has given us this list) "Sustainability-Related Grant Applications and Awards" [List removed for confidentiality](#)
- E.3 Scholarship & Creative Arts Day [Sustainability Symposiums \(4th annual event March 21, 2015\)](#)
- E.4 "GreenCon" Regional conferences e.g., at Dickinson 2013 a LEED charette conducted on promoting regional sustainability (Etown, Dickinson, Penn State, Drexel, Temple, and Philadelphia U.)
- E.5 [Perhaps committee goes to Greencon2015 at Franklin & Marshal College on March 19, 2015 3:00pm for this talk: "Elizabethtown College Architecture of Wellness and Sustainability"](#)

F. SUSTAINABILITY RELATED CLUBS

- F.1 "Biking Club"
- F.2 "Environmental Group" – M. Kozimor-King, Sociology -- Susan Webster, English
- F.3 "FEAST" (Future energies and sustainable technologies) – T. Estrada, Engineering
- F.4 "Habitat for Humanity"
- F.5 "National Science Teachers Association" – K. Blouch, Education
- F.6 "Outing Club"
- [F.7 Engineers Without Borders \(EWB\) student chapter being formed in Spring 2015](#)

G. ACADEMIC COMPETITIONS and OPPORTUNITIES FOR STUDENTS TO PUBLISH (Peer-reviewed Conferences, Journals, etc.)

- G.1 Engineering Solar Decathlon (partially planned for in Spring 2013 Charette)
- G.2 Engineering Solar Boats (*it's been several years since competing*)
- G.3 Engineering Intelligent Ground Vehicle Competition (includes environmental mapping) - several years since competing
- G.4 [Mobile Wellness Center Design Competition](#) (Spring 2014)
- G.5 [Campus Wellness Center Design Competition](#) (Fall 2015) – 22 judges
- G.6 [Health-Clinic Design Competition for Sierra Leone, Africa](#) (Fall 2015) – 8 judges

H. ACADEMIC OUTREACH

- H.1 Professional affiliations (Sierra Club, USGBC, EPA, NSPE, AIA, ASCE, ASEE, IEEE, ASME, etc)
- H.2 Farms (e.g., Methane Digester – saves \$15,000/yr, Mennonites families) - B. Read, D.Kraybill, J.Wunderlich
- H.3 Masonic Homes (Largest Masonic retirement facility in the Nation? – next door to us) – D. Bowne
- H.4 Collaborations with other U.S. Schools (Universities, Colleges, High-schools, Grade-schools) [See E.4 and E.5 above](#)
- H.5 Collaborations with Schools Abroad (University of Trento in Italy, Pantheon Institute in Rome, U. Gambia in Africa)
- H.6 Corporate affiliations (Phoenix Contact USA and Germany, IBM, SustainX, Bechtel, etc.) – J. Wunderlich, M.Scanlin, etc
- H.7 Government (DEP, Planning commissions, Building inspectors, Mayors, State Legislature, U.S. Congress) – F. McClellan
 - [2014, 2015 outreach to Governor Tom Wolf and Senator Bob Casey](#)
- H.8 Foreign governments (Italy, Gambia, Japan, Costa Rica, Middle East) – Wunderlich, Estrada, Degoede, John Craig
- H.9 Venture Capital start-ups (e.g. via Ambassador Craig's International venture capital company, etc)
- H.10 NGO's (Peace Core, Habitats for Humanity, World Vision, Lancaster County Conservancy, etc)
- H.11 Young Center and churches; Don Kraybill for Amish and Mennonites, Jeff Long for Hinduism, Jainism, and Buddhism.
- H.12 Native Americans – Bob Wheelersburg (Anthropology) has organized several activities in the past

I. GREEN INTERNSHIPS (we need to make a list somehow – from career services? – from departmental Administrative Assistants?)

J. PRESS

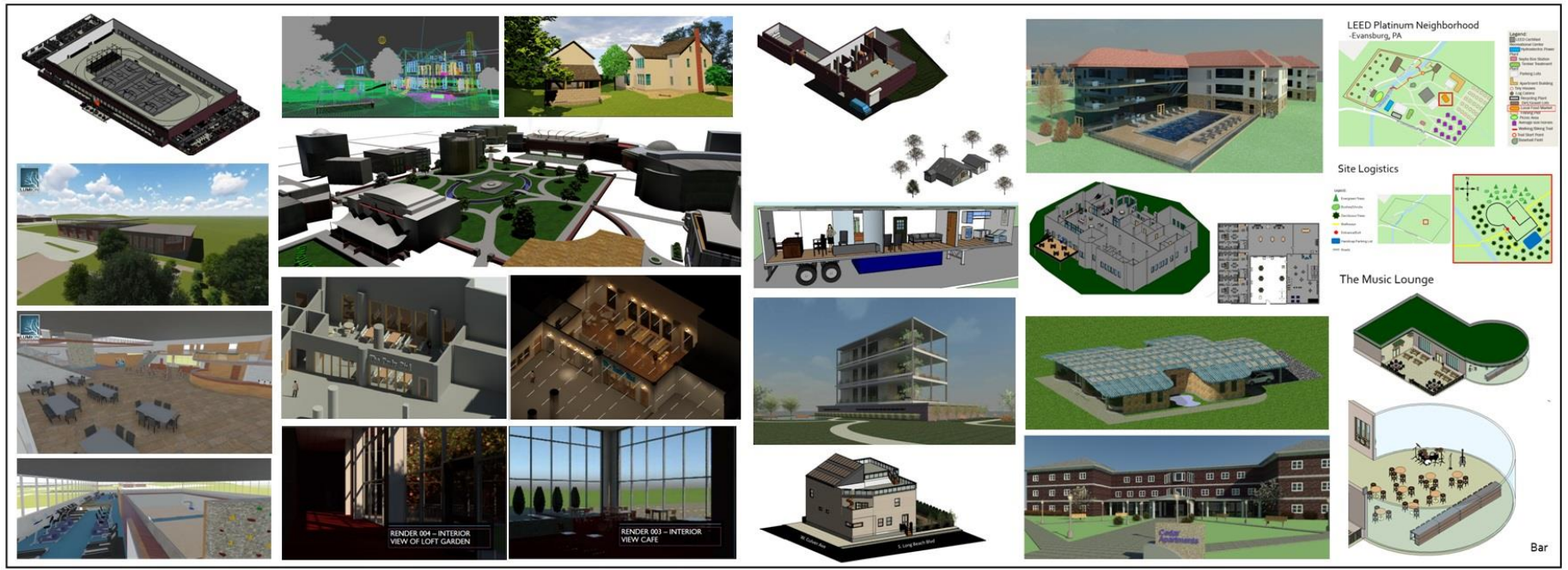
- I.1 Winter 2012 Elizabethtown College Magazine ["Blue and gray turns green"](#)
- I.2 [SLE-Capstone Architecture Poster to Trustees](#) (and again to "Trustees in Training" on March 20, 2015)
- I.3 Talk at Franklin & Marshal for Greencon15, March 19, 2015 3:00pm: ["Elizabethtown College Architecture of Wellness and Sustainability"](#)
- I.4 [Compare our Green web-presence to other schools](#) (2014). Hopefully action taken in 2015

K. FACULTY/STAFF COLLABORATIONS

- K.1 Successful 2013 Hydroponic Gardens (in [Design & Technology-transfer Studio](#)), now being built in food services
- K.2 New large Elizabethtown College Photovoltaic Array to be built (M.Scanlin, Plant-ops, et al)



Annual Architecture Design Studio Defenses and Student Portfolios
with up to 12 judges including professional Architects and Engineers, Senior Faculty and Staff, Trustees, etc



Student Projects Website:

http://users.etown.edu/w/wunderjt/home_pageARCHITECTURE.html

Year-end Architecture "Crits" and Portfolios (click on names)



- 2020 VIDEOS (*Residential Renewal, etc*)
 - Oculus Rift VR of Campus in 1924 and Present, all rendered in Revit by *Joseph J Wunderlich IV*
 - Etown Cedar-St. College-Hill Housing by *Donato Grimaldi*
 - Etown Cedar-St. College-Hill Housing by *Colton Shriner*
 - Maryland Development by *Devon Moravec*
 - Etown Cedar-St. College-Hill Housing by *Hugh Brolly*
 - Etown North-Campus OT/PA Housing (near Brown bldg) by *Zachary Silfies*
 - Etown College and Town Planning by *Alec Miller*
 - Castle by *Ahn Nguyen*
 - TA and Revit/VR tutor for above by *Joseph J Wunderlich IV*
- 2019 (VIDEOS soon) (*Residential Renewal, etc*)
 - Etown Cedar-St. College-Hill Housing by *Joseph J Wunderlich IV and Thomas Kuhn*
 - Etown Cedar-St. College-Hill Housing by *Kyla Strikler, Hunter Reiner, and Alec Miller*
 - Etown Cedar Street Housing by *Abby Beyer*
 - Etown Cedar-St. College-Hill Housing by *Brendan Burke, Hugh Brolly, and Annie Alex*
 - Etown Cedar-St. College-Hill Housing by *Donato Grimaldi, Jonathan Knapp, and Adam Way*
 - LCBC Megachurch 3D Renderings by *Joseph J Wunderlich IV*
 - Etown Library "Idea Cube" 3D Renderings by *Joseph J Wunderlich IV*
- 2018 VIDEOS (*Residential Renewal, etc*)
 - Etown North-Campus OT Housing (near Brown bldg) by *Haley Vozzella, Madison Burnham, and Abbey Beyer*
 - Etown Meyer Dorm & Conference Center by *Brendan Burke, Ean Mann, and Thomas Palen*
 - Etown Cedar-St. College-Hill Housing by *Grant Michal, Kyla Strikler, and Hunter Reiner*
 - Etown Lemon Street Arts & International Housing by *Joseph J Wunderlich IV*
- 2017 VIDEOS
 - Cafe for Etown Library by *Madison Burnham and Haley Vozzella*
 - Cafe for Etown Library by *Joseph J Wunderlich IV and Delaney Dammeyer*
 - Cafe for Etown Library by *Brendan Burke and Grant Michal*
 - Cafe for Etown Library by *Joshua McMahon, Thomas Kuhn, and Alec Miller*
- 2016 VIDEOS
 - Campus SPORTS, FITNESS & WELLNESS CENTERS by *Michael Graziano (Field House) (Fitness & Wellness Center)*
 - Green Retirement Community by *Rodrigo Barrera and Joshua McMahon*
 - LEED Urban Townhouse by *Kelly Bresnowitz*
 - New Urban Elizabethtown College Campus by *Joseph J Wunderlich IV (ANIMATION only)*
 - Postmodern Home by *Greyson McDonald*
 - Modern Sacred Space by *Brian Brennan*
 - African Health Clinics, and a Rural Highrise by *Sarah Fay*
 - Green HVAC Design by *Brynne Kirsch*
 - Hydroponic Gardens by *Anh Bui and Basle Lavery*
- 2015 VIDEOS
 - UNIFIED Campus SPORTS, FITNESS & WELLNESS CENTER by *Michael Graziano (ANIMATION ONLY) (Fast-ANIMATION ONLY)*
 - Nicarry Renovations by *Brynne Kirsch and Brian Brennan*
 - Sierra Leone Health Clinics by *Sarah Fay and Greyson McDonald*
 - Home with a Green Roof by *Kelly Bresnowitz*
 - Custom Home by *Margaret Brace*
 - Modern City Center by *Joseph J Wunderlich IV (ANIMATION only)*



2016 EGR343 Green A & E Arizona Retirement Communities and 2020 Tokyo Olympic Facilities



2015 EGR434 Green Robotics, Automation, & AI Smart House VIDEO-1 VIDEO-2



2015 EGR434 Green Robotics, Automation, & AI Sierra Leone Pharmaceutical Plant VIDEO-1 VIDEO-2



2014 EGR343 Green A & E Etown College Wellness Center



2014 EGR343 Green A & E Sierra Leone Health Clinics



2014 Trucker Wellness Center Competition (over \$5500 in awards) PDF PPT VIDEO



2013 EGR280 Engineering Research Engineering Fabrication Lab



2012 EGR343 Green A & E LEED projects



Annual Sustainability Symposiums 2013 2014 2015 2016



2010-2013 Minecraft Architectural Servers and FYS "Conceptual Architecture" Towns, and FIRST ETOWN WELLNESS CENTER DESIGNS (In 4 "Green Towns" plus Field House design)



pre-2012 EGR280 Research and FYS100 Conceptual Architecture using Rhinoceros & Flamingo software



Sample Freshmen Architecture (Best 2018 Paper) Best 2018 Models: (1, 2) (Best 2013 Paper)



Seven Architecture Courses taught: *“Conceptual Architecture,” “Green Architectural Engineering,” “Architectural Design Theory,” “Architectural Materials & Methods,” “Frank Lloyd Wright,” “Architecture Design Studio I and II” (with rotating focuses on Urban Design, Acoustics, Lighting, and Specifications)*

http://users.etsu.edu/w/wunderjt/home_Lab_Manuals_Architecture.html

ARCHITECTURE



SELECT LECTURES:



COURSES

ART2100 CONCEPTUAL ARCHITECTURE

- Architecture Theory Intro: Missions, Bases
- Architecture of JCRW and I&I
- FRANK LLOYD WRIGHT: Ages 0-19 (1867-84), 24-33, 34-41, 42-47, 48-42, 60-74, 75-91, 92-Lecture of 31 Chicago Designs
- Assignments: 1 2 3 4 5 6 7 8 9 10 11 12

EGR2055 GREEN ARCHITECTURAL ENGINEERING

- REVIT Lab 1 and Lab2, "SWEET'S" Catalog
- LEED Intro: LEED Project Neighborhood Design(ND), Green Master Plan, LEED Project Building(BD+C) or Interior(D+C), LEED Type: SFW Center and SFW 2
- LEED Checksheet: ND Plan, BD, C New Credit, Major Plans, ND Bull, BD, C Core&Shell, BD, C Schools, BD, C Retail, BD, C Data Center, BD, C Warehouse/Office Center, BD, C Hospitality, BD, C Healthcare, BD, C Home&MultiFamily/Lowrise, BD, C MultiFamily/Midrise, ID, C Commercial Interiors, ID, C Retail, ID, C Hospitality, O&M Cooling/Bldg, O&M Schools, O&M Retail, O&M Data Centers, O&M Hospitality, O&M Warehouse/Office Center
- Lectures: CHD Thermodynamics Concepts : CHM Control : CH&H Climate&Site Design : CHM Solar Geometry : CH7 PASSIVE Solar Heating : CH8 Active Solar : CH616 PASSIVE Cooling : CH12,13,14 Daylighting and Illumination Engineering : CH15 Building Envelope : CH16 HVAC: Acoustic
- AIA: Analyze Standards, GreenSpeakers, 2018 FPMAC, EXXON

ART2370 ARCHITECTURAL DESIGN THEORY

- Lectures: PRIMARY ELEMENTS FORM FORM & SPACE ORGANIZATION CIRCULATION PROPORTION & SCALE PRINCIPLES
- Assignments: 1 Japanese Bridges, 2 Meeting Models, 3 Organ, 4 Kruger Architecture, 5 Sacred Space, 6 Joyful Space, 7 Great Window Inspired Residence
- Cedar Hill Housing

ART2371 ARCHITECTURAL MATERIALS & METHODS

- 2020 PDFs of in-class Lectures before Coronavirus (also on "Canvas") STANDARDS STRUCTURAL FOUNDATIONS WOODS 1, 2, 3 Masonry/Concrete HISTORY, STONE, ...
- 2020 PPTX Lectures with Audio-dan to Coronavirus (also on "Canvas")
 - ... BRICK PPTX audio PDF
 - BLOCK PPTX audio PDF
 - CONCRETE PPTX audio PDF CLOMDev/scraps/VIDEO
 - STEEL/ALUMINUM/ROSES PPTX audio PDF MP4 YouTube
 - SHELL/ENVELOPE PPTX audio PDF MP4 YouTube CLOMDev/scraps/Pwd:3H4M2L
 - INTERIORS PPTX audio PDF MP4 YouTube CLOMDev/scraps/Pwd:3e@q48R
- Assignments: E&H1_Bridges/Drive 2/Steel/Revit: 3/Neighborhood/Revit/LEED2 4/STYL DESIGN (Residential/Revit, VR, etc.)
- Final Exam

ART2800/31 FRANK LLOYD WRIGHT

EGR2055/499/499A&B ARCHITECTURE STUDIO I&II (Juried)

- 2017 **Etown Library Cafe** from 1988 Library Drawings
 - ACOUSTICS
 - Glass/Stone/Piers
 - LEED: Daylight, Views, Lighting, Acoustics, Raw materials, Material Ingredients
 - Retail Store, Levels, Walls, High Library, Interior, Clean&Windows, Library acoustics
- 2018 **Etown Residential/Renewal**
 - LIGHTING: Design, Solar, Feng Shui
 - LEED Daylight, Views, Lighting, Neighborhood Development, LEED ND rates
 - Green Master Plan: 1989 Chapter 1 and seven site analysis maps, 2011 update, Etown 3d Google Map, and Topographical Map, Surround Overview of Human, Urban, Color, and Building Engineering, Illumination Engineering Standards (IES) Eye&Brain, Horizontal Effects, Performance&Perception, and Gallery Design
 - Revit assignments: 498A Perspective, 498B Perspective, 498A&B Perspective, 498A Solar, 498B Solar, 498A REVIT View, 498B REVIT Type, 498A REVIT BIM (Building Information Management), Doors&Windows, 498B REVIT Type, "CONCEPT" Catalog, 498A&B Site Walk
 - Done by Cannon Design, Real Estate Development
- 2019 **Etown 31M RACP Grant, and Cedar Hill Housing**
 - SPECIFICATIONS
 - Assignments: 1 Bridges, 2 Green Roofing Spec, 3 31M RACP Grant for Sports, Fitness, & Wellness, 4 Revit Great-Window Inspired Residence
 - Cedar Hill Housing

EGR2055/200/4 enable, EGR2055/203 enable "ENGINEERING RESEARCH IN ARCHITECTURE" (Studio)

Frequent Guest lectures in ART280 World Architectures, ART115 Intro to Art History, and EGR110 Intro to Engineering



Missions & Inspirations (PDF, PPT) Roman Architectural Engineering (PDF, PPT) 2006-2015 Intro to Architecture Theory (PDF, PPT) Personal House Architecture



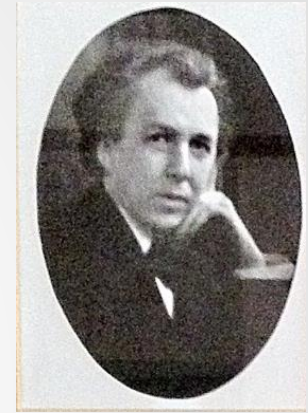
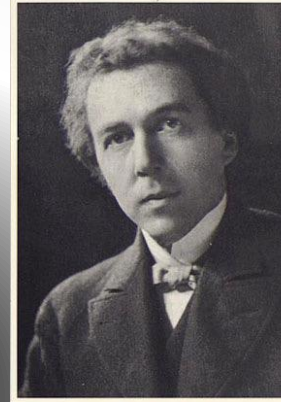
Architectural design theory

Lecture Series

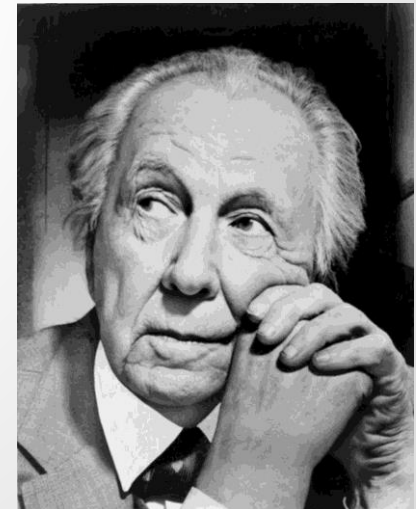
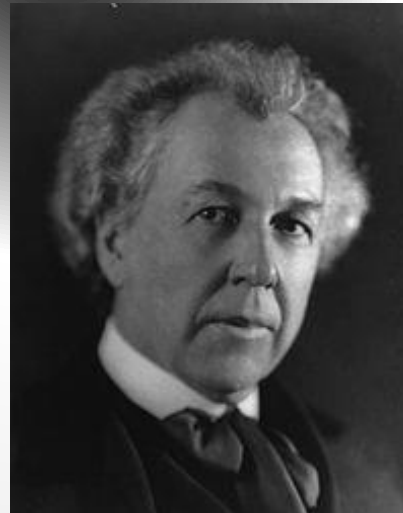
- ▶ **PART 1 PRIMARY ELEMENTS (This Lecture)**
- ▶ PART 2 FORM
- ▶ PART 3 FORM & SPACE
- ▶ PART 4 ORGANIZATION
- ▶ PART 5 CIRCULATION
- ▶ PART 6 PROPORTION & SCALE
- ▶ PART 7 PRINCIPLES



Frank Lloyd Wright Lecture Series 2018



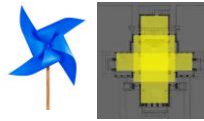
Overview of
upcoming book
[HERE](#)
and below ...



Organic Architecture Design Principles

CONFORM TO SITE, sun, topography, environment

PINWHEELED PLANES -- CRUCIFORM



- PRAIRIE-SCHOOL, BROAD CENTRAL CHIMNEY, LONG CANTILEVERS (overhangs & balconies)

FOLDED PLANE like origami ...continuity...walls, ceilings, and floors become one

SIMPLE GEOMETRIES

HUMAN SCALE

OPEN FLOOR PLAN

FROEBEL
BLOCKS



UNITARIAN
MOTHER
Teacher



Japanese Buddhism & Shintoism,
with some roots in Chinese Philosophy

- DESTROY BOX, no Victorian box-type rooms, – FLOW between rooms, and inside/outside
- Walls become screens, BANDS of WINDOWS, FRAME VIEWS – like ENGAWA
- Use MATERIALS IN NATURAL STATE -- same on exterior and interior

FORM and FUNCTION are one! Harmony, *not one following other, secondarily*

A UNIFIED WHOLE - inside and out - ORCHESTRATE SUN

BRING NATURE OUT OF MATERIALS, but Innovate (Textile Blocks, Modular "Ken" Design, etc.)

STRUCTURAL ART like in Nature (e.g., the veins in Leaves) - Interior space made exterior as architecture

SOFT WARM OPTIMISTIC COLOR TONES of earth, and autumn leaves

ASSIMILATE FIXTURES into structure, BUILT-IN FURNITURE many plants & planters

ARCHITECTURE = MUSIC



© JT Wunderlich PhD

Arts & Crafts, Italy, JAPAN



MUSICIAN
Preacher
FATHER



ARCHITECT
MENTOR
Louis Sullivan



"Key" Japanese words
by Mahua Bhattacharya,
Professor of Japanese,
for J Wunderlich's students

OMOIYARI - Considerate
ON - Duty
AMAE - Empathy
WA - Group Harmony
UCHI - Inner (or insider)
KENSEN - Modesty
GIRI - Moral Obligation
SOTO - Outside (or outsider)
GAMAN - Persistence
ENRYO - Restraint
HAJI - Shame

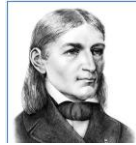


NOTE: COMPRESSION & RELEASE is not Organic Design, but commonly used by FLW to cramp/hide entries so as to magnify destination Architecture

Frank Lloyd Wright's Earliest Influences

[Froebel 2013, PENN Rare Book 2014, Huxtable 2004, Storrer 2017, Wright 1957, Burns 2001]

- ▶ **FROEBEL** influenced by Taoism and Buddhism
 - Japanese Shinto rooted in Chinese Taoism
 - Shinto Gods in everything, especially **nature**
 - FLW would later love Japanese Art, Design, and Culture
- ▶ Mother's family were all **UNITARIANS**
 - Inspiration from all religions, love **nature**, God in everything



Friedrich Froebel
1782-1852 Germany



Maria **Montessori**
1913 in Italy



MOTHER

Homeschool Teacher
using Froebel System

Others in history homeschooled:
Leonardo da Vinci, Monet, Mozart, Bach,
Newton, Ben Franklin, Edison, Jefferson,
Washington, Einstein, Teddy and
Franklin-Delano Roosevelt, Churchill,
John Muir, and the Wright brothers



FATHER

Preacher, Lawyer, School Superintendent, Teacher, Musician
B.A., M.A. Colgate University

"Artist, photographer, and designer of furniture, graphics, books, and buildings, his patronage of Chinese and Japanese art, his obsession with every aspect of his surroundings, his dedicated collecting of beautiful things, owed much to his father" [Huxtable 2004]



Most of childhood in rural **WISCONSIN**

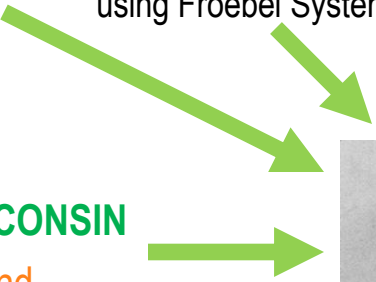
- Like Pennsylvania farmland



Frank Lloyd Wright 1867-1959



Future
Designers



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PART 1: Frank Lloyd Wright Age 0-19 (1867-1886) [PDF](#) [PPTX-w/audio](#) [MP4](#) [YouTube](#)

Context: Post Civil War recession. Industrial Revolution. Farm life. Preacher/Musician-Father, Teacher-Mother. Mother's large influential Unitarian family of Welsh farmers. Nature. Parent's divorce.

Architecture: Froebel schooling (e.g., blocks). Barns/farm-houses ([PDF](#) [PPTX-w/audio](#) [MP4](#) [YouTube](#)). Organic Architecture roots.

PART 2: Frank Lloyd Wright Age 20-33 (1887-1900) [PDF](#) [PPTX-w/audio](#) [MP4](#) [YouTube](#)

Context: Rebuilding Chicago after the Great Fire. Wife Catherine and first five children.

Architecture: Architects Joseph Silsbee and Louis Sullivan. Oak Park. Home & Studio. "Organic Architecture" begins.

PART 3: Frank Lloyd Wright Age 34-41 (1901-1908) [PDF](#) [PPTX-w/audio](#) [MP4](#) [YouTube](#)

Context: First Japan trip ([PDF](#) [PPTX-w/audio](#) [MP4](#) [YouTube](#)). Arts & Crafts movements. Six children.

Architecture: Prairie Style. Oak Park & River Forest, Unity Temple, Robie House, Larkin Building.

PART 4: Frank Lloyd Wright Age 42-47 (1909-1914) [PDF](#) [PPTX-w/audio](#) [MP4](#) [YouTube](#)

Context: Secession movement. Lived in Italy ([Page](#) [MP4](#) [YouTube](#)). Built Taliesin on family farmland. Mistress murdered.

Architecture: Wasmuth Portfolio published(Germany). Taliesin. Many operable windows for health & passive cooling. Sculptures.

PART 5: Frank Lloyd Wright Age 48-62 (1915-1929) [PDF](#) [PPTX-w/audio](#) [MP4](#) [YouTube](#)

Context: WWI, Roaring 20's. Short 2nd marriage. Lives 3 yrs in Japan, then California and Wisconsin. 3rd marriage (Olga).

Architecture: Tokyo Imperial Hotel. Textile Houses in California (with Mayan influences).

PART 6: Frank Lloyd Wright Age 63-78 (1930-1945) [PDF](#) [PPTX-w/audio](#) [MP4](#) [YouTube](#)

Context: 1930's Great Depression. WWII. Taliesin Fellowship/school. Utopian-Ideals(communal-living) Winters in AZ.

Architecture: Broadacre City, Fallingwater, Johnson Wax Building, Taliesin-West, Hanna-Honecomb House, Usonian Homes.

PART 7: Frank Lloyd Wright Age 79-91 (1946-1958++) [PDF](#) [MP4](#) [PPTX-w/audio](#) [YouTube](#)




Context: Post-WWII boom. Cold War. Communal living at Taliesin. FLW dies in 1959. Fellowship/school continued at Taliesin & Taliesin-West by Olga for 27 years -- and still exists today with some very recent changes (2020)

Architecture: Price Tower, Churches/Synagogue/Auditoriums. The Guggenheim. AZ homes, Modern materials.




▶ More on Wunderlich [website](#) and [YouTube Channel](#):

ARCHITECTURE






STUDENT DESIGNS DESIGN STUDIO VIRTUAL REALITY


SELECT LECTURES:




2019 Architecture Theory Lecture series (PDF, PPT)




2018 Frank Lloyd Wright Lecture series (PDF, PPT)




2019 Frank Lloyd Wright 31st Anniversary in Chicago-Land




2013 Japanese Urban Design and Architecture (PDF, PPT)



2016 Swedish Greenhouse The Skin (PDF, PPT)



2016 Lighting Design (PDF, PPT)



Synagogue (PDF, PPT)

COURSES (and Revit software tutorials)

FYS101 CONCEPTUAL ARCHITECTURE

- Architecture Theory Intro; Missions; Bams
- Architecture of JAPAN and ITALY
- FRANK LLOYD WRIGHT Ages: 8-19 (1887-1911), 28-33, 34-41, 42-47, 48-49, 50-59, 70-94, V. Lecture of 31 Chicago Designs
- Assignments: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

EGR353 GREEN ARCHITECTURAL ENGINEERING

- REVIT Lab 1 and Lab 2: "SHRETS" Catalog
- LEED Intro: LEED Project: Neighbourhood Design(ND), Green Master Plan, LEED Project (Building(BD+C) or Interior(INDC)), LEED Topics: SFW Center and SFW 2
- LEED Greenhouse: ND Plan, BD, C New District/Major Revamp, ND Bldg, BD, C Core/Shell, BD, C Schools, BD, C Retail, BD, C Data Center, BD, C Warehouse/Office Center, BD, C Hospitality, BD, C Healthcare, BD, C Home/Manufacturing/Industrial, BD, C Multi-family/Mixed, BD, C Commercial/Institution, BD, C Retail, BD, C Hospitality, O&M Cataloging, O&M Schools, O&M Retail/O&M Data Center, O&M Hospitality, O&M Warehouse/Office Center
- Lectures: CH3 Thermodynamics Concepts / CH4 Comfort / CH&H Climate&India Design / CH6 Solar Geometry / CH7 PASSIVE Solar Heating / CH8 Active Solar / CH9 LEED PASSIVE Cooling / CH12, 13, 14 Daylighting and Illumination Engineering / CH15 Building Envelope / CH16 HVAC / Acoustics
- AA Graphics Standards; Guest Speakers; 2018 FINAL EXAM

ART205 ARCHITECTURAL DESIGN THEORY

- Lectures: PRIMARY ELEMENTS: FORM, SPACE, ORGANIZATION, CIRCULATION, PROPORTION & SCALE, PRINCIPLES
- Assignments: 1. Lighthouse/Bridge, 2. Mailing Model, 3. Origami, 4. King's Architecture, 5. Sacred Space, 6. Jugh's Space, 7. Green-Window Inspired Residence
- Cedar Hill Housing

ART207 ARCHITECTURAL MATERIALS & METHODS

- 2020 PDFs of in-class Lectures before Coronavirus (also on "Canvas"); STANDARDS: STRUCTURAL FOUNDATIONS: WOOD: 1, 2, 3. Masonry&Concrete: HISTORY, STONE, ...
- 2020 PPTx Lectures with Audio due to Coronavirus (also on "Canvas")
 - BRICK PPTx audio PDF
 - BLOCK PPTx audio PDF
 - CONCRETE PPTx audio PDF CLOUD:vtwncnrg@purd.edu
 - STEEL&W/BRICK PPTx audio PDF MP4 YouTube
 - SHELL&ENVELOPE PPTx audio PDF MP4 YouTube CLOUD:vtwncnrg@purd.edu
 - INTERIORS PPTx audio PDF MP4 YouTube CLOUD:vtwncnrg@purd.edu
- Assignments: 1. Stone, 2. Brick&Concrete, 3. Steel, Revit, 4. Neighbourhood, Revit2, LEED1, 4. FINAL DESIGN (Residential Renewal, VR, etc.)
- Final Exam


ART100231 FRANK LLOYD WRIGHT

EGR404RT40644(40444) ARCHITECTURE STUDIO I&II (Juried)


- 2017 Etown Library Cafe from 1988 Library Drawings
 - ACOUSTICS
 - Down Solar Paths
 - LEED Daylight, Views, Lighting, Acoustics, Raw materials, Material Ingredients
 - Real Intro, Levels, Walls, High Library, Interior, Doors&Windows, Library acoustics
- 2018 Etown Residential Renewal
 - LIGHTING: Design, Solar, Feng Shui
 - LEED Daylight, Views, Lighting, Neighbourhood Development, LEED ND rules
 - Green Master Plan: 1988 Chapter 1 and seven sub-analytic maps, 2011 Update, Green 3rd Google Map, and Topographic Map; (Source) Overviews of: Human Values, Color, and Illumination Engineering
 - Illumination Engineering Standards (IES): Eye&Sight, NonVisual Effects, Performance&Perception, and Gallery Design
 - Real assignments: 488A Perspective, 496B Perspective, 496A&B Perspectives, 488A Solar, 496B Solar, 496A REVIT Intro, 496B REVIT Topo, 488A REVIT I&II (Building Information Management), Doors&Windows, 496B REVIT Topo, "SHRETS" Catalog, 496A&B Site Walk
 - Design by Carbon Design (Real Estate Development)
- 2019 Etown \$1M RACP Grant, and Cedar Hill Housing
 - SPECIFICATIONS
 - Assignments: 1. Bridges, 2. Green Roofing Spec, 3. \$1M RACP Grant for Sports, Fitness, & Wellness, 4. Revit Green-Window Inspired Residence
 - Cedar Hill Housing

EGR2020(4 credits), EGR2020(6 credits) "ENGINEERING RESEARCH IN ARCHITECTURE" (Studio)


Frequent Guest lectures in **ART280 World Architectures**, **ART115 Intro to Art History**, and **EGR110 Intro to Engineering**




Mansions & Inspirations (PDF, PPT)




Roman Architectural Engineering (PDF, PPT)




2006-2015 Intro to Architecture Theory (PDF, PPT)



Personal House Architecture (PDF, PPT)






Joseph Wunderlich
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DISCUSSION
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SEARCH




2020 Etown Oculus Rift VR of Campus in 1924 and Present, in ...
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All buildings including most interiors of the present Elizabethtown College Campus, and the 1924 campus, were rendered in Revit and then ported into Virtual Reality. A programmed switch is implemented for the user in VR to switch time frames. All work done by Joseph John Wunderlich IV

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2019,20 LECTURE: 31 Frank Lloyd Wright sites, plus two FLW influenced family homes

232 views · Jul 10, 2019

Joseph Wunderlich
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ANALYTICS EDIT VIDEO

2019 Visited 31 Frank Lloyd Wright sites in Chicago area (*Vlog Lecture*)



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2019 Chicago-Land tour of 30 Designs on 31 significant Frank Lloyd Wright sites; compiled from ~100 video clips and ~1000 photos taken in June 2019. Part of a JT Wunderlich lecture series used in parts of five undergraduate architecture courses. See course syllabi:

<http://users.etown.edu/w/wunderjt/hom...>

.... This video also includes my wife Karla's family homes in Batavia and Lemont, IL -- both likely inspired by Frank Lloyd Wright works.

SITES VISITED:

- 1) 1883 FLW Oak Park, Wright Home and Studio
- 2) 1893 FLW Oak Park, Wooley Residence
- 3) 1893 South Chicago, Colombian Exposition (Worlds Fair) where FLW was strongly influenced by the Japanese Pavilion recreation of Ho-o-den (Phoenix Hall in Kyoto Japan) -- a pivotal moment!
- 4) 1893 FLW Oak Park, Walter Gale Residence
- 5) 1892 FLW Oak Park, Thomas Gale Residence ("Bootleg")
- 6) 1892 FLW Oak Park, Robert Parker Residence ("Bootleg")
- 7) 1894 FLW River Forest, Winslow Residence
- 8) 1895 FLW River Forest, Williams Residence
- 9) 1895 FLW Oak Park, Moore Residence
- 10) 1895 FLW Oak Park, Young Residence
- 11) 1898 FLW Oak Park, Smith Residence
- 12) 1897 FLW Oak Park, George Furbeck Residence
- 13) 1897 FLW Oak Park, Rolin Furbeck Residence
- 14) 1900 FLW Oak Park, Hills Residence
- 15) 1901 FLW Oak Park, Frick Residence
- 16) 1902 FLW Oak Park, Martin Residence
- 17) 1901 FLW Oak Park, Thomas Residence
- 18) 1902 FLW Oak Park, Huertley Residence
- 19) 1904 FLW Oak Park Laura Gale Residence
- 20) 1904 FLW Oak Park, Unity Temple
- 21) 1906 FLW Batavia, Gridley Residence
- 22) 1906 FLW Oak Park, Beachy Residence
- 23) 1906 FLW Geneva, Hoyt Residence
- 24) 1906 FLW River Forest, River Forest Tennis Club
- 25) 1906 FLW Chicago, Robie House
- 26) 1907 FLW Geneva, Fabian Villa
- 27) 1908 FLW River Forest, Roberts Residence
- 28) 1909 FLW River Forest, Ingalls Residence
- 29) 1911 FLW Oak Park, Balch Residence
- 30) 1913 FLW Oak Park, Adams Residence
- 31) 1950 FLW Hampshire Twp, IL, Muirhead Farm Residence

Also,

- A) My Great-Grandparent-in-law's (Grandma Judy's family) FLW inspired house in Batavia IL
- B) My Great Grandparent-in-law's (Grandpa John's family) FLW inspired house in Lemont IL



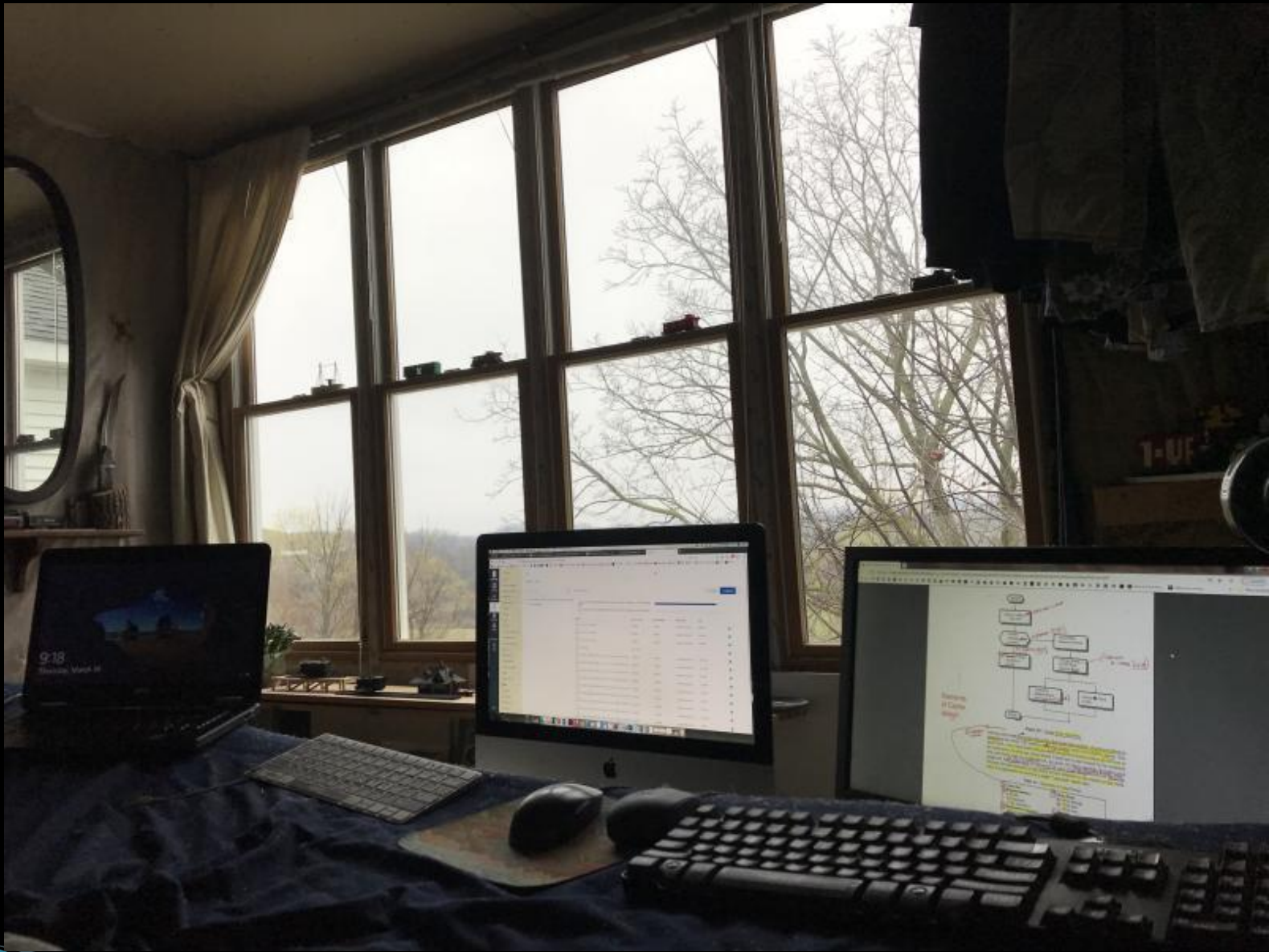
Student Architecture helping with Real College Projects using advanced computer modeling & animation software's

Proposed Etown Cedar Hill housing

- 2020
- 2019
- 2018



2020 Coronavirus demands virtual learning (for Hi-Tech and Architecture)



Sample lectures on [my Youtube Channel](#),
as well as PPTX-w/audio, MP4's, PDF, etc on "Canvas" and on [my Website](#)



2020 Virtual Reality



See motion here:

<http://users.etown.edu/w/wunderjt/First%20Virtual%20Reality%20at%20Etown.mp4>

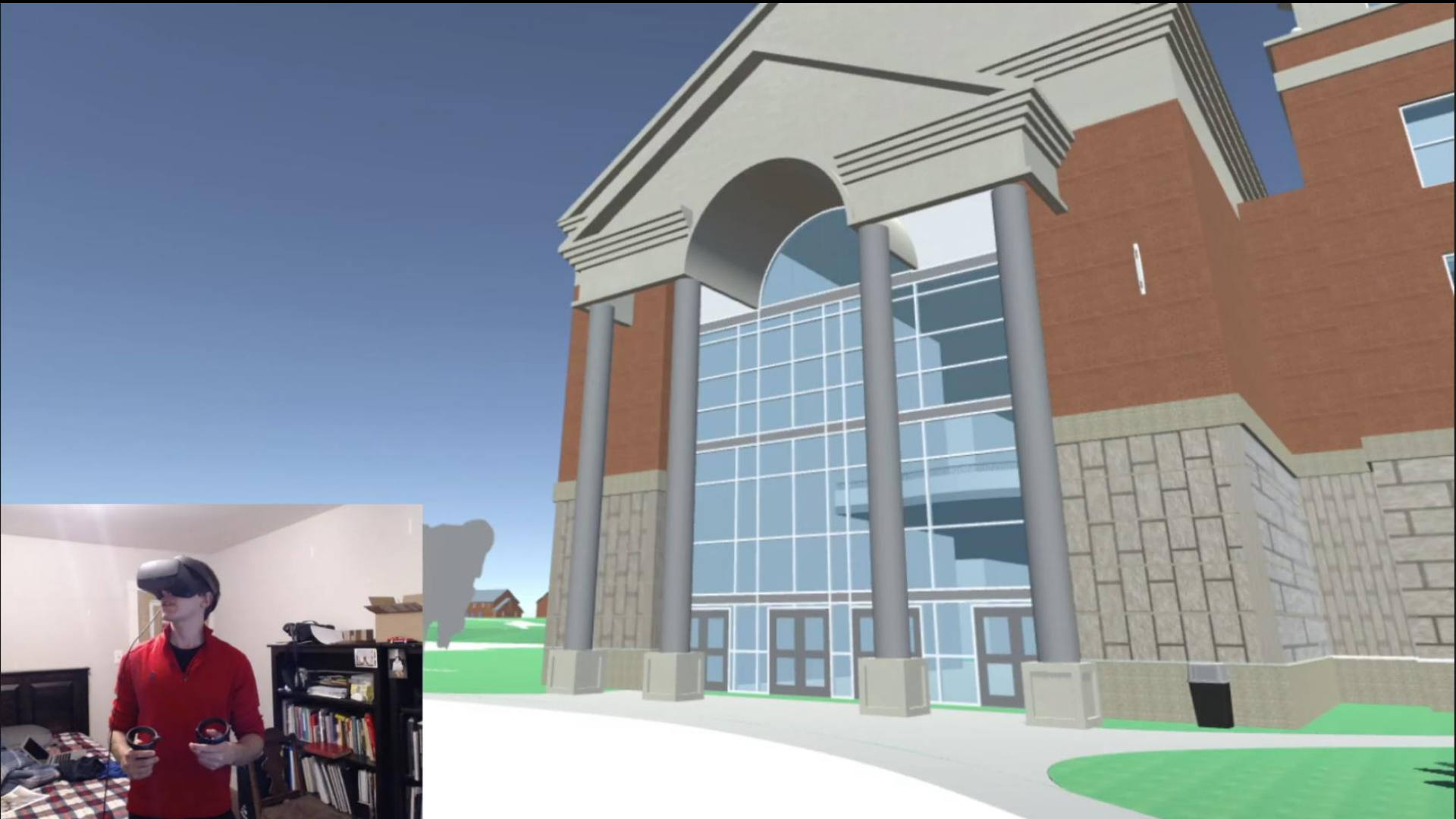


Increased merging Architecture with Hi-Tech ! including Virtual and soon Augmented Reality



See 2020 Scholarship Day 3D Computer Modeling of Architecture projects:
<http://users.etsu.edu/w/wunderjt/Architecture%20Lectures/371%20Materials&Methods/2020%20Etown%20SCAD40%206th%20Annual%20Year>

Increased merging Architecture with Hi-Tech ! including Virtual and soon Augmented Reality



See 2020 Scholarship Day rendering of entire Campus:

<http://users.ctown.edu/~wunderjt/Architecture%20Lectures/371%20Materials&Methods/2020%20Etown%20SCAD42%20Oculus%20Rift%20VR%20of%20Campus%20in%202020>



YouTube Channel



Joseph Wunderlich
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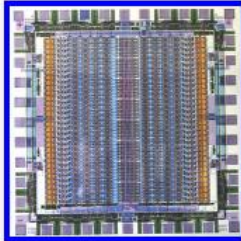
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Joseph T Wunderlich PhD, Associate Professor of Engineering & Computer Science
Coordinator of Computer Engineering and Architecture Programs at [Elizabethtown College](#)



COMPUTER ENGINEERING



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since 1/1/00

NEWS:

2020 Sample first online lectures: [Lab&Studio](#) [Neural_Net_Chips](#) [Humanity?](#) [Architecture+Engineering](#) [Frank_Lloyd_Wright_Lecture_Series](#) [Interior_Architectures](#)

2020 6th year-end [Architecture Crits](#)

2020 [First Etown Virtual Reality](#)

2020 \$XX,000 of Phoenix Contact electronics (and Germany webinars)

2020 visited 11 Arizona Frank Lloyd Wright sites

2019 Our 9th generation robot: "E-bot9"-["Deliver E Bot"](#)

2019 100 Freshman Architecture Models

2019 [Vlog](#) of 31 Chicago Frank Lloyd Wright sites

2019 Our Tech lab manuals uploaded to EduNet ([126 Universities in 31 countries](#))

2019 5th year-end Architecture Crits, 12 VIP judges

2019 "Skyscrapers" PDF PPT annual invited talk

2019 Begin [2020 ABET re-accreditation](#)

2019 Organized Eastcoast Tech Contest (PA,NY,SC schools)

2018 Invited talks: ["Roman A&E" PDF PPT](#), ["Frank Lloyd Wright's Formative Years" PDF PPT](#), ["Human Computer Interaction\(HCI\)" PDF PPT MP4](#)

2018 Judged national Tech contest

2017 Invited [EduNet](#) Tech talk PDF PPT in Vienna (to [29 Universities from 19 countries](#))

2017 Viewed 20+ presentations, and given tour of Italian National Architectural Archives, at [Univ of Venice](#)

2017 Hosted talks by [Director of Game Development](#) at [Firaxis](#)

2017 Collaborated with [Clair Global](#) and [Tait Towers](#) including huge [Rock-Lititz](#)

2017 [\\$80,000](#) in electronics from [Phoenix Contact](#)

OLD NEWS:

2016 Organized [5th Sustainability Symposium](#)

2016 Hosted U.S. Ambassador Craig ["Technical insights as a Boeing Company President"](#)

2015 [Fallingwater](#)

2015 ["Mansions"](#) invited talk PDF PPT

2015 Hosted U.S. Ambassador Craig ["Making US State Department policy, and National Security Council"](#) VIDEO

2015 Education in DC at [US Cyber Consequences Unit](#)

2015 GreenCon15 talk at F&M: ["Etown Architecture of Wellness & Sustainability"](#) PDF PPT

2015 Presented Architecture to Etown Trustees

2015 Organized [Etown Sports, Fitness, & Wellness Center Design Competition](#) (22 judges)

2014 [Keynote Speaker in Japan](#) PDF PPT

2013 Organized and moderated [U.S. Ambassador Craig's Cybersecurity Seminar](#) (with three top international experts)

2011 Organized [11th Robotics & Machine Intelligence Symposium](#) (our first pre-dated Etown Scholarship Day)

2009 [Visiting Engineering Professor at University of Trento, Italy](#) (for PhD students)

2009 U.S. representative founding member of the international Phoenix Contact EduNet

2008 [Wunderbot \(IV\)](#) 3rd time in international competition (earns JAUS-challenge)



Download PowerPoint of this portfolio (WITH EMBEDDED AUDIO):

http://users.etown.edu/w/wunderjt/Wunderlich_JT_Architecture_and_Urban_Design_PORTFOLIO.pptx

And sample lectures and more at: <http://users.etown.edu/w/wunderjt/>

