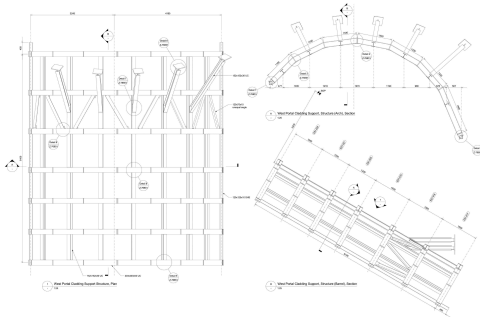
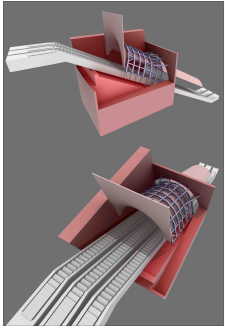


# Eduard Vrábek

Atkins

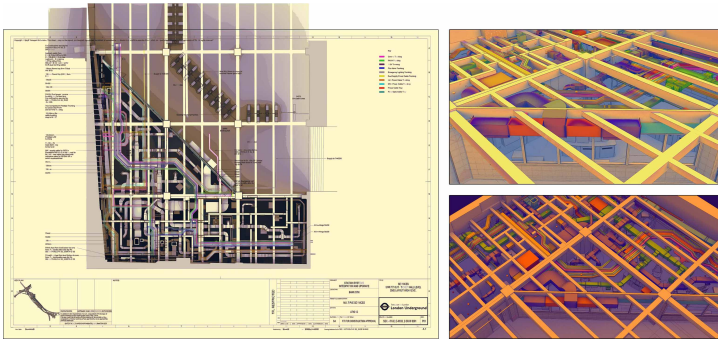


## Farringdon Station

Services: Structure | Studio: Atkins | Client: Crossrail | Year: 2017 | Software: MicroStation, ProjectWise | Stage: 5 (K) | Location: London

About: The new east and west ticket halls are connected by underground mined platforms. This major transport interchange site fits within a complex infrastructure network up to 25 metres below ground.

Contribution: Producing various steel to steel and steel to concrete fixing detail drawings. Accurate remodelling steel construction from obtained structure analysis models with required details. Work closely with the architects and structural engineers on the construction stage.

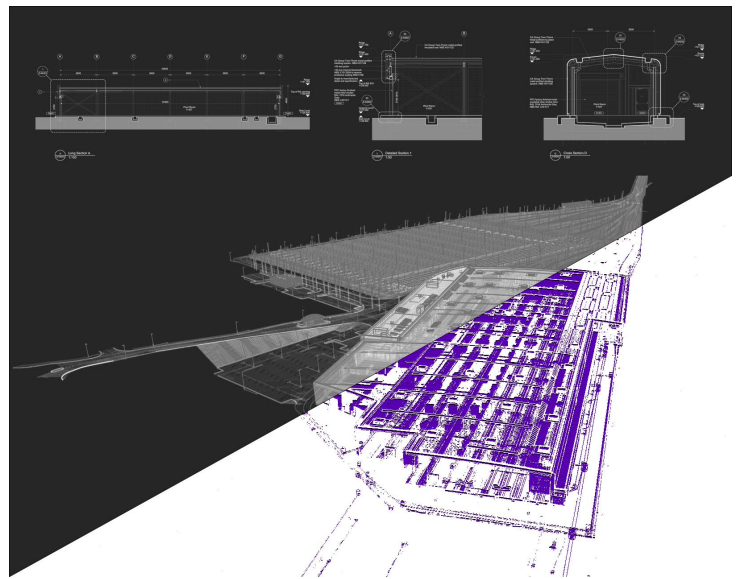


## Bank SSIU

Services: MEP | Studio: Atkins | Client: Transport for London | Year: 2016 | Software: AECOSim | Stage: 5 (K) | Location: London | Value: overall £57m

About: The Bank Station Systems and Integration Upgrade (SSIU) project is to upgrade essential existing station assets. Consisted of Stations Operations Room (SOR) with services rooms, implemented ceiling services to supply electrical and mechanical systems to meet current LU asset strategy.

Contribution: Learning and applying basic principles for Cabling Management System (CMS). Due to limited spacing in underground area the 3D model of CMS need to be coordinated accordingly with other communication assets in ceiling service area.

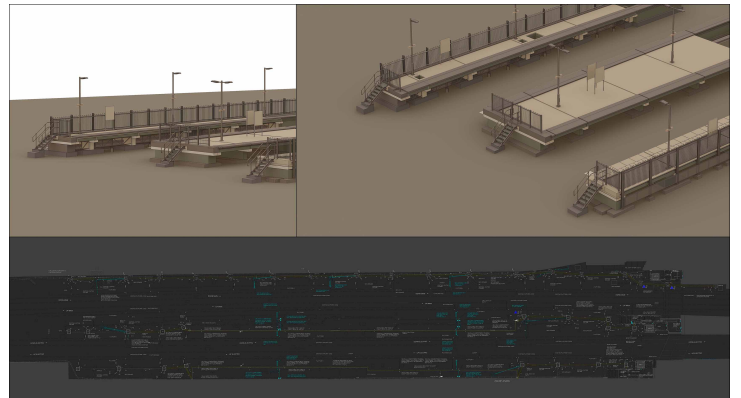


## Old Oak Common Depot

Services: Architecture, Structure | Studio: Atkins | Client: Vinci (Taylor Woodrow) | Year: 2016 | Software: MicroStation, Architecture, Structural Modeler, ProjectWise | Stage: 3 – 5 (D – J) | Location: London | Value: overall £142m

About: The eight-rail track depot area providing maintenance, stabling and office accommodation for the new fleet of trains for the Elizabeth line. This needed architectural redesign for AVIS and train wash facilities.

Contribution: Generating extraction for drawings and details. Updating architectural and structural models with prefabricated element as stated in the specification. Check CAD QA on ProjectWise as required before files are issued to final stage.

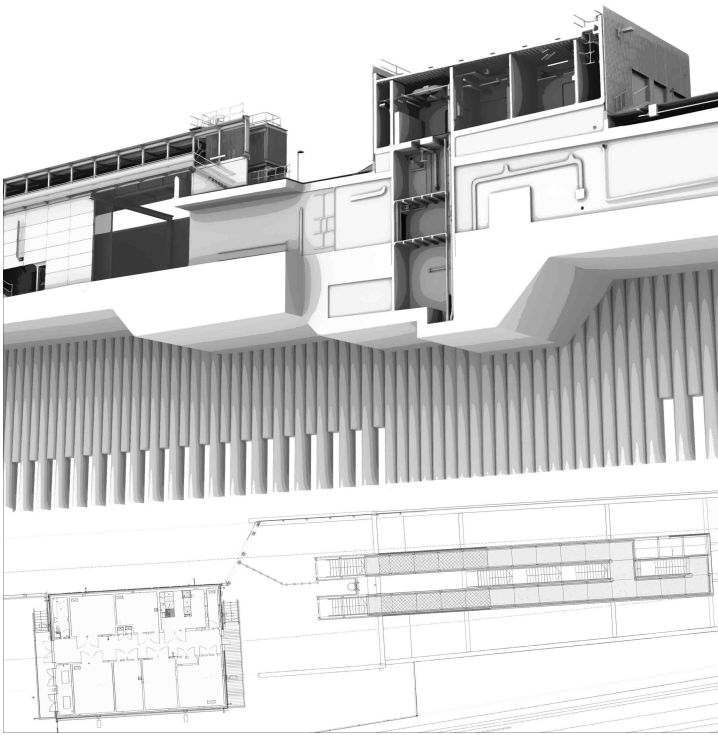


## Crossrail Anglia

Services: MEP | Studio: Atkins | Client: Network Rail | Year: 2015 – 2016 | Software: AECOSim, MicroStation, ProjectWise | Stage: 5 (K) | Location: London | Value: overall £42bn

About: The new eastern section of the Elizabeth line route runs on the existing rail network between Stratford and Shenfield in Essex. A number of major improvements were being carried in preparation for the arrival of the new trains. This includes platform extensions, improved ticket halls, lifts and footbridges.

Contribution: Working on electrical drawings for new signage, help points, customer information screens and CCTV.



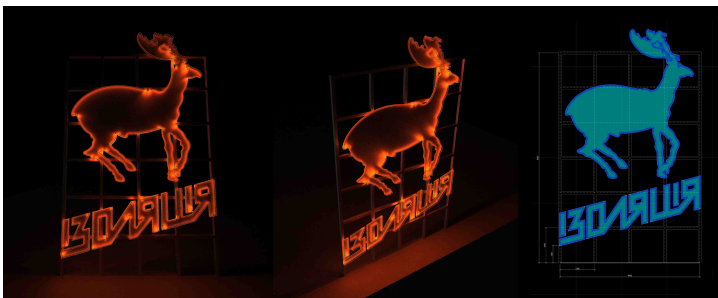
## Victoria Dock Portal

*Services: Architecture, MEP | Studio: Atkins | Client: Vinci (Taylor Woodrow) | Year: 2015 – 2016 | Software: MicroStation, Architecture, Mechanical Systems, Structural Modeler, Navigator, ProjectWise | Stage: 5 – 7 (H – L) | Location: London*

About: Two buildings built on top of a reinforced concrete portal structure for the Elizabeth line. This consisted of a Head House building (service room). The design included emergency Intervention & Escape structure which provided access from the main rail platform.

Contribution: Running clash detection between multi-discipline models and creating a report. Ensuring all elements in 3D model have datasets applied and created with BIM tools which complied with standards. Utilizing Dataset Explorer to generate correct graphical presentation of 2D extractions.

## Freelance

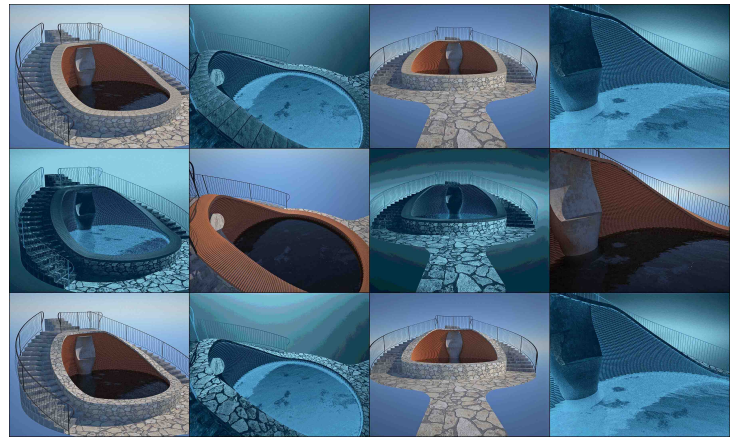


## Neon Deer

*Services: Architecture | Studio: Freelance | Client: Rick Rowbotham CML | Year: 2014 | Software: MicroStation, Maxwell Render | Location: Kiev*

About: Hotel located in Kiev required a featured design of a glowing deer.

Contribution: Produced render situated in night environment for better representation of the mounted glowing deer.

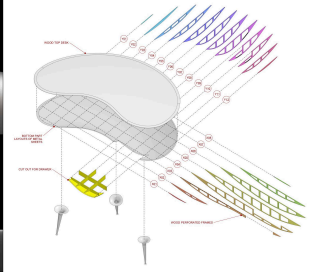


## Fountain Basin

*Services: Landscape Architecture | Studio: Freelance | Client: Rick Rowbotham CML | Year: 2014 | Software: MicroStation, GenerativeComponents, Maxwell Render | Location: France*

About: The reconstruction of a fountain using the 'squama' effect. The inner layer primarily made from terracotta plates placed in a spiral form.

Contribution: Set up a parametric formula to generate spiral layout for terracotta. Participated in meetings with architect, taking notes on essential changes required.



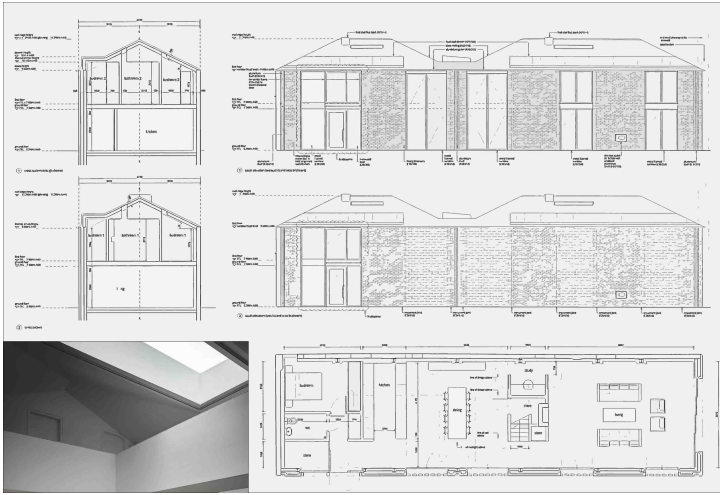
## Home Office Desk

*Services: Architecture | Studio: Freelance | Client: Rick Rowbotham CML | Year: 2014 | Software: MicroStation, Maxwell Render | Location: France*

About: With inside placed wooden ribs construction, this made it possible to design an organic layout of desk to reflect the curved office room.

Contribution: Producing visualisations with material variations. Fabrication sections and schematics were required by woodworker.

## Lifschutz Davidson Sandilands



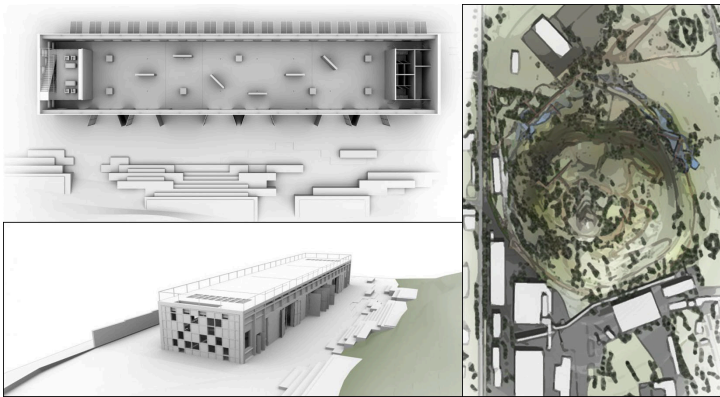
## Latymer House

Services: Architecture | Studio: Lifschutz Davidson Sandilands | Client: Private | Year: 2014 | Software: MicroStation | Stage: 5 (J - K) | Location: London

About: Luxury mews houses and a small apartment building located in Hammersmith. Consisted of two stories with existing shell and core.

Contribution: Helped with producing brick layout design for neatly detailed brick wall, completed with zinc roofs and aluminium framed windows. Updated detail drawings. Calculating controlled external rainwater management in a cobbled courtyard with parking spaces at the entrance leading to a lush garden.

## FoRM Associates



## Izolyatsia Industrial Landscape Park

Services: Landscape Architecture | Studio: FoRM Associates | Client: Izolyatsia | Year: 2010 – 2011 | Software: MicroStation | Stage: 1 – 3 (A – E) | Location: Donetsk

About: An architectural and landscape transformation of a former industrial site. The first phase of the project delivered an experimental Arts centre using a former vehicular depot. In subsequent phases a new circular park turned the prominent centrally placed 45m high slag heap into a new bio-diverse landscape.

Contribution: Due to the complex terrain of large scale artistic transformational project, focused on modelling the contoured landscape and surrounding industrial buildings in the area.

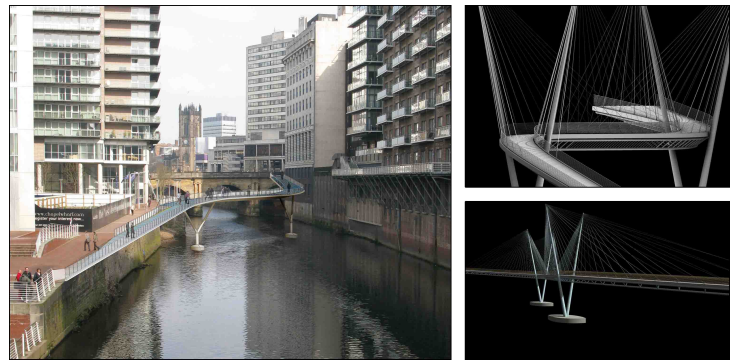


## Trafford Wharf Promenade

Services: Landscape Architecture | Studio: FoRM Associates | Client: Peel | Year: 2010 | Software: MicroStation | Stage: 1 – 6 (A – L) | Location: Manchester

About: The design of the Trafford quayside plays with convex and concave geometries complementing the designs of both the IWMN and the Media Bridge. Constructed deck and stepped area built over water, this delivered generous connectivity as well as a series of public realm spaces. Terraced seating leading down to the water's edge provides excellent views of the area.

Contribution: Modelled and calculated heights of stepped stones. Create fabrication sections and details for manufacturer.

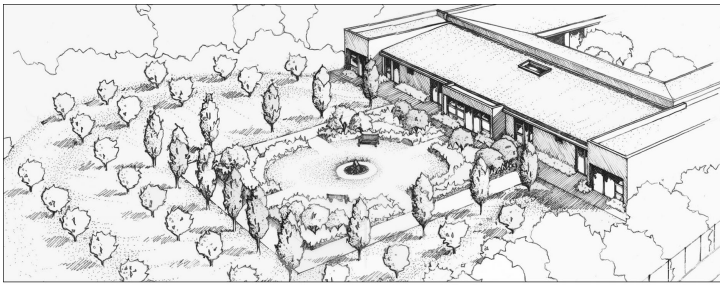


## Irwell River Park

Services: Architecture | Studio: FoRM Associates | Client: Manchester CC, Salford URC | Year: 2009 – 2010 | Software: MicroStation, GenerativeComponents | Stage: 1 – 3 (A – E) | Location: Manchester | Value: overall £50 – 100m

About: The concept of the new linear park overcomes the effects of previous industrialization by transforming the river corridor into a premier public realm. The concept design provides a coordinated strategy for delivering regeneration and creating a public asset integral to the experience and identity of Manchester.

Contribution: Involved in creating parametric models of the Cathedral Walk, Woden Street & Clippers Quay bridges from initial design stages through to the final proposal. With constant experimentation of angles, height and the separating distance between columns, a final design was configured.

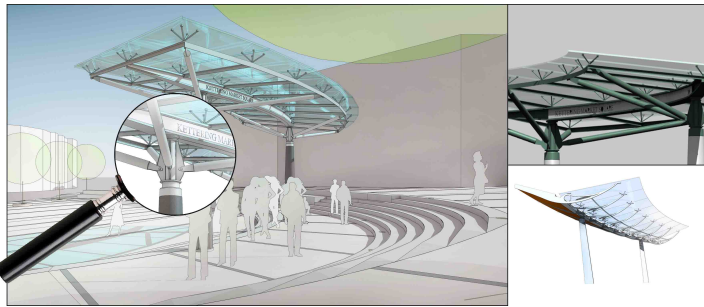


## St. Wilfrid's Hospice

*Services: Landscape Architecture | Studio: FoRM Associates | Client: Balfour Beatty | Year: 2009 | Software: MicroStation | Stage: 1 – 6 (A – L) | Location: Eastbourne | Value: overall £12m*

**About:** New build environment for palliative care, utilising private, semiprivate and public space and sustainable energy sources.

**Contribution:** Drafted landscaping proposals for the scheme. Attractive and well thought out gardens were quite significant to the brief, so drawings had to be produced to a high aesthetic standard.

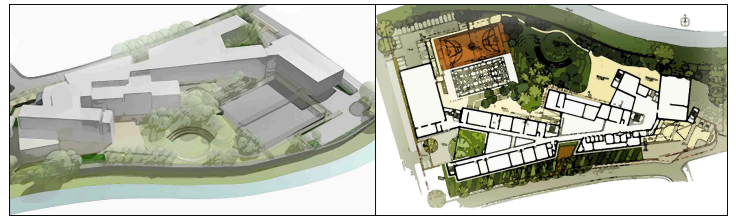


## Market Place

*Services: Architecture | Studio: FoRM Associates | Client: Kettering Town Council | Year: 2008 – 2009 | Software: MicroStation | Stage: 1 – 6 (A – L) | Location: Kettering*

**About:** Created for the use in a busy urban square. The Market Place is envisioned as a vital public realm elevated by new landscape features and uses whilst retaining its original functions and character.

**Contribution:** Produced many variations of 3D model for the canopy which was designed as a shelter and confined space for social activities.



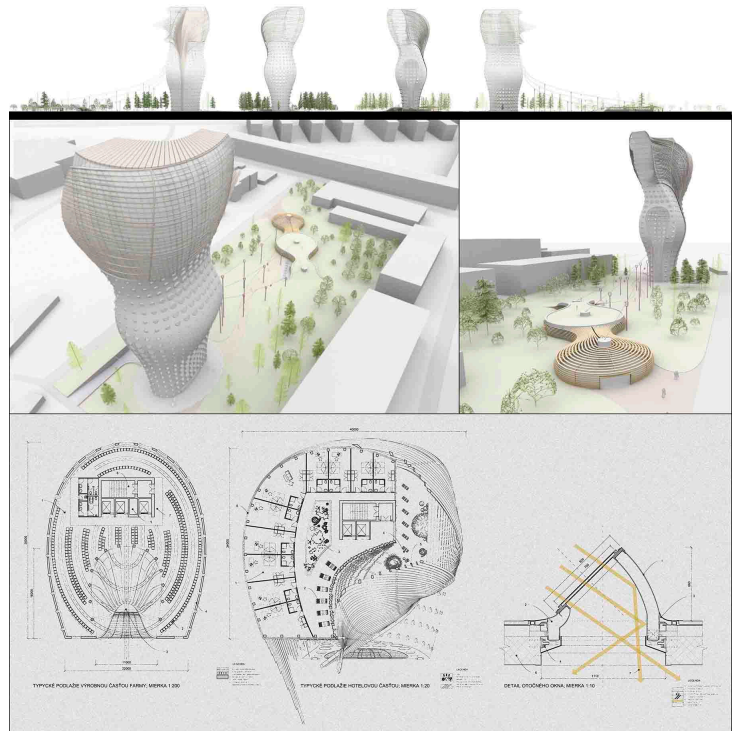
## Skinner's Academy

*Services: Landscape Architecture | Studio: FoRM Associates | Client: Willmott Dixon | Year: 2008 – 2009 | Software: MicroStation | Stage: 1 – 6 (A – L) | Location: London | Value: overall £26m*

**About:** The striking contemporary design on a sloping site overlooking the river in Hackney, carefully crafted landscape, makes an aspirational statement for new school.

**Contribution:** Asked to create an initial 3D model and visualisation of the landscape and multi-use games area. Followed by master plan drawing and technical construction detailing.

## Slovak University of Technology

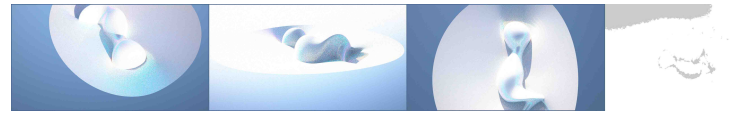
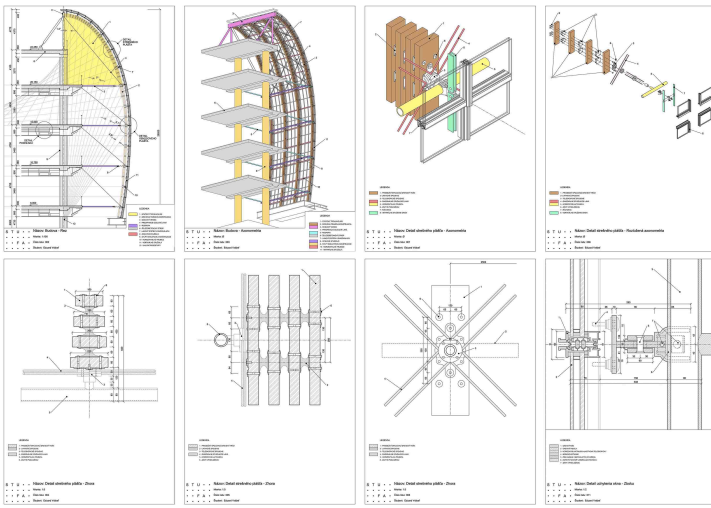


## Vertical Farm

*Type: Architectural Design | School: Faculty of Architecture | Year: 2012 | Software: MicroStation, GenerativeComponents*

**About:** With the current emphasis on sustainable living, I wanted to create a building that encountered both food production and dwellings.

**Resolution:** From this, and inspirations taken from the shape of a willow tree, my building form was subdivided into hospitality areas on the top floors (including hotel rooms, a restaurant and botanic gardens) with horticultural production taking place on the middle-lower floors.



## Silhouette

*Type: Art Design | School: Faculty of Architecture | Year: 2008 | Software: MicroStation, Maxwell Render*

**About:** The sculpture was developed for an artistic sub – module and liaise with previous project.

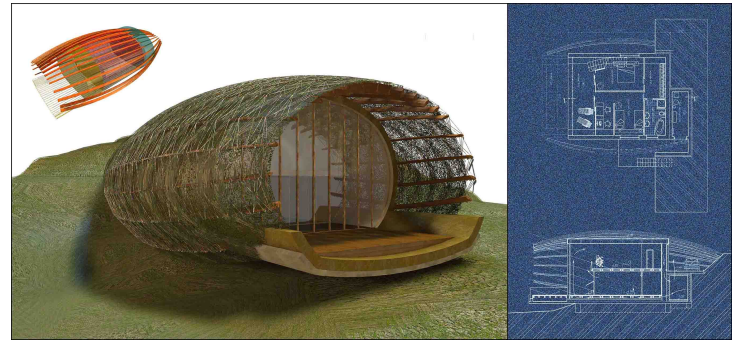
**Resolution:** The lying silhouette oriented in the way, it is protected by a curved building design. Main desire was to transform previously made sketch to model as innocent and pure.

## Building Analysis

*Type: Design Study | School: Faculty of Architecture | Year: 2011 | Software: MicroStation*

**About:** The five–storage building required structural analysis of it complex glass façade construction.

**Resolution:** Producing drawings and details of hinge joint system. This created a fixed triangle as the main support for the shell of the building.

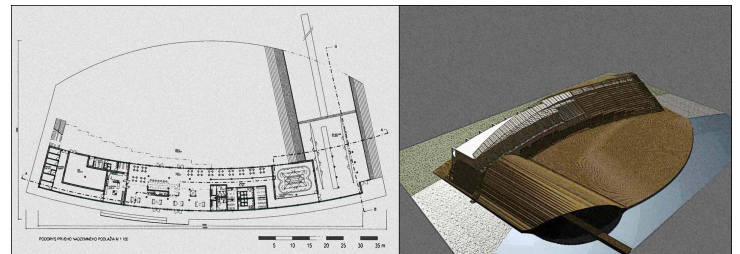
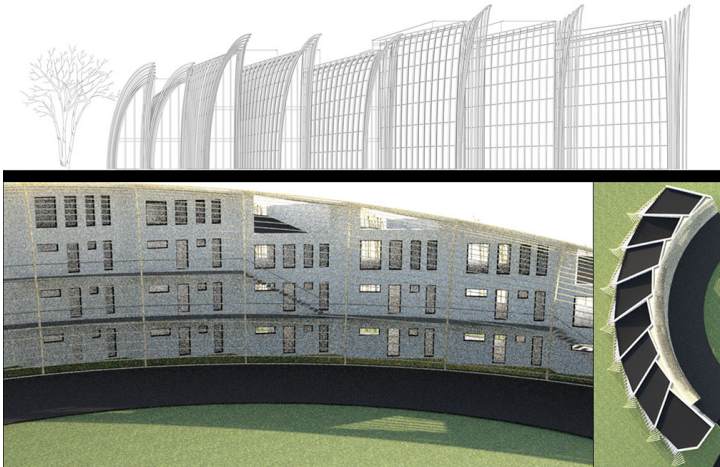


## Warm Nest

*Type: Competition | School: Faculty of Architecture | Client: Isover | Year: 2007 | Software: MicroStation, GenerativeComponents, Mathcad*

**About:** A design entry for a passive house competition, using foliage as both a screen and natural form of insulation.

**Resolution:** The house is curved in form, as rectilinear designs are more prone to heat loss, especially at corners.



## Residential Development

*Type: Diploma Thesis | School: Faculty of Architecture | Year: 2008 | Software: MicroStation, GenerativeComponents, Maxwell Render*

**About:** A selection of technical drawings and views illustrating the ribbed shape of the building which was designed with its surrounding context and microclimate in mind.

**Resolution:** The building's orientation and division of apartments, directs prevailing wind into the interior spaces whilst louvres are angled according to the users desired solar access.

## Kayak

*Type: Architectural Design | School: Faculty of Architecture | Year: 2007 | Software: MicroStation*

**About:** The building comprises of indoor training facilities, kayak storage, a viewing platform and luxury hotel – restaurant.

**Resolution:** The training centre further enhanced by a wooden louvre screen curved like a sail.

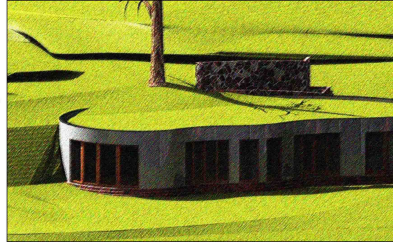
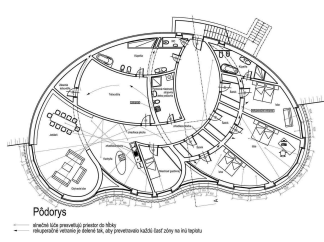


## Interior

Type: Interior Design | School: Faculty of Architecture | Year: 2007 | Software: MicroStation

About: The interior design incorporates the apartment's primary structure, whilst utilising space efficiently to create a complimentary living area.

Resolution: To achieve enhanced visualisations, complex radiosity rendering were used.

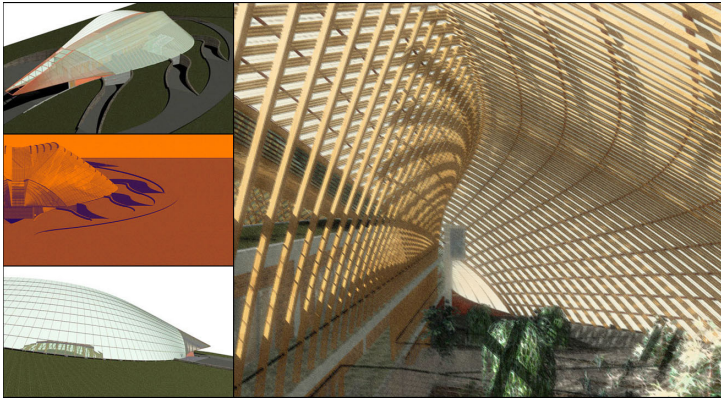


## Ellipse

Type: Competition | School: Faculty of Architecture | Client: Isover | Year: 2006 | Software: MicroStation, Mathcad

About: Briefed as a 'low energy' design, the house is built into the contoured landscape, features a green roof and well insulated walls.

Resolution: Furthermore, recovery ventilation and the buildings curved shape prevents heat loss, helping to maintain a good thermal mass.

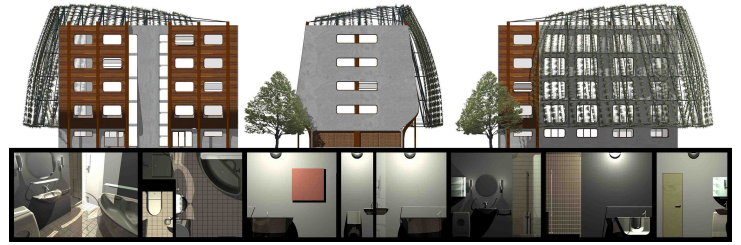


## Botanical Garden

Type: Industrial Design | School: Faculty of Architecture | Year: 2006 – 2007 | Software: MicroStation, GenerativeComponents

About: The glasshouse adopts a form similar to that of an onion, featuring an external glazed protective film, a layered shell of various plantation and a functional core. The central core hosts horticultural production, which mimics the movement of the human digestive system as it proceeds through the building.

Resolution: During this project, I became acquainted with the parametric software, to help accomplish the building's complex organic shape.

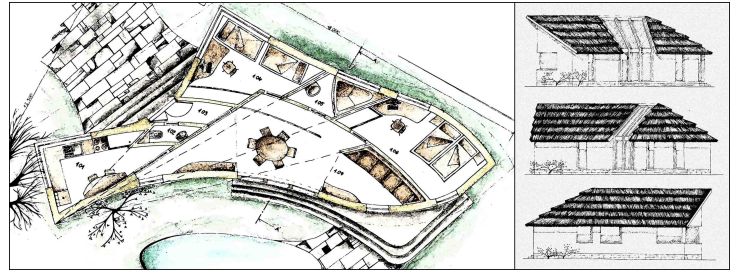


## Residential Apartments

Type: Architectural Design | School: Faculty of Architecture | Year: 2005 | Software: MicroStation

About: The apartment block has been designed with adaptable wings which rotate at the axis, enhancing inhabitant's ventilation and solar gain.

Resolution: Learning sufficient 3D modeling allowed CAD software to be used in full scope of work.



## Cozy Family Home

Type: Architectural Design | School: Faculty of Architecture | Year: 2004 – 2005 | Software: MicroStation

About: The project brief was to develop a family house, designed to adapt well to further expansion.

Resolution: For this reason, overlapping circles were used to draft the perimeter of house to achieve non-restrictive nature of circular form.

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