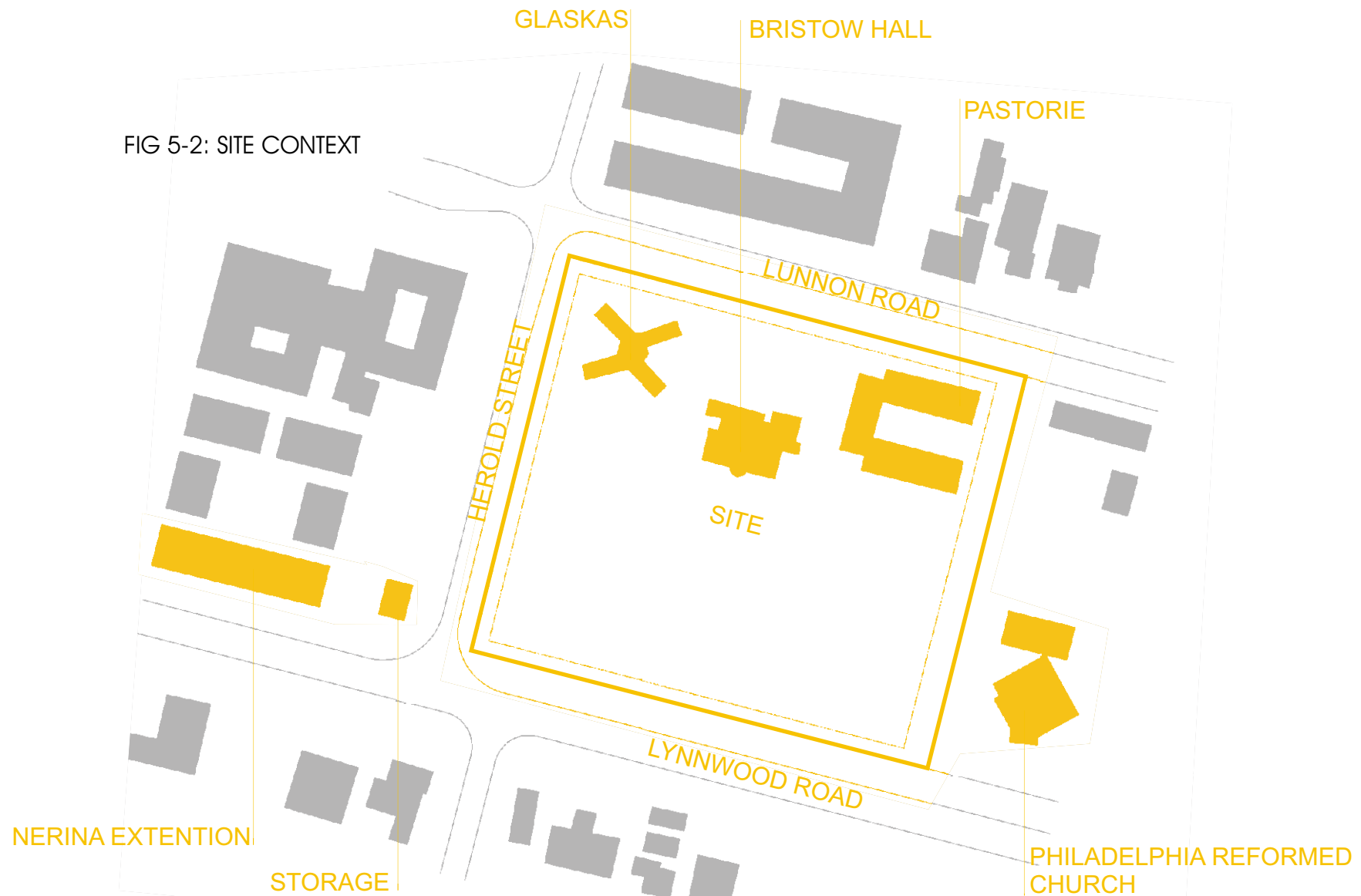




FIG 5-1: RETHA FERGUSON/ UNIVERSITY OF PRETORIA

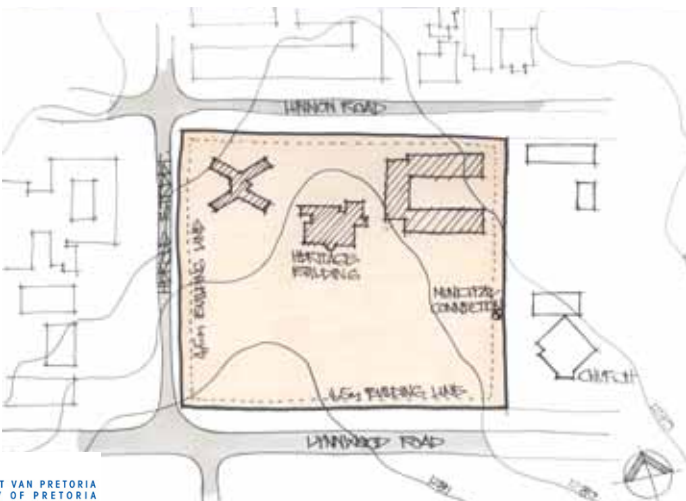
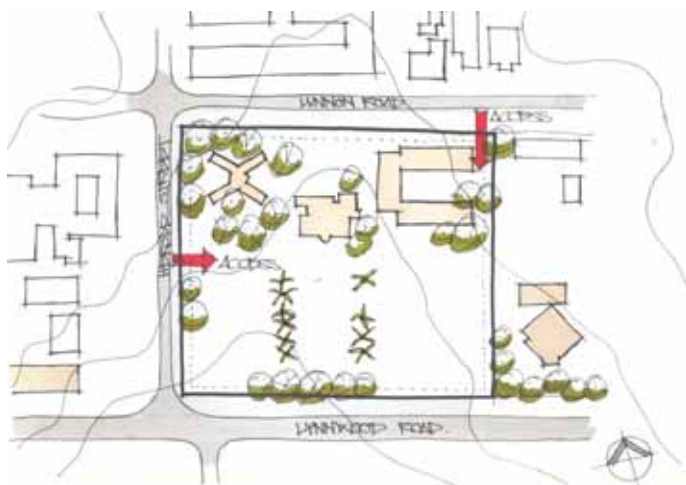
FIG 5-2: SITE CONTEXT



context

Indicated is the buildings which would influence the decision making of my design proposal. The Nerina extension has a terrible facade with toilet windows facing Lynnwood Road. There is also a storage building, which obviously has no aesthetic value. The Glaskas is one of few international style buildings in Pretoria. The Bristow Hall is protected by the heritage association act as it was built in 1921. The Pastorie however is of no historical or architectural value. All three existing buildings on the site is used for accommodation. The Church, being of architectural value, should be complemented.

site analysis



Climate

Temperature - Average maximum - 26,3deg. Celsius

Average minimum - 9,1deg. Celsius

Relative humidity - Average summer - 62%

Average winter - 57%

Rainfall - Summer - 131mm

Winter - 6mm

Solstice - Summer - 88deg. Equinox - 64,5deg.

Winter - 41deg

Access

There are currently two access points to the site, one on the north and another to the west. Access could be obtained directly from Lynnwood Road, but the facade as well as the space in front of the building should be kept clean of cars in order to be reserved for presentation. However the main entrance to the building should be on Lynnwood Road, as pedestrians and people traveling by public transport would enter the site from the road. The main vehicular access to the site is on Herold Street, there should be therefore a secondary entrance from the north. The northern access from Lynnwood Road will be used for delivery access needed for the workshops as well as the restaurant.

Municipal information

Zoning - Educational

Coverage - 50%

Height restriction - 19m

Floor area ratio - 1,5

Area - 19 036sqm

Building lines - 4,5m

site



FIG 5-4: GLASKAS



FIG 5-5: BRISTOW HALL



FIG 5-6: PASTORIE

GLASKAS

BRISTOW HALL

PASTORIE

FIG 5-7: AERIAL PHOTOGRAPH OF SITE



The existing buildings on the site is indicated on the diagram. The International Style Glaskas building should still be used for accommodation. The Bristow Hall heritage building should be used for Tuks Alumni offices, who keeps in contact with previous students of the university, which could assist the Incubator of Innovation for potential candidates. The Pastorie which is of no architectural or historical value and should be demolished for a green space, considering there would be a lot of people accommodated for not only in the incubator program but people for exhibitions as well as lectures given by CE@UP.

HEROLD STREET

MAIN VEHICULAR ACCESS TO SITE

PHILADELPHIA REFORMED CHURCH
CHURCH SHOULD BE COMPLEMENTED

INCUBATOR OF INNOVATION SITE
CURRENTLY USED FOR PARKING



FIG 5-8: LYNNWOOD ROAD FRONTAGE

LYNNWOOD ROAD
FRONT FACADE OF BUILDING

lynnwood road frontage

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analysis site

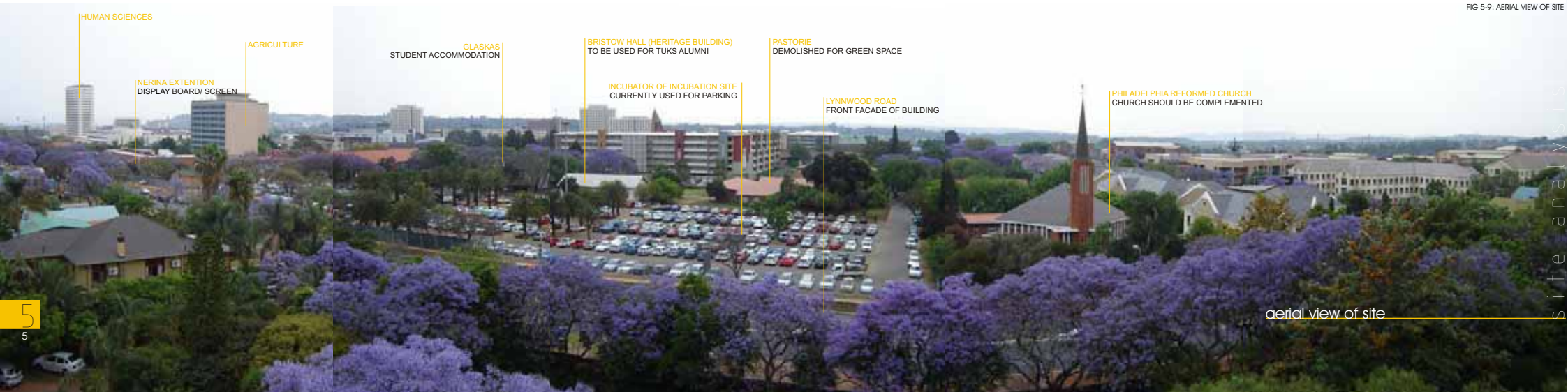


FIG 5-9: AERIAL VIEW OF SITE

guiding innovative thought

Being an Incubator of Innovation, the focus is to guide the entrepreneur's innovative thoughts into a commercial product in order to start a business. Therefore the architecture should display this concept of guiding along a path, and should not be harsh geometric shapes. The building should have a curvilinear form with flowing lines. The building should represent the product of the University of Pretoria and should therefore be highly innovative, form and aesthetically driven, in order to be the pinnacle performance of the narrative.

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FIG 5-10: CONCEPT MODEL



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guiding innovative thought

concept

Exhibition spaces - 1 760sqm

Ground floor - 900sqm

First floor - 80sqm

Second floor - 700sqm

Third floor - 80sqm

Studios, workshops and laboratories - 1 500sqm

Mechanical and electrical engineering workshop - 385sqm

Electronic and computer engineering workshop - 285sqm

Chemical engineering lab - 75sqm

Architecture studio - 285sqm

Fashion and graphic design studio - 280sqm

Fine arts/photography - 190sqm

Lecture rooms - 600sqm

Lecture hall 1 - 45 people - 70sqm

Lecture hall 2 - 45 people - 70sqm

Lecture hall 3 - 45 people - 70sqm

Lecture hall 4 - 145 people - 160sqm

Lecture hall 5 - 145 people - 160sqm

Computer lab - 25 people - 70sqm

Offices - 1 005sqm

Mechanical and electrical engineering offices together with

Electronic and computer engineering offices - 460sqm

Chemical engineering offices - 75sqm

Incubator@UP & Administration - 310sqm

Continuous Education@UP - 160sqm

Restaurant - 300sqm

Kitchen and Catering - 100sqm

Seating space - 200sqm

design brief & accommodation

Design a business incubator facility for the development of innovations, which will be orchestrated by Enterprises@UP for the University of Pretoria graduates in the fields of design/art and engineering. The facility should accommodate exhibition spaces, lecture rooms, laboratories, studios, workshops and offices. The building should accommodate offices and lecture rooms for Continuous Education@UP. It should be an iconic building representing the product of the university. The building should be sustainable by making use of passive cooling systems and solar power as well as harvesting rainwater for use on site.

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FIG 5-11: INITIAL MASS MODEL

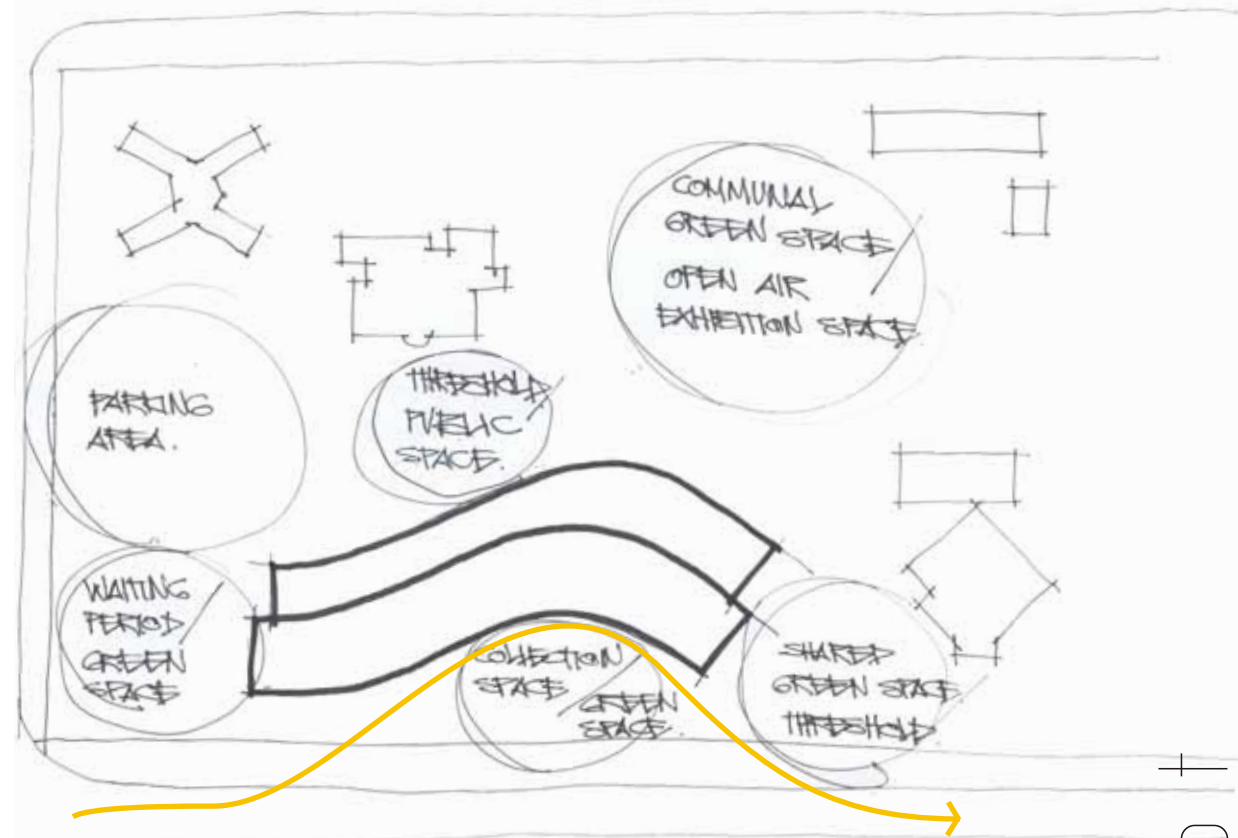
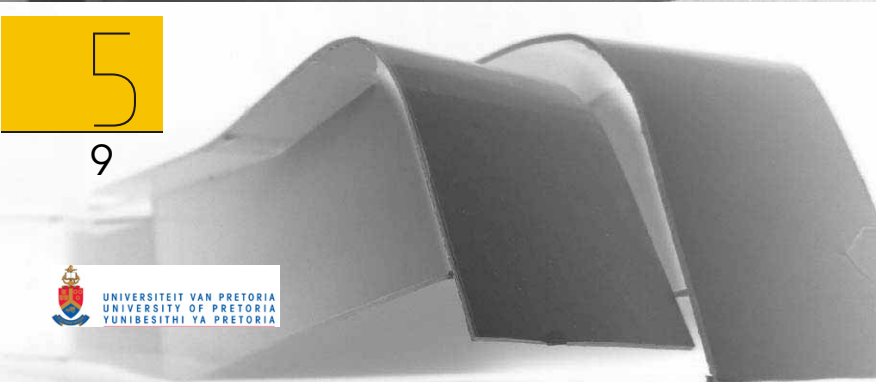
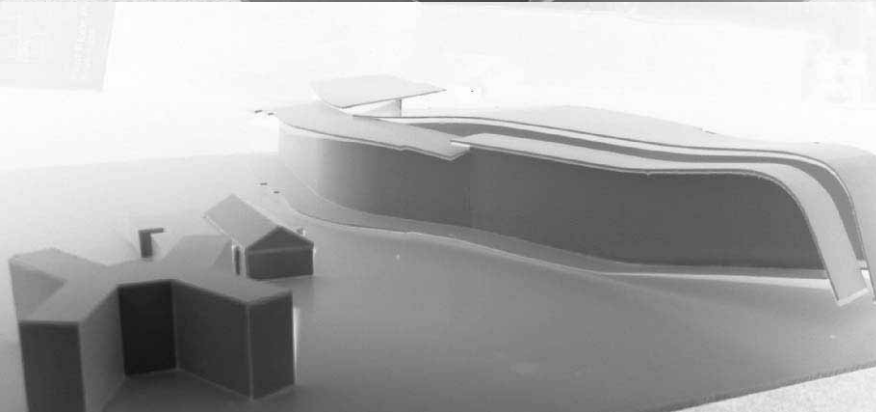
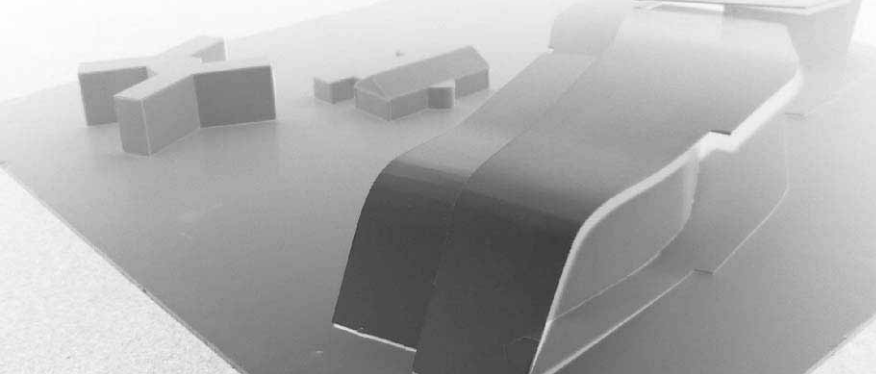
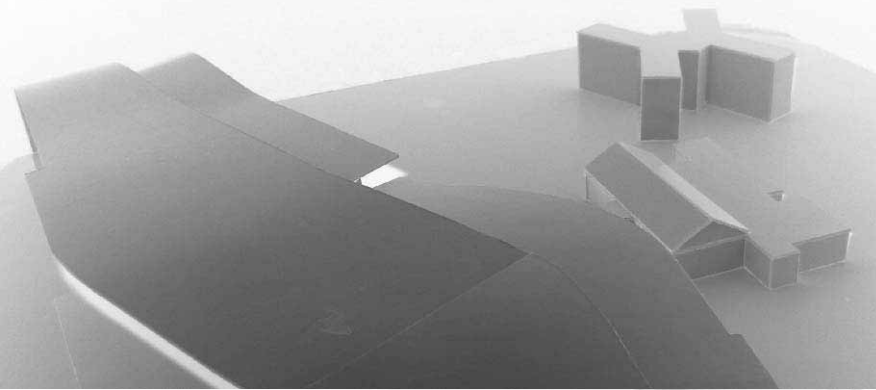


FIG 5-12: SPACE DEVELOPMENT

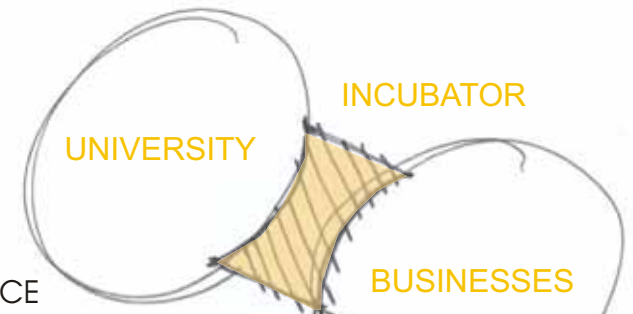
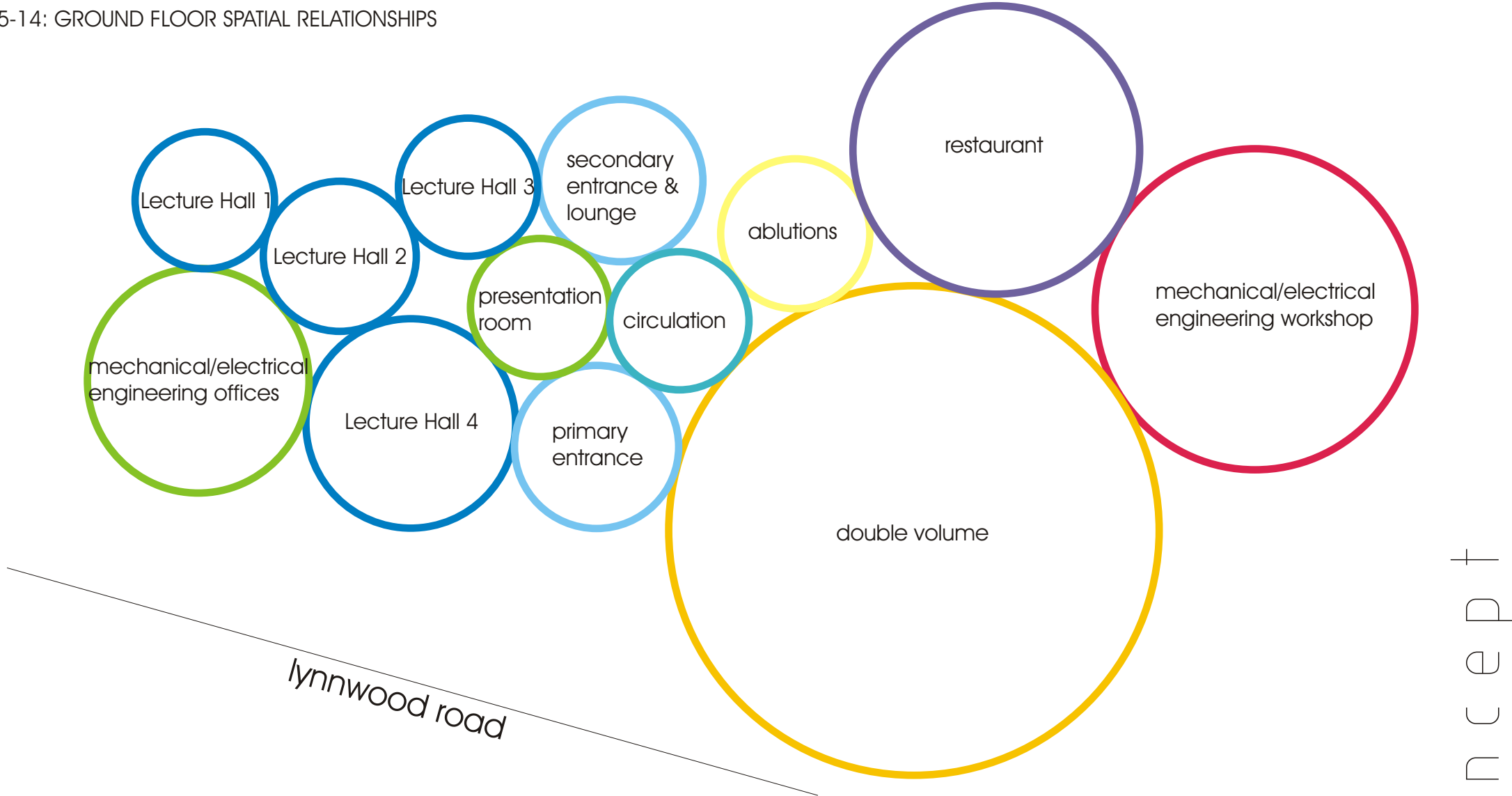


FIG 5-13: INTERFACE

space and mass development

The waiting period provided through the green space in front of the building serves to be a comma before the rest of the sentence continues. The shape of the building should draw people into a collection space from where they can enter the building. The shared green space between the Incubator and the church serves as a threshold in order to respect the presence of the church. The threshold public space between Bistow Hall could be the secondary entrance gathering space. The Incubator is not included in the universities fence as it serves to be the threshold or interface between the university and businesses.

FIG 5-14: GROUND FLOOR SPATIAL RELATIONSHIPS

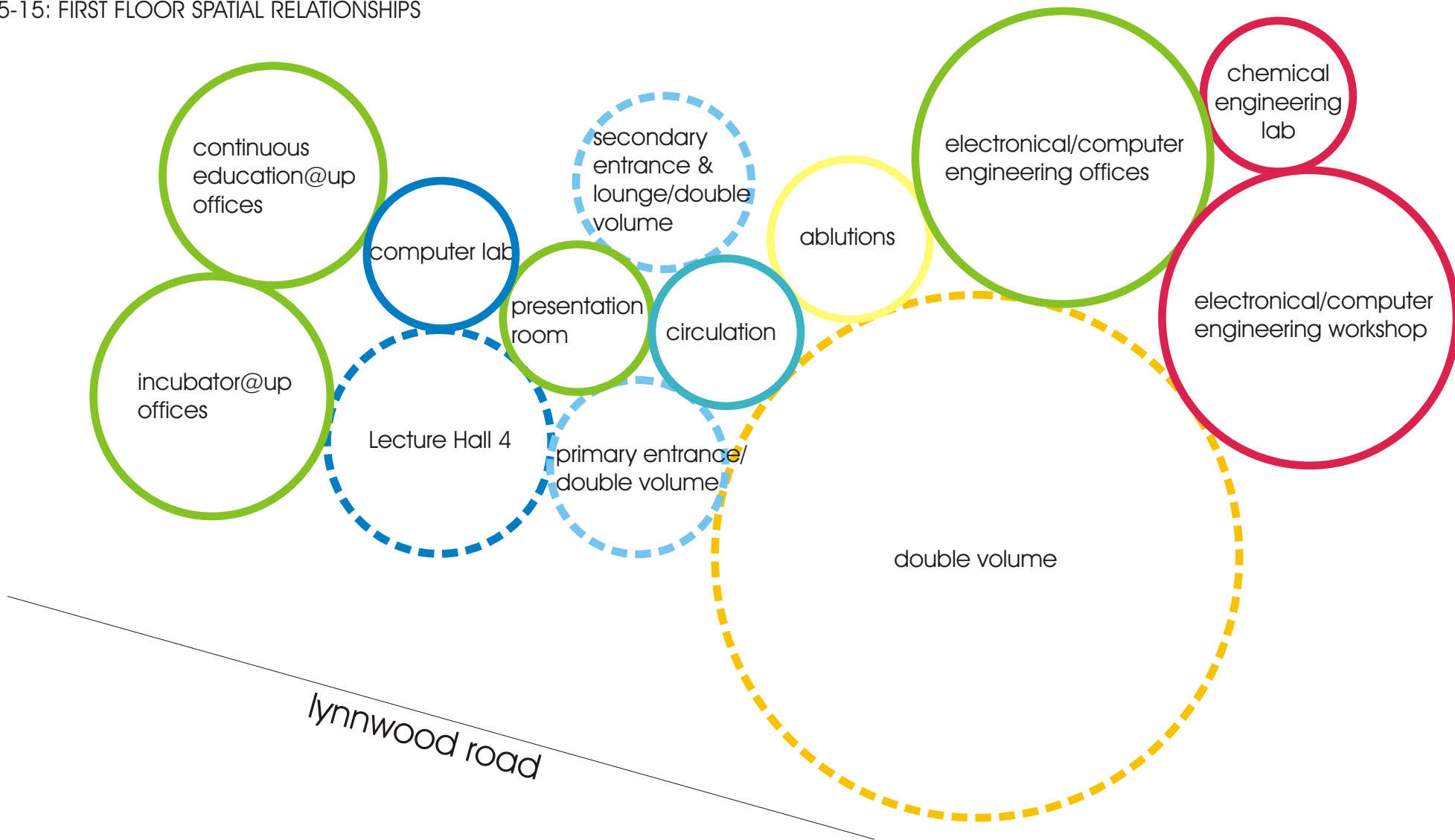


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spatial relationships - ground floor

There are entrances to the north and south of the building and situated in the center of the building. The most publically utilized spaces are the closest to the entrances, such as main circulation, lecture halls, toilets and the exhibition space. The exhibition space face Lynnwood Road to the south, for displaying purposes. The toilets is placed next to the main circulation to the north of the building away from Lynnwood Road. The restaurant should be next to the exhibition space for catering purposes and face north towards the green area. The mechanical/electrical workshop are placed to the north for easy access.

FIG 5-15: FIRST FLOOR SPATIAL RELATIONSHIPS

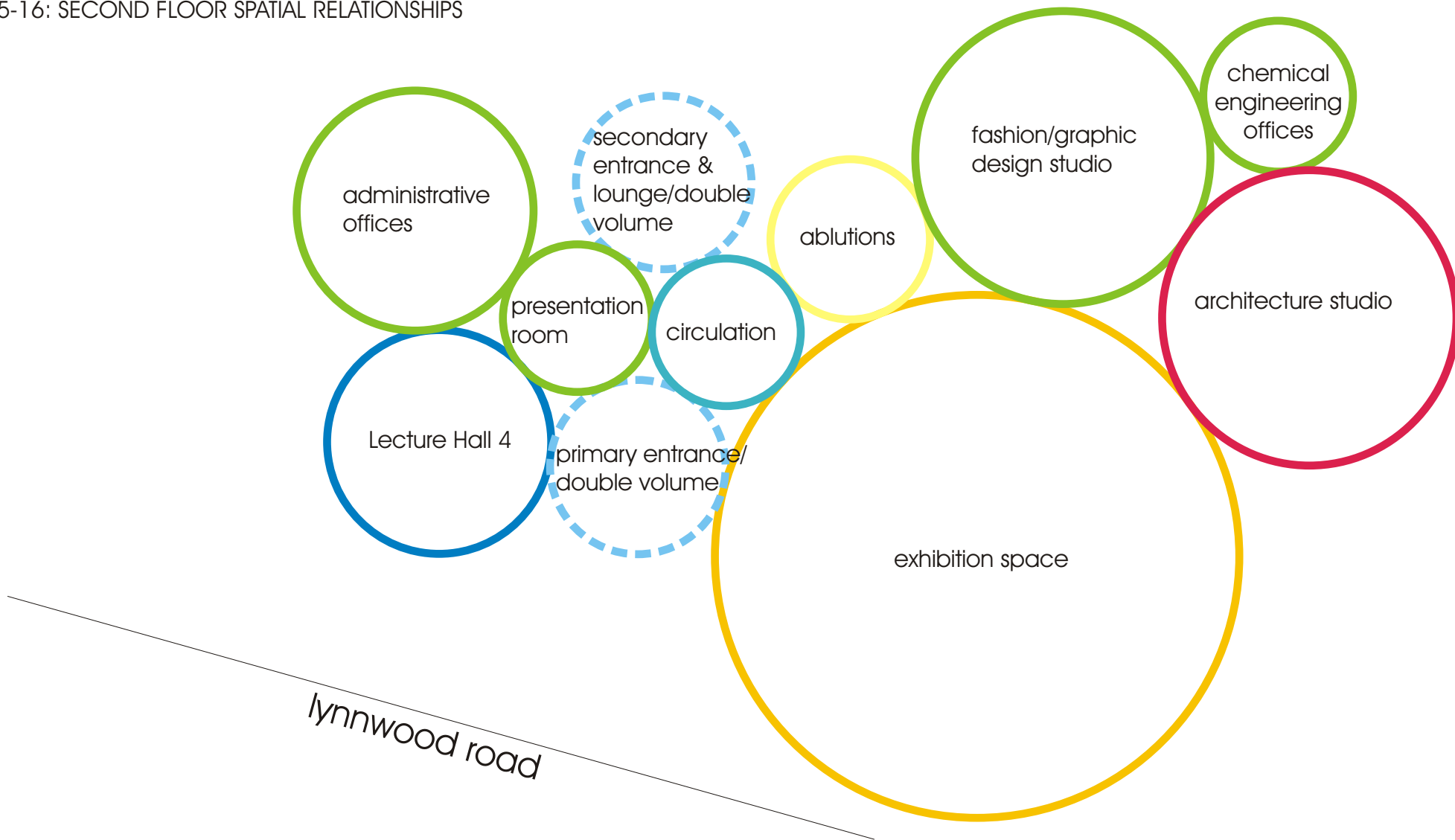


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spatial relationships - 1st floor

The entrance foyers are given double volumes to give it prominence. The exhibition space has a double volume to create a space suitable for the amount of people who will be utilizing the space. The double volume also gives flexibility to the exhibition space, which allows large innovative products to be displayed. Through the double volume, other spaces such as the main circulation, offices and workshops can look onto the exhibition space.

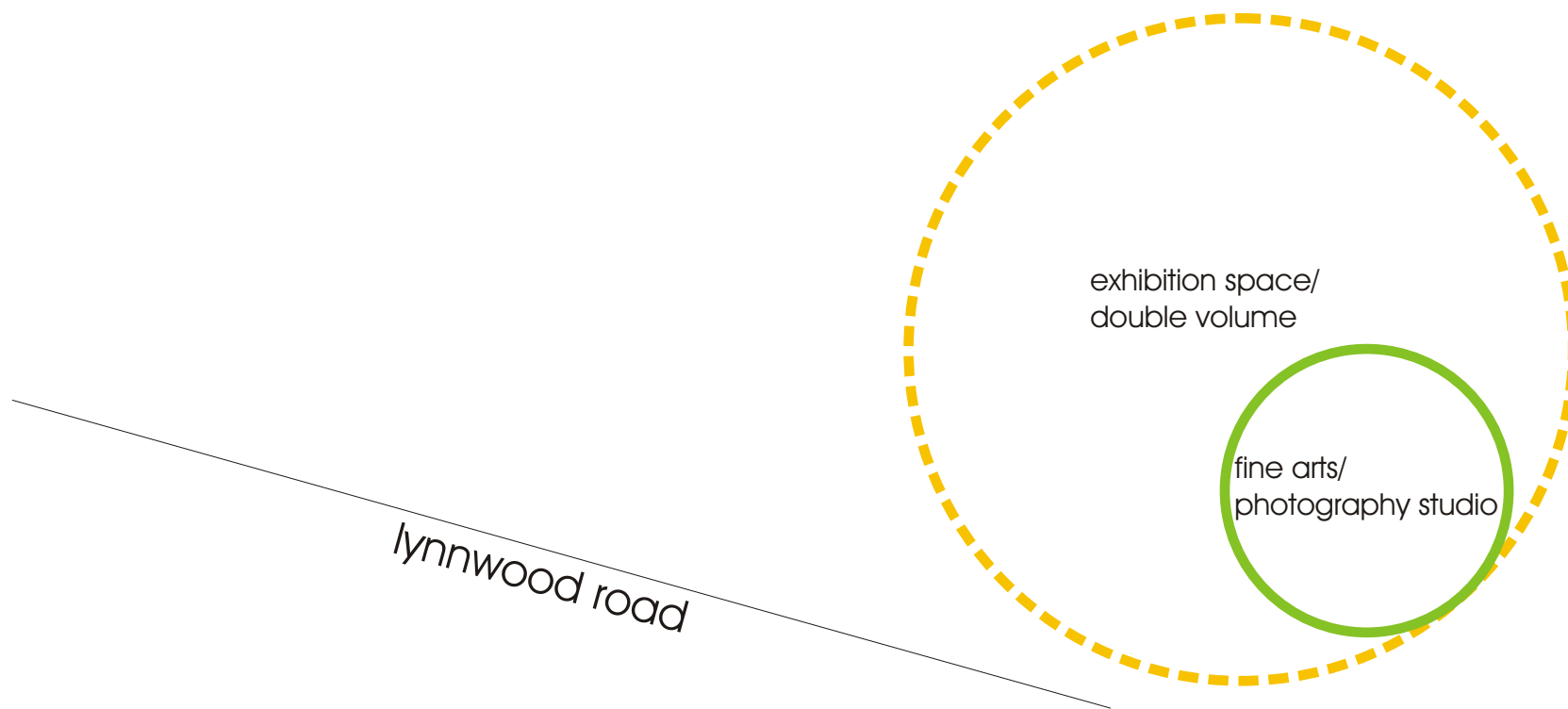
FIG 5-16: SECOND FLOOR SPATIAL RELATIONSHIPS



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spatial relationships - 2nd floor

There is another large exhibition space on this floor which should have yet another double volume above. The spaces to the west also start diminishing in order for the building to lead up towards the pinnacle of the building.



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spatial relationships - 3rd floor

The fine arts/photography studio is the only space that will be on the 3rd floor as this would be the highest point of the building. The entire building would lead towards this point to make this the focus, which is therefore the exhibiting of innovative and creative ideas. The studio will look upon the exhibition space making it part of the exhibition to create an atmosphere which would inspire the individuals.

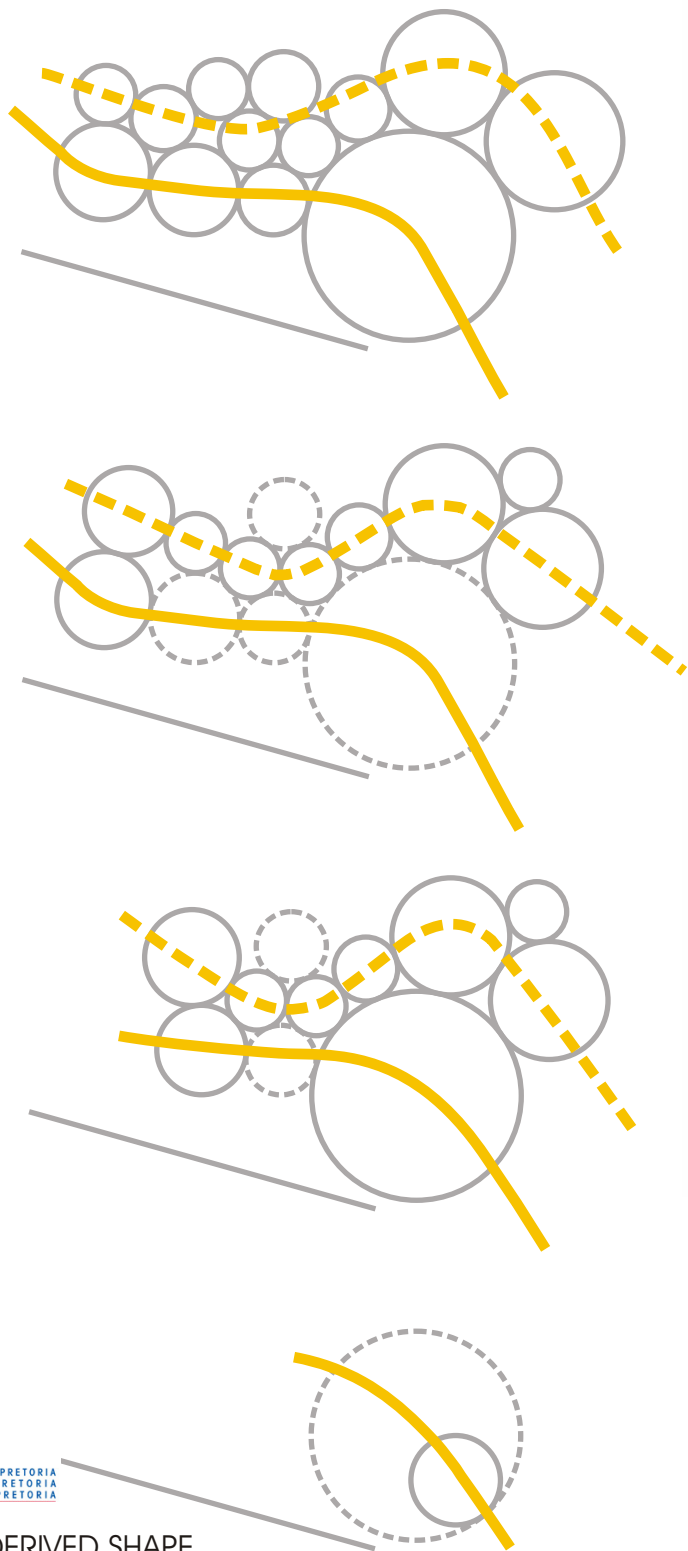
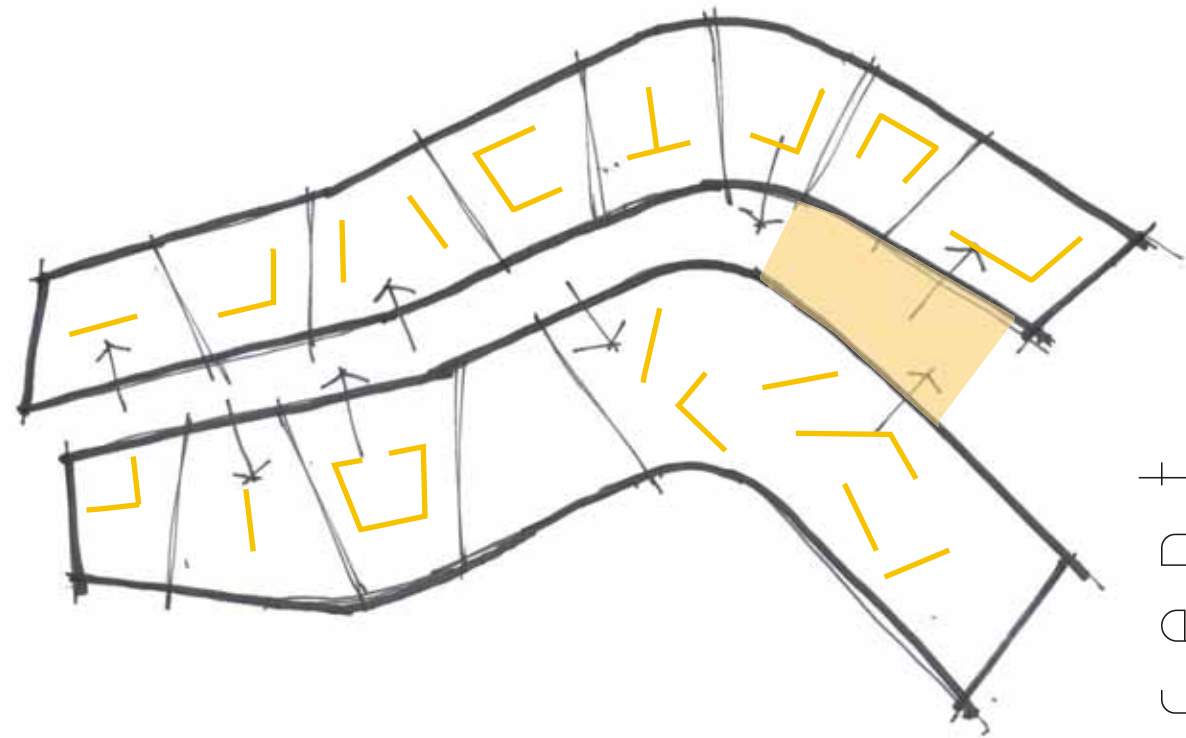


FIG 5-19: INTERNAL SPACE DEVELOPMENT



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spatial relationships - shape

Through the spatial relationships the shape of the building can be derived. The building should through its curvilinear lines and fluid forms draw people into the narrative of the building. This plan should therefore also strengthen the concept of Guiding Innovative Thought. The building should function by having a central circulation flow from where all the spaces can then be enter from. The circulation should flow towards a central atrium space. The spaces entered into should be open plan, and the internal spaces can be managed by the creative individuals through movable partitions.

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FIGURE 5-20: PINNACLE PERFORMANCE

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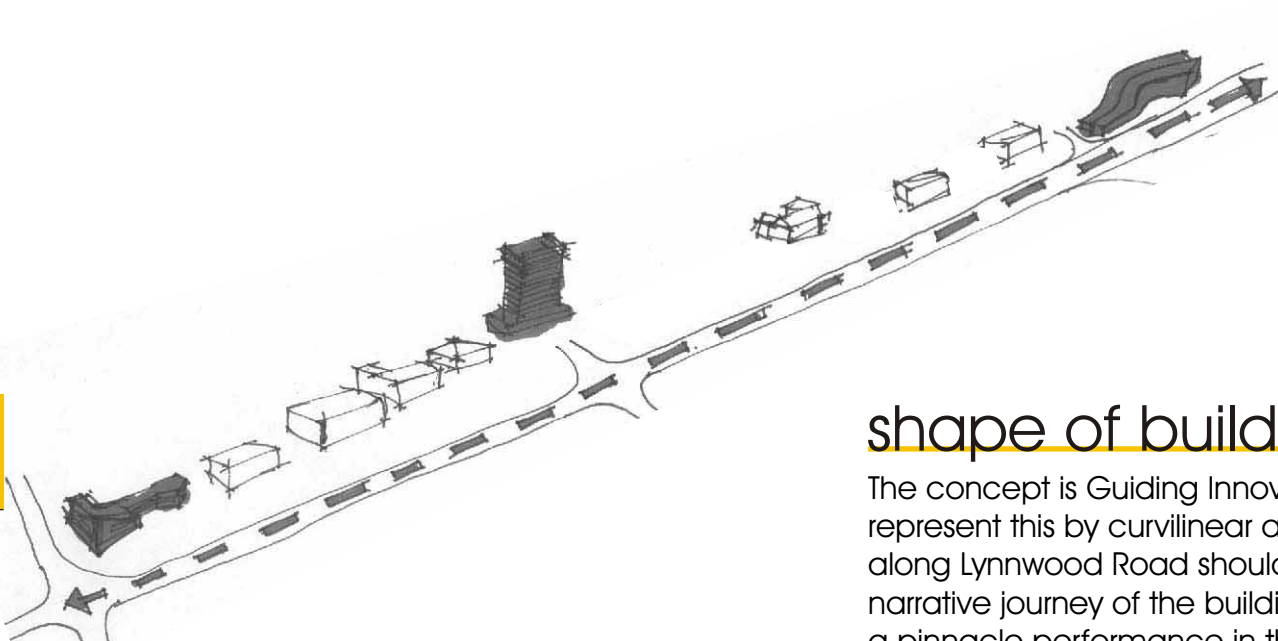


FIGURE 5-21: LYNNWOOD ROAD NARRATIVE

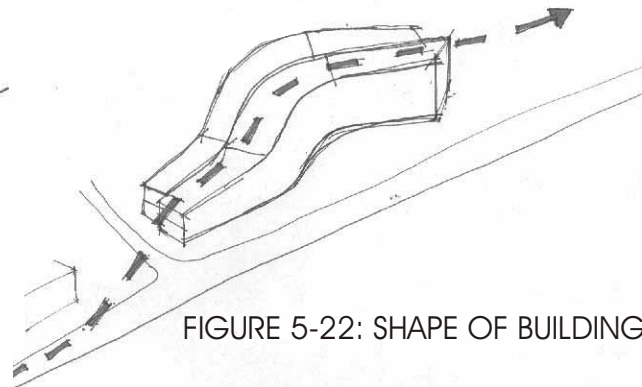


FIGURE 5-22: SHAPE OF BUILDING

shape of building

The concept is Guiding Innovative Thought, therefore the building should represent this by curvilinear and fluid lines. The attention of the people that drive along Lynnwood Road should be drawn towards the building and into a narrative journey of the building. The building should lead the attention towards a pinnacle performance in the whole Lynnwood Road narrative, which is the displaying of the product of innovation that is achieved by studying at the University of Pretoria. Therefore the exhibition space, having a high volume, is at the end of the building, marking the end and conclusion of the narrative.

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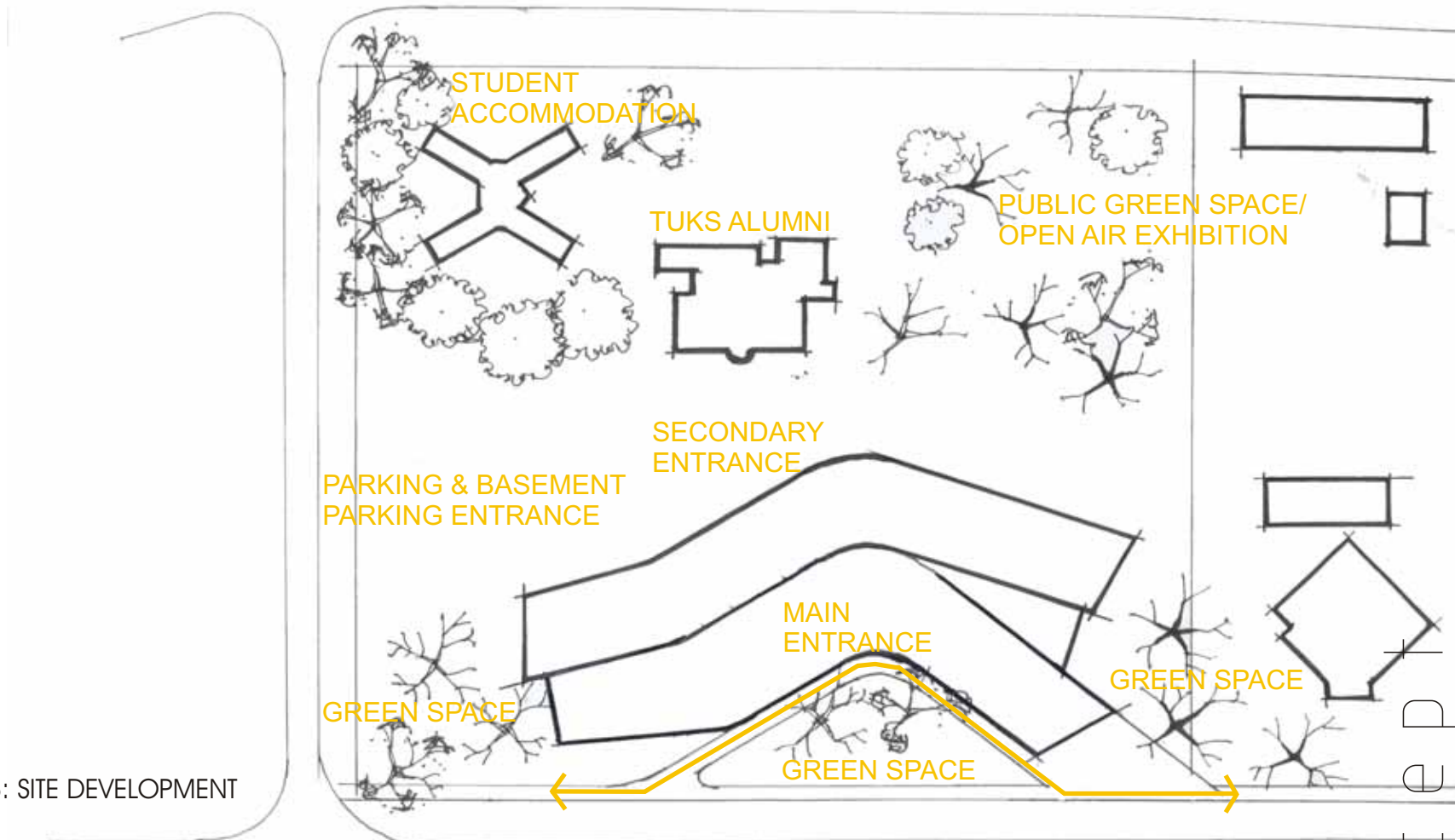
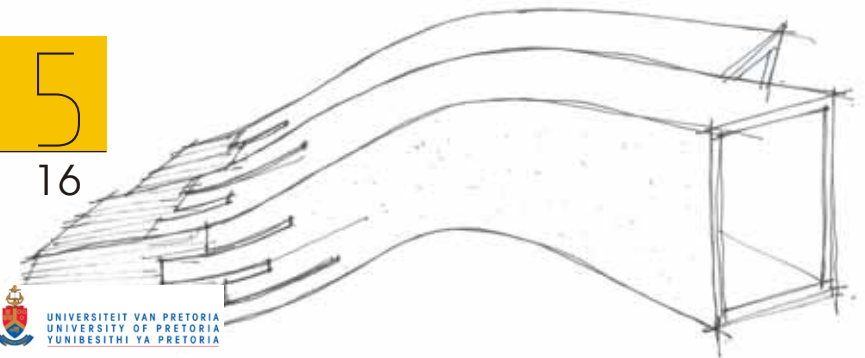


FIG 5-23: SITE DEVELOPMENT

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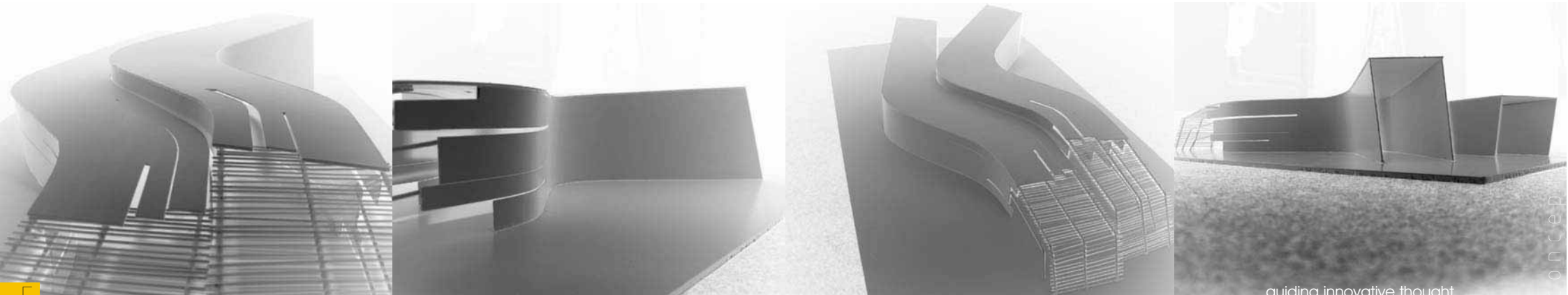
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concept development

The concept of Guiding Innovative Thought is further developed where the building speaks of a narrative taking place with regard to the incubation process. The building starts off to be extremely fragmented as to represent a person coming into the incubator with a concept but must still develop it. He doesn't have a business plan or the necessary business skills to make it work. As the person progresses through the incubation program, the concept starts to formalize and his business is starting to get on its feet. Further progressing, the product solidifies to have in the end a solid innovative commercial product.

FIG 5-24: NARRATIVE OF THE BUILDING



5 FIG 5-25: FINAL CONCEPT MODEL