

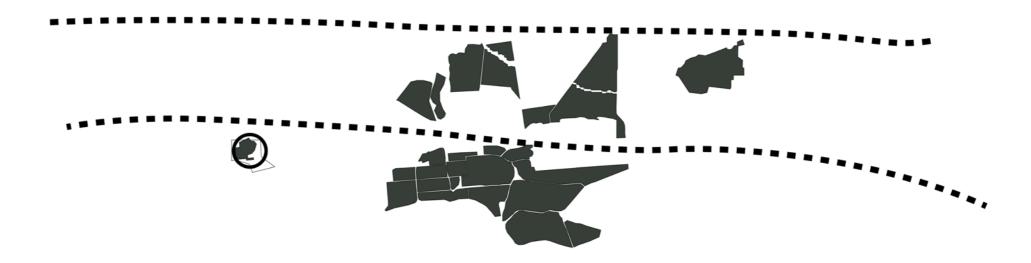






Westfort was founded in 1897 by the former Zuid Afrikaansche Republiek (ZAR)

Located 10 km outside of the centre of Pretoria



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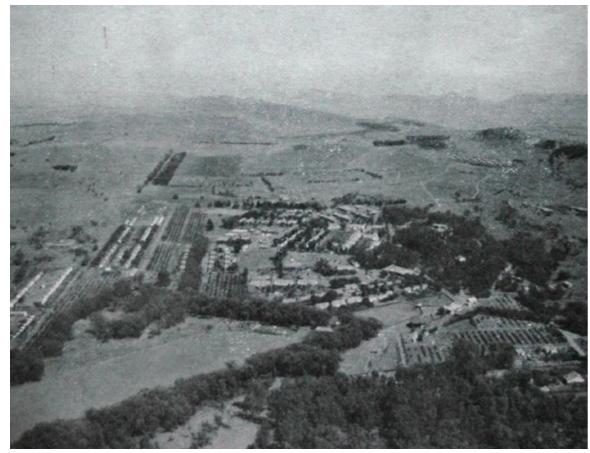
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Green was abundantly used

Third development | 1930 - 1950 Vegetation





Aerial view of the Leprosy Institute about 1956 (source: NASA collection, UP).



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Segregation of patients



Education is relatively bad

"Education is a major target for the government, mainly because of the poor results... ...South Africa scores relatively bad, it spends on average more money per pupil but has under average school results"

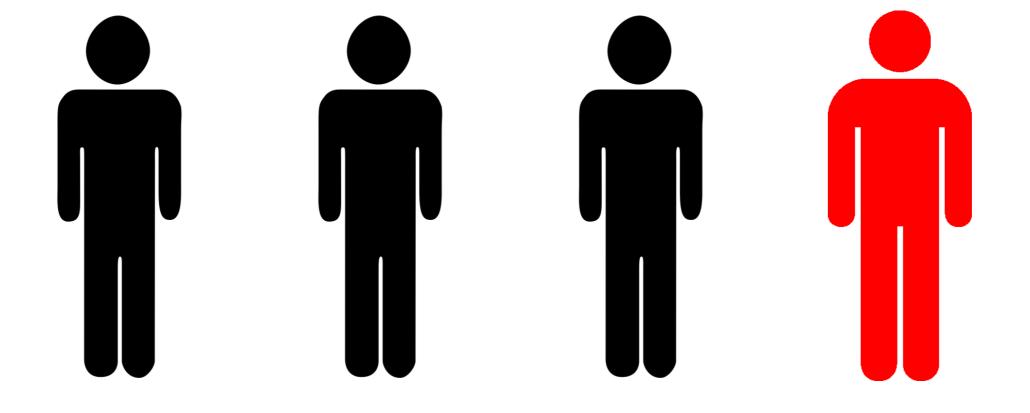
Wilkinson (2013)

"The South-African education is known for its great inequality. There is a major difference between whites and blacks."

Nkabinde (1997)

Education is relatively bad

A quarter of the population lives in extreme poverty



Education is relatively bad

A quarter of the population lives in extreme poverty

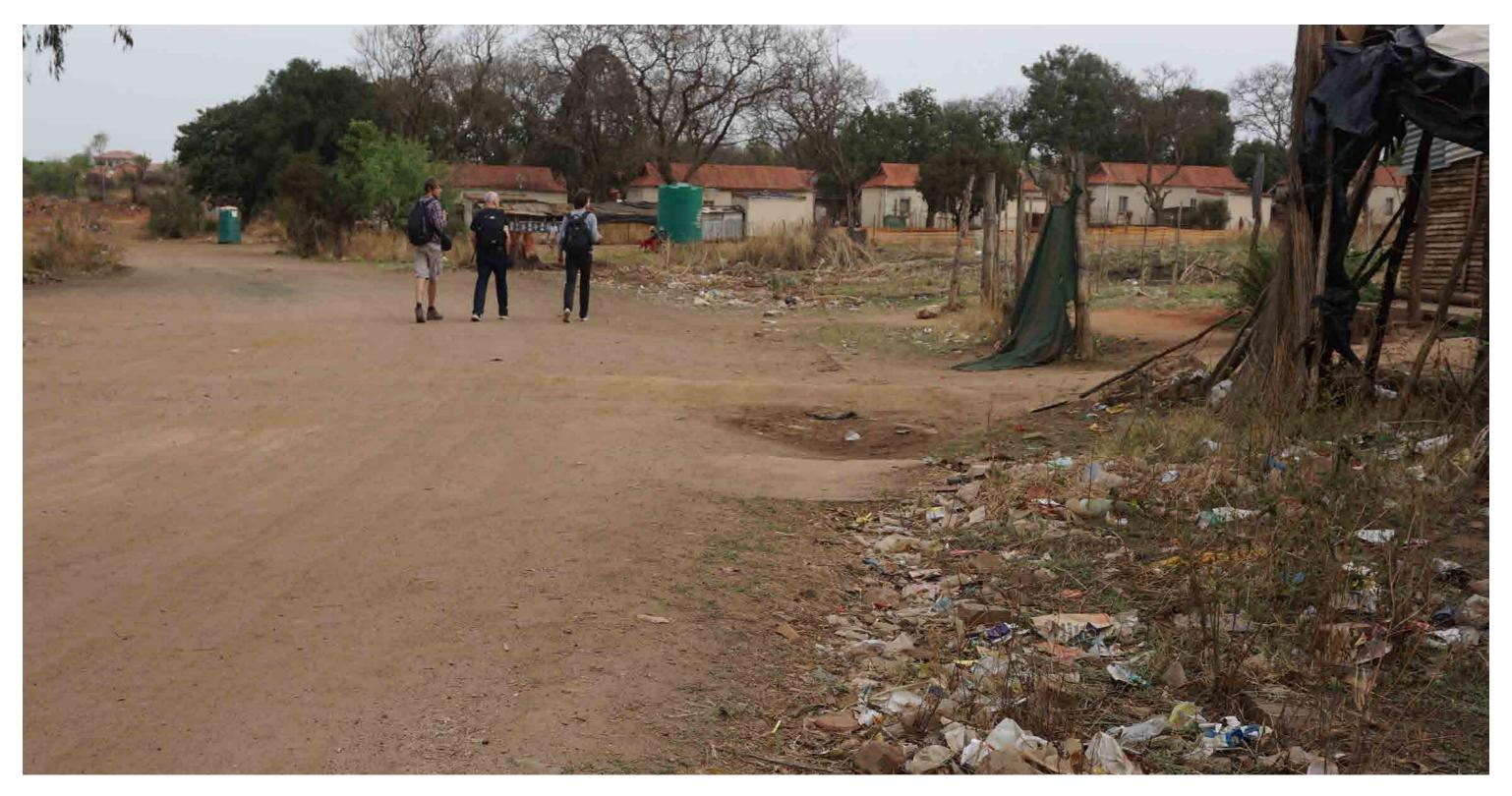
Westfort as a refuge



Education is relatively bad

A quarter of the population lives in extreme poverty

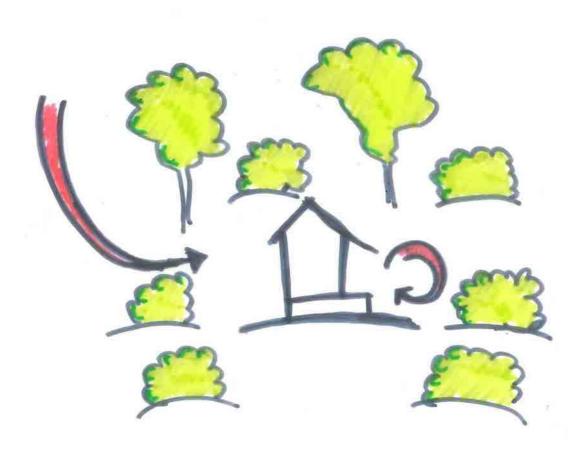
Westfort as a refuge



Westfort was a final destination

Westfort used to be a place excluded from society

Where people could find different layers of privacy

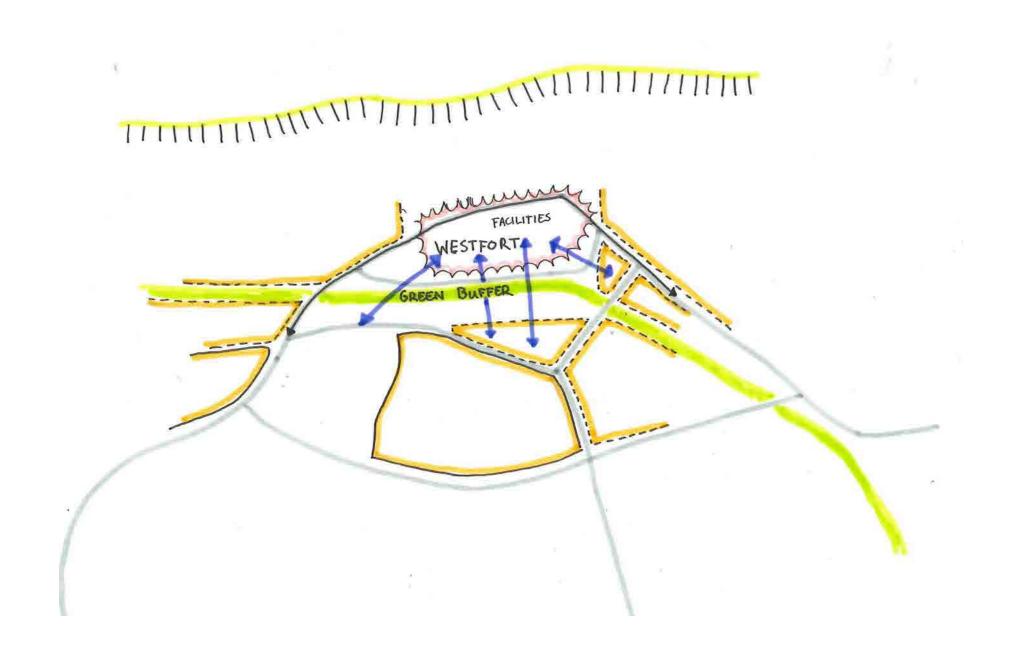


Make Westfort a Centre for the area

Introduce facilities in Westfort

Enhance the green area to provide a buffer with the new development

Connect Westfort with its surroundings



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Water management

South Africa endures hot humid summers and cool dry winters

Retention ponds and Bioswales help to guide the water through the area

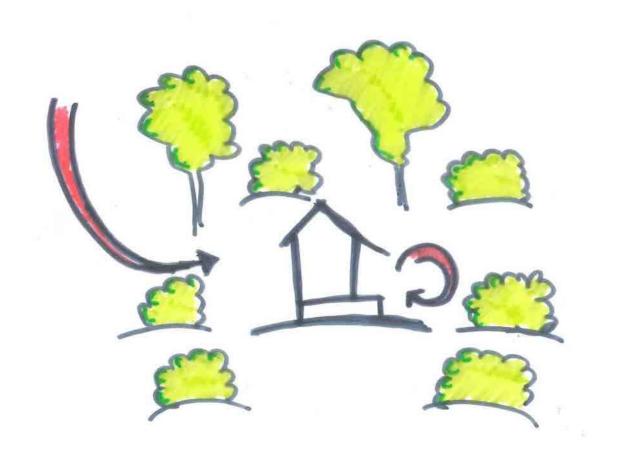




Urban Strategy

Make Westfort a place of inclusion rather than exclusion

A starting point rather than a ending point





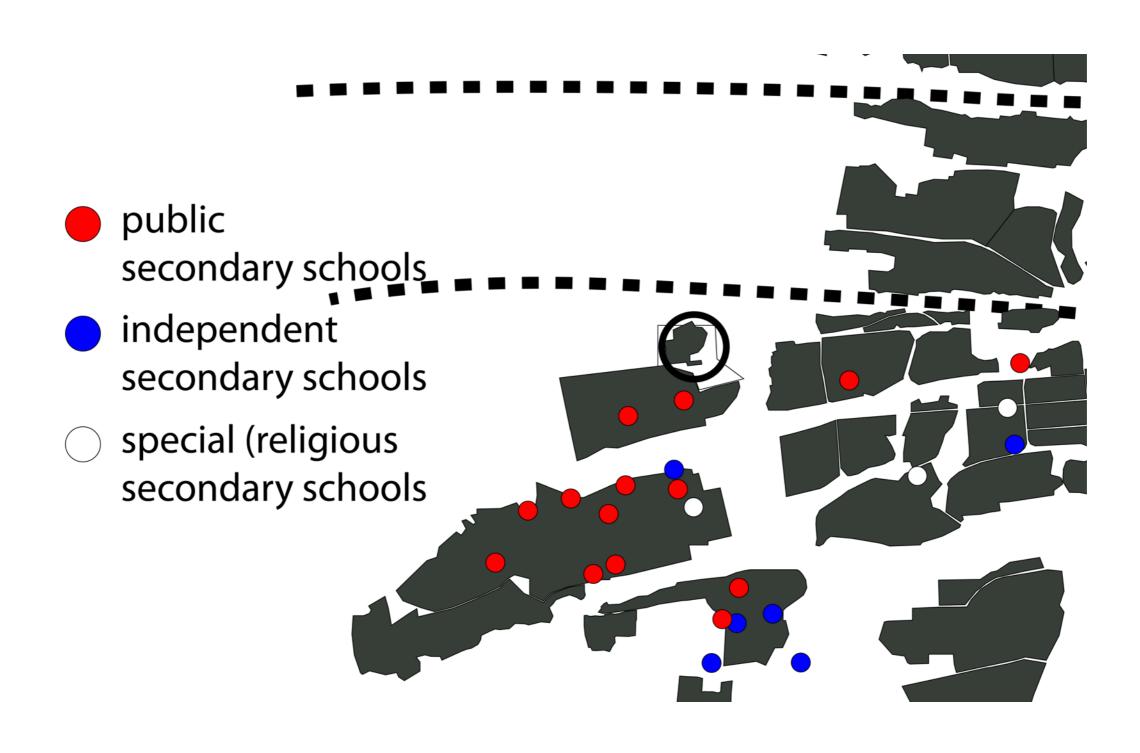
The Healthy School

A secondary school is an ideal starting point



Schools cannot refuse students from their direct surroundings

An independent school can offer a higher quality of education



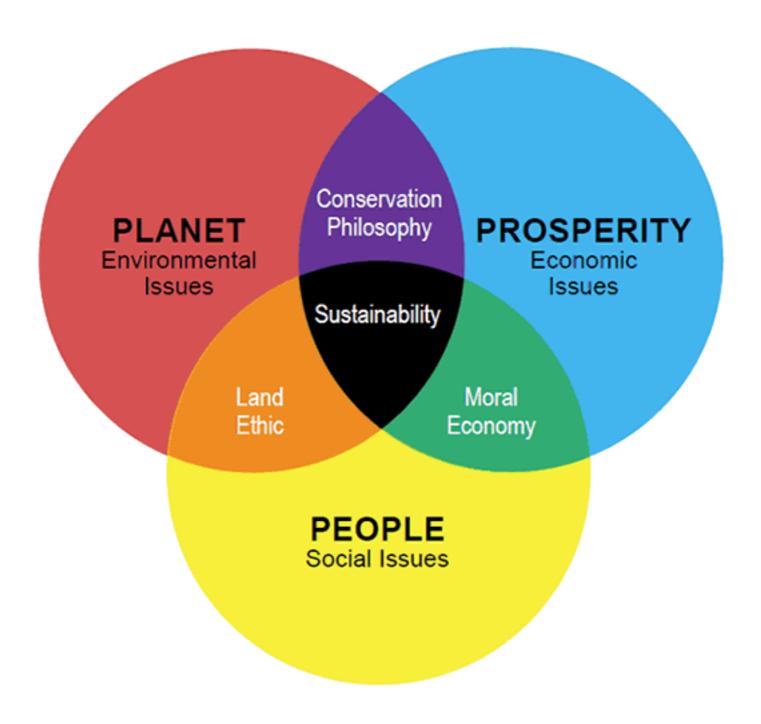
An independent secondary school

Schools cannot refuse students from their direct surroundings

An independent school can offer a higher quality of education

A sustainable school is a must in this day and age

- *Utilizing the elements
- *Low environmental impact
- *Reuse of the existing
- *Inspirational and usefull environment



Central location



Central location



Central location



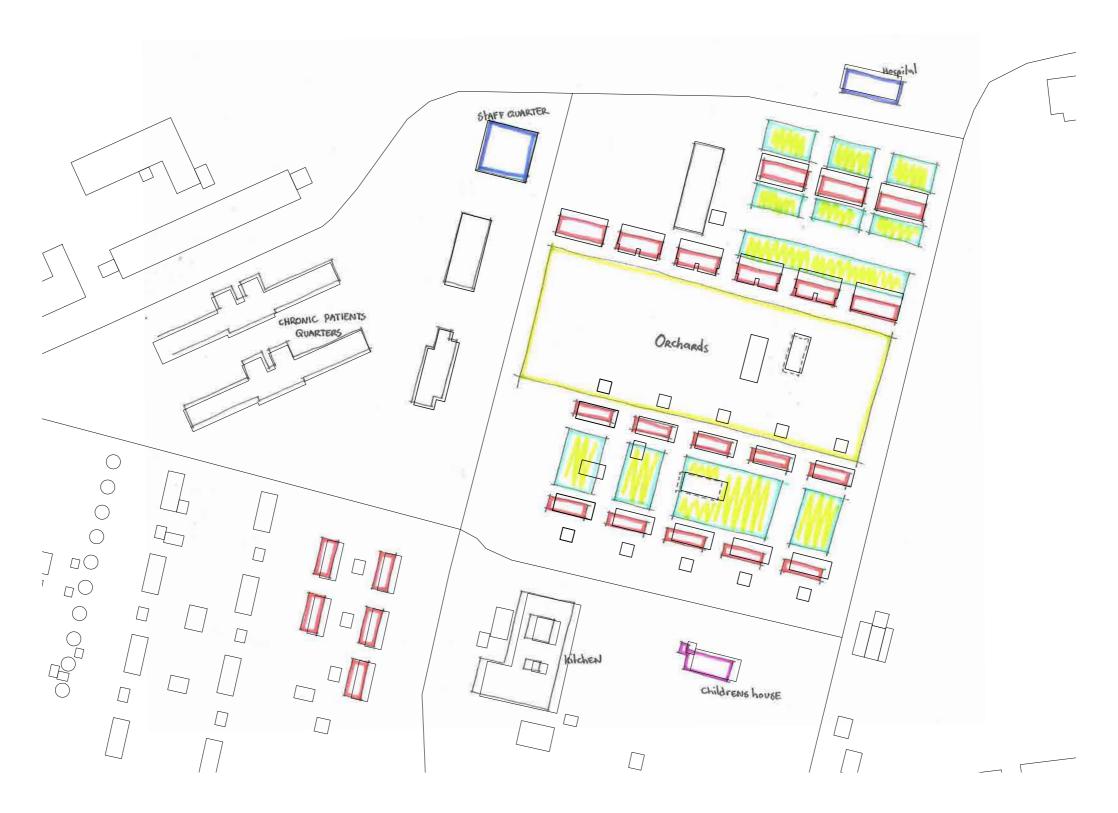
Central location



Historical use

Behind the patient clusters where orchards which served for daytime activity

The interiors were green gardens



Preservation of the clusters as an urban structure

Maintain historical orientation

Free the **interior courts** to better emphasise the seclusion of the patients



Strengthen the **main axis** by adding structure

Utilize the different **open spaces** and highlight their identities

Building in between the two clusters will **reduce the wastespace**

Fill the gap that exists by adding a building overlooking the 'coloured' cluster



Educational spaces

- * 15-20 classrooms (60sm) (classrooms of 30-40 students)
- * 2 computer rooms (80sm)
- * media centre (80sm)
- * library
- * 2 multipurpose classrooms
- * 2 science laboratories (80sm)
- * social science room (80sm)
- * 2 agriculture classrooms (120sm)
- * 2 arts classrooms (120sm)

Administrative rooms

- * 15 offices (15-20sm)
- * reception area (20sm)
- * 3 services rooms (15sm)
- * staff room (60sm)
- * 3 rooms pastoral care (15sm)

Additional educational spaces

- * food garden (increased size)
- * dining room (120sm)
- * kitchen (20sm)
- * food storage (15sm)
- * general purpouse room (auditorium) (180sm)
- * sport facilities for soccer/rugby for volleybal
- * 2 services rooms (25sm)
- * caretaker and security room (20sm)
- * 26 toilets

Student hostel 100-150 students





Strengthening the main axis

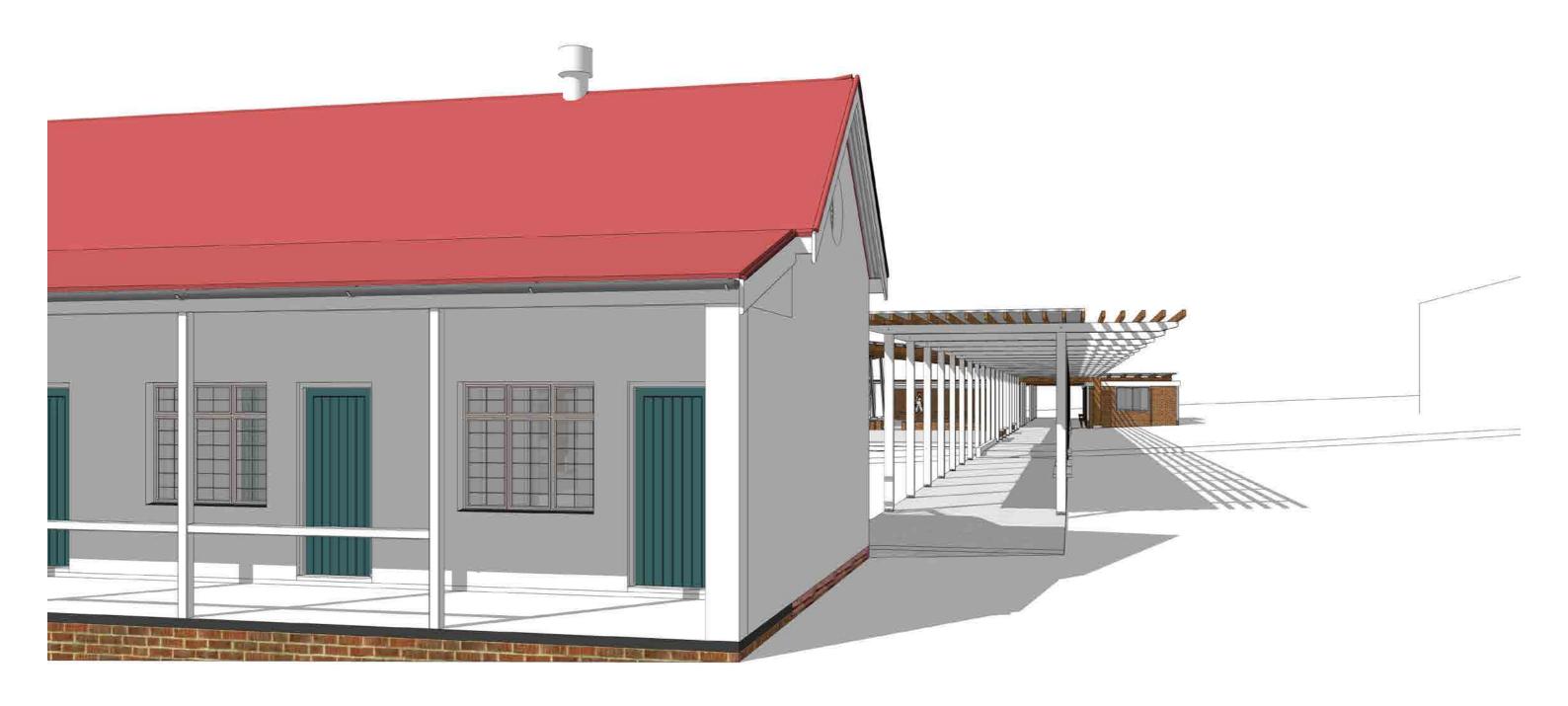
The Open-air auditorium is situated along the main entrance axis



Strengthening the main axis

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A shaded walkway allows for a dry and cool passage to and from the auditorium



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Open-air Auditorium

Opening to the patient cluster



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Large open structure

A secondary walkway connects the Open-air auditorium with the two classroom wings



Open-air Auditorium

Opening to the patient cluster

Large open structure

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Gradual transition between the auditorium and the heritage opposing it

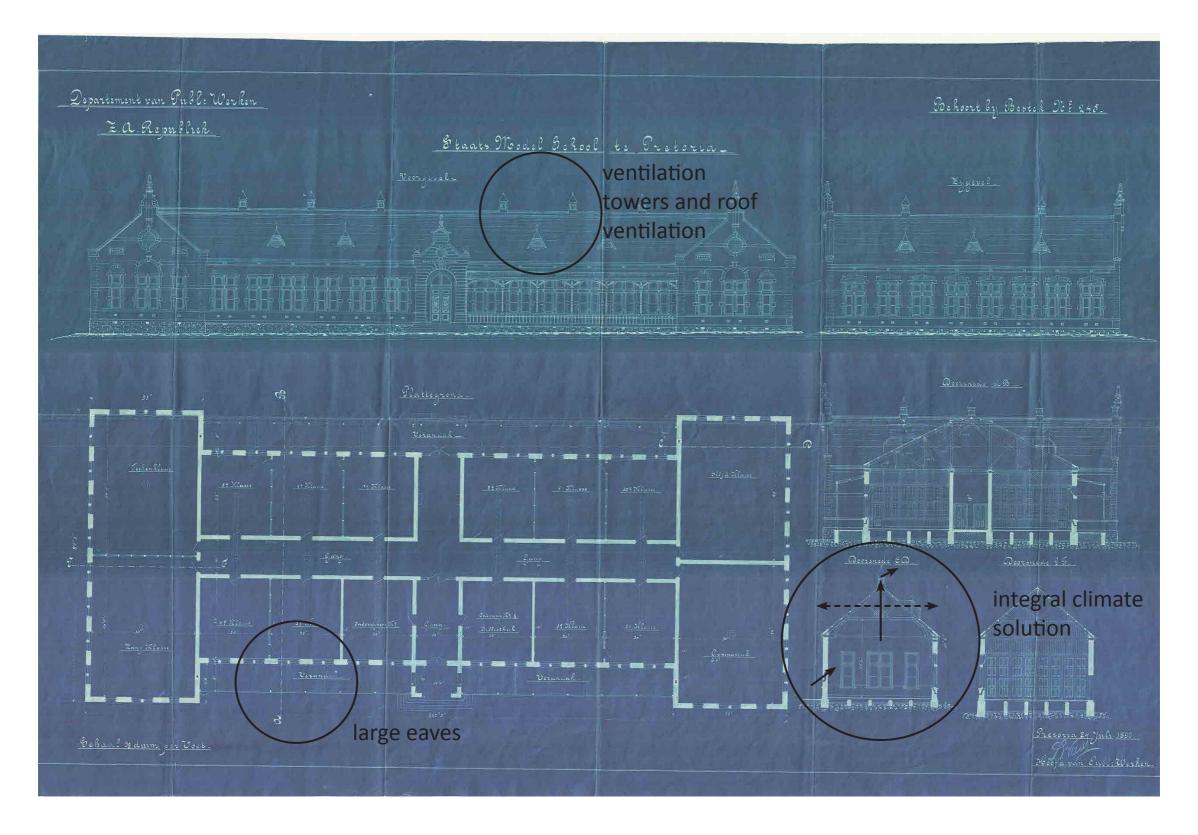


Buildings designed by Sytze Wierda



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Wierda acknowledged the importance of architectual meassures to improve the interior climate



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Smart passive strategies were used

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Buildings designed by Sytze Wierda

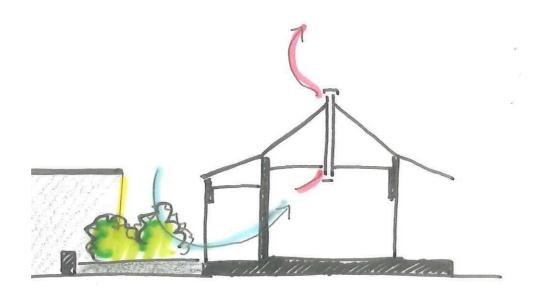
Wierda acknowledged the importance of architectual meassures to improve the interior climate

Smart passive strategies were used

A healthy environment was considered very important to reduce contamination



Improve ventilation of the houses



Improve ventilation of the houses

Make the backside more attractive since it will become more representative





Improve ventilation of the houses

Open the interiors to show the respective functions

Make the backside more attractive since it will become more representative

Introduce green spaces

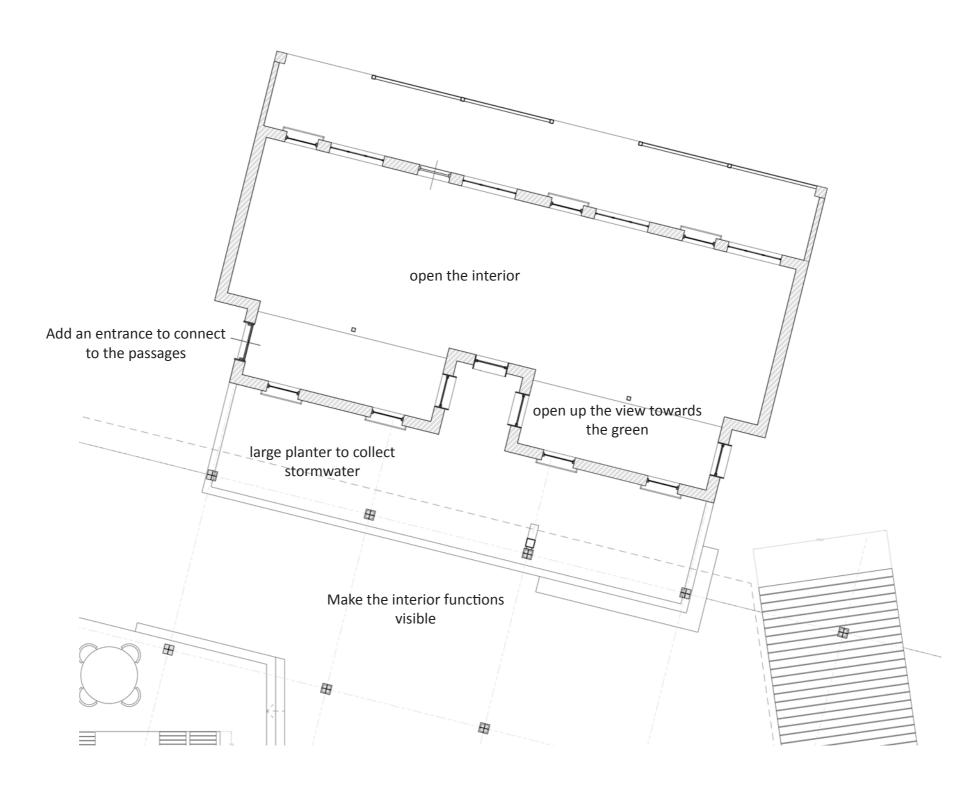


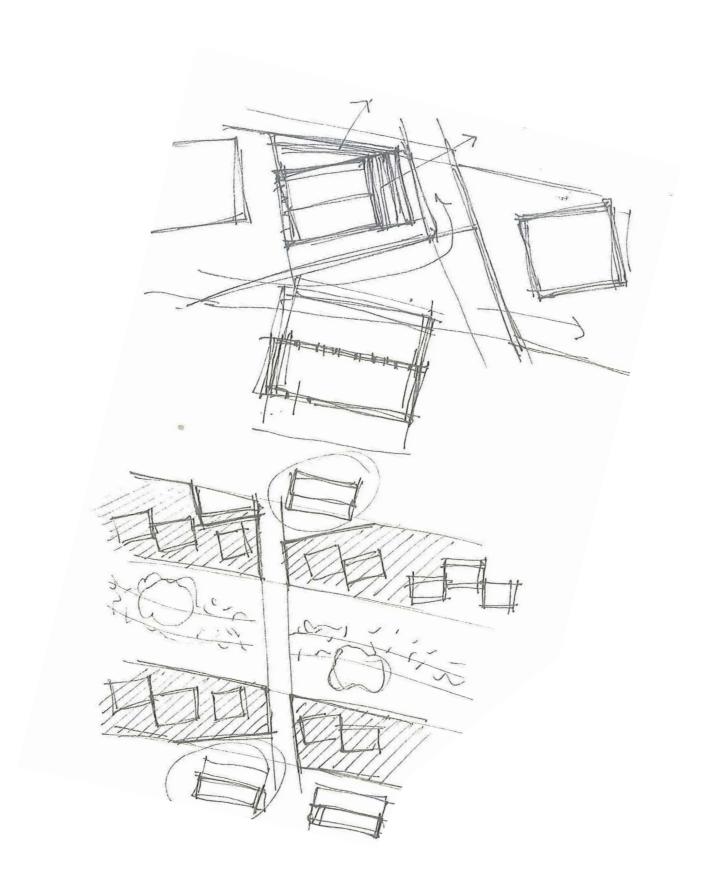
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Sustainable buildings in a green study landscape



Sustainable buildings in a green study landscape

Reused bricks and a wooden construction give it a natural look that fits the landscape



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Sustainable buildings in a green study landscape

Backsides of the old houses are now attractive spaces

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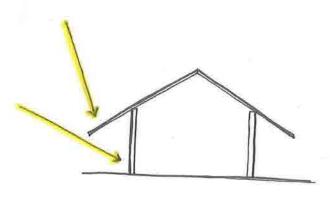


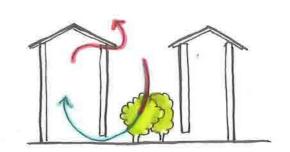
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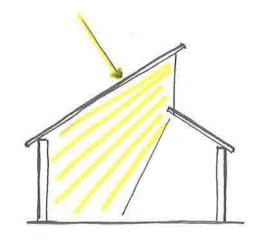
Backsides of the old houses are now attractive spaces Sustainable ventilation technology

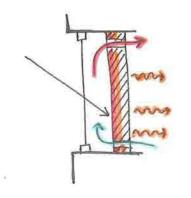
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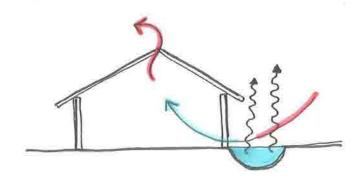
Large eaves provide shade

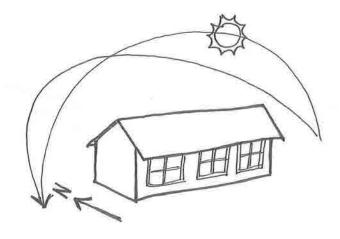


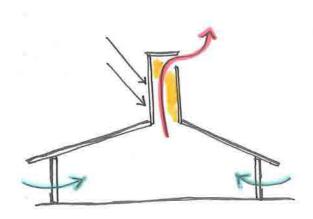


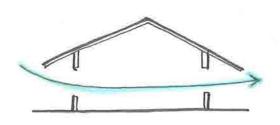










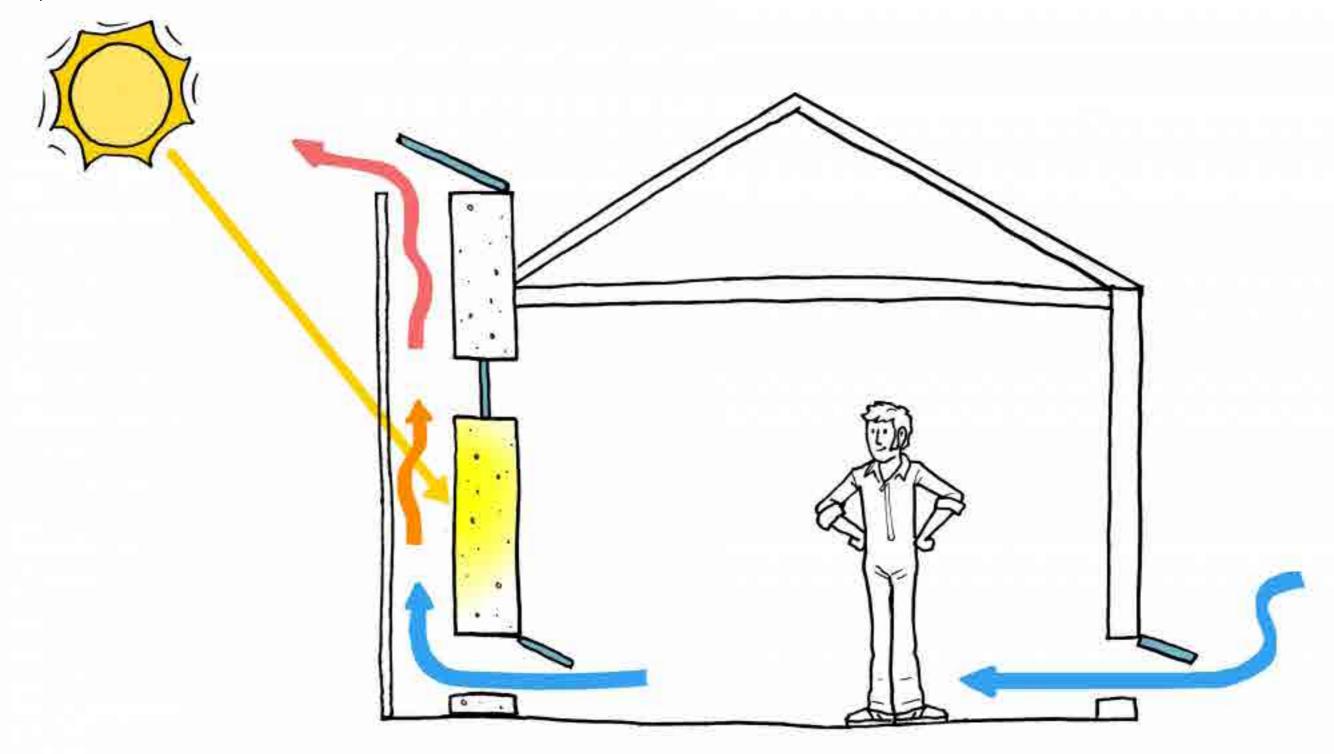


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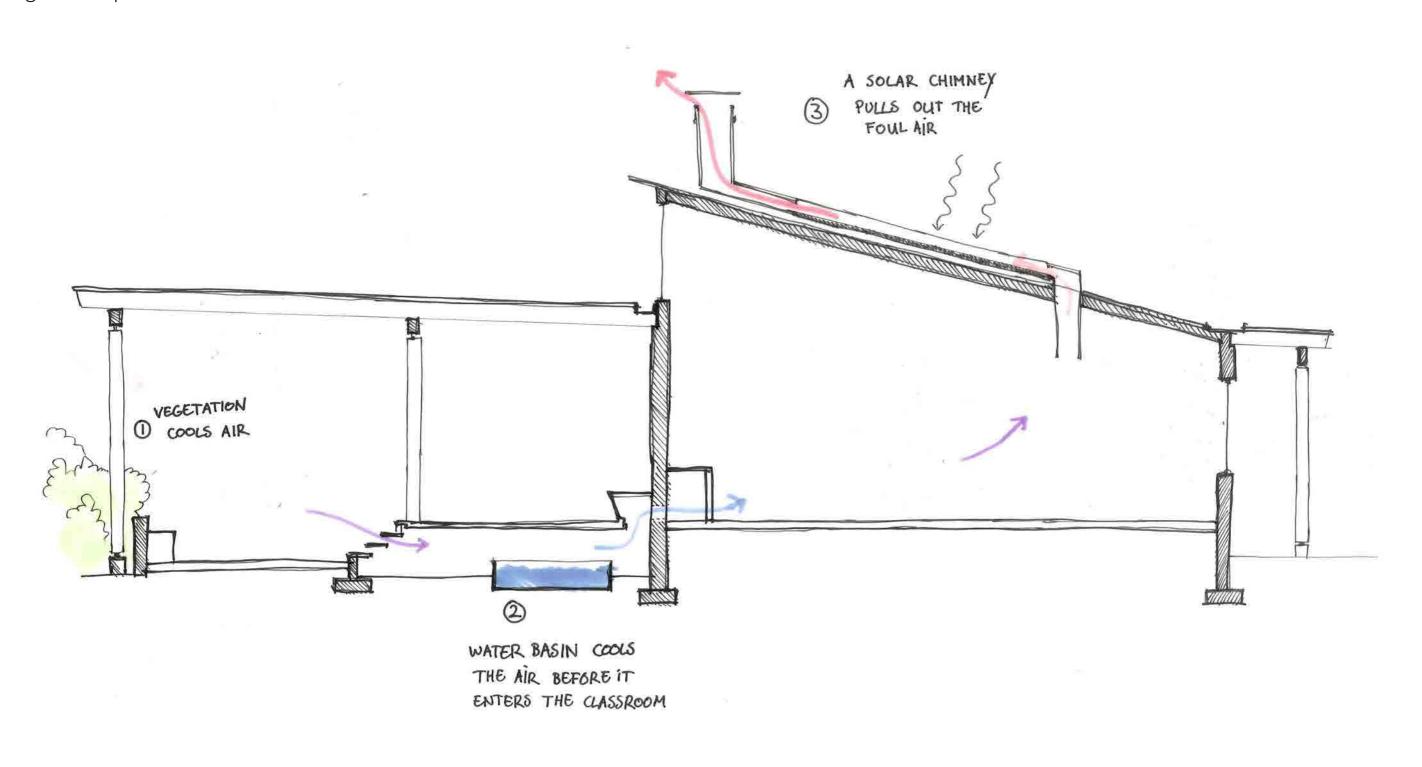


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One roof protects against rain and sun and benefits from the elements

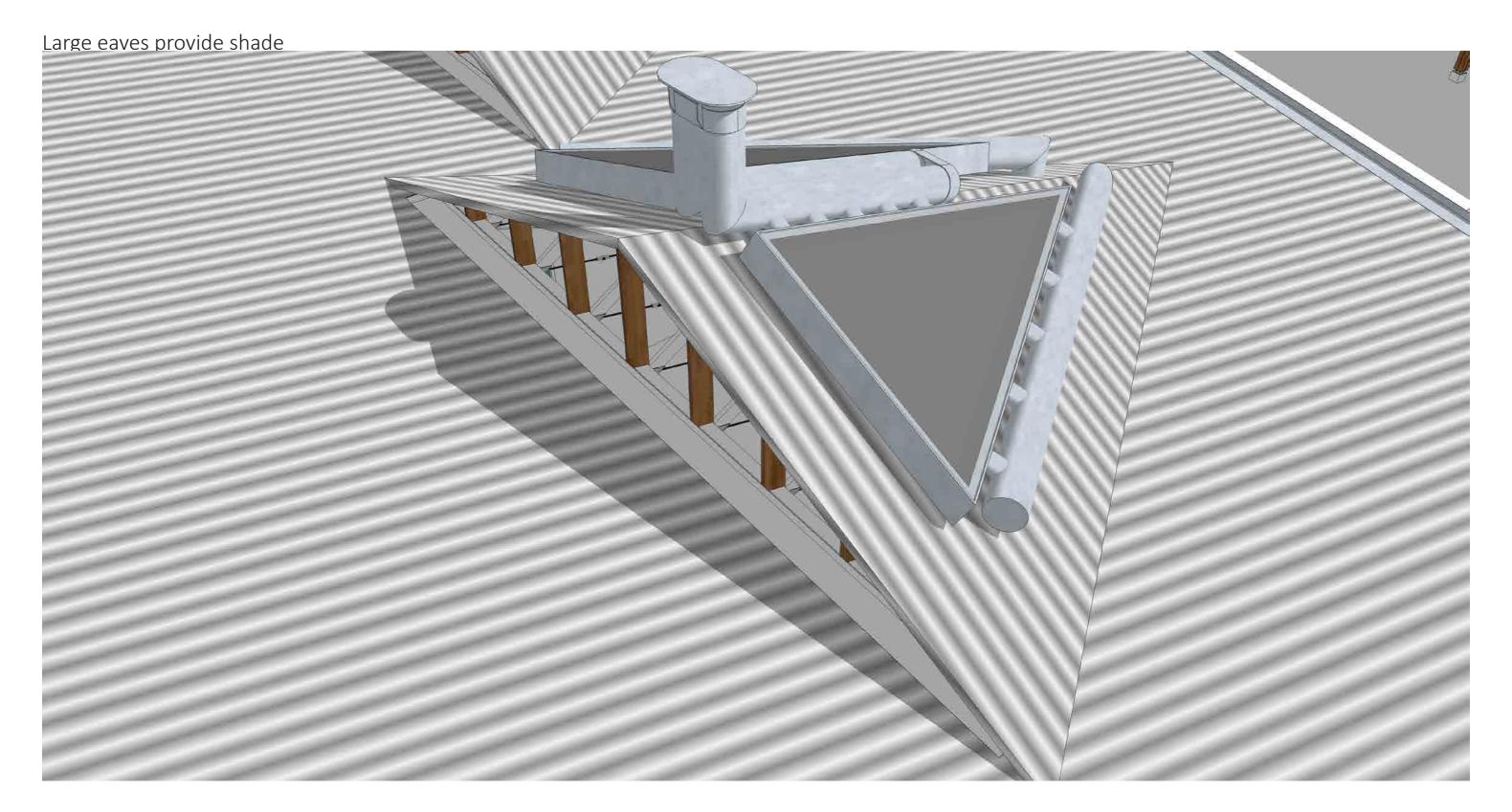


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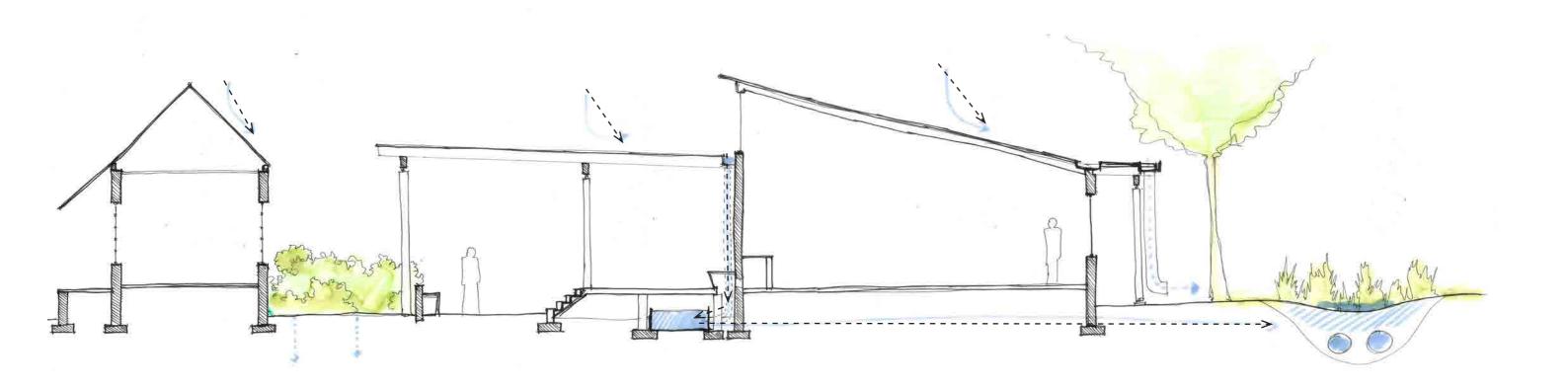
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Water management

Storm water is guided to the bioswale

Water is used to cool the ventilation air



Water management

Storm water is guided to the bioswale

Water is used to cool the ventilation air

The water system is a central part of the design and forms a barrier between the classroom wings



Conclusion

The Healthy School will be a valuable addition for Westfort's future



Thank you for listening