

Chapter 9

C O N C L U S I O N



TERMINATION



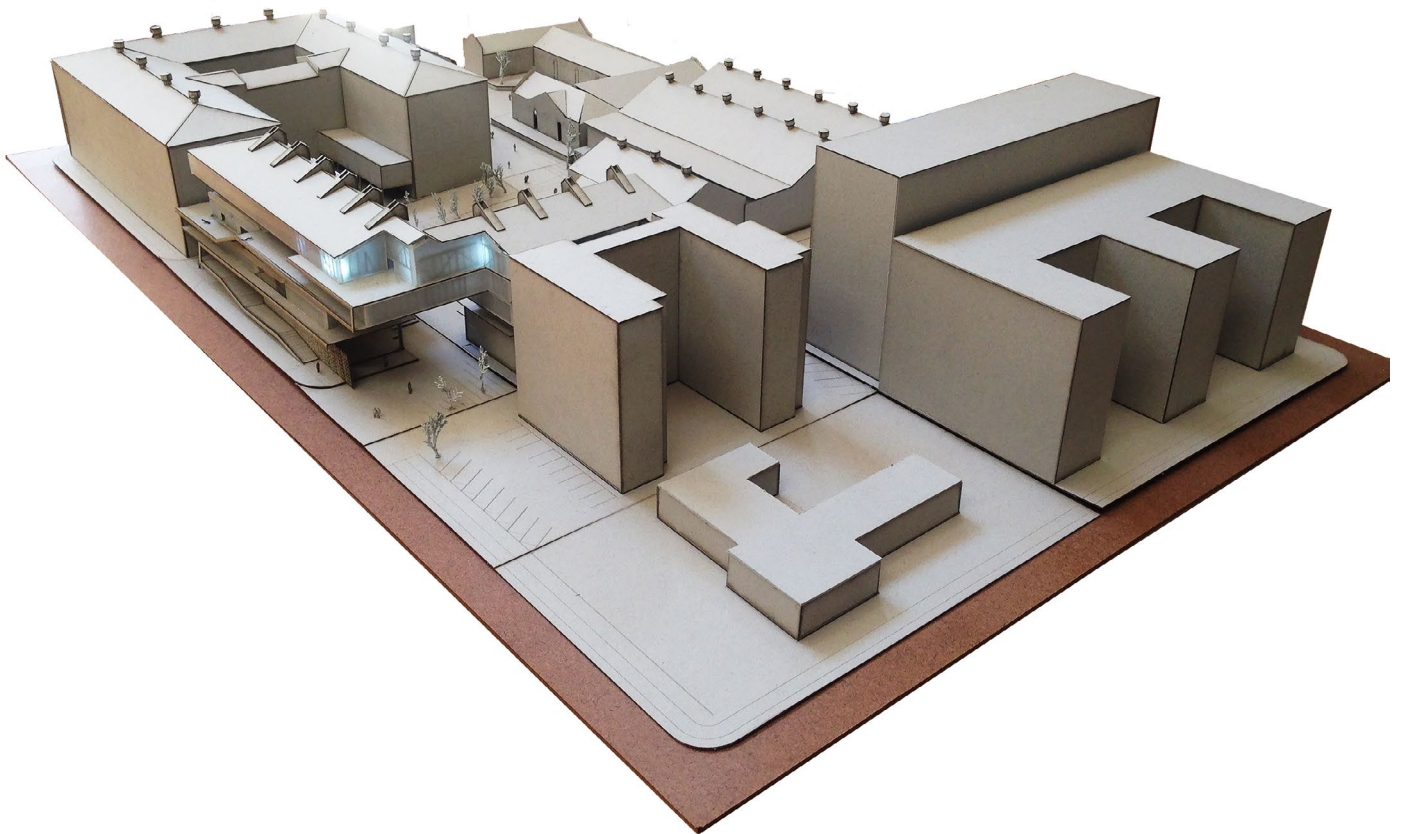
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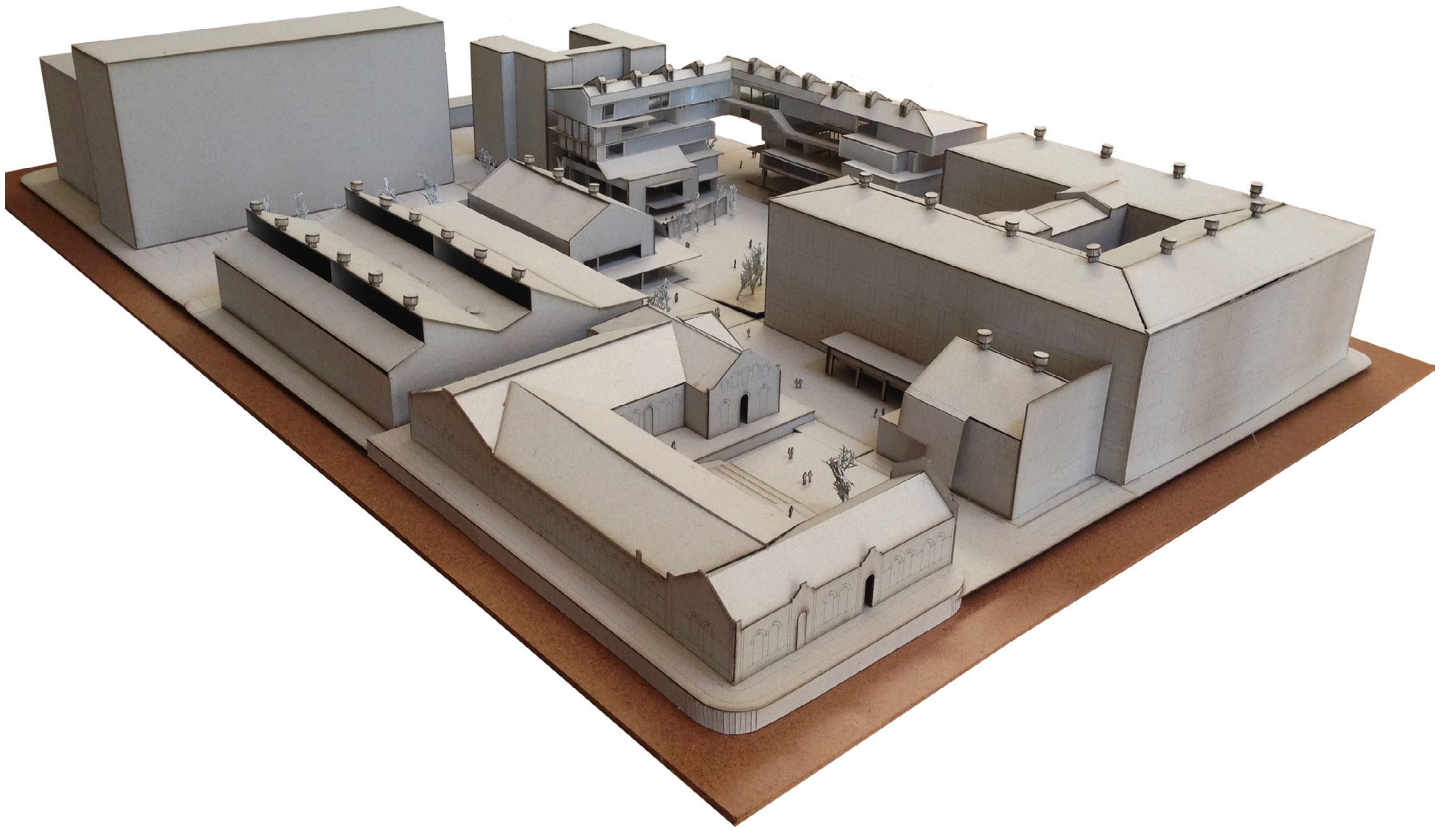
“...when you build a thing you cannot merely build that thing in isolation, but must also repair the world around it, and within it, so that the larger world at that one place becomes more coherent, and more whole; and the thing which you make takes its place in the web of nature, as you make it.”

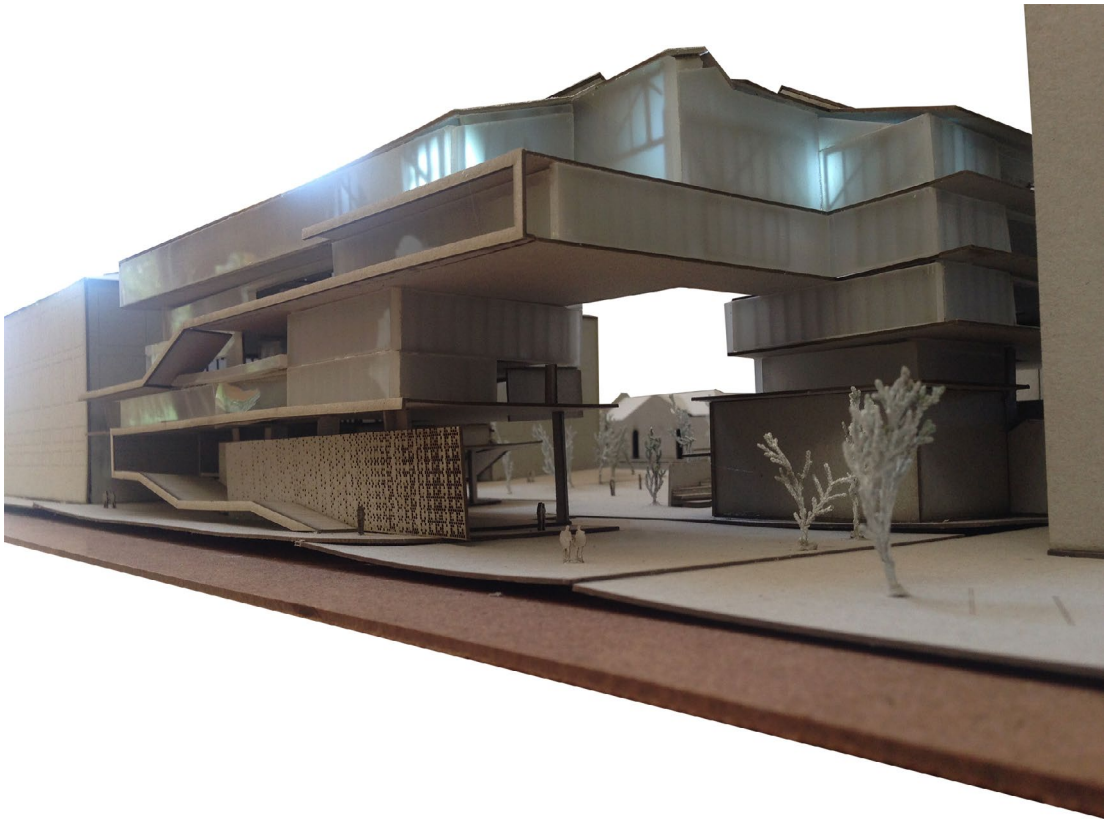
- Christopher Alexander, 1977



F I N A L M O D E L





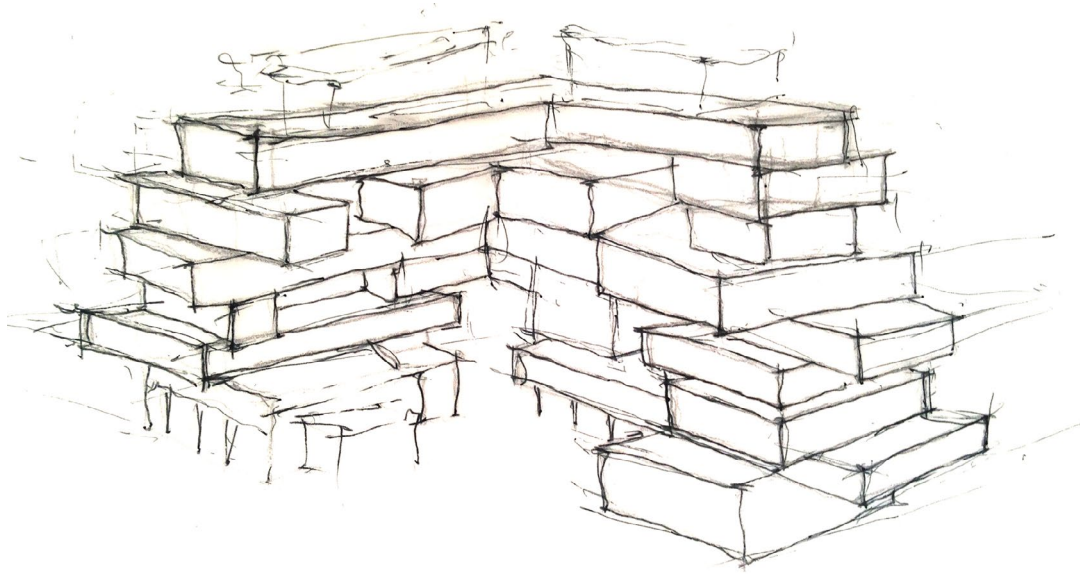


F I N A L R E V I E W





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' G R O W I N G ' B U I L D I N G
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I hope that this study will encourage the reader to always remain cognisant of changing times, to never accept the patterns of the world around them and always keep on questioning the norm.

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WATER TANK CALCULATIONS:

Annual rainfall = 650mm

Total runoff surface area = 17360m²

WATER USAGE:

IRRIGATION:

TOTAL IRRIGATION SURFACE AREA = 918m²

918m² x 5mm irrigation per day = 4,59m³ water

4,59m³ x twenty days per month (dry season) = 92m³ water per month

4,59m³ x fifteen days per month (wet season) = 69m³ water per month

FLUSHING OF TOILETS (Total water usage per month):

(See Note 1 for occupancy & usage calculations per building)

Auditorium:	3,072m ³
Restaurant (in new building):	11,440m ³
Learning spaces:	19,760m ³
Historic 1896 building (Co-working office & restaurant):	25,272m ³
Production House:	7,040m ³
Offices in N-E building:	20,988m ³

Total water usage for toilets per month on block (designated site are) = 87,572m³

TOTAL WATER USAGE PER MONTH (dry season) = 92m³ + 88m³ = 180m³ + 499,1m³ (western side) = 679,1m³

TOTAL WATER USAGE PER MONTH (wet season) = 69m³ + 88m³ = 157m³ + 482,5m³ (western side) = 639,5m³

679,1m³ x 4 months during dry season = 2716,4m³

2716,4m³ - (29mm rainfall during driest months (May, June, July & Aug) over surface area (17360m²) = 503,4m³)

Storage tank will therefore need to store 2213m³ water

TOTAL VOLUME OF WATER STORAGE TANK = 2213m³

[Dimensions of tank = 5,2m x 15,7m x 26,8m]

TO FILL UP THE TANK TANK WILL TAKE 127,5mm rainfall over surface area of 17360m².

DURING SUMMER:

Dec (80mm x 17360m²) + Jan (80mm x 17360m²) + Feb (60mm x 17360m²)

= 3819,2m³ rain water collected

3819,2m³ - (usage of 157m³ x 3 months during wet season + 720m³ volume of tank)

= SURPLUS of 300m³ water during three peak rainfall months



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