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"To a land of priests and petrol-heads": the Jeppestown motor ministry

Duarte, Sergio Fernando

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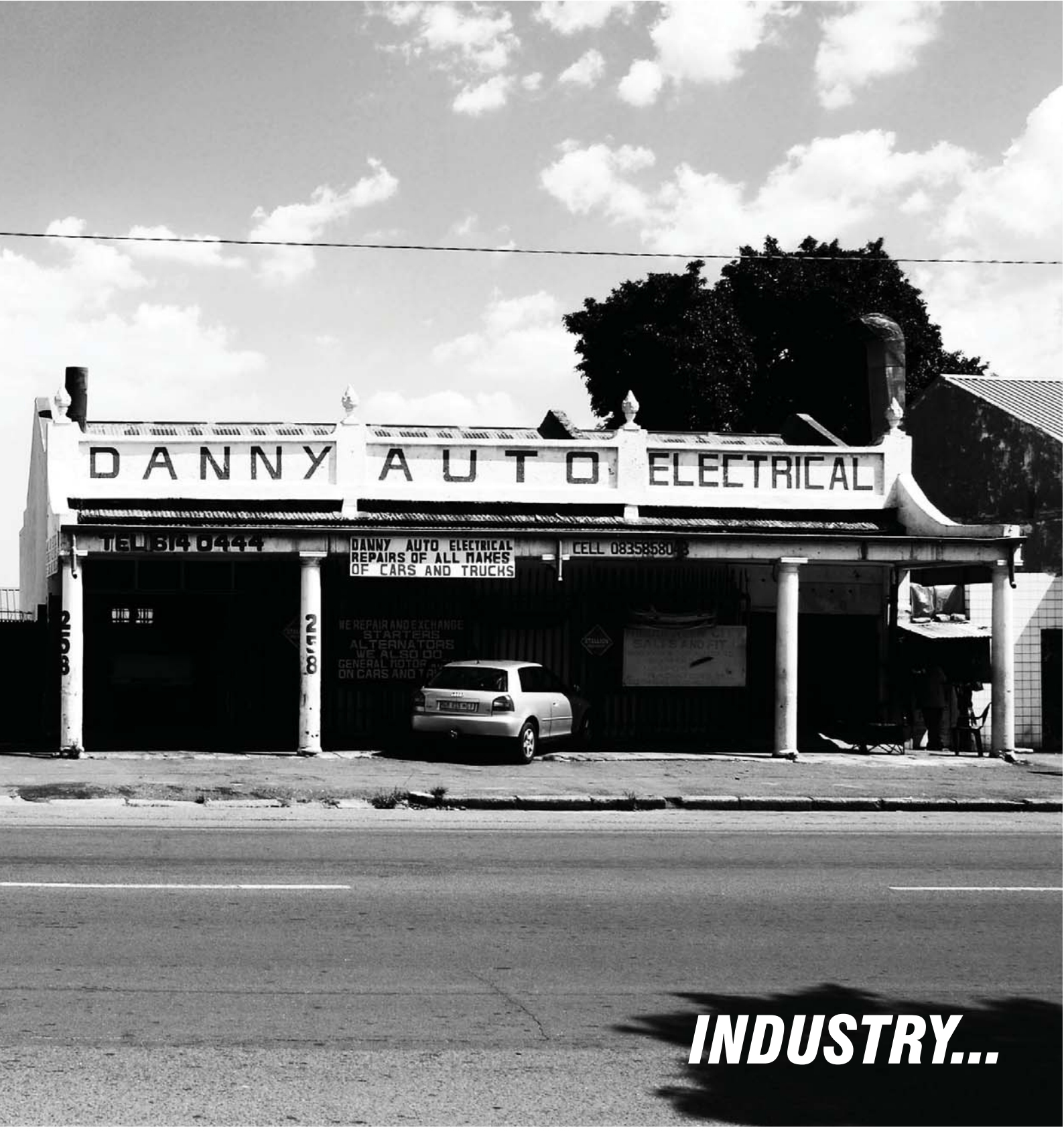
‘TO A LAND OF PRIESTS AND PETROL-HEADS’

THE JEPPESTOWN MOTOR MINISTRY

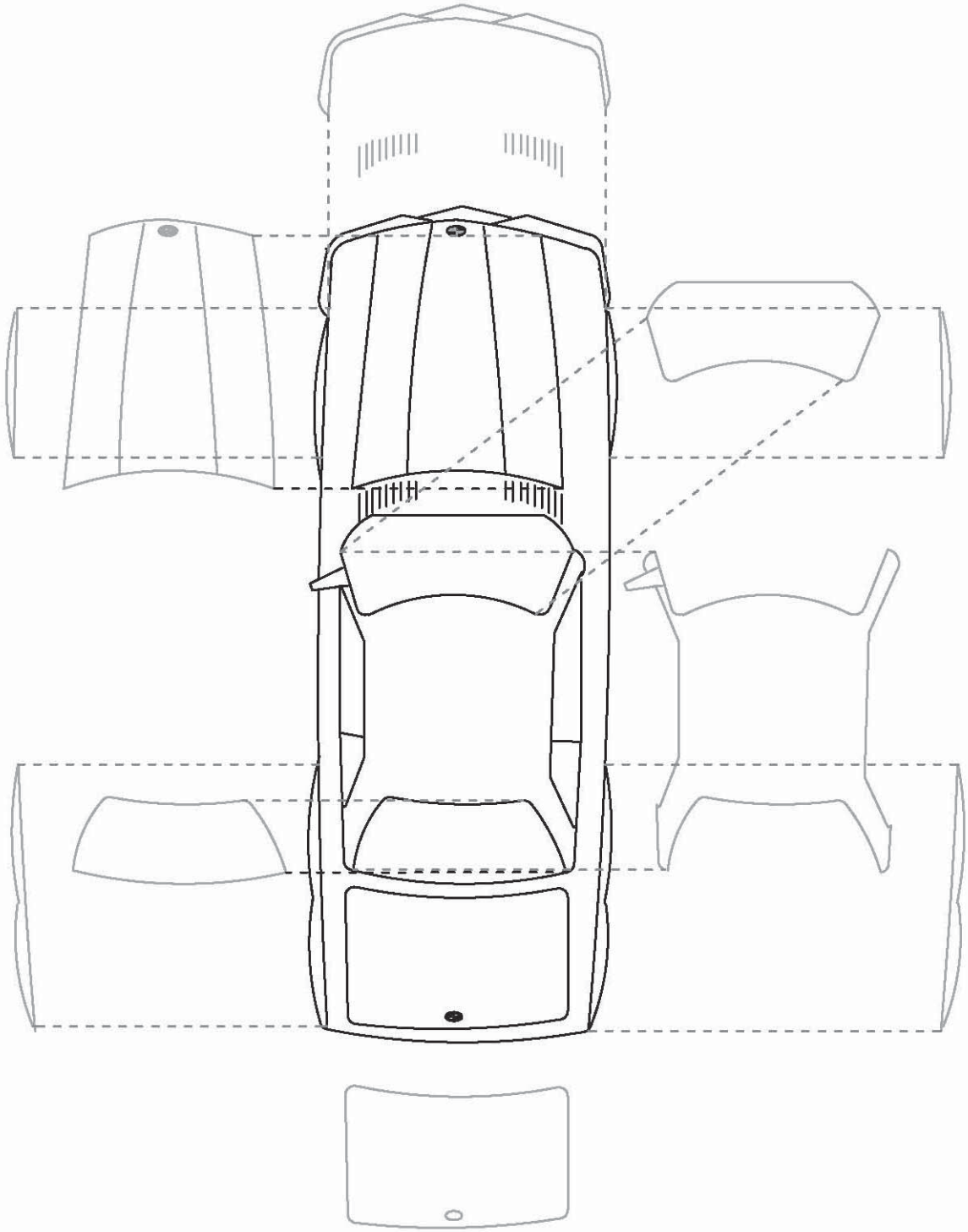
SERGIO DUARTE 2010



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INDUSTRY...



DECLARATION.

I, Sergio Fernando Duarte 0506891a, am a student registered for the course Master of Architecture [Professional] in the year 2010. I hereby declare the following:

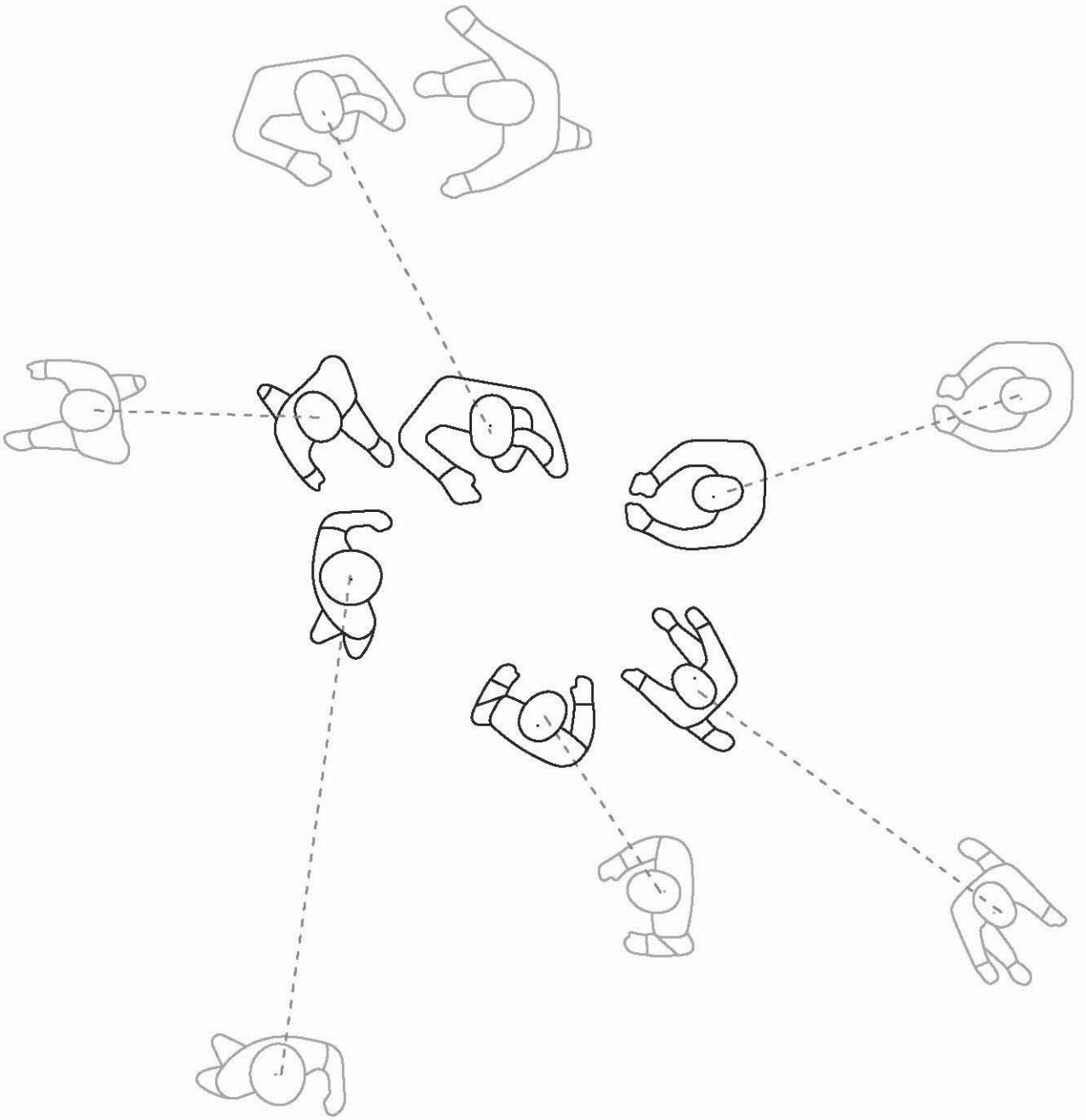
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Sergio Duarte

02 December 2010
This document is submitted in partial fulfilment for the degree:
Master of Architecture [Professional] at the University of the Witwatersrand, Johannesburg, South Africa, in the year 2010.

ACKNOWLEDGEMENTS.

Thank you to all the WITS school of Architecture staff for the ongoing excitement, positivity and expectations for this project through all the major milestones of this year. Thanks to Hilton Judin for helping to maintain that excitement for the times in between and all the lessons and insight that came with it. To my studio: Claudia, Julie and Kay, I can't imagine a better team to have worked with this year. And most importantly to my mom and dad, Sharon and Fernando, for your never ending support and giving me the opportunity to pursue my degree.



ABSTRACT.

The new motor-car has acquired systems that give it memory, intelligence and senses. Modern motorcars are taking on human attributes and have a religion and following all to themselves. In parallel, Jules Street, in Johannesburg's original motor district is the place where the motor car goes to, post motor-plan. It is far departed from the glistening showrooms that are scattered over the rest of JHB- it is a place of vacant lots, workshops and passionate petrol-heads. **Jules Street is however not a place of the past, the industry of this place is the future of every brand new car being built today. It is a place of necessary after-market vehicle service, although it is struggling to adapt to the evolving technology of the modern motorcar. Jules Street is also the home of a diverse, growing community. This new public has inspired the refurbishment of disused workshops into religious institutions, 11 on the Jules Street motor strip alone.** These adapted places of worship provide an opportunity to view this fragile industry from a new perspective; that of a soul. The motor car, from a pristine assembly line to a filthy scrap-yard, has one continuing relationship, *with people*. This becomes the point of inquiry for this thesis, the life long relationship between cars and drivers, machines and people, industry and culture, beyond the assembly line and showrooms that it is often associated with. The people who design, build, drive, fix, recycle, pimp, admire and inspire cars over their lifespan are the basis for designing the architecture of the ever-enduring motorcar. The conflict between the hi-tech and low-tech, the sophisticated and the raw, define the challenges associated with automobility today, and the opportunities in investigating the *auto-tecture* that it requires.

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JULES ST, JEPPESTOWN

HISTORY AND ANALYSIS

PART 1.

Introduction

History

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Site Selection

INTRODUCTION

Jules Street, running eastbound from the Johannesburg inner city, is an urban landscape hybrid defined by 'conflicting' edges: suburbia in the north and industry to the south, as well as being a vital east-west connection from the inner city to Germiston. The street has a historical reputation as being the heart of automobility in Johannesburg.

In an interview with Sally Hogan, vice chairperson of the Malvern Community Forum, Hogan speaks of her plans clean-up of pavements in the suburb , and filling them with colourful plants, and then encouraging residents to maintain their gardens. The suburb is dominated by Jules Street, a wide, busy street, with taxis looking for customers all the way into town. She continues to state that Jules Street is believed to be the longest, straightest street in Johannesburg, named after Sir Julius Jeppe, who bought the land east of the city, and was instrumental in establishing the suburbs west of Malvern - Jeppestown and Belgravia. In the early years a tram trundled from the centre of town down the middle of Jules Street. Malvern dates back to 1889, and was closely linked to the Jumpers Mine across the railway line in neighboring Cleveland. There's still evidence of the suburb's age today: the Methodist Church, now called the Zenhele Methodist Church, is 107 years old.

In the 1880's the suburb was known as Morristown, named after "law agent" Hyman Morris. In 1904 its name changed to Malvern, believed to be named after Malvern in England, a health spa with rolling green hills. The association was made because the ridges of Malvern offered a reprieve from the lively, dusty gold-rush town of Johannesburg. This contrast between the green of suburbia and the grey of industry still exists today, with Jules Street as both a dystopian result of this adjacency and also a mediator of these seemingly conflicting districts.

A current trend defines this landscape as being in demand for seeking affordable accommodation with a close proximity to the job prospects in the adjacent industrial sector. The street itself represents this opportunity, the motor industry, from car repairs to chop-shops (places to break down what are usually stolen motor-cars to sell as parts), new car parts sale to used car lots, employs many; albeit far less than it had in its prime. The street has a schizophrenic mix of abandoned car lots and thriving motor related businesses (Fleming; 1970).

The influx of people moving to this area has sparked the development of public amenities amidst the *autotecture*, mostly and most surprisingly, the church. There are eleven recent conversions from workshops to churches on Jules Street alone. The churches represent the emerging congregations of blue collar workers and their families that are choosing to live in this dystopian setting. Accommodation that is accessible to the entry-level working-class in economically viable locations is not common in Johannesburg; these locations are usually reserved for the privileged. The poor majority, the "anti citizens" as described by Martin Murry in *Taming the Disorderly City*, are often banished to the periphery or to inner city slums. But Jules street is well located, prosperous and has the potential to be developed. This mix of industry and suburban, machine and culture, may be more than just a beguiling dichotomy. It's a perceived buffer, a repellent mask, making place for the working class in the city (Murry, 2008).





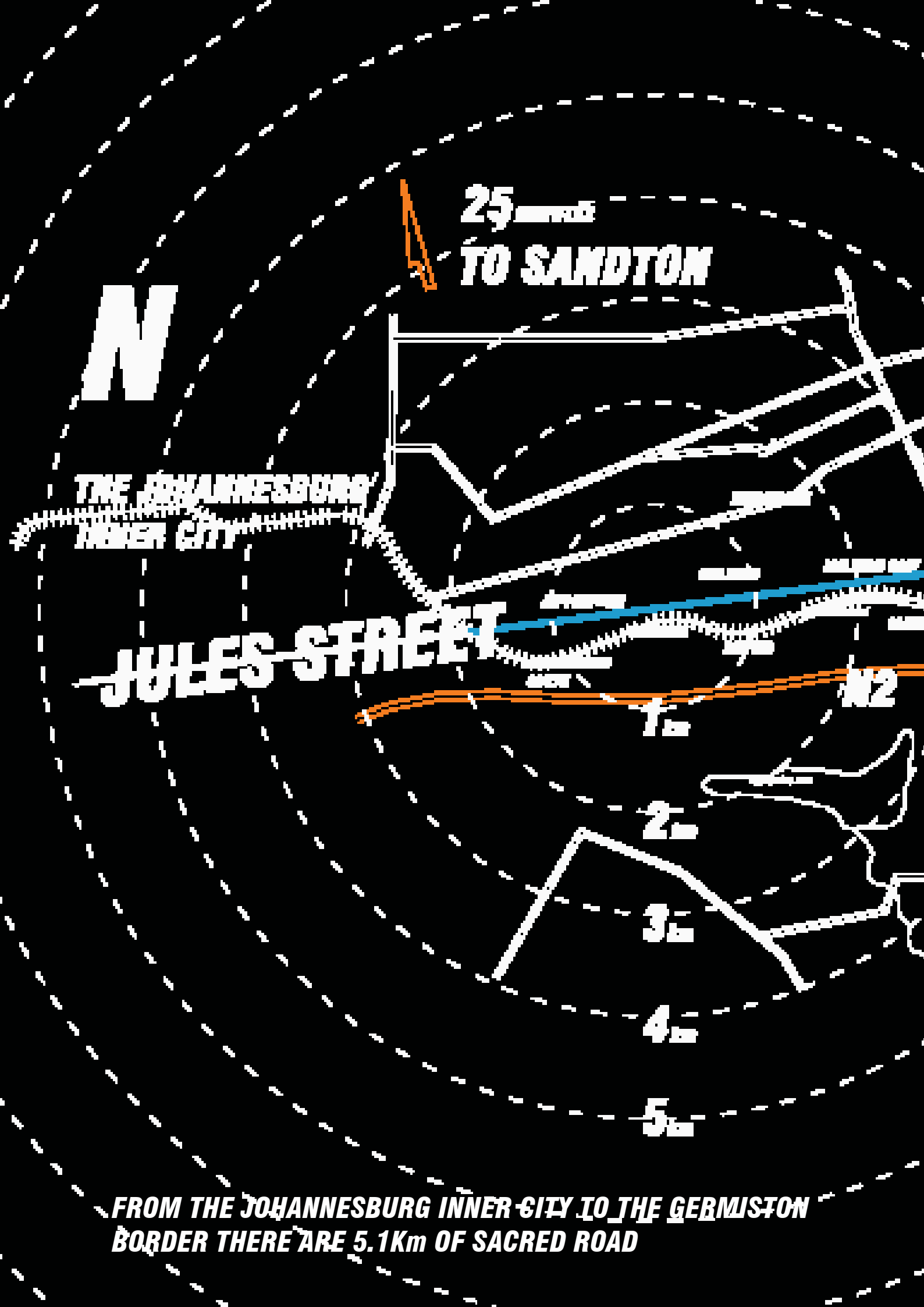




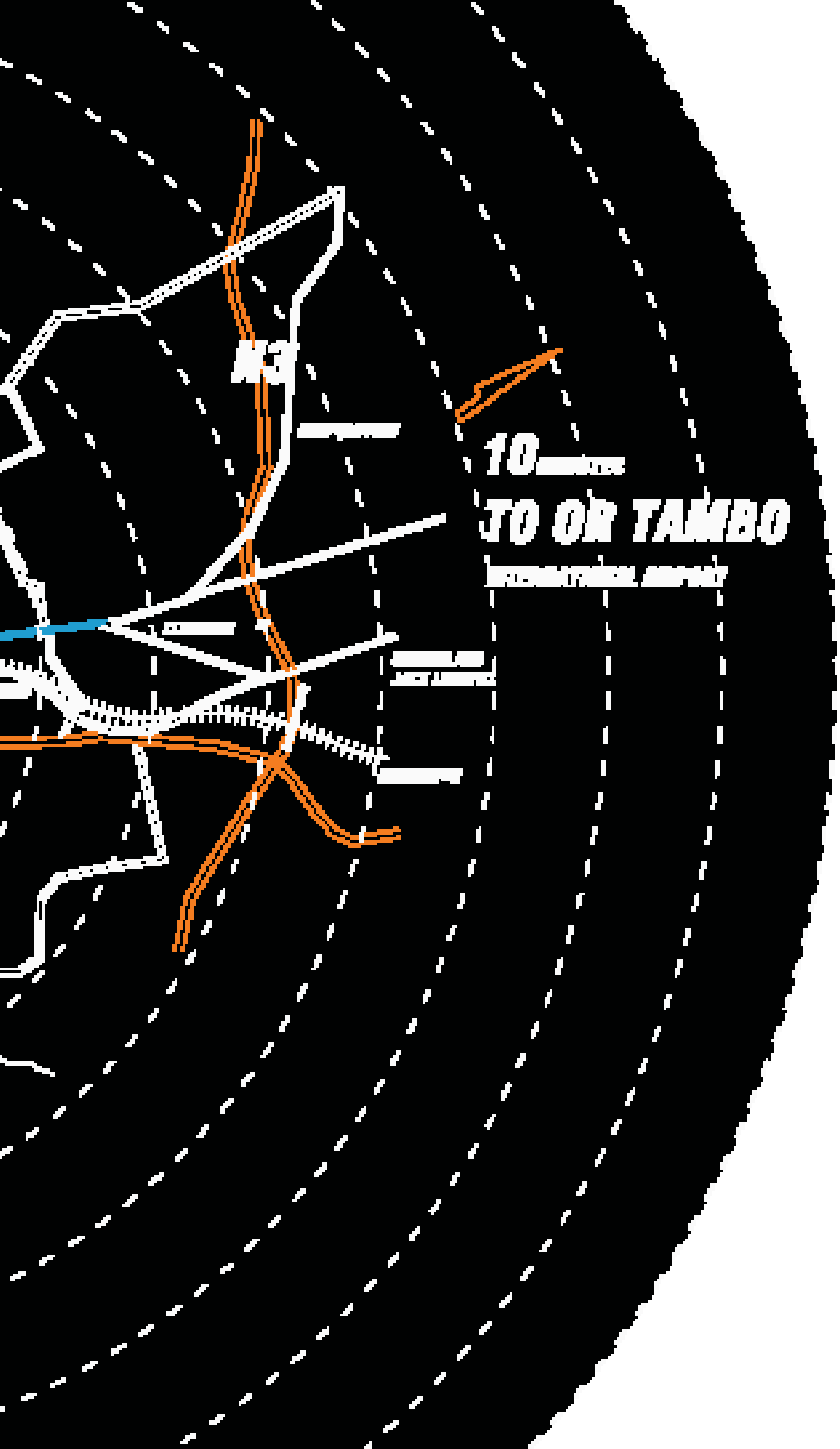
IMAGES OF EASTWAY SERVICE STATION, JULES STREET, 1983.

The images display a collision that occurred when a patron decided not to pay for his petrol and attempted to make a break for it. Hindering his escape was the nozzle of the pump, still attached to the car...

Images Sourced from the family photo album of the author.



FROM THE JOHANNESBURG INNER CITY TO THE GERMISTON BORDER THERE ARE 5.1Km OF SACRED ROAD

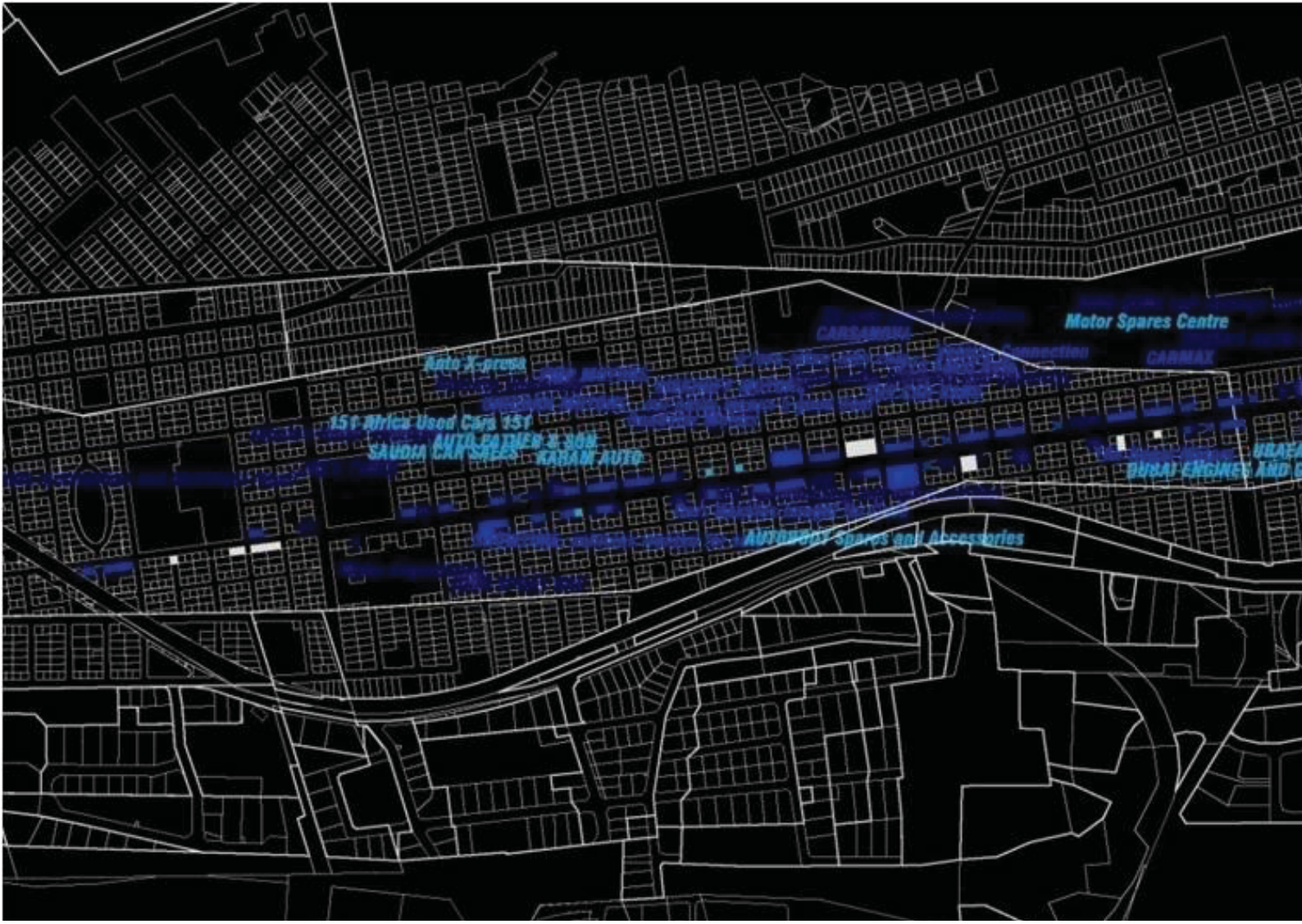

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TO OR TAMBO



IMAGES OF JULES STREET, 2010.


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Jules Street Industry mapping, 2010

A concentration of motor related industry can be seen on the central to western portion of the strip.

Next page, Jules Enterprises 1970, one of the first properties to be converted to a used car sales lot. The building to it's right, a tattoo removals company, shows the remnants of the residential use that Jeppestown was founded as.

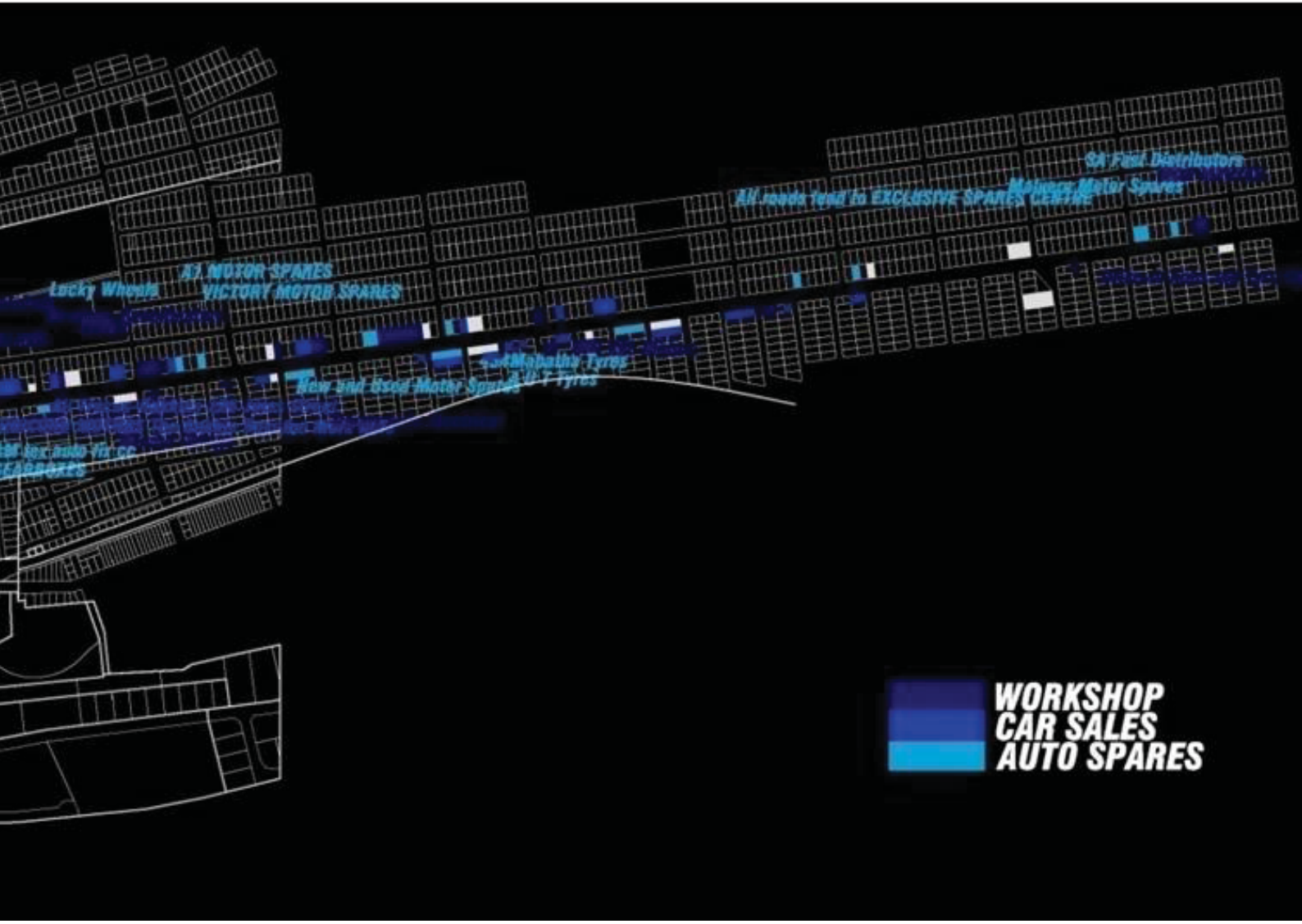




Image Source:(Fleming, 1970)



Jules Street Culture mapping, 2010

The presence of the church in particular can be seen right across the length of the strip. The text indicates the signage that is legible from the motor strip.

Next page, OK Bazaars (front) and the Standard Bank Building (right) 1970, show the predominantly retail and banking uses of the eastern end of the strip in 1970. The mapping shows how even this retail zone has been infiltrated by the church.

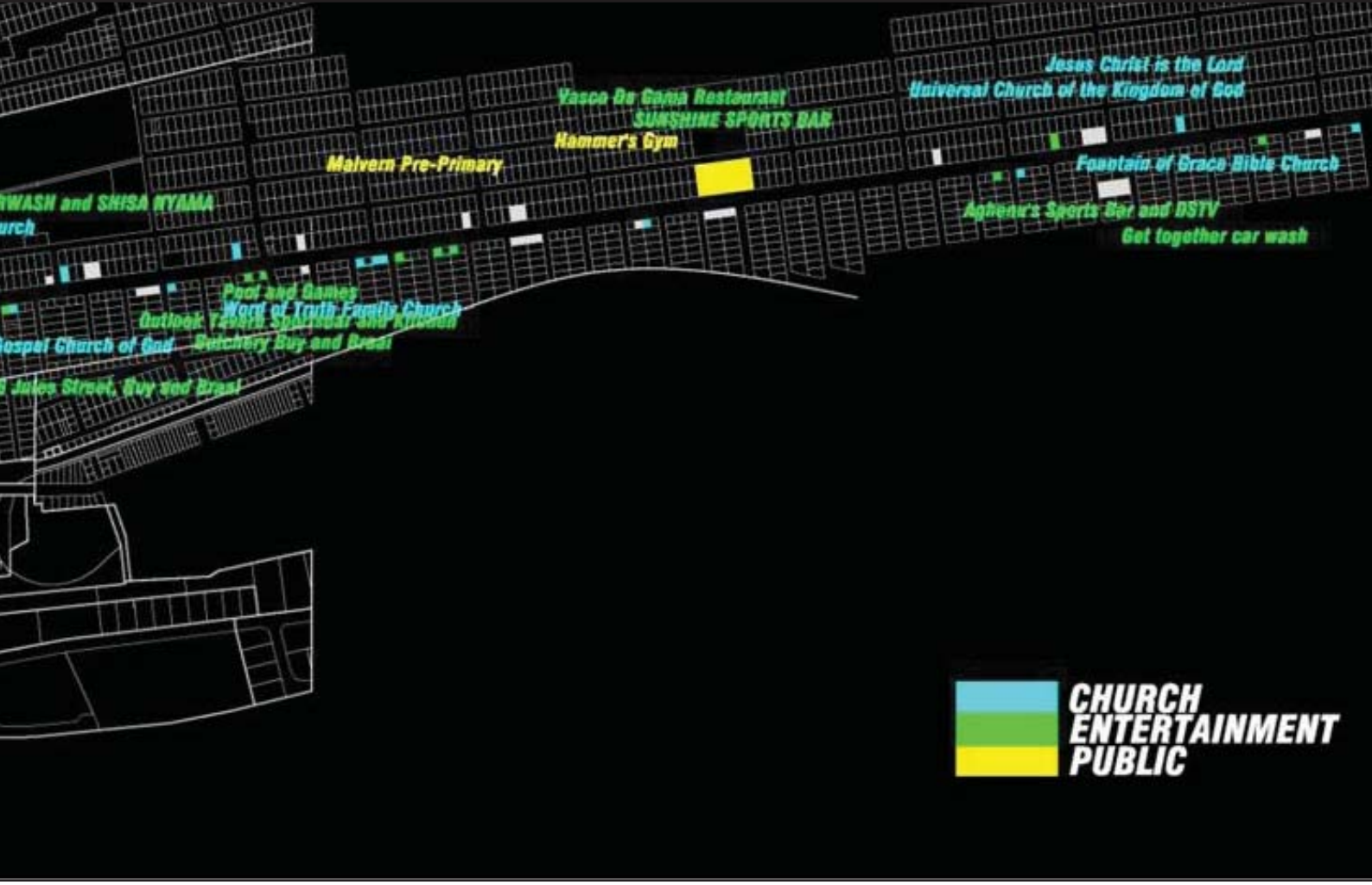




Image Source:(Fleming, 1970)



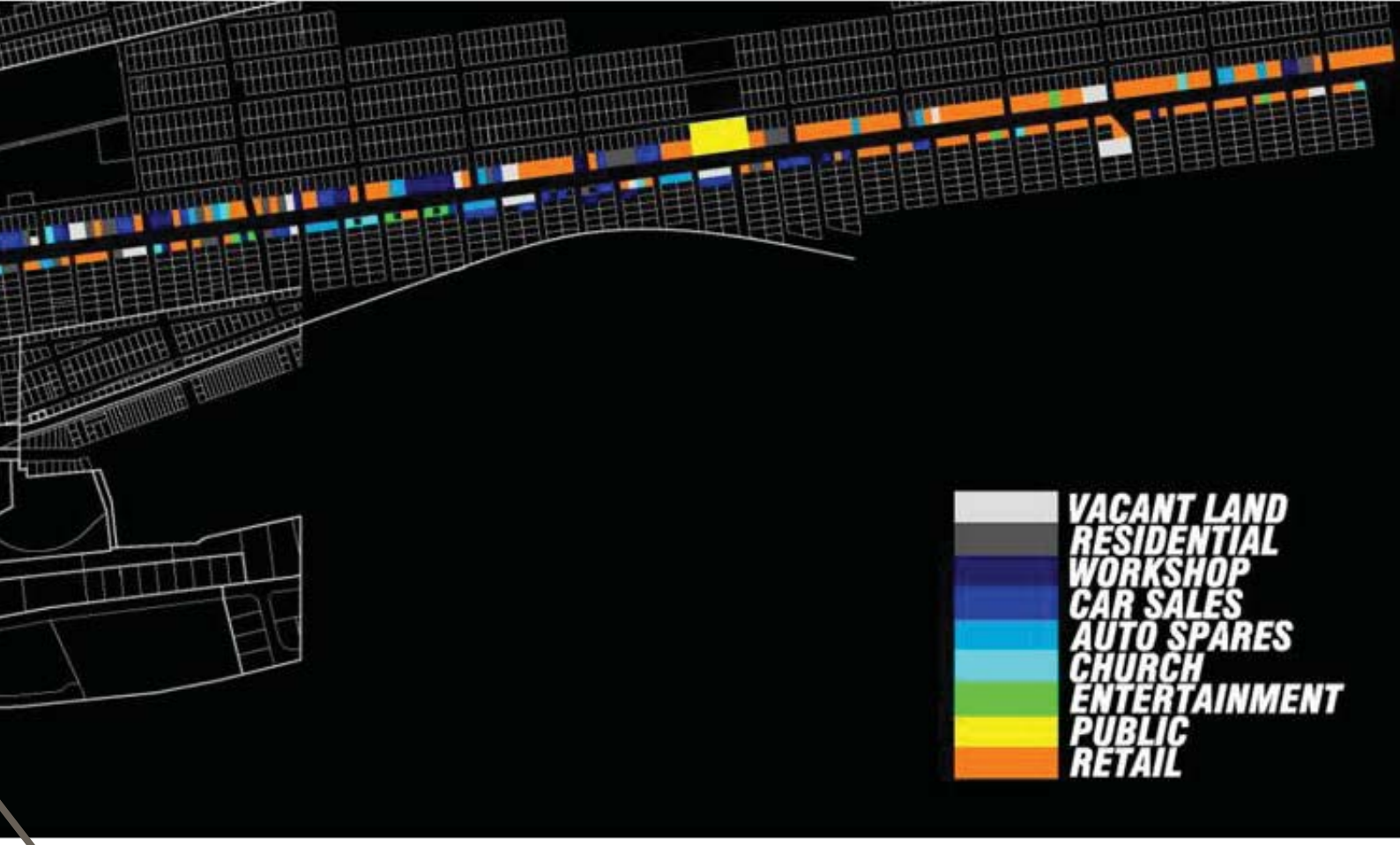
Jules Street Use mapping, 2010

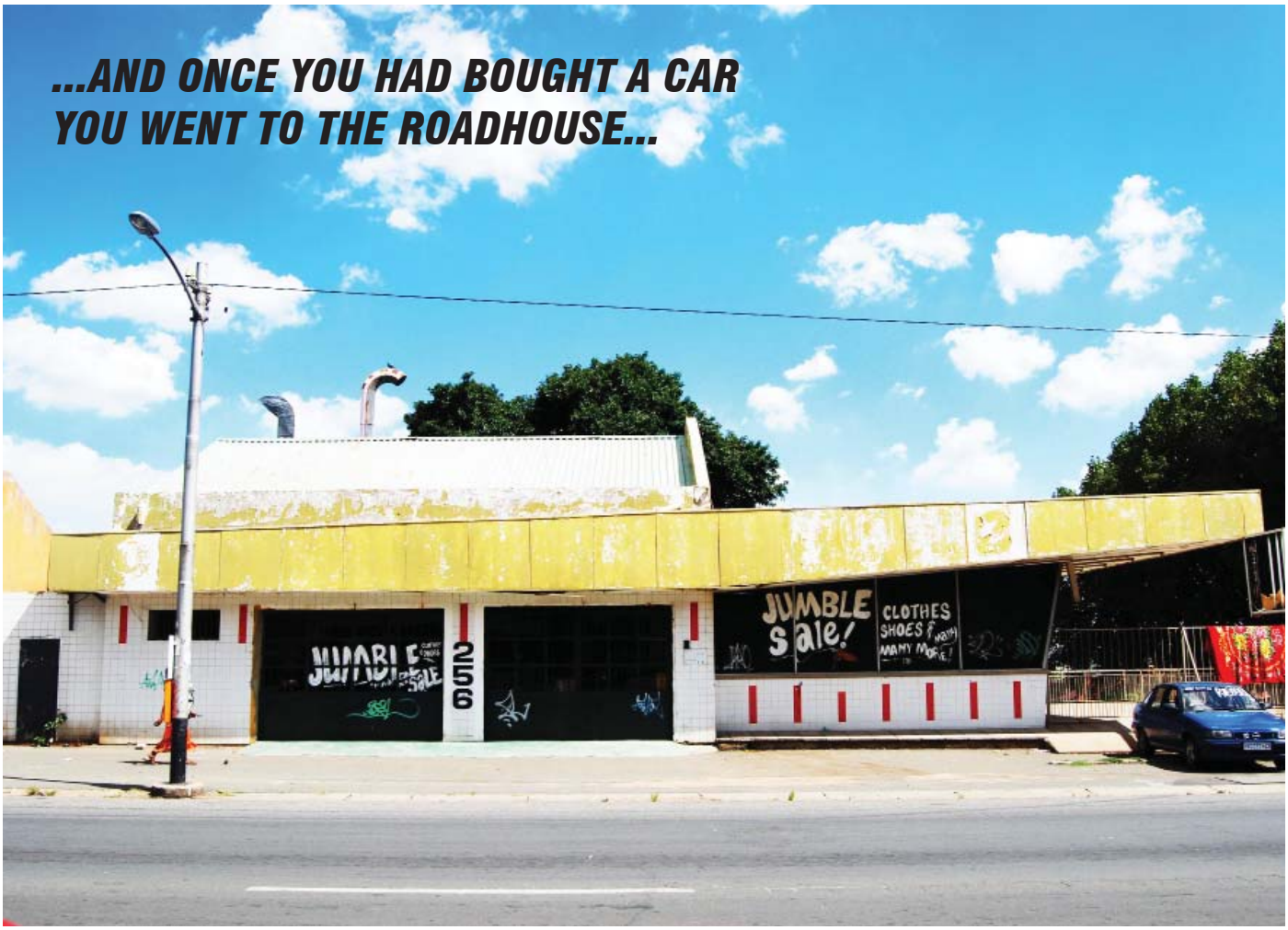
The mapping seems to indicate four main zones, Residential to the western end, followed by motor industry, then mixed use and ending with retail in the east.

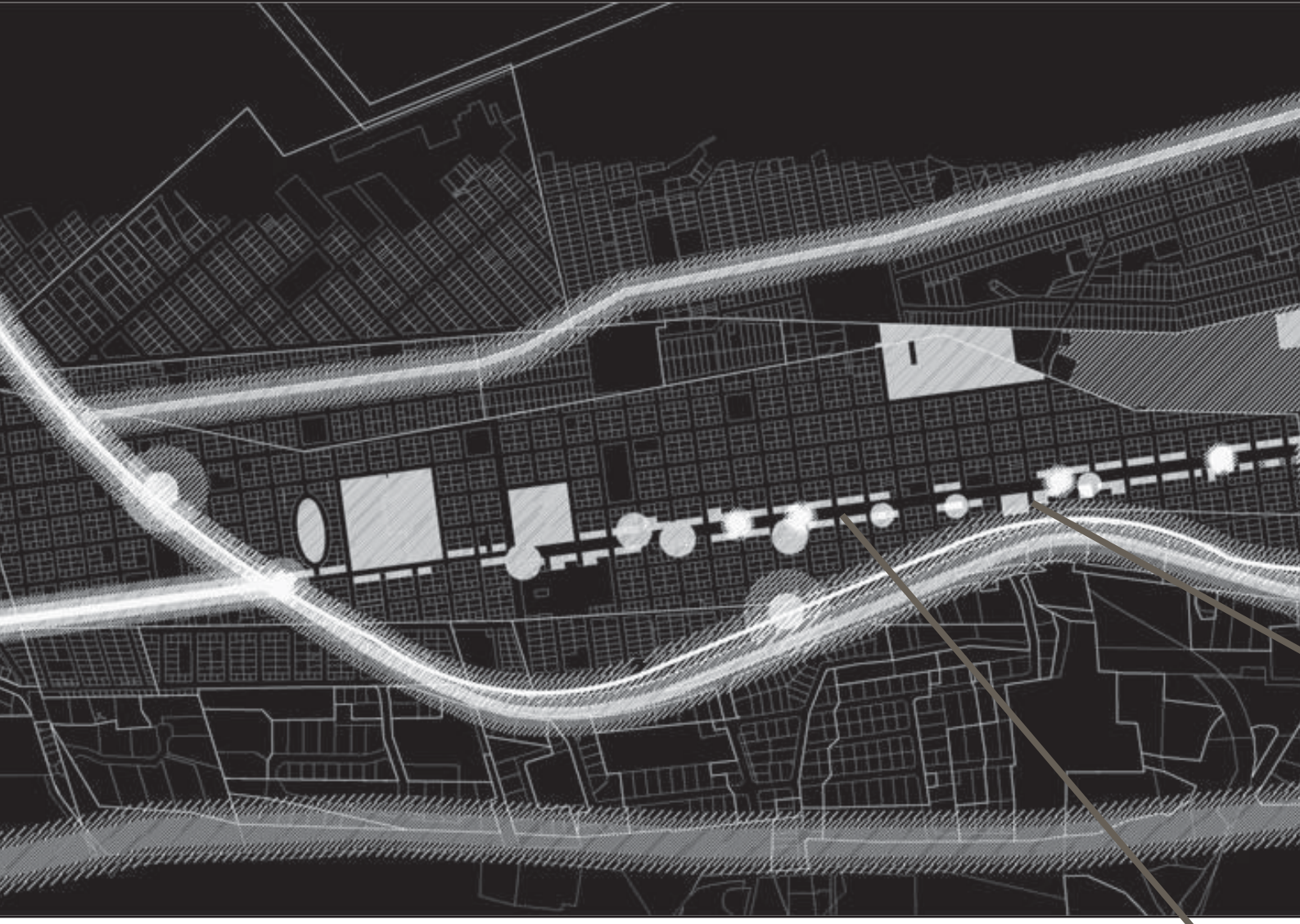
Next page, Remnants of what is said to be the first drive-through restaurant in Johannesburg 2010, Used most recently for the jumble sale of clothing and shoes, the structure remains empty.

IN 1973, WHEN YOU WENT TO BUY A SECOND HAND CAR YOU TOOK A TRAIN TO JEPPESTOWN AND DISEMBARKED AT THE GEORGE GOCH STATION AND WALKED EASTWARDS ALONG JULES STREET, AS A RESULT OF THIS MOVEMENT 70% OF THE CARS SOLD ON JULES STREET WERE SOLD ON THE 7 BLOCKS FROM THE STATION...

.


VACANT LAND
RESIDENTIAL
WORKSHOP
CAR SALES
AUTO SPARES
CHURCH
ENTERTAINMENT
PUBLIC
RETAIL


...AND ONCE YOU HAD BOUGHT A CAR
YOU WENT TO THE ROADHOUSE...
JUMBLE sale!
CLOTHES
SHOES &
256

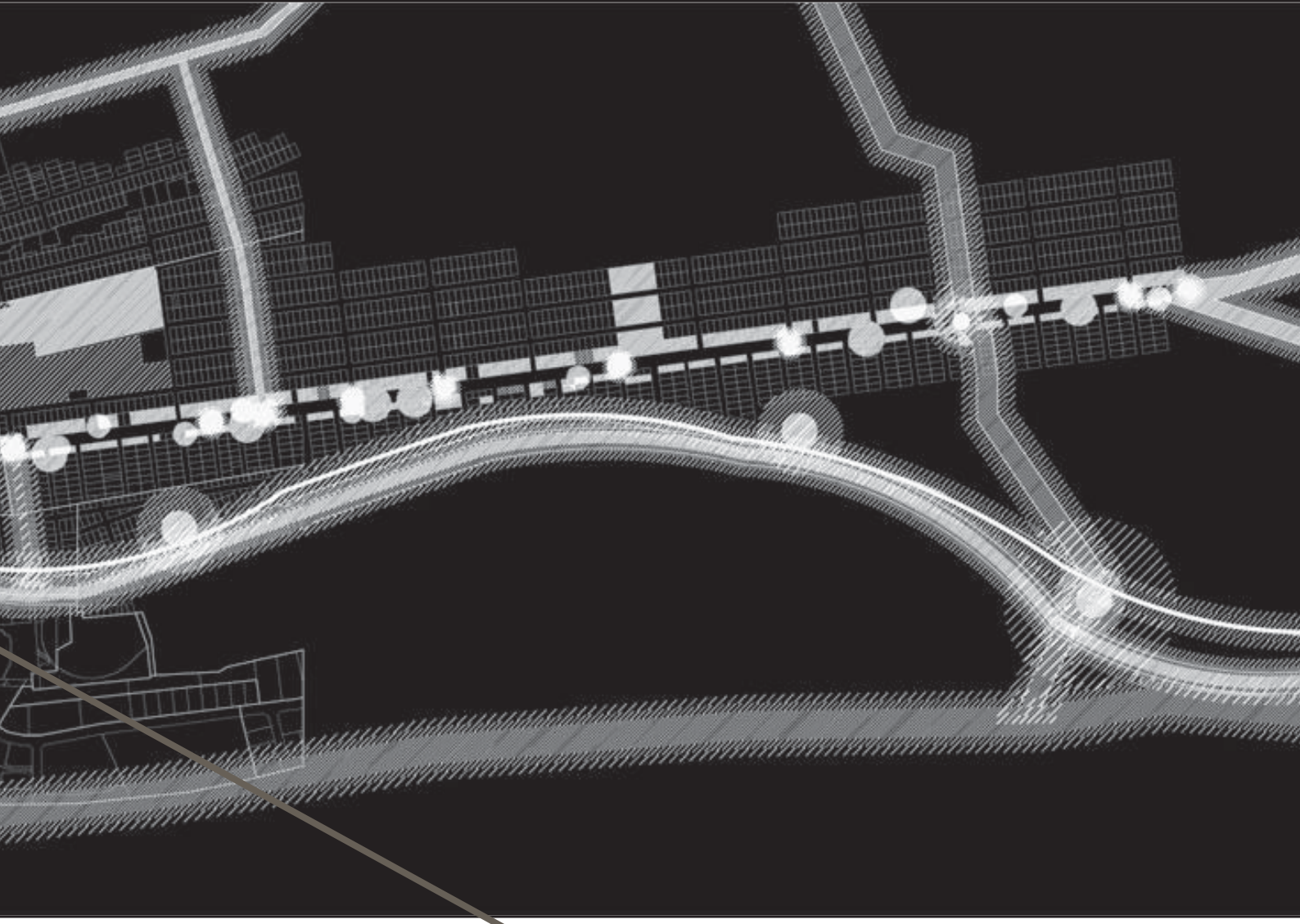


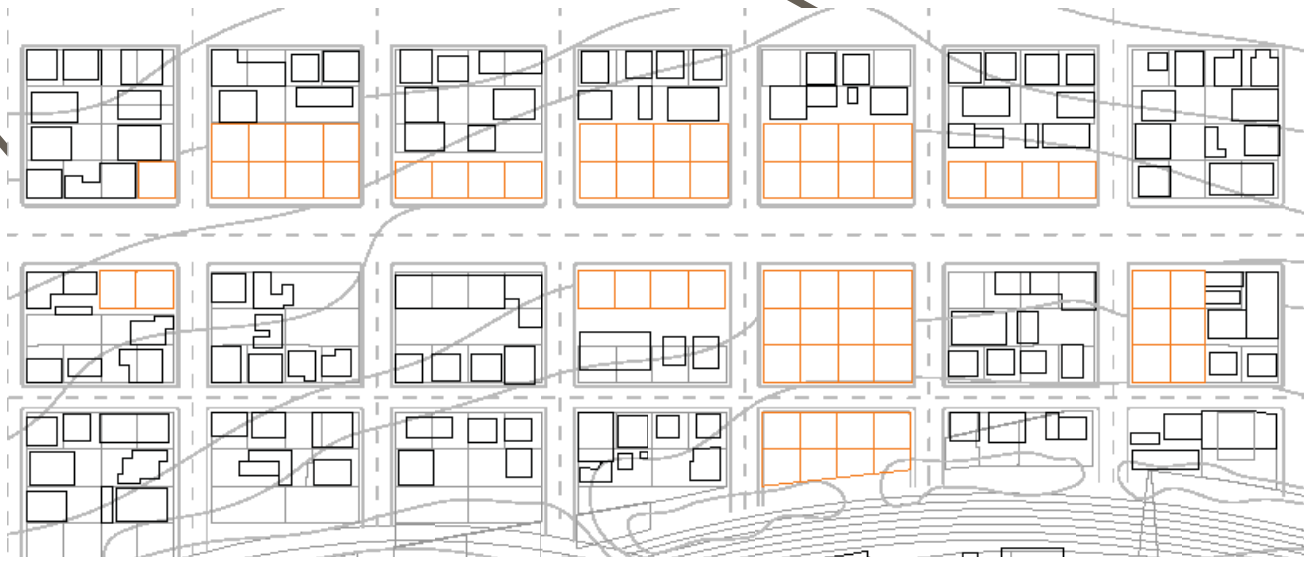
Jules Street Energy mapping, 2010

The mapping shows activity generated by the railway line and the N2 highway to the south, the N3 highway to the east, and feeder routes from the inner city to the west and Kensington to the north. On the strip itself vacant plots and disused land is left blank, and a noticeable energy lapse can be observed.

Next page, Sites selected for observation, most of which were used as car sales lots, with minimal infrastructure to be removed, in an easily accessible part of the city.

...THE EXTRAORDINARY SALES ON THESE SEVEN BLOCKS LED TO THE DEMOLITION OF ALL HOUSES AND SMALLER RETAIL BUILDINGS AND THE ERECTION OF CAR PORT STRUCTURES WITH SMALL SALES OFFICES. IN THE MID 1980'S CAR SALES DROPPED AND THESE NEW STRUCTURES FELL INTO DISUSE.



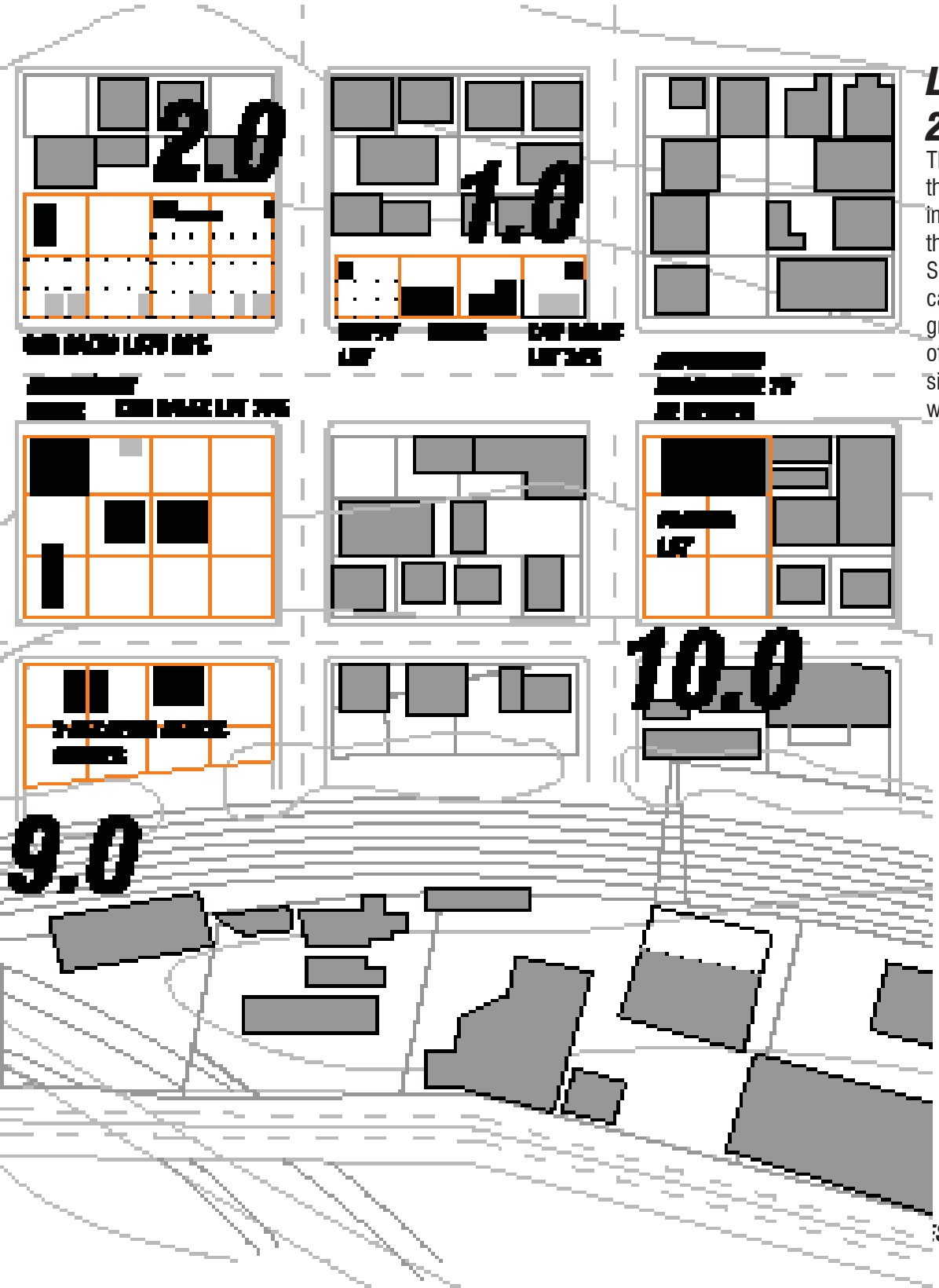


SELECTED SITES

IN CONCLUSION.... PART 1

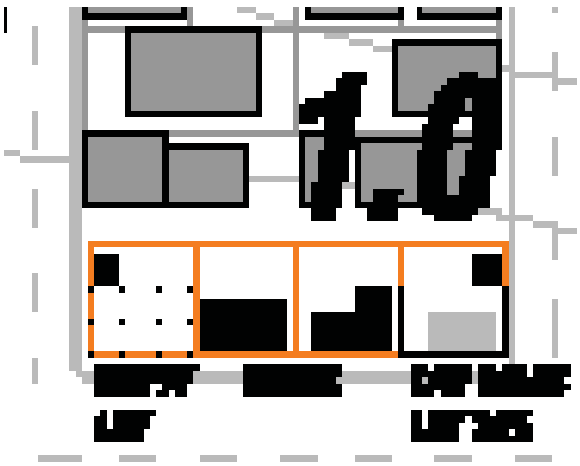
A LANDSCAPE OF POTENTIAL

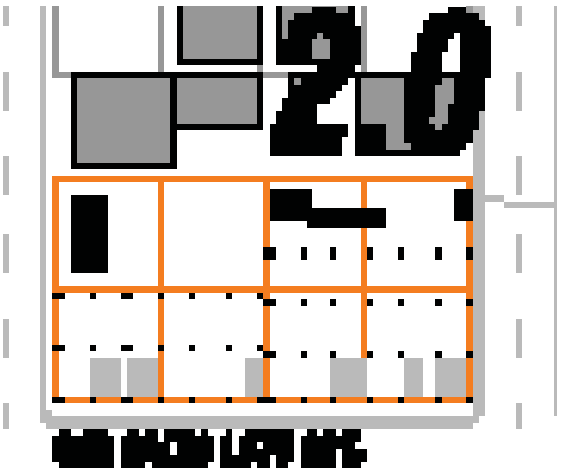


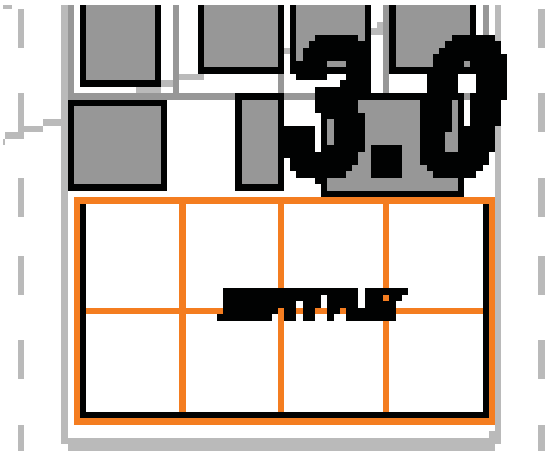


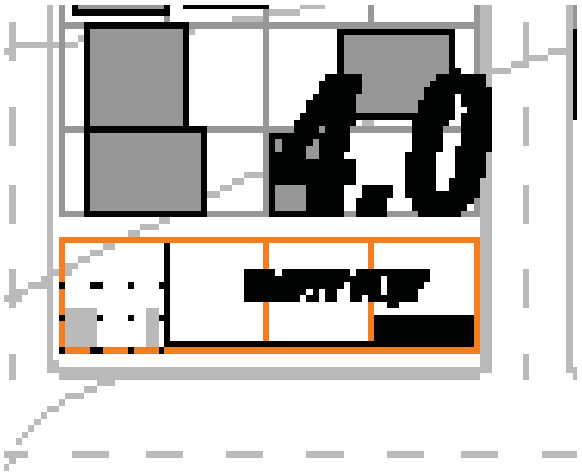
Leftovers mapping, 2010

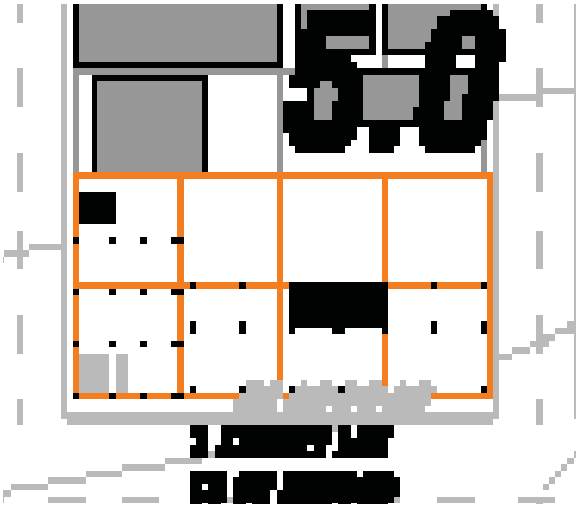
The opportunity of these sites are the very small amounts of existing built infrastructure paired with their vacant abandoned nature. Some sites are still operating as car sales lots: The cars on the diagram indicate the average number of cars for sale on each lot, the sites that had usage below 30% were included.


1.0


2.0


3.0


4.0


5.0



Site 1.0, Panoramic From Jules Street



Site 2.0, Panoramic From Jules Street



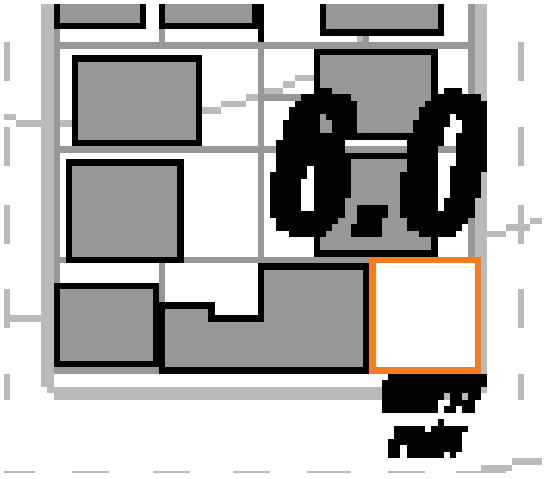
Site 3.0, Panoramic From Jules Street

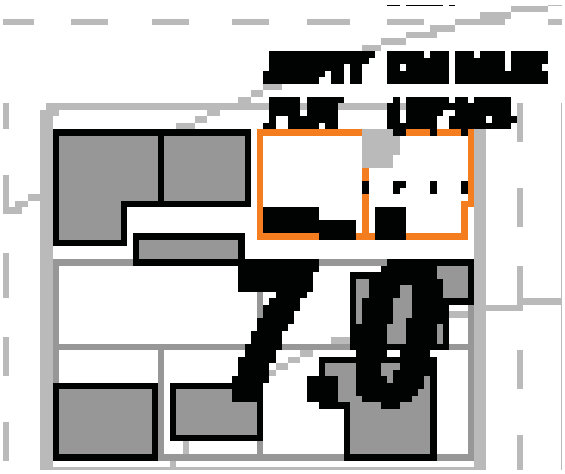


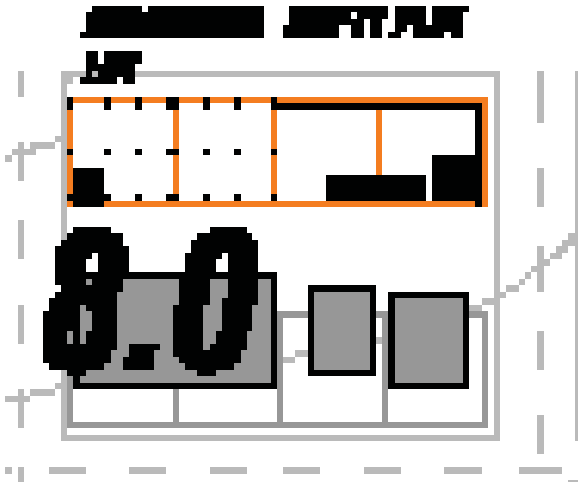
Site 4.0, Panoramic From Jules Street

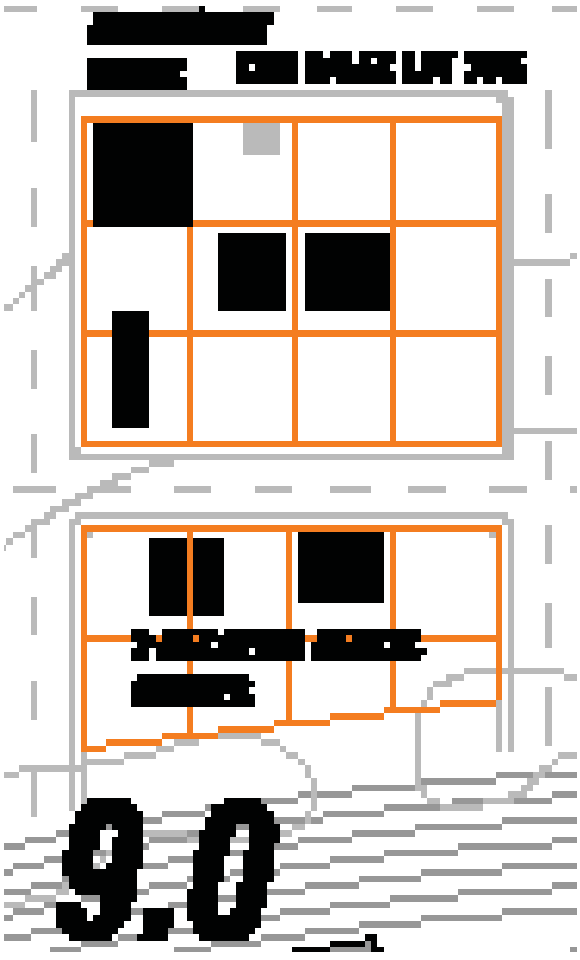


Site 5.0, Panoramic From Jules Street


6.0


7.0


8.0


9.0


10.0



Site 6.0, Panoramic From Jules Street



Site 7..0, Panoramic From Jules Street



Site 8.0, Panoramic From Jules Street



Site 9.0, Panoramic From Jules Street



Site 10.0, Panoramic From Jules Street

INDUSTRY MEET CULTURE

TO A LAND OF PRIESTS AND PETROL-HEADS

PART 2.

The sections that follow place Jules Street amongst the theory and precedents relating to; A. the decentralization of industry to the periphery where B. the core is adaptively reused for cultural production. The relationships, conflict and C. possibility for hybridization between industry and culture are then investigated along with how D. the strong relationship between human beings and machines, specifically the motorcar, have evolved over time.

'I'M SO BAD I PARTY IN DETROIT.'

(Oswald 2006)

There is a powerful attraction to decaying industrial buildings, as if the viewer is happy to see the end of an industrial age that along with progress, brought many of the environmental problems of todays world. The decentralised core, a hard place, offers new opportunity.



Image Source:(Vergera, 1997)

A.

DECENTRALIZATION: CORE AND PERIPHERY

The first signs of JHB motor showrooms moving from Jules street could be seen in the 1980's. From a series of interviews conducted in recent months, business-owners in the area accredit this trend to increasing crime, vandalism and slowing down of sales. Up to this point, the aftermarket car sales and repair was concentrated in this place, attracting a large customer base to Jules Street. To add to this, Johannesburg had already begun to grow. Car dealerships and car drivers were fragmented and Jules Street industry could not be sustained with the client base left over. The truth is -the motor-car spelt the end of the motor-district. Robert Fishman on describing suburbanization in the USA stated:

"Twentieth-century urbanism was primarily decentralizing, making use of such networks of decentralization as the automobile, the telephone and other electronic communication to make possible-urbanization at any point in a region. The advantages of the core over the periphery shrank; people and industry naturally gravitated toward the cheaper land and open spaces at the edge. And so we have shrinking cities at the regional core."

The social and physical implications of industry exodus can be seen in Detroit, USA. The parallels between Johannesburg and Detroit are plentiful, both cities experienced suburbanization, histories of racism and segregation and with particular reference to Jules Street, the decentralization of industry. Unlike Detroit, Jules Street is not a baron wasteland of empty spaces, there has been a large movement to migrate towards industry. There is a new population with needs for employment, accommodation and recreation as well as a niche of the previous industry that continues to thrive. This emerging population is a dynamic one of various religious faiths, transient workers in the area searching for jobs and a vibrant mix of race and culture that come from all over South-Africa and the rest of the continent. The city of Detroit does, however, serve to be a useful precedent in terms of studying the peculiarities of an industrial core, where the large industries have moved to the periphery. A re-occurring theme is that of emerging open space, the core begins to have the vacancies that the now overcrowded suburbs in the periphery no longer has. The exodus of prior use creates opportunities in accessible parts of the city (Oswald,2006).

These zones of opportunity often provide unconventional situations where prior use meets new use. In Jose Camilo Vergara's book entitled *The New American Ghetto* is an image of the former Michigan Theatre, the caption reads "Extreme contrasts abound in the former Michigan Theatre, now a parking garage, Detroit, 1995. Where plush rugs once were is now pavement; older, pinked toned marble columns face three parking floors supported by steel and concrete beams. The garages ceiling is reminiscent of a rococo palace minus the chandeliers. An Australian architect commented "they would never have done this in Europe. They would have either demolished the building or restored it." With the exodus of it audience, the theatre could not sustain itself, and the building was re purposed. (Vergara, 1997)

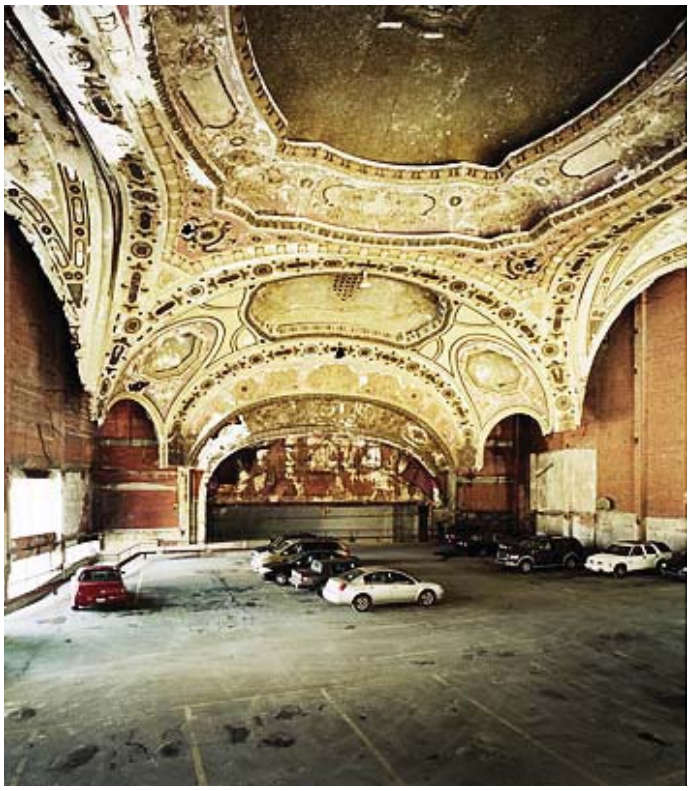


Image Source:(Vergera, 1997)



JULES ST, JOHANNESBURG'S RUST BELT.

The similarities between Detroit Motor City and Jules St Motor District are plentiful. One difference seen in this image, that contrasts Jose Vergaras baron landscapes of Detroit, is the presence of a new community who look to this place for a place to live, work or go to school.


OD YEAR

B. FROM INDUSTRY TO CULTURE AND BACK

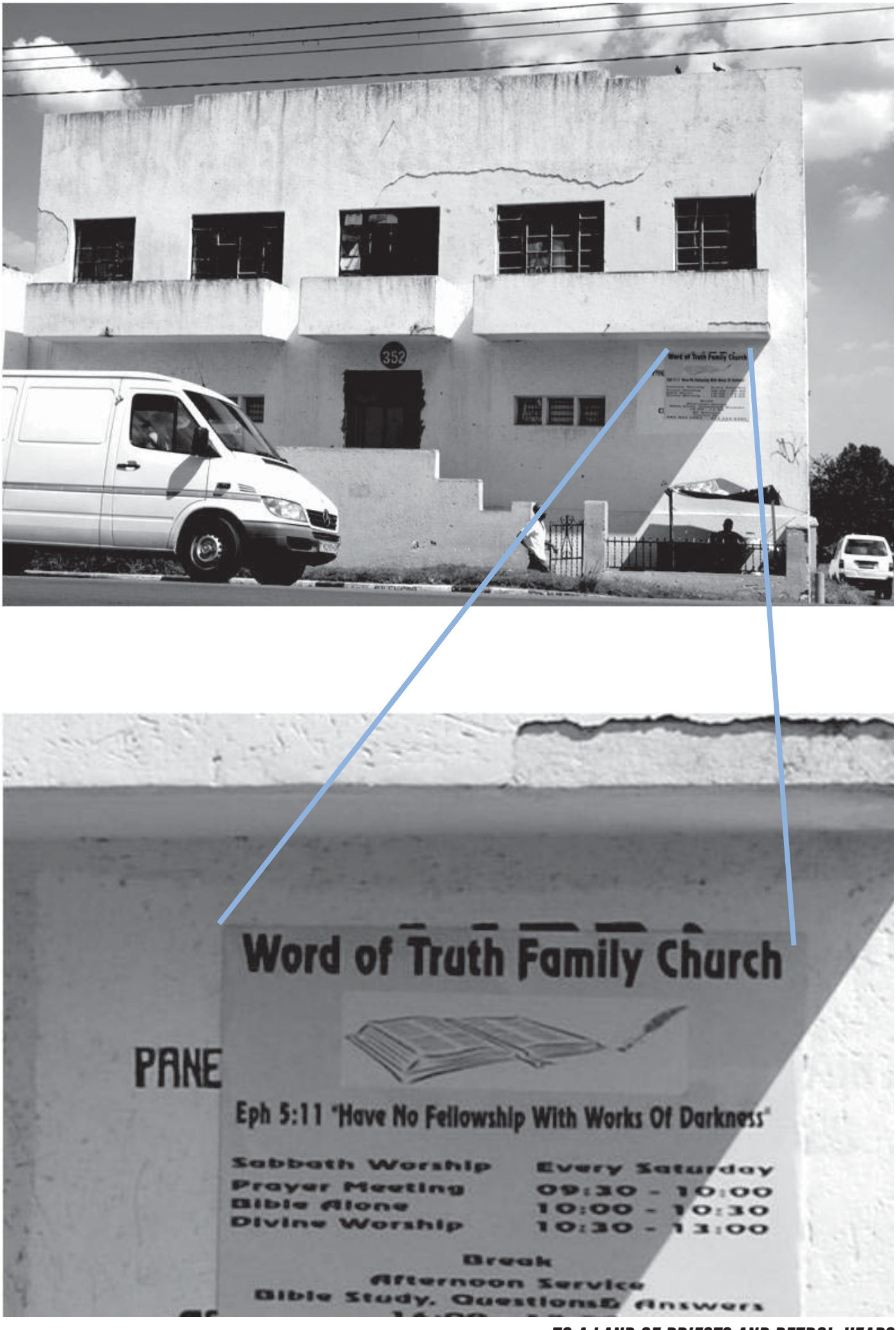
The notion of moving from industrial to cultural production has become a new obsession in contemporary architecture; from power stations to art galleries, from urban wastelands to cultural precincts. The question arises as to why the industrial should be eradicated for the cultural to prevail? The symbiotic relationships of workshops and churches on Jules Street can be understood by analyzing them in terms of their physical location, the physical spaces that have been adapted, the attitude towards the historical use of industry and the dirt and weathering associated with it (Crisman, 2007).

A workshop is extremely adaptive spatially, specifically for the use of congregating people. There is no doubt that the eleven workshop to church conversions manifested themselves out of necessity as well as ease, both physically and financially, of adapting the Jules Street abandoned workshops. On visiting four of these churches it is evident that the unplanned by product of these opportunistic conversions is the layering of history from the old to the new use of these spaces. The result is not the awe inspiring, powerful and sacred space usually associated with the practice of religious congregation. The vast space, of particularly the Word of Truth Family Church with its oil stained floors, layered signage and a patina of use on the walls, from hand marks to the black cloud that a car's exhaust leaves on paintwork provides an alternative religious experience. As unaccommodating as this may sound, one is constantly reminded that this is a place that has accommodated many before and will continue to do so in the future; the buildings history and congregation are part of the walls. To develop in a space like Jules Street requires an understanding of the detrimental effects of literally washing away the dirt and patina of use that contributes to the history of a place. The common notion of cleaning up a place for human use may end up alienating those who it has been cleaned for. (Crisman,2007).

The contrast between the buildings and activities on this street and the modern car showrooms of Johannesburg is evident in the materiality of these spaces. Weathering, dirt and detritus form a large part of the character of these spaces along with their rich history of use. These spaces provide a great contrast to the sterile uninviting showrooms of steel and class that define all of the showrooms of the large car manufacturers represented in Johannesburg. A showroom that breaks away from this stereotype is the BMW Headquarters in Midrand, Johannesburg designed by Hans Hallen and built between 1984 and 1985. Hallen developed architecture of strong geometric form, exploiting a combination of off-form concrete, brick, glass and metal .The BMW headquarters' synthesized geometry and brick construction forms are strongly related to the characteristics of site, on the edge of a busy motorway. Automotive architecture can be seen as the defining building typology of our time (Sanders, 2000). It has changed, and will continue to change, the face of our city. The abundance of these introvert buildings is evident at any point in the city. No matter what context these buildings sit in, from city to city, suburb to suburb; these buildings are all much the same. Despite the masses of these building types that exist, they seem to have ceased to develop either socially or in terms of their architecture- they do not take advantage of the culture of the motorcar. As the motor car continues to be a means of transportation to our sprawling city, to places where public transport cannot be made viable, it is inevitable that the motorcar is here to stay, for a while at least. A new consciousness from car manufacturers towards their products' life span, communities and effects on the environment means that automotive architecture is about to do the same.

ON SITE INVESTIGATOR.

Word of Truth Family Church signage pasted over the signage of a previous use, a panel beater. The adaptability of the open span workshop space means that the most evident change to the building is it's signage


352
Word of Truth Family Church
PANE
Word of Truth Family Church
Eph 5:11 "Have No Fellowship With Works Of Darkness"
Sabbath Worship Every Saturday
Prayer Meeting 09:30 - 10:00
Bible Alone 10:00 - 10:30
Divine Worship 10:30 - 13:00
Break
Afternoon Service
Bible Study, Questions& Answers



TO LIVE WITH INDUSTRY.

The relationship between Jeppestown and the industrial zones of Denver and Benrose to the south is not as chaotic as it may sound, the apparent dirt of industry is what allows a low income public to live work and pray in an accessible part of the city.



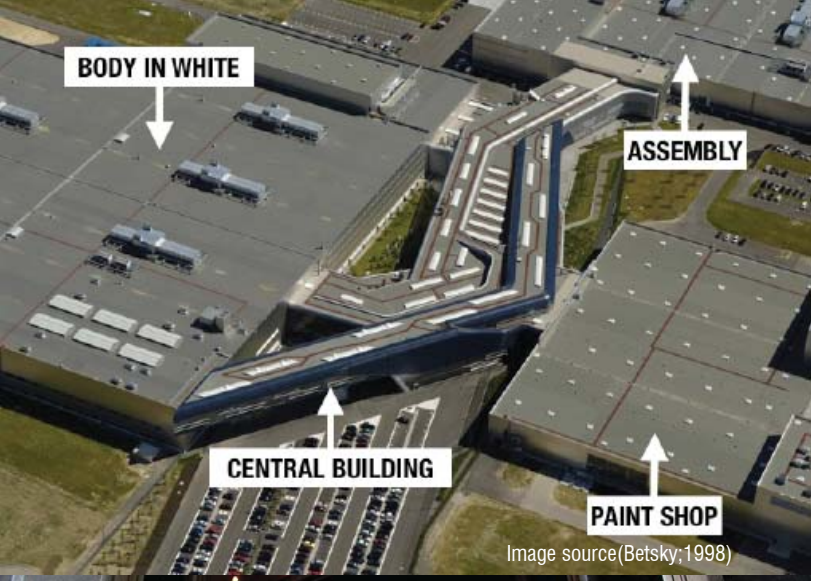
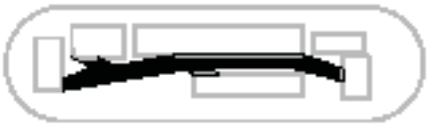


Image source(Betsky;1998)


Image source(Stephens ,2003)


Image source(Merz,2006)

-BMW CENTRAL BUILDING



-FIAT LINGOTTO FACTORY.



-MERCEDES BENZ MUSEUM



AUTO-TECTURE

Top:
BMW Central Building, Zaha Hadid
Center:
Fiat Lingotto Factory, Giacomo Matte-Truco
Bottom:
Mercedes Benz Museum, Un Studio

C.

ENABLING HYBRIDITY

The current landscape of Jules Street presents an image not much different to a collage. The relationships between industry and spaces of culture are for the most part limited to adjacency and lack any other interaction. This dynamic as it exists on the ground does allow for both industrial and cultural production to exist, side by side, as is required- so what would be the benefit of establishing a relationship, both physically and programmatically, between these two institutions. 'Hybridization,' as defined by UN Studio, "makes it possible to melt various components of architecture into a new whole. The intensive fusion of construction, material, circulation and programmed space creates a hybrid whose individual components can no longer be clearly distinguished. And finally, the seamless unity of different images represents the paradigmatic change from collage to hybrid." (Andreas, Mende: 2000)

The melting of culture and industry can be seen in UNstudio's Mercedes Benz Museum. ***"The works around you belong to no other culture than your own. They are much closer to you and speak more clearly to you than most of today's art."(***Merz,2006). The 'specialist collection' is housed in the building in a manner conducive to creating a space that celebrates both the museums contents as well as it's visitors. The spiraling circulation provides a vantage point to view and interact with the exhibits themselves but also make an outwards gesture to the industrial complex that surrounds the building. The outdoor arena sits between these two zones; the place of industrial production and the cultural production that is the museum. The arena becomes the place of both cars and the human beings. Used for a multitude of functions throughout the year, the arena provides an opportunity to see these machines in action (Merz, 2006). This building and the few others like it are but a small fraction of the architecture designed for automobility. The functional, working buildings are conceptualized, with a slight exception for Zaha Hadid's BMW Central Building, for machines rather than people. Hadid only managed to partially integrate the blue and white collar workers in the building which forms part of an assembly plant. The community and clientele of the workshops and showrooms rarely receive more than a waiting room and an area with product samples.

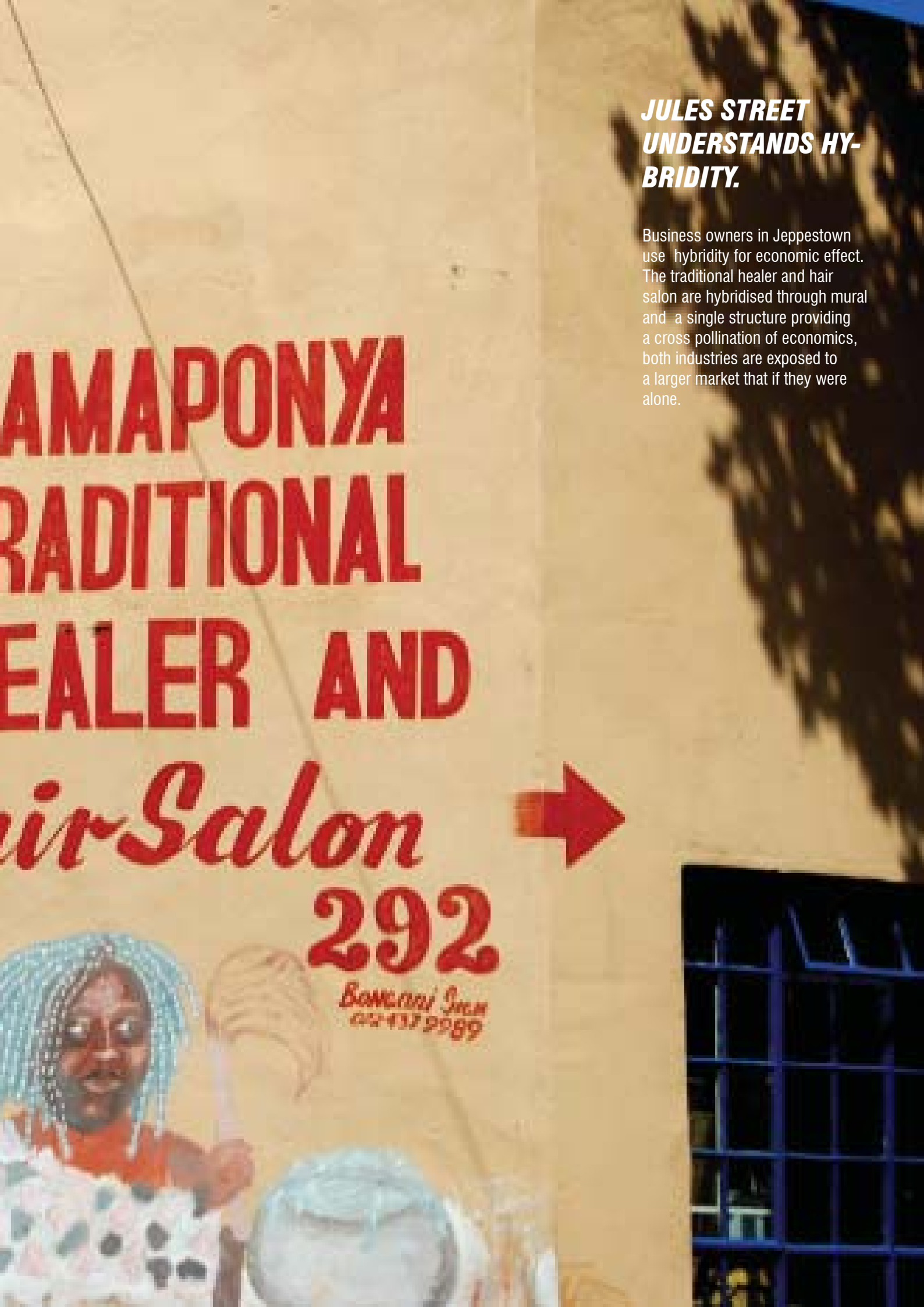
Another example of the merging of industry and culture would be Renzo Pianos renovation of the Lingotto Factory. The original structure was designed by Giacomo Matte-Truco and became an icon of the Modern Movement when Le Corbusier mentioned it in *Vers Un Architecture*. The factory design physically manifests the movement of the car in both assembly in its 4 levels of vehicle manufacture as well as the roof top racing track. The current renovation has been revered but also criticized, specifically for the cleaning of the historical patina that had for some been a major interest for the reuse of these spaces. The movement from a singular, monolithic space of industry to smaller collections of hybridized programme is interesting. The changing patterns of use of historical places is described by Stevens: "Not only is the vision inherently organic, but it probably represents the future too when mono-function industrial plants, of which Lingotto was the modernist apogee, have been down sized and broken up to be replaced by interactive communities of smaller, fast changing enterprises." (Stephens, 2003). Evidence of the merits of fast changing enterprises can be seen on Jules Street, the workshops that employ ingenuity and are able to adapt easily, and thrive.



Mega Plant to Micro Industry

The diagram above represents the common approach for re purposing the massive scales of disused factories and plants.


HEALER AND hair Salon
MARSHALL ST
292



JULES STREET UNDERSTANDS HY-BRIDITY.

Business owners in Jeppestown use hybridity for economic effect. The traditional healer and hair salon are hybridised through mural and a single structure providing a cross pollination of economics, both industries are exposed to a larger market that if they were alone.

D. HUMAN MACHINES

Since there was a large movement of car dealerships and workshops away from the street in the 1980's, little new development in terms of the workshops and car sales lots has occurred there since. The automobile, however, did not stop evolving. First cars became intelligent, and now, they are becoming soulful. The lexicon of new car terms is sounding biological, and more recently, psychosomatic. The modern car needs to respond, adapt and be conscious of its surroundings.

Lars Spuybroek, in a lecture entitled Motor Geometry, defined the relationship between a driver and their car as being like the relationship between an amputee and his/her prosthesis. "The bodies inner phantom has an irrepressible tendency to expand, to integrate every sufficiently responsive prosthesis into its motor system, it's repertoire of movements, and make it run smoothly. That is why a car is not an instrument or piece of equipment that you simply sit in, but something you merge with. So every prosthesis always has the nature of a vehicle, something that adds movement to the body that adds a new repertoire of actions to the body. Of course, the car changes the skin into an interface, able to change the outside into the interior of the body itself."(Spuybroek, 1997)

The precedent to define this architectural theme is not a building – it is GINA, a motorcar. GINA (Geometry and functions IN Adaptations) is the realization of a concept from the designers at BMW that promises to be the new defining moment in the making of motor cars. This is not a first for BMW, the 'dolphin shape' 3 series saloon of the early 1990's became the pioneer of molded car forms, especially the molding of headlamps and taillights to fit the contours of the cars body. This revolution of form became the inspiration for many architects. Lars Spuybroek used this movement to develop plastic architectural form. Prior to this movement, headlights were square or round, common to all makes of vehicles and mounted into what was usually a black plastic grille. The effect of this movement can be noted in nearly all of the new cars built today, as well as plastic forms being a common theme in architecture, from Frank Gehry to Zaha Hadid. Adding to this came their movement called 'flame surfacing' under the leadership of Chris Bangle in the early 2000's, inspired by the development of the machinery used to create the bodywork of cars. The results are complex, multifaceted body parts. Now with GINA, in 2010, the defining characteristic of this car is the approach skin, not the ridged steel, carbon fiber or plastic used on cars today, but fabric. The result is an animated body that resembles a human being rather than a car. The on-average ten body panels that cover the inner workings of the modern car have been replaced by four lycra sheets and the joints between them have been replaced by slits and folds. (Biener, 2009).

Skin is a theme investigated by many architects. Lars Spuybroek lends from Gottfried Semper's theory that architecture is based on four constitutive elements: earth mound, wooden poles, textile enclosures and fire as in the earliest forms of building. Semper viewed textiles as "the main agent of architectural form and the original technique for creating architecture" (Semper, 2004). Skins remained the key spatial component and were made from textiles that shared the tectonic role with wooden structures. Spuybroek supports this idea, but suggests that textiles and skin should be used conceptually rather than as a surface materially. ***"The idea here is not to build with textiles but to inform the rigid matter with a textile thinking in order to go beyond the classical rift between 'structure' and 'ornament'. I want the textile itself to become tectonic without the help of the wood or any other support. Then, the soft elements will become rigid through collaboration, by teaming up, weaving, bundling, interlacing, braiding, knitting or knotting, and through this convolution the whole will become strong and rigid".*** Computer programs are the tools allowing such a change of pattern from hard to soft structure and form, but he adds that: "soft constructivism that has nothing to do with hard materials mimicking softness or liquidity but with softness and flexibility building structure."(Spuybroek, 2008).The opportunity of working with an integrated skin and structure for the proposed development in Jules Street would be the efficiency and functionality of that system.



(OFTALMOLOGIST)

BMW workshop, specialized medicine for your vehicle.

Grupo Bavarian de Nicaragua S.A.
Official BMW Importer
3rd Km south road, from Montoya statue 1 block north
Managua, Nicaragua.
Tel: (505) 22687274

Image Source:(BMW Press Release, 2009)

The design of BMW Welt by Coop Himmelb(l)au, in Munich employs the use of technological advances in computer software to create architectural form that would otherwise not have been able to be developed. The team of architects led by Wolf D. Prix, planned BMW Welt in Munich to resemble a cloud landscape made up of 10,000 square meters of glass. The building was opened in 2007 in the BMW group headquarters as a hybrid of delivery centre and event venue – “an automobile meeting centre for 850,000 people a year that will transform the BMW marque into an experience.”The programme that integrates the showroom, retail, and branding functions has been awarded the “Car-thedral” nickname. (Shandley, 2008)

The difficulties for programming a building in the context of Jules street are the relationships and incompatibilities of industry and culture in this sensitive and unique setting. How to make the dirt and detritus of industry hospitable and allow the church to serve the growing needs of its community.

The car-thedral is beginning to make cultural motor-space in a hi-tech manner; a development on Jules Street should do the same, but also take advantage of the districts low-tech ingenuity. The successful merging of these concepts will form part of the overall success of the resulting building.

The inspiration of technology, especially of manufacturing technology, as a driving force for design is valid for the development of auto-architecture, what tools do we have to our disposal as architects?. My recent spending of time in many mechanical workshops on Jules Street has sparked my interest in the growing capabilities of the informal sector to build and create. The making of an exhaust, for example, is an art to itself. Designed to fit with exacting dimensions and forced to contort itself around the hidden space under a car, the chassis, exhaust-pipes are shaped on hydraulic bending machines using only a trained eye as a reference or guide.

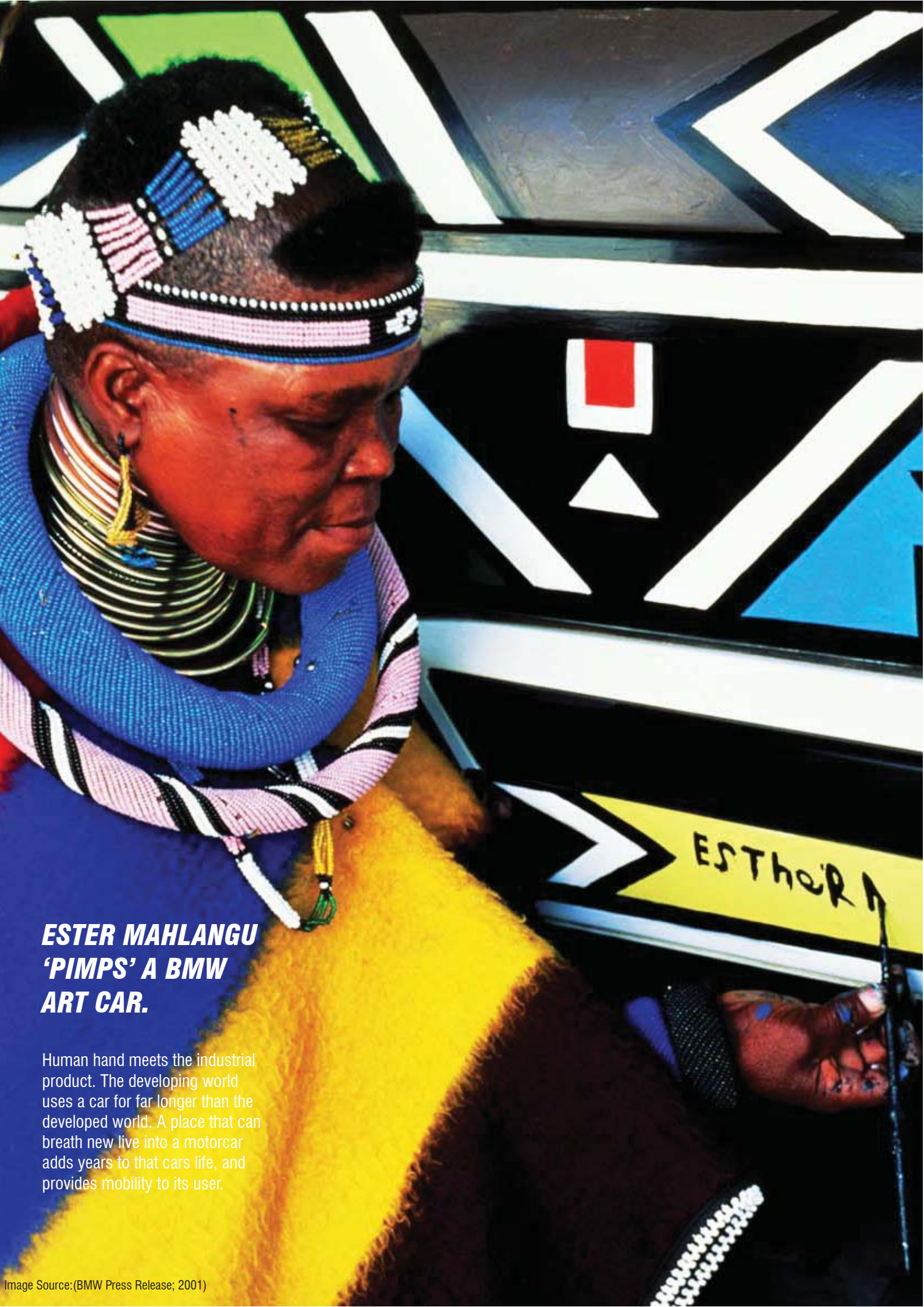

Image source(Shandley,2008)



CAR-THEDRAL

Above:
BMW Welt, Coop Himmelb(l)au.

A Cathedral of commerce



ESTER MAHLANGU 'PIMPS' A BMW ART CAR.

Human hand meets the industrial product. The developing world uses a car for far longer than the developed world. A place that can breath new live into a motorcar adds years to that cars life, and provides mobility to its user.

Image Source:(BMW Press Release; 2001)

IN CONCLUSION... PART 2

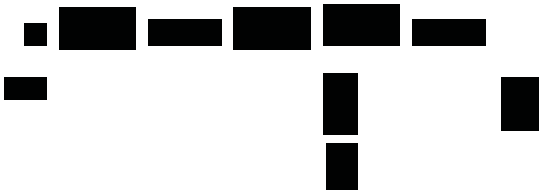
GIVING PRECEDENCE TO THE PRECEDENT.

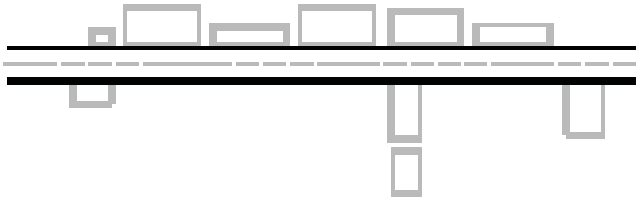
-DETROIT MOTOR CITY.



-FIAT LINGOTTO FACTORY.

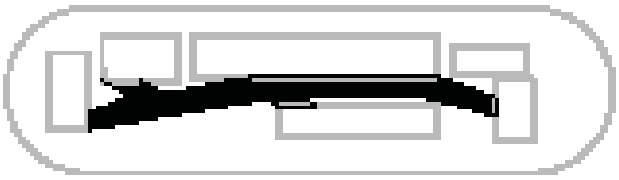


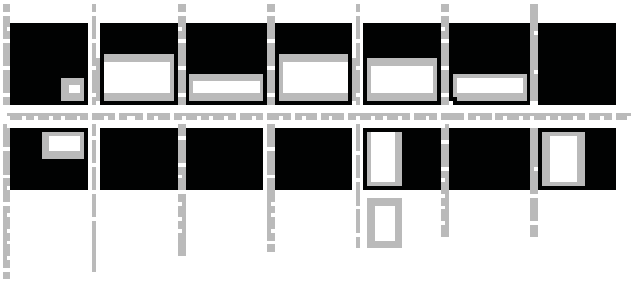




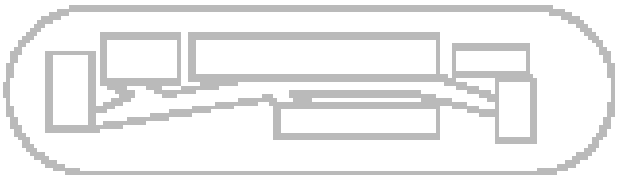
CONCLUSION CONTINUED...

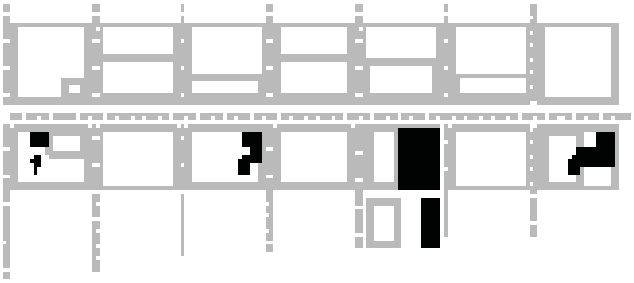
-BMW CENTRAL BUILDING





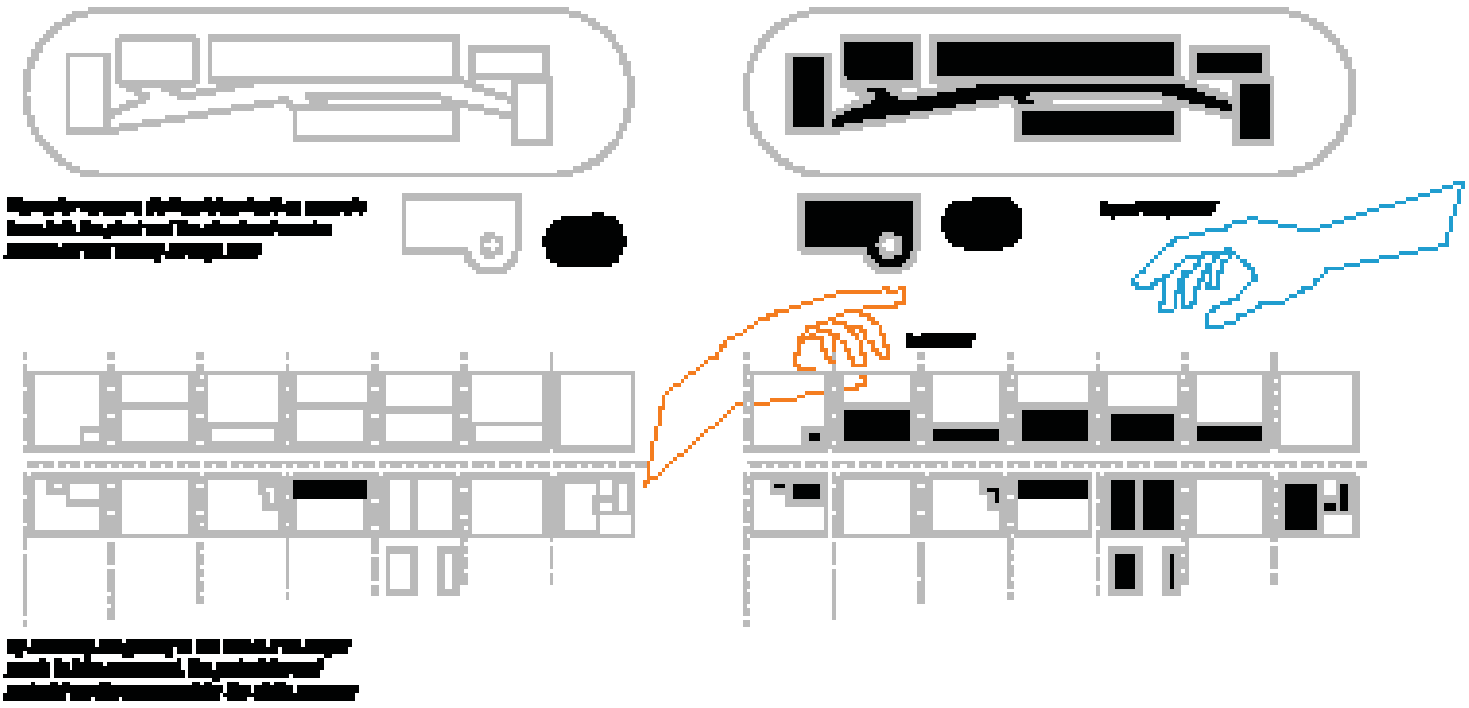
-BMW WELT.





-MERCEDES BENZ
MUSEUM

-MODERN PLANT VS
JEPPESTOWN MOTOR MONASTRY



THE AUTO-MOTIVE AFTER-MARKET

CREATING A VIRTUOUS-CYCLE

PART 3

Developing programme

A, The after-life. B Devotion. C, Resurrection. D, Congregation. E, Procession


1.0
CONGREGATION
2.0
DEVOTION
3.0
RESSURECTION
4.0
AFTER-LIFE
5.0
PROCESSION

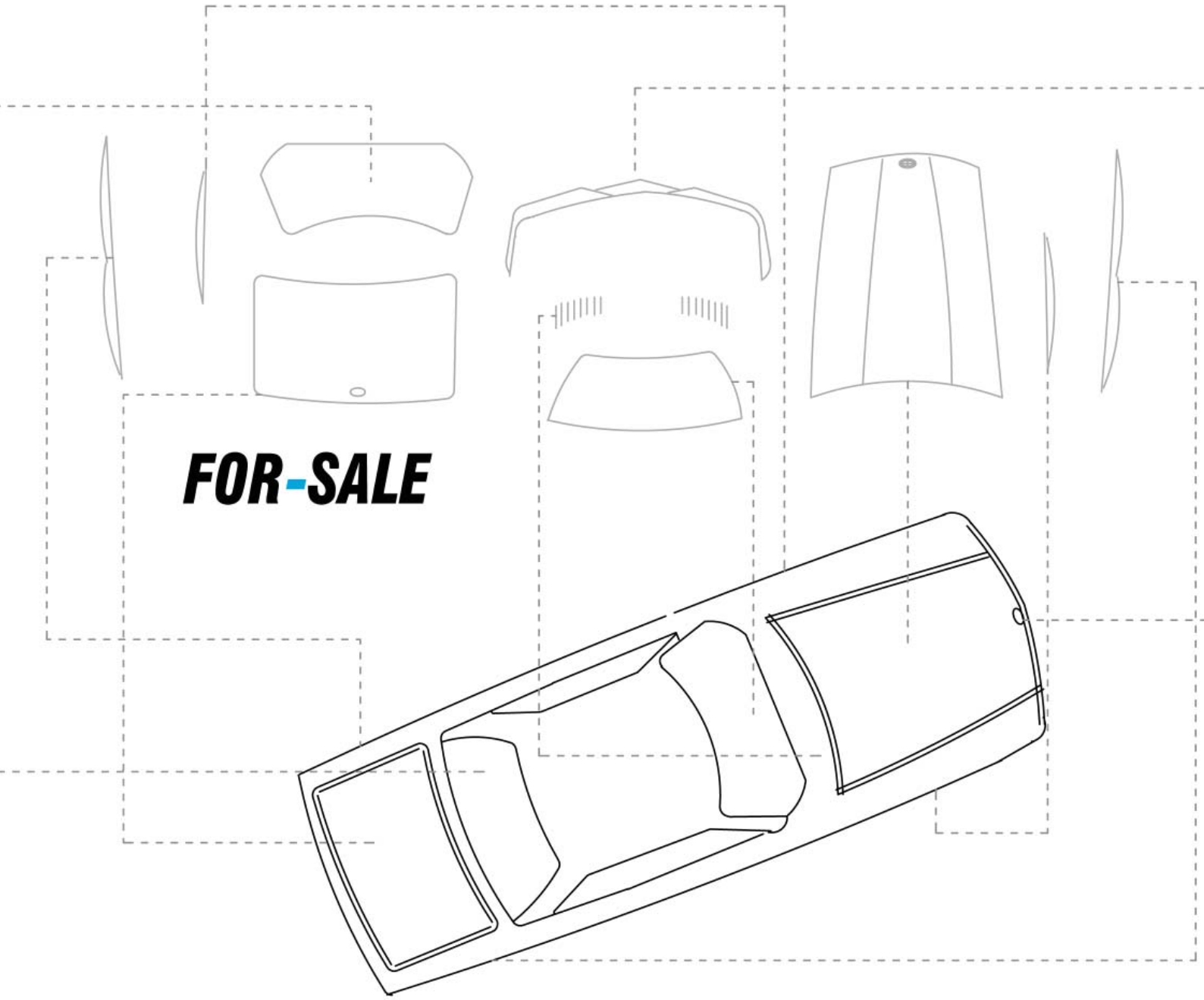
DEVELOPING PROGRAMME THROUGH RELIGIOUS METAPHORS FOR THE CYCLE OF LIFE

The Jules Street motor industry is in a state of transition both internally (the rapid evolution of the car) as well as externally (the evolving physical and social context of Jules Street). A relationship between a large car manufacturer and the small workshop owners would bring together the technological resources and devoted workforce that are required for the aftermarket service of the modern automobile. With this would come an awareness of the direct community of this development that live with the industry and how the development of a church and its associated amenities can benefit this community.

The metaphor used to drive the programming of a new development on Jules Street is based on the adjacency of industry and religion of this exceptional place. The objective is not to force these programmes together, a church-workshop, but rather view the motor industry in light of religious themes to enable unanticipated outcomes and analyze the church as an industry in itself with themes of efficiency, quality and mass cultural production. Themes of congregation, devotion, after-life, resurrection and procession are the avenues used for investigating the re-use and development of this place.

AFTER-LIFE

1.0 SCRAP YARD 2.0 breaker 3.0 compo-nents



AFTER LIFE DIAGRAM.

Even a motorcar rendered un-roadworthy as a whole has potential in pieces. Rather that a place of decay, this is a place that allows for new life.

A. AFTER-LIFE

The afterlife (also referred to as life after death, the Hereafter or the Next World') is the idea that the consciousness of a being continues after physical death occurs, either by natural or supernatural means. In many popular views, this continued existence often takes place in an immaterial or spiritual realm. Major views on the afterlife derive from religion, esotericism and metaphysics.

In most faiths death is just an instance in time, the end of life in one place instantly marks the start of life in another. This same theory is true for a motor car, but often the scrap yards they end up in places that aid decomposition and decay. For motor cars, life-after-death is aided by a sense of care and conservation. The scrap yard as we know it has to change- the economic and eco value of cars at the end of road means that this is not a place of decay but rather one of preservation.

BMW South Africa is renowned for its forward thinking brand image. This is highly visible in the design and construction of their ever evolving motorcars. A part of being progressive in thought is to think of the entire lifecycle of the BMW product, and it seems fitting that BMW should be the first of the car makers to own a facility that reinterprets the automotive aftermarket facilities. BMW would be the first car manufacturer to take full responsibility for its product; from production to recycling. This development would add to the progressive brand image for prospective clients, provide a new service to their existing BMW owners as well as give back to the community that is associated with the service and repair of the brand.

Dr Juergen Hedrich, director of technical & logistics at BMW South Africa, describes the brands ethos; ***"At BMW SA we believe that progress is only sustainable if it is accompanied with a value system, thus we are reaching far beyond the borders of our plant to better the lives of the communities that our employees live in through different community projects."***

_SALVAGE YARD/BREAKER YARD

Recycling and preservation of cars at the end of the road provides a *Virtuous Cycle*, as described by Wolfgang Schneider in his article on eco-friendly car production. A motor car is an eco-efficient product, with an average of 85% recyclable parts. To add to this many car manufacturers have adopted an approach of "design for recycling", where even draining of fluids such as oil and engine coolant can easily be released in order to recycle parts. These recycled products often don't require much processing as they can be used directly as spare parts. The market for these parts is immense, as many models would share similar parts; 75% of the components of a new BMW 3 series are exactly the same as the previous model. There is so much value in a car that has been deemed un-roadworthy by either age or accident that preserving and recycling them means good environmental and financial practice (Schneider, 2008).

Traces of this attitude can be seen in many of the found objects I have collected on Jules Street. For example; a set of discarded HT Leads (the wires that send electric pulses to the spark plugs of an engine's distributor) stripped of all metal to the point where just the plastic fittings and rubber sleeves remain. The eleven adjacent sites that have been selected for development on Jules Street will require this same spirit for salvaging any materials of use. From the renovation of entire existing buildings to the reuse of bricks and concrete, there will be a respect for the districts past and the various patinas of use of this place.

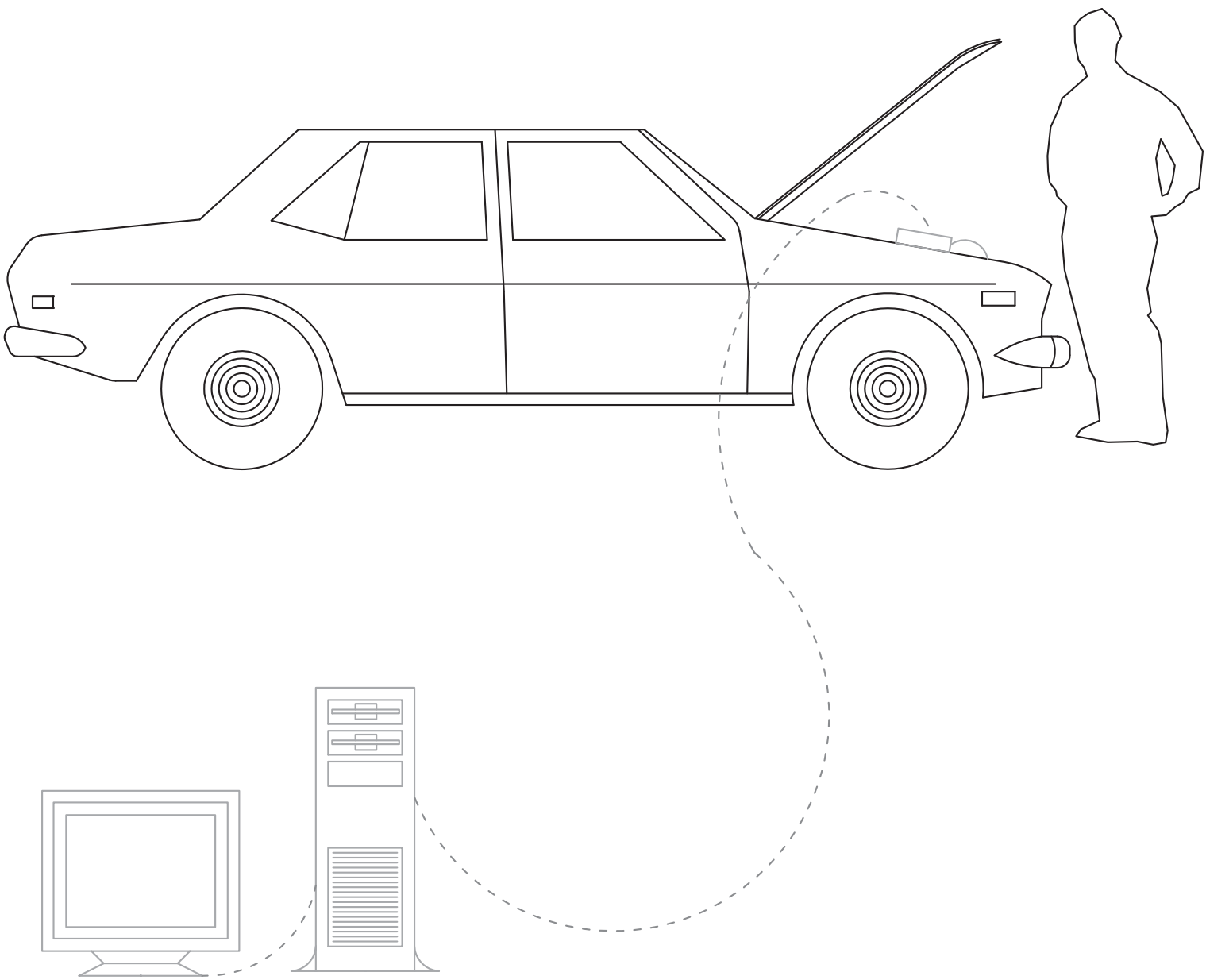
Next Page, The images show the industry of the afterlife on Jules street. The decaying BMW 525 shows waste but also potential.

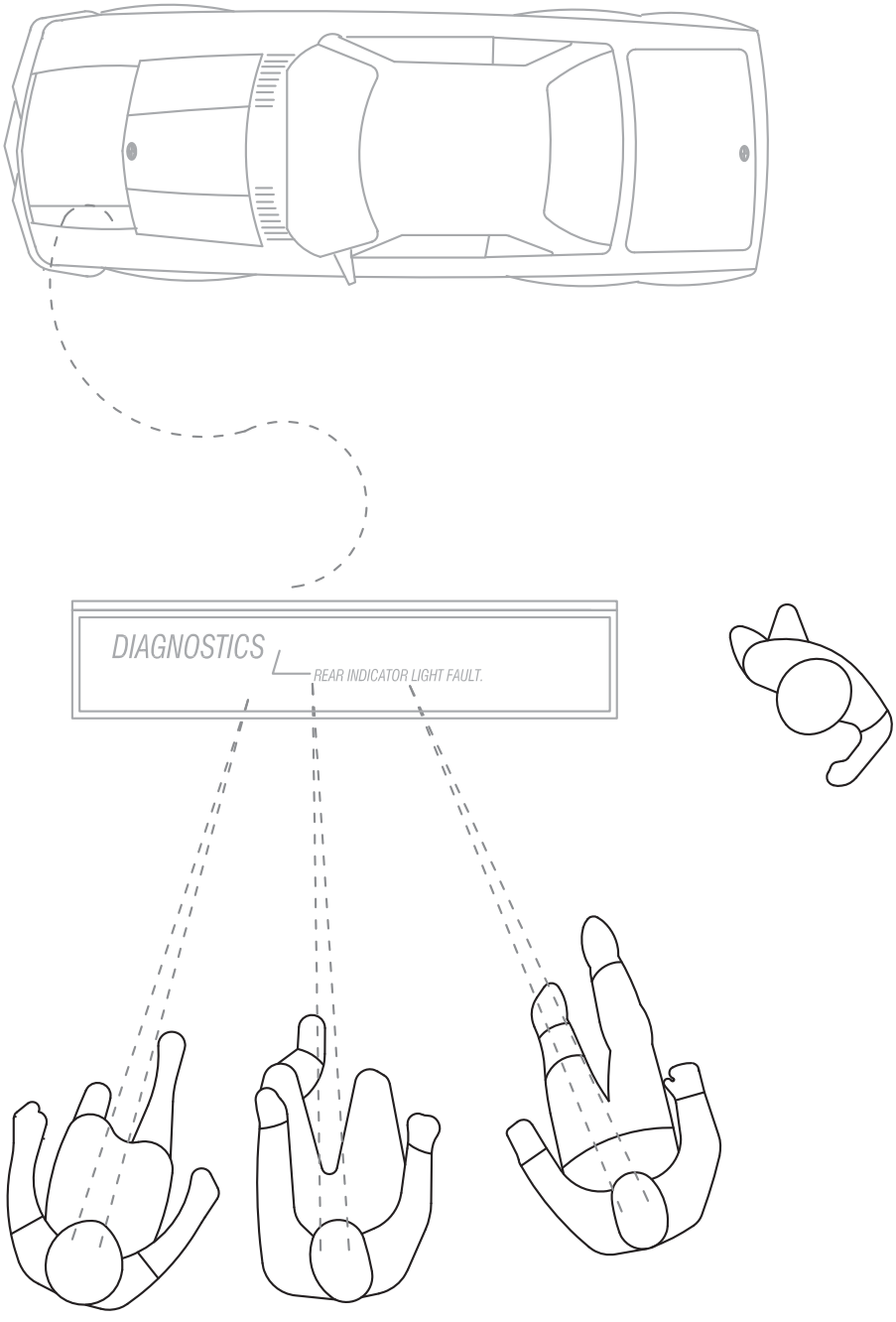

DEVINE
Funeral
Emergence : 07
110
Tel:011 615 6383 FA
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DEVOTION

4.0 RENT A WORKSHOP
5.0 COMMUNITY RESOURCE CENTRE
6.0 LOOKOUT AND ADMIN
7.0 TRAINING FACILITIES





DEVOTION DIAGRAM.

The mechanic has evolved from a passionate petrol head to a passionate petro-electric head. Laptops and spanners sit side by side in the modern workshop in an ongoing devotion to keep these machines on the road.

B. DEVOTION

The term petrol-head refers to someone with an unwavering passion for cars, and more specifically the repair of cars. This sense of devotion is a defining characteristic of the small workshops on Jules Street. The ever evolving motorcar is threatening the manner in which these small enterprises operate. As the car has advanced, so has the tooling that makes and repairs it. From spanners to laptop-based diagnostic equipment, the workshop now houses a spectrum of diverse activities and processes. As much as these petrol-heads are providing crucial aftermarket service, the increasing cost of this tooling (that is often outdated in a matter of months), is making this niche service industry die out.

To gain an understanding of the workshop dynamics of service and repair of cars on the road today an interview with a motor tooling expert of Bosch Diagnostics Systems SA. This company is the outlet for both electrical systems parts as well as the new age tooling associated with the German manufactured cars on SA roads. On starting our discussion Jose handed me a printout of *Automotive Aftermarket: 2010 lexicon of car term s* .This 48 page document is a list containing just the car-jargon associated with car repair today. “This is the problem with my industry today; we update this list four times a year”. From ADAS Advanced Driver Assistance System and DMA Direct Memory Access to ESA Emissions Systems Analysis and LDM Longitudinal dynamics Management, this inventory is a telling document of both where car design has come from and where it is going to. The lists of concerns for car manufacture, much like for those of architecture, are growing daily. Diagnostics and test equipment are essential for any workshop wanting to compete in the aftermarket service industry today. To add to this Jose states that as important are the spanners and hand tools that are still required to actually fix faults that have been diagnosed. This creates a vast divide within a modern workshop- those in front of the laptops and those under the bonnet-which is a difficult line to cross for either. Bosch Diagnostics have taken up training workshops for their products, but computer illiteracy of the average mechanic on the workshop floor, and the lack of hands on experience of the emerging laptop mechanic make this a difficult task. This specialist, expensive tooling provides a dilemma for small workshops like those operating on Jules Street today. As a result interesting networks of resource -sharing, in terms of technical tooling, have developed. These networks are however, fragile.

_HI-TECH is LOW-TECH WORK-SHOP, RESOURCE CENTRE AND TRAINING

Hi tech is not hi-tech forever: ***“High tech becomes low tech with longevity and familiarity, and as old technologies are replaced.”*** (Naisbitt, 2000)

‘Java’s’, a curb side mechanic working on Galteemore Street which runs parallel to Jules Street 4 roads to the north, specializes in road side exhaust repairs. “Last week I fixed loose exhaust hanger of a new Mercedes Benz”. He couldn’t tell me how new it was exactly but assures me it wasn’t older than 5 years old. Work is slow for him, he believes that it is because not enough of the ‘rich’ people trust his work, but is confident that his work is of good quality. He chooses self employment over working for a boss for the freedom. He runs his business on salvaged exhaust parts that he repairs himself and adapts to fit his ranging clientele. Car-repair spaces range from the side of the road to diagnostic facilities that resemble the operating theatres of a surgeon. The interface between the car and human being is the tooling that is required. Here it is does not matter how sophisticated or primitive the tooling is that counts, it is rather a matter of simply using the right tool for the job, be it a crow-bar or a CO2 emissions analysis system. This dynamic, however, is not merely using new tools for new cars and old tools for old cars; modern cars still employ technology developed decades ago and older models can rely on modern technology that enable them to run better than they had from new. This jolt-the juxtaposition of sophisticated and the raw- will be the basis for the design of this space, particularly the merging of these elements.

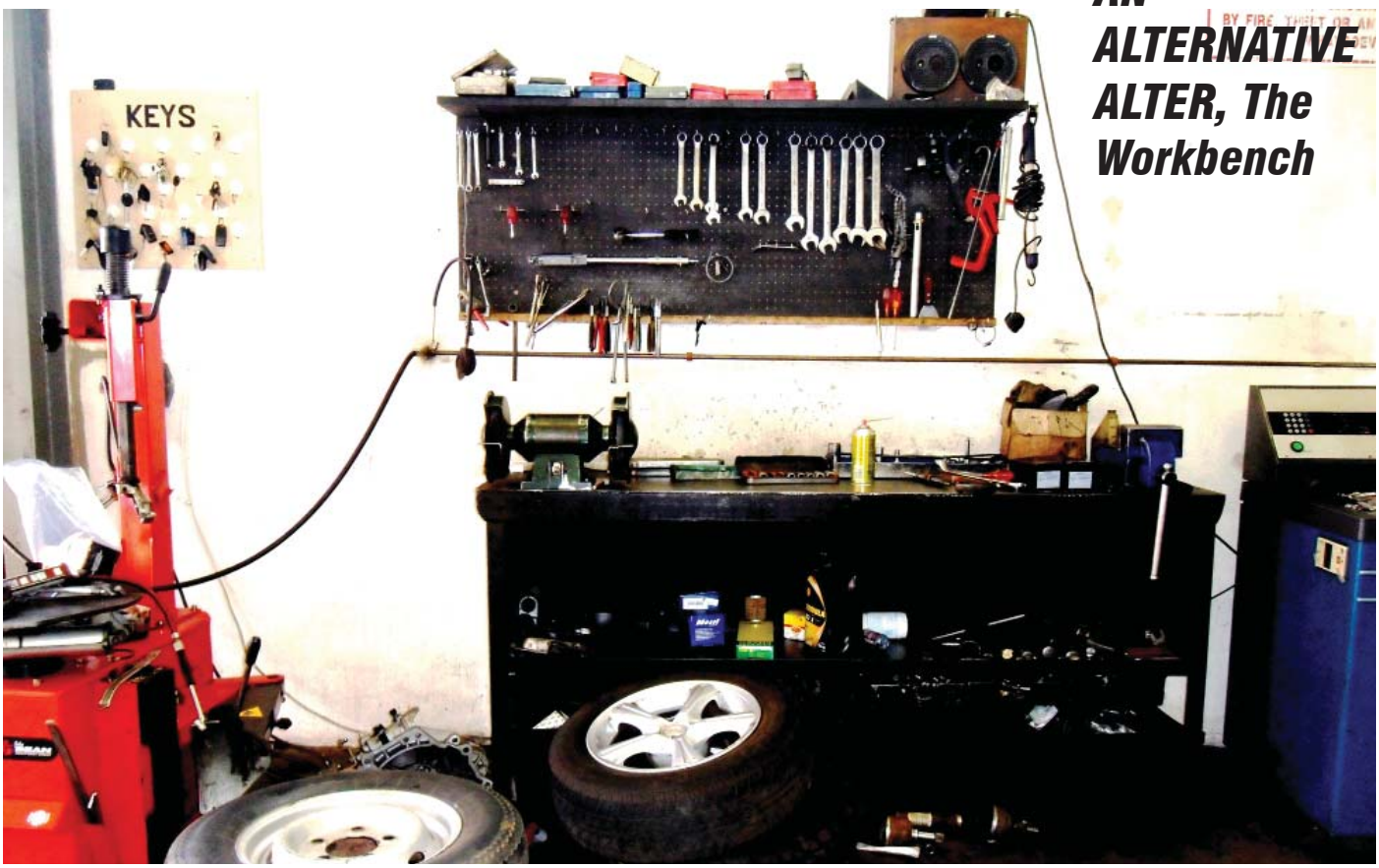
This continual evolution in the motor industry requires emphasizing skills development on an ongoing-perhaps every day-basis. The consolidation of the workshop to force interaction between the spanner cleaners, the technicians and the computer based diagnostics staff allow for the cross pollination of ideas and skills in both peer and apprentice style learning. Adding to this a resource center, as opposed to a typical training centre, will provide continually updated as well as the just-as-relevant 'pre-dated' information. Adding to this will be the specialist tooling facilities that the aftermarket mechanic will need but not be able to afford.



A major issue with car manufacturers up till recently has been their blind eye towards the actual current lifespan of a motor car. Few manufacturers associate themselves to their products after the motor plan expires. 5 years or 100 000km, whichever comes first, is a small part of a cars lifespan. Even second hand, or rather pre-owned vehicle sales associate themselves with cars older than 7 years. A dynamic workshop that begins to merge the resources of a large motor manufacturer with the cost effective practice of the small, privately-owned workshops becomes a viable opportunity in this area. The manufacturer regains a lost relationship with the aftermarket service of their product, and the smaller enterprise has access to the tooling required to accept more work.



AN ALTERNATIVE ALTER, The Workbench



The notion of congregation in the motor industry quickly conjures visions of the assembly of new cars; parts coming together to work as a whole .For Jules Street, however, it is the potential of those individual parts to make a whole that is very interesting. This area does not need a state-of-the-art production plant to move the motor district of Jules Street into the future, what it requires are the parts that enable the re-congregation of vehicles. An after-market, second hand car-parts processing center is required. A space that returns salvaged car parts back to the industry for their second turn at congregation.

On interviewing four of the established workshops on Jules Street that seem to be thriving, Vee Motors, Carsanova and Riekhoff Motors, the agreed point for their success in the past is that they could provide service cheaper than the car 'agents' could. A requirement for this is the use of second hand parts.

_AFTERMARKET SUPERMARKET/PARTS PROCESSING

The architecture of automobility has become a defining typology of Cathedrals of Commerce. Car makers have become well aware of the strong bond between the public and their product, and are creating places that begin to facilitate this relationship. The question then arises as to what relevance is this to Jules St. What are the benefits of meshing corporations and communities?

These cathedrals of commerce are the result of the motorcar being viewed as a cathedral in itself. Roland Gérard Barthes', in his declaration Mythologies of 1953 described the motorcar of that time: ***"I think that cars today are almost the exact equivalent of the great Gothic cathedrals: I mean the supreme creation of an era, conceived with passion by unknown artists, and consumed in image if not in usage by a whole population which appropriates them as a purely magical object."*** Barthes major influence was the Citroen DS, and in particular, the junction of its components. He noted that smoothness had always an attribute of perfection because its roughness reveals a human operation of assembly: as Barthes states; Christ's robe was seamless. "There are in the D.S. The beginnings of a new phenomenology of assembling, as if one progressed from a world where elements are welded to a world where they are juxtaposed and hold together by sole virtue of their wondrous shape, which of course is meant to prepare one for the idea of a more benign Nature." He described the new motor assembly as a humanized art, and that the DS marked a change in the tradition of cars. Until that point the ultimate motorcars were solely a display of power; the DS became more spiritual and more homely.(Barthes, 1953)

This declaration was made over 50 years ago. For contemporary Jules Street the consumer cathedral is less about worshiping the car, but rather realizing its potential. The human machine has similar problems to the human body, at some point it will need repair. Vehicle parts are the organs, and the aftermarket parts supermarket will provide a place to test, repair and service these organs.

DISPOSABLE SOCIETY

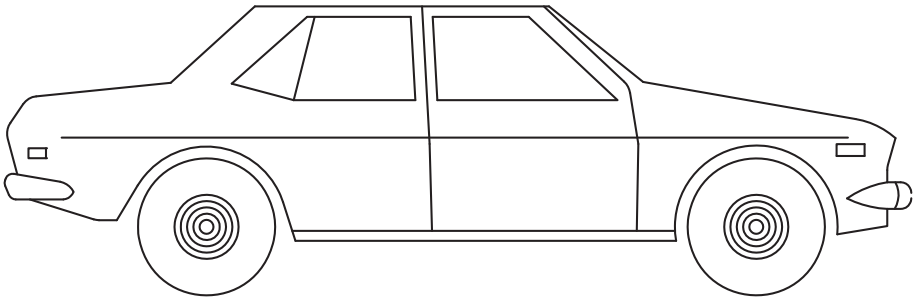
Manufacturers and consumers are starting to be held accountable for their waste. Landfills can no longer cope with the mountains of scrap. Remanufacture provides an opportunity to turn waste into profit



Image Sourced from Google Images

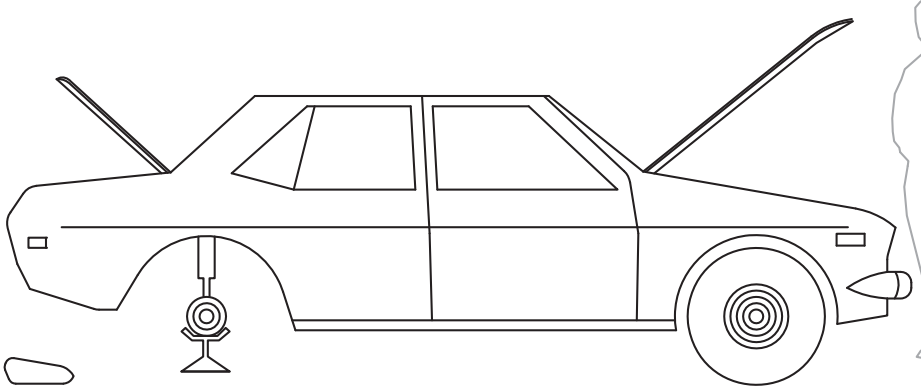
RESURRECTION
MOTOR MUSEUM
AND GALLERY





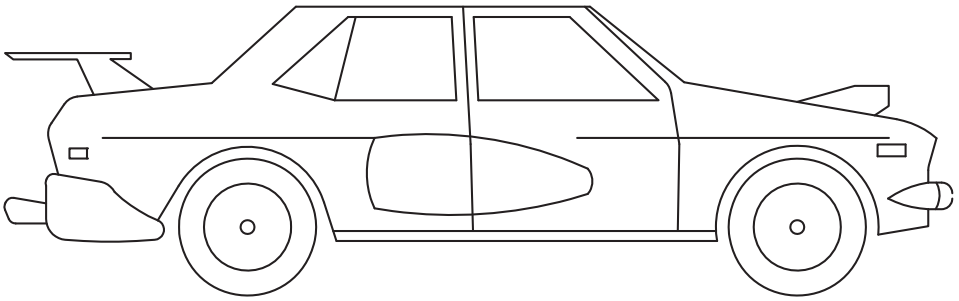














MUSEUM

PRODUCTION





GALLERY

RESURRECTION DIAGRAM.

A transport museum would be an asset to Johannesburg, but more importantly a place of motor vehicle resurrection that houses the work of this motor community would be an asset to Jeppestown which still has a far reaching motor community through out Johannesburg.

C. RESURRECTION

The concept of resurrection is central to the doctrine of many religious convictions. It may refer to the resurrection of biologically dead by divine power or to a purely spiritual resurrection where the 'dead' come to life by means of spiritual awakening and subsequent transformation to a life of holiness. To completely bring something, or someone, back to life is a rare and fantastic phenomenon. As motor cars are often imbued with very human, living characteristics, their resurrection can prove to be a moving experience.

The effects of motor- resurrection can be seen on *Pimp My Ride*, a television program developed by the institute of alternative culture that is MTV. Up to this point the art of car customization was, for the most part, a relationship between a driver and their own car. This show, that selects a deserving car owner to have their clapped out vehicle *pimped out*, has highlighted car customization as a form of contemporary art that has a largely untapped viewer base. The audience is able to engage with the story of both the driver and the vehicle and is allowed witness the radical transformation of the vehicle and the delight of its owner at the end of the show. The personality of the car owner is always the inspiration and driving force for the car's re-imagining; A boot juice bar for a student of nutrition or an on board theater for a drama scholar. The amalgamation of a machine and personality never ceases to amaze this captivated audience, many of whom are too young to drive themselves.

_CUSTOM SHOP/PERFORMANCE/ GALLERY

Franca Sozzani, the editor of Italian Vogue, on specifying a 7 series sedan for BMW individual, stated that the car customization industry offers the opportunity to create the ultimate luxury product; (Biener, 2008). In contrast, the art of automobile resurrection on Jules Street provides an affordable way to gain access to the freedom and opportunity associated with private vehicle ownership. Not just a place to personalize the stitching on the leather upholstery on a luxury vehicle, but a place to make an old car roadworthy again, literally brings the car back to life.

The car customization requires a gallery. A space that is simultaneously a museum displaying the historical and weathered canvasses that are the motorcars destined for pimping, a performance space housing the physical events of panel beating, spray painting and upholstery sewing to name a few and finally a gallery to display a product for viewing. The gallery as a typology is exclusive, although less exclusive than most modern car showrooms, and would need to be engaged with to create a more inviting and accommodating space. MASS MoCA, the Massachusetts Museum of Contemporary Art, aims to create "a place that encourages dynamic interchange between making and presenting art, with galleries turned workshops that let visitors experience the dirty work of art production while exhibits are fabricated." The benefit of this approach is that the spaces created are not pristine and intimidating but rather animated and intriguing. (Crisman, 2007)

BMW has offered many contemporary artists the opportunity to express themselves using the companies' sports cars as canvasses through their BMW Art Car Collection. Taking this a step further was the art performance conceived by the South-African artist Robin Rhode. He moved beyond the precedents of the Art Car collection to a point where the car is no longer just a canvas or object, but itself executing artist. "This work is an expression of painting in action - my hope is to communicate the power and thrill inherent in the creation of art", says Rhode. "For me, the use of an un-traditional paintbrush like a high performance car is a great way to investigate the relationship between emotion, technology and industrial creativity. The development of the picture, this process of formation itself is as important as the completed oeuvre. For this reason the Z4 performance is suggestively titled An Expression of Joy". (BMW press release, 2009)

The striking images painted by the tyre treads on the huge canvas appear self-motivated and impulsive, as if created spontaneously. The performance had been meticulously planned by Rhode through a series of paintings made onto

paper by the artist's hand. BMW SA states that "unlike the legendary action paintings created by Jackson Pollock nothing was left to chance. Jake Scott filmed the complete performance for the TV campaign accompanying the new Z4 Roadster´s launch in 2009. The cinematographer was able to draw on his experience documenting rock concerts in order to deal with the singular character of this particular live performance. "

The space to be created is to be both a gallery and a performance space. The difficulty that arises is how to reconcile public display with private security/risk management. In order to do this will require a richness in the thresholds between public and private space with a varying relationship of visual links, secure space and public space. Level changes and excavation can provide vantage points to view into secure spaces.

BMW ART CARS.

FROM THE TOP DOWN:

Robert Rauschenberg (USA) 1986 BMW 635 CSi
Michael Jagamara Nelson (AUS) 1989 BMW M3 Group A Race Version
Esther Mahlangu (ZA) 1991 BMW 525i
"Your mobile expectations: BMW H2R project"Jeff Koons (USA) 2010 BMW M3 GT2

Below

Robin Rhode: Expression of Joy, BMW Z4 (South Africa) 2009





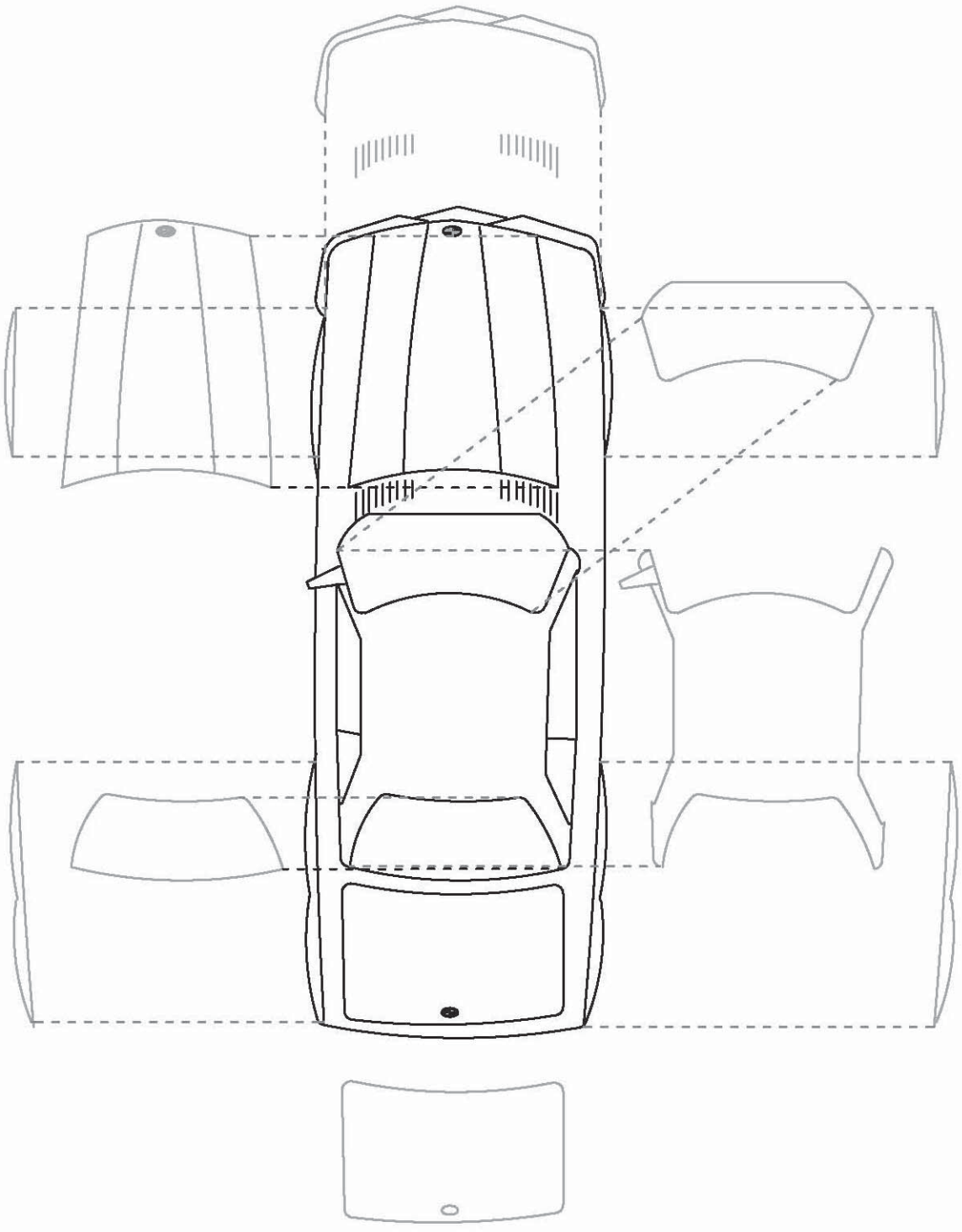






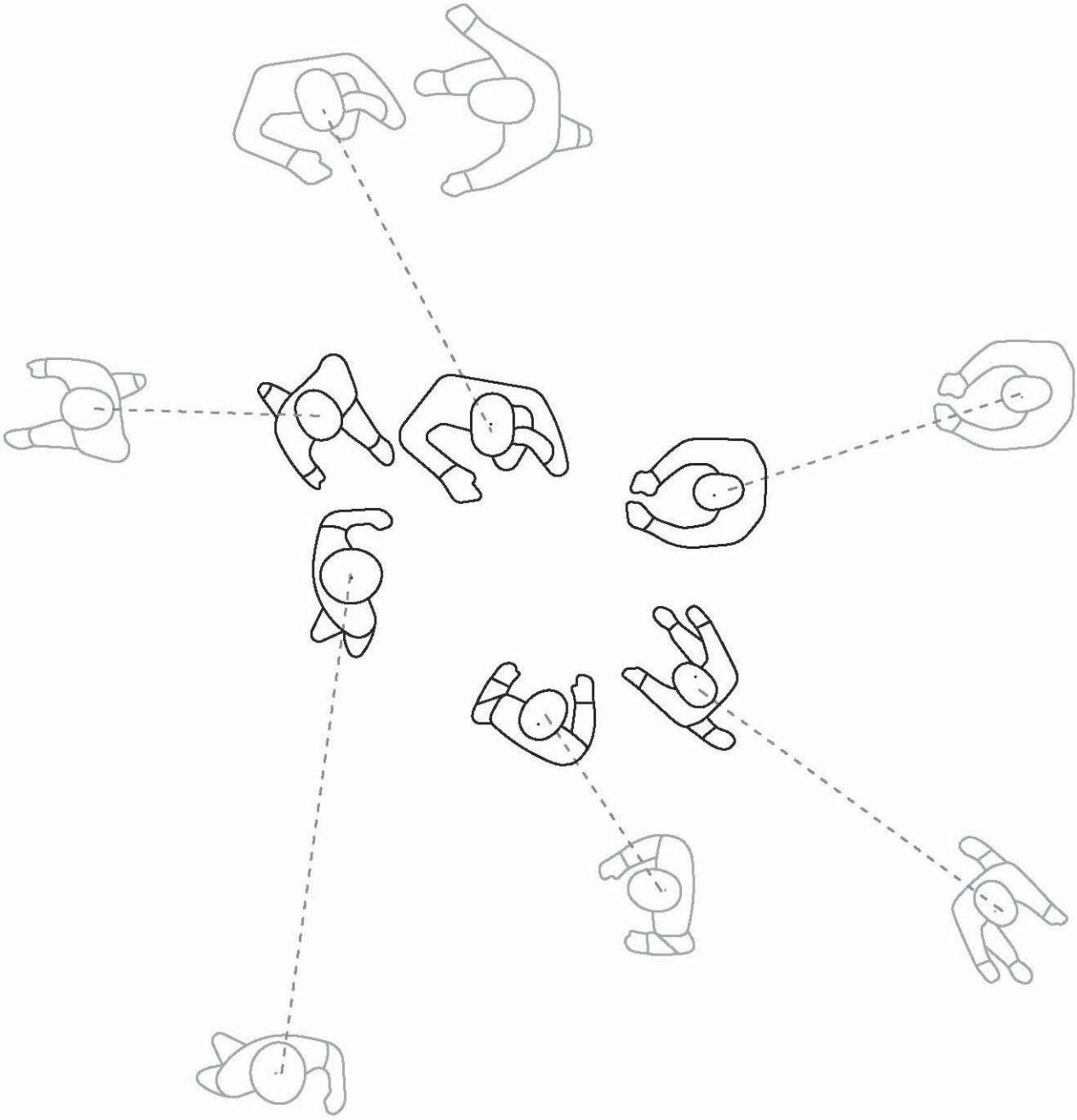
All Images Sourced from:(BMW Press Release, 2010)

9.1 CHARISMATIC CHURCH AND EXHIBITION SPACE AND 9.2 EVENTS SQUARE



CONGREGATION DIAGRAM.

The church and the motor car both have a congregation. By creating a space that works for both it will appeal to a larger public, at a greater frequency.



D. CONGREGATION

Using the motor-car to bring people together for a common purpose is an obsession for many car manufacturers in an effort to align their brand with their client. The opportunity in Jeppestown is that there is a public who can sustain a congregation space between exhibitions. The charismatic church, The Universal Church of the Kingdom of God, will be the concept driver for the design of a very outward industrial church. The development of programme for this building will need to blur the lines of culture and industry, a place that inspires but also serve its community. The procession to and the congregation in the church will be linked, taking the amenities of this space to this community.

_ CHARISMATIC CHURCH

Sam Mockbee utilized the car windshield as a substitute for stained glass in Rural Studio's 1999 chapel. The windshield is very often the most pristine part of a rusting car in a scrap yard. The chapel which utilized 80 windshields from 1980s Chevy Caprice sedans at the cost of $120 "The making of a single building or other artworks from copies of one mass-produced object occurs regularly enough in both architecture and art. Success occurs when the multiple elements merge into an overall form producing a new tactile surface. In the best of circumstances the connotation of both the new form and the old materials heighten the experience of both."(Mockbee, 1999)

The use of automotive parts in the creation of religious spaces is coincidental in terms of the context of this thesis. What is most intriguing is the use of iconography from industrial use rather than that of most religious buildings. The Glass Chapel is seen today as to some extent unsuccessful, the building appears as though may be unused. The success of this design is architectural ingenuity—and the adaptive reuse of parts to inform an entirely new whole, something that would seem appropriate in the context of Jules Street.

The Universal Church of the Kingdom of God is South Africa's fastest growing charismatic church. This institution and the congregation it represents are becoming increasingly familiar with spaces of devotion that are unlike any historical precedents for religious space. On Jules Street the congregation is growing rapidly, and the spaces provided for the congregation are used out of necessity rather than want. Despite the churches popularity there are many critics who believe that the church is little more than a money-making scam, say pastors who have been left to fend for themselves after making a fortune for the church. Instead of questioning the churches profitability (because after all the donations are given to the church at the congregations discretion), the question may be that ; if a contemporary church is an amenity that a congregation will pay for, what are the services that the contemporary church can give in return? These churches already have a very strong relationship with the street where visual and sound connections to the interior are made. Amenities such as crèches and eateries may further integrate this church into its community.



Image Source:(Mockbee, 1999)



'JESUS!' She remarked after seeing a 1970s photo of the Standard bank building that we were standing in front of. I was 1 year old!
"I live just up the road, so I'm here shopping. I come here all the time, but its very dirty."
I enquire about the many new churches on the strip and if she attends or knows anyone who attends them. "I go to the church just here." She points…

INTERVIEW: FAVOURITE NYEMBE,
Age: 41
Occupation: Domestic Worker
Place of residence: St Frusquin Street, Malvern.
Location: Cnr of Jules and Monmouth Streets, 08-03-2010

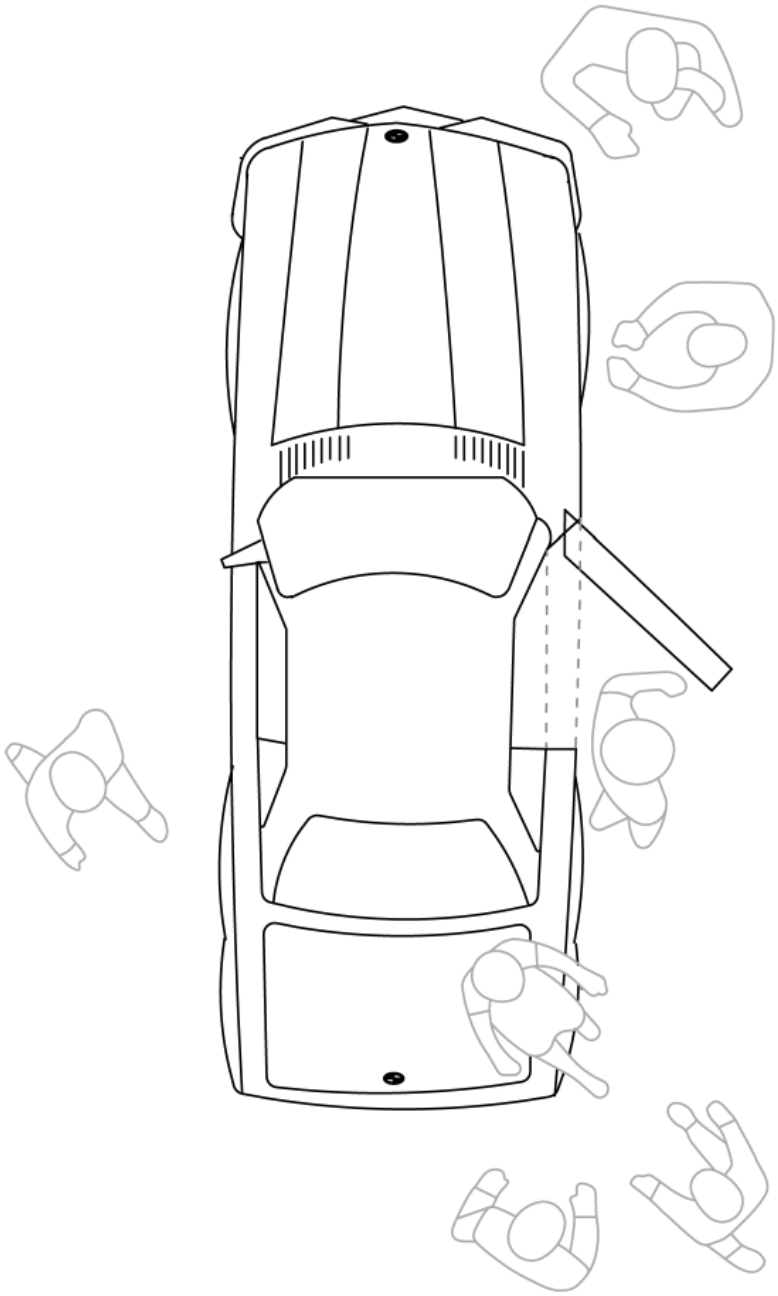
FAVOURITE'S CHURCH

Interviews initiated by showing Jeppestown community members photographs of the area as it was in 1970, a local perspective was made possible.

Above: The church that Favourite Nyembe attends.

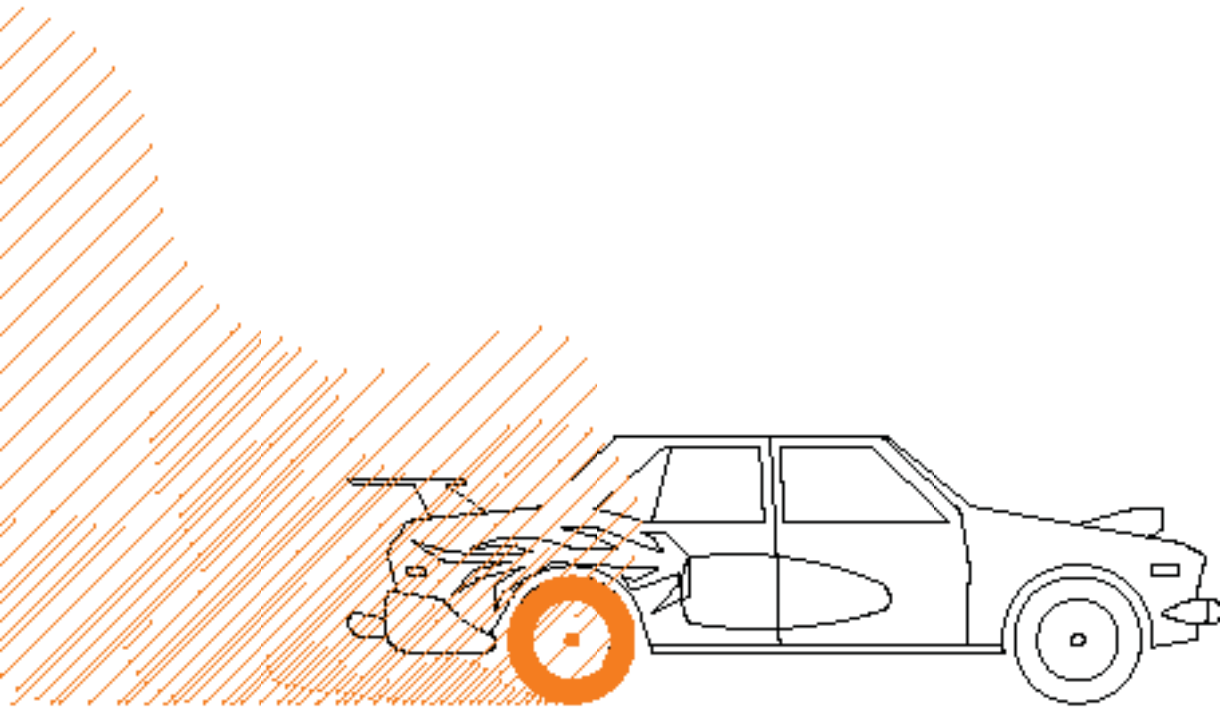
PROCESSION

10.0 DINING HALL +SHISA-NYAMA (BUY AND BRAAI) +THE URBAN GASKET



PROCESSION DIAGRAM.

A motor car can bring people together. The procession of a car provides spectacle and entertainment, but also brings together a local community and a larger urban public and connects them through joy.



E. PROCESSION

"Even the churches in suburban Detroit require vast amounts of parking spaces, as though worshippers need a sports-utility vehicle to sing hosanna. The majestic charm of the older churches in traditional Detroit is that they were part of, not remote from, the houses and shops of their parishioners, who could walk to them with ease. Driving to church in suburban Detroit feels much the same as driving to the mall." (Oswald, 2006) The churches of Jules Street have a very different relationship to cars than most churches in Johannesburg. The nature of the city, and the private transportation that Johannesburg relies on, means that the church procession occurs within the car itself and the parking lot, which is attached to most contemporary churches, replaces the church square. Surprisingly the churches of Jules Street, in the motor district, do not adopt this relationship between the motor car and the church. Members of the community, most of whom do not own cars, walk to church and meet fellow worshipers on the street and on the pavement outside the church doors.

On visiting one of the three Shisa-nyamas, (a recreational buy and braai facility) on Jules Street on a Friday afternoon, the incredible social effects of a hard environment can be felt. Author Jeremy Herron, on discussing the social environments of modern day Detroit recalls a popular T-shirt that reads: 'I'm so bad I Party in Detroit' (Oswald 2006). A place that's so bad, it's cool. It speaks of street credibility … something I would require more of as I was told by a Malvern resident, if I were to visit this place at night. Alongside the development churches on the street there is an emerging bar culture. Adding to this is the street car drag-racing. The Pure and Cool Roadhouse on Stanhope Road- the eastern extension of Jules Street is well known as the venue for illegal street racing. This spectacle is, of course, illegal for good reason; the show-boating and need-for-speed has taken many victims, here as well as many other venues of this sort in South Africa; the allure of it all is, undoubtedly, very enticing. The street offers a far more authentic space for viewing the car in motion, a venue that removes the car from the street would find it difficult to compete.

_ STREET ARENA/ SHISA-NYAMA/DRAG STRIP

As this thesis is based on the interaction between people it would be an oversight for the street that inspired this process to remain an adjacency of vehicular traffic in its lanes and pedestrian traffic on the sidewalks. The street has the potential to become an arena, for that of street racing and display, product launches and social interaction between the community of Jules Street and those visiting for events. Those activities can become instigators in the hard-scaping between the building and street. Factors of site lines for spectators and spectator safety combined with the constraints of vehicle and pedestrian movement can inform a new street-scape.



SHISA-NYAMA: HOT MEAT.

In 1970 one took their family to the roadhouse,in 1990 one went to a drive through, in 2010 the shisa-nyama is the automotive, culinary destination of choice. These buy and braai facilities are growing in numbers throughout Johannesburg. The motorcar becomes the furniture and sound system of an outdoor restaurant.

IN CONCLUSION....PART 3

AFTER-LIFE.

DEVOTION.

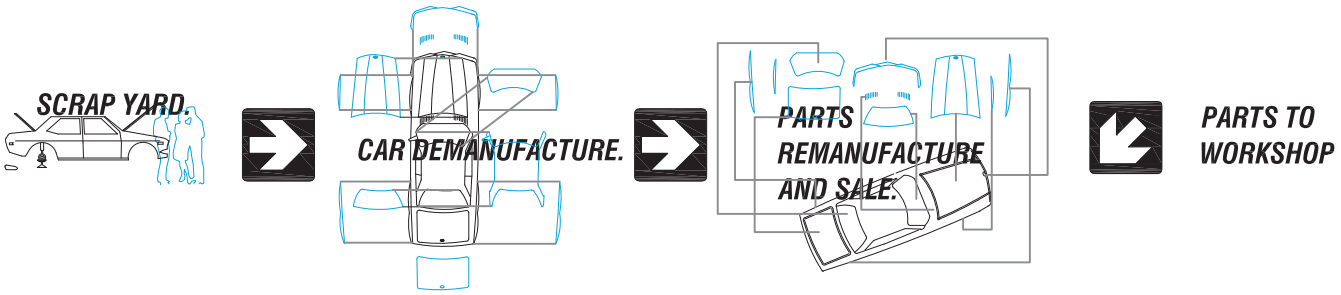
RESSURECTION.

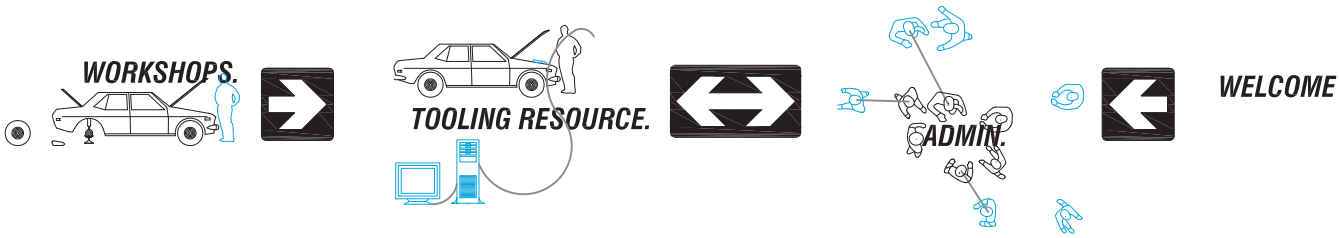
CONGREGATION.

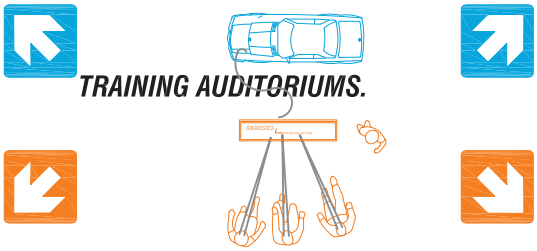
PROCESSION.

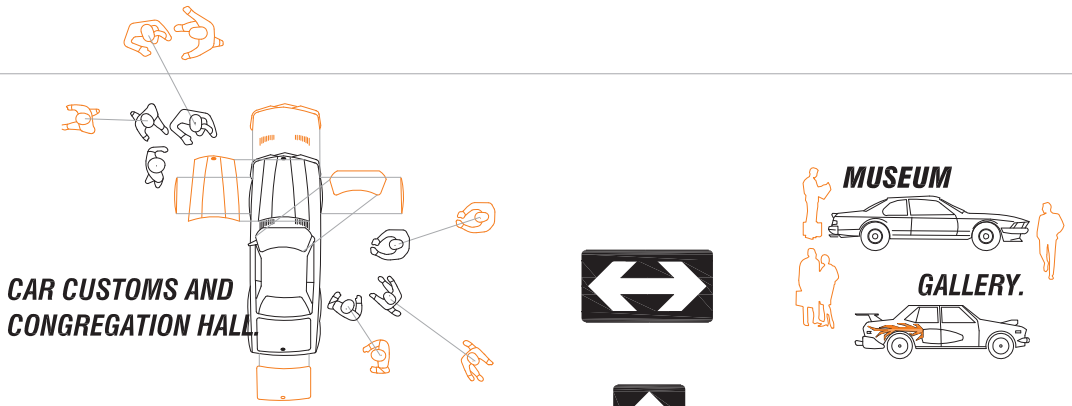
PROGRAMME RELATIONSHIP DIAGRAM.

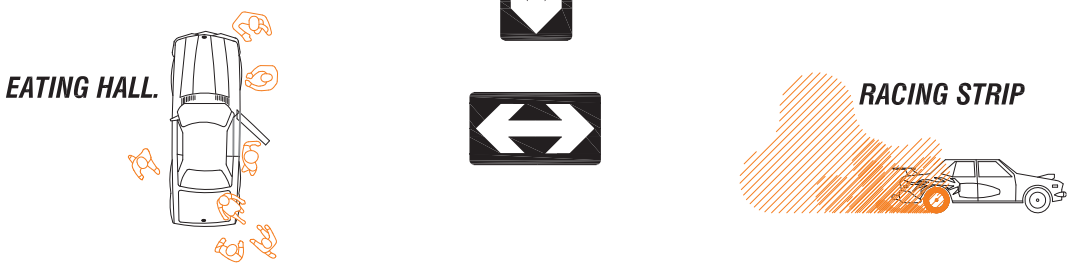
Merging the linear re-production line with a cultural centre







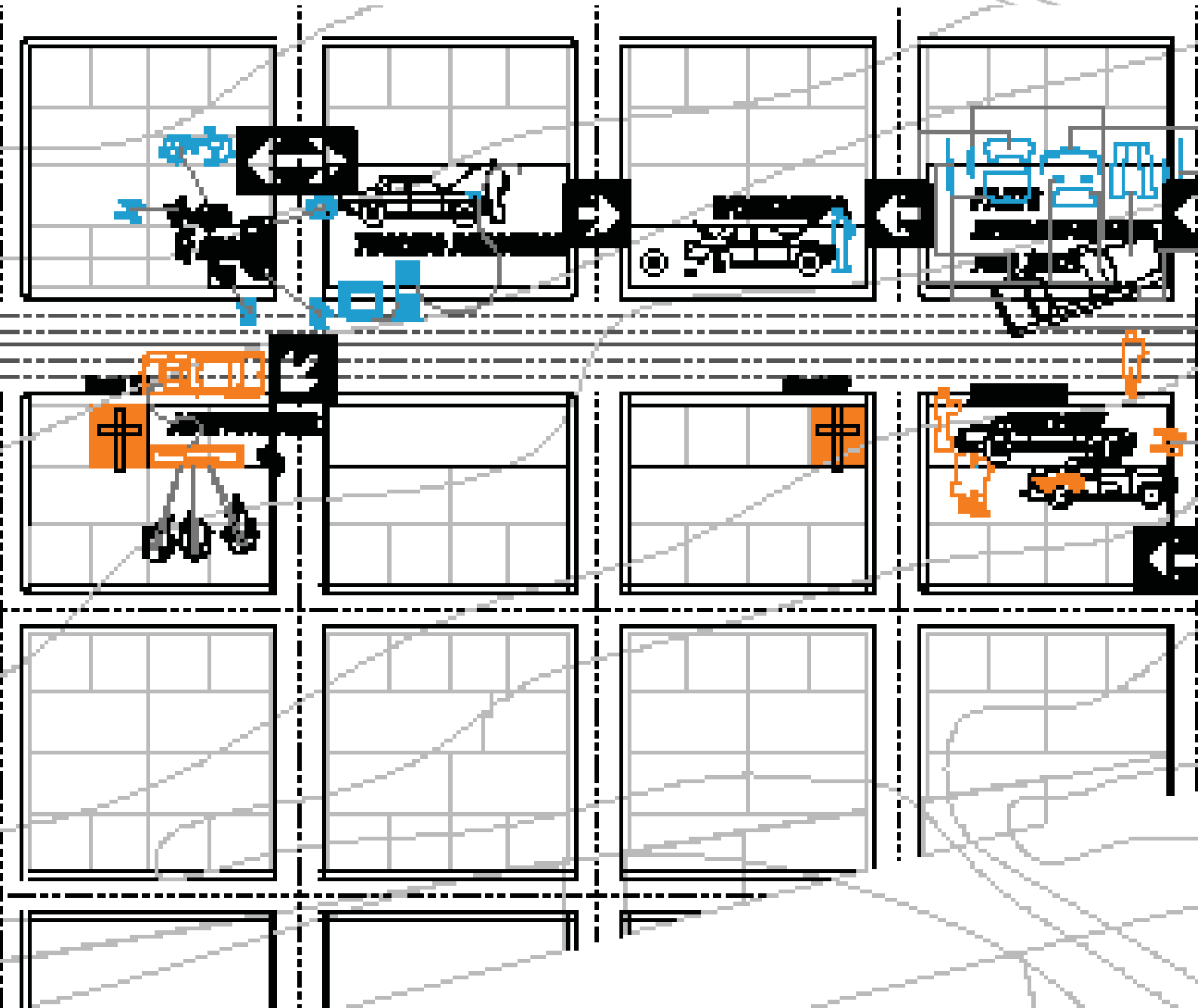




TO A LAND OF PRIESTS AND PETROL-HEADS

CONCLUSION CONTINUED...

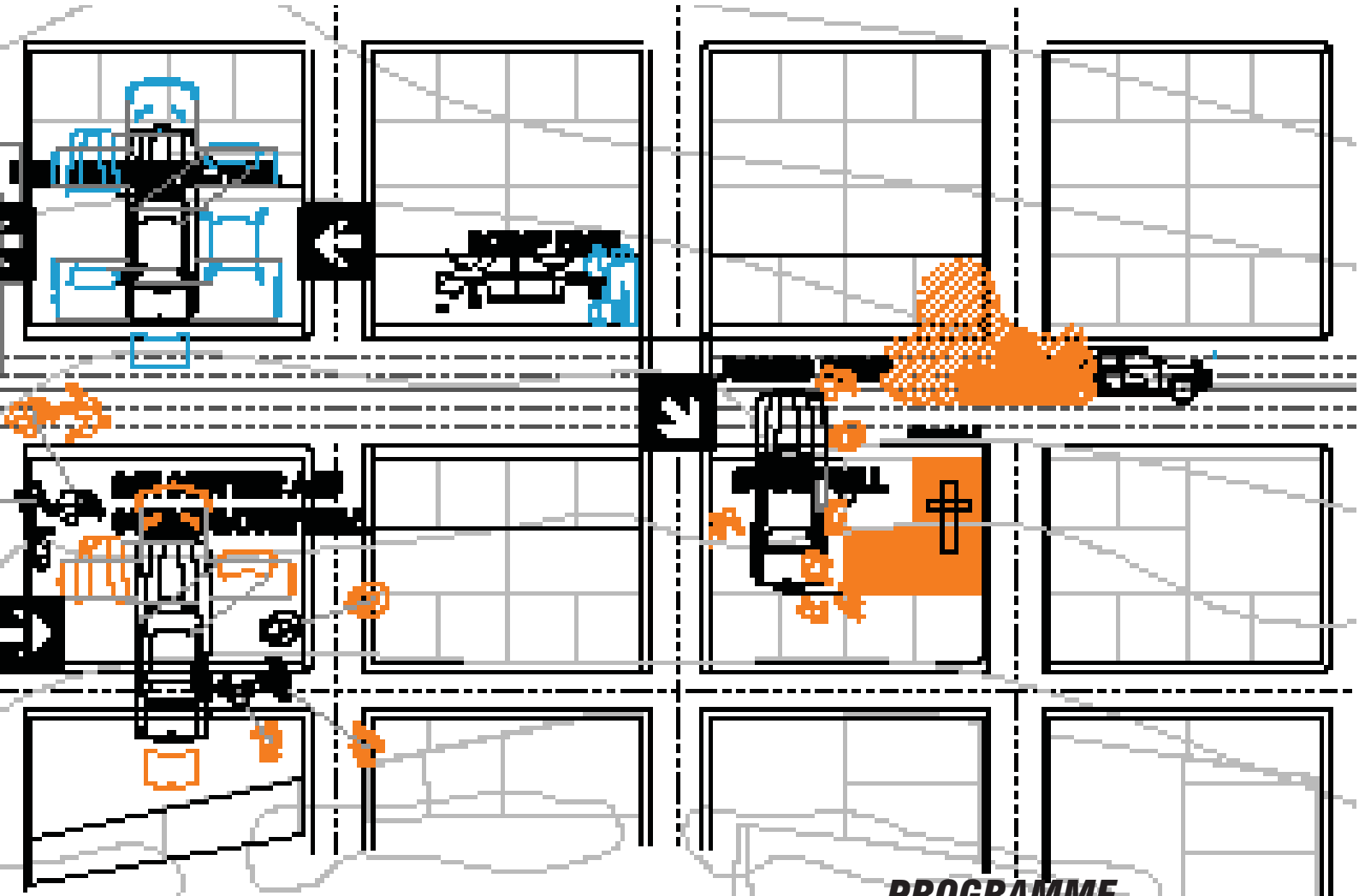




1 INDUSTRIAL PRODUCTION-LINE

3 CULTURAL CENTRES

AFFILIATED TO 3 EXISTING CHURCHES



PROGRAMME ON SITE

Mediating the constraints of available land portions and relationships between programme.

DESIGN DEVELOP-MENT

MAKING A SOULFUL SHED

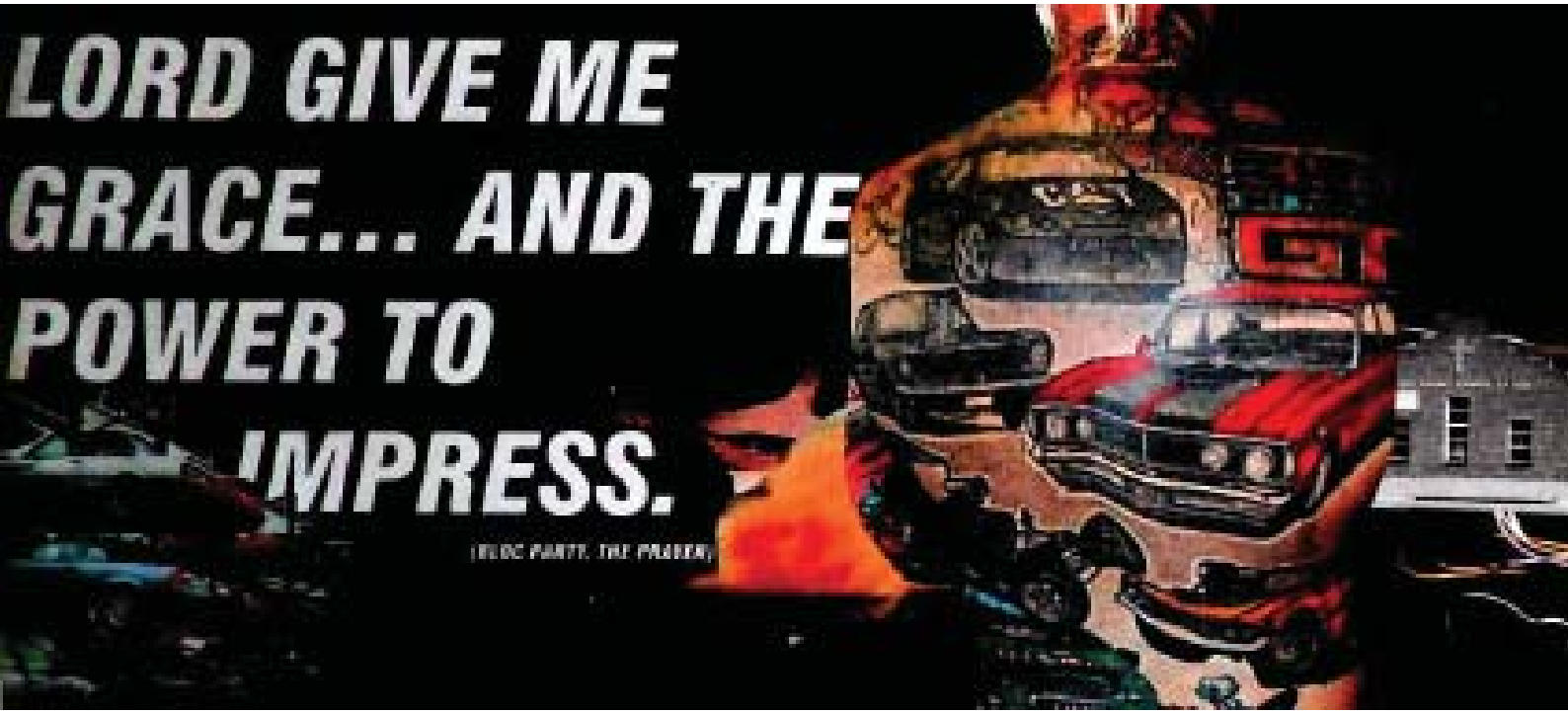
PART 4

INTERSECTIONS THAT JOLT

In this hypersensitive society neither of these cultural entities, the automobile nor the church, can be adjusted without the perspective of the other. A mutual consideration between the attitudes of each community allows for cross-pollination; the autotecture inherits sentiment appropriate to the new ethos of the motorcar and the church aligns itself to be the centre of contemporary living.

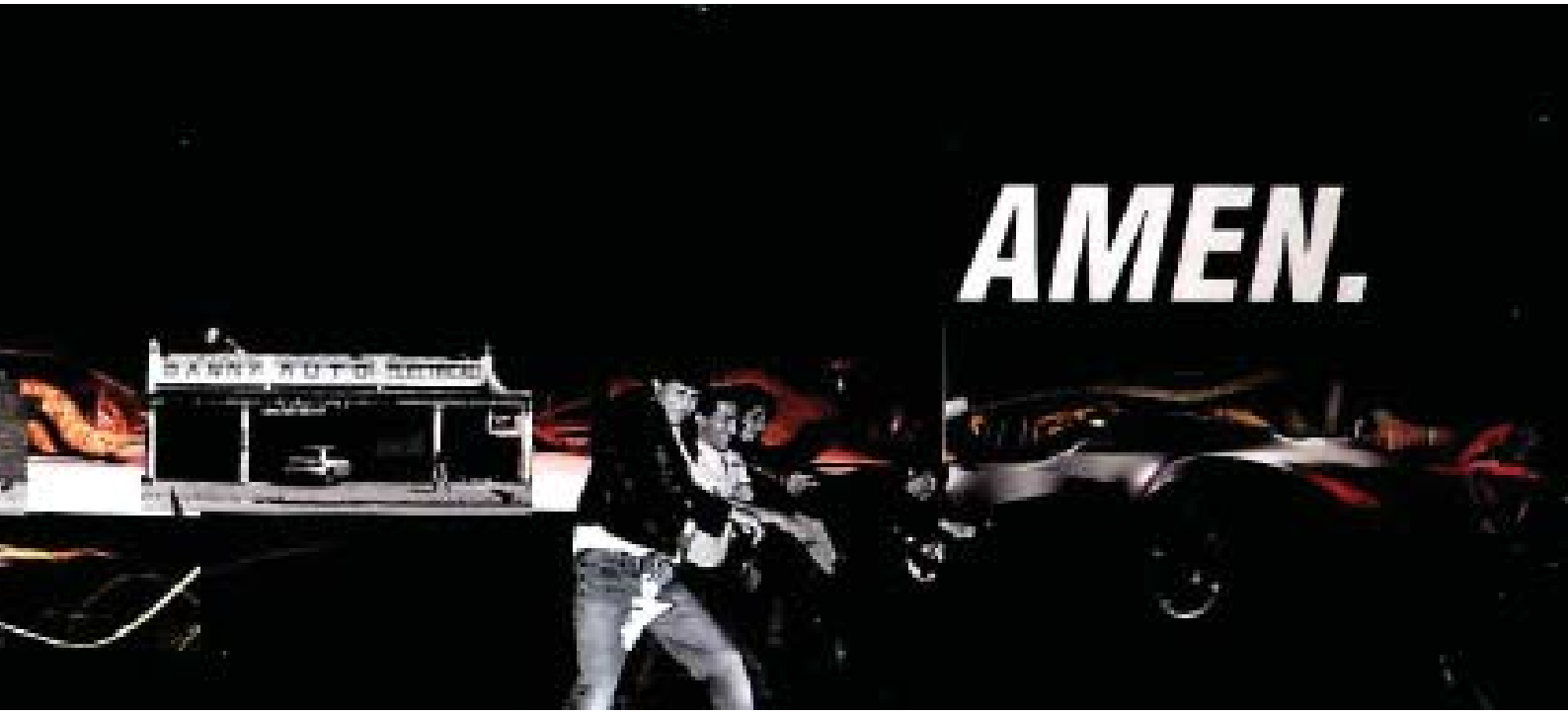
The opening line of this essay presents a jolt; to a land of priests and petrol-heads. The word jolt, an emotional shock or a sharp reminder, defines the experience of this place; a place where hi-tech technology meets low-tech ingenuity, face to face. This thesis is to engage with compatibilities and incompatibilities of clashing people and machines, culture and industry, hi-tech and low-tech with regard to both building's programmatic mix as well as it's architectural expression. The site selected for development will consolidate vacant, under used and under-developed plots of land that run parallel to each other on both sides of Jules Street. A collection buildings on both sides of the street will be the starting point for displaying the tension that underpins this line of investigation. The resources of the car brand meet the ingenuity of the petrol head in the future-museum, workshop, showroom, gallery and church of the automobile.

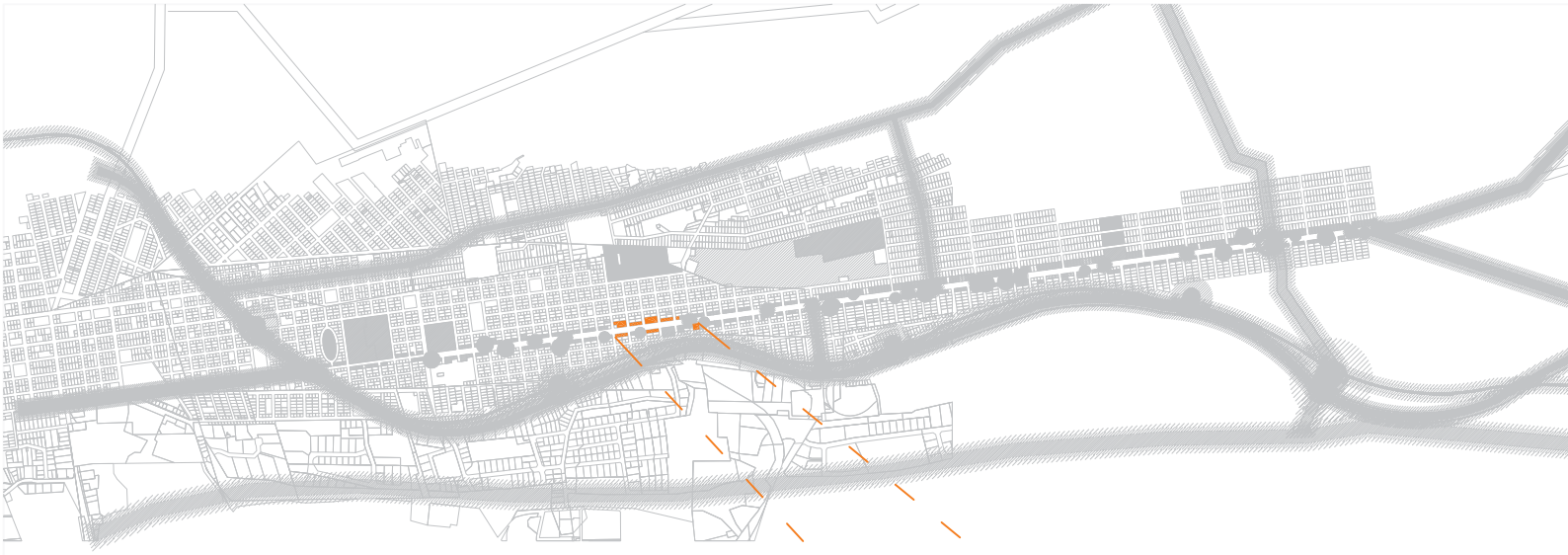
A. VISION IMAGE EXPLORING THE SPIRIT OF THIS PLACE



AN ALTERNATIVE HIGH PRIEST SURVEYS HIS KINGDOM

The passion of this petrol-head can be read on his skin. His dilemma, mediating the aftermarket motor industry (to his left) and the future of mobility on his right. The answer lies right in front of him, the adjacency of culture and industry.


AMEN.



energy mapping of jules st and surrounds. POTENTIAL SITES CURRENTLY VACANT OR IN A STATE OF DISUSE INDICATED IN ORANGE.

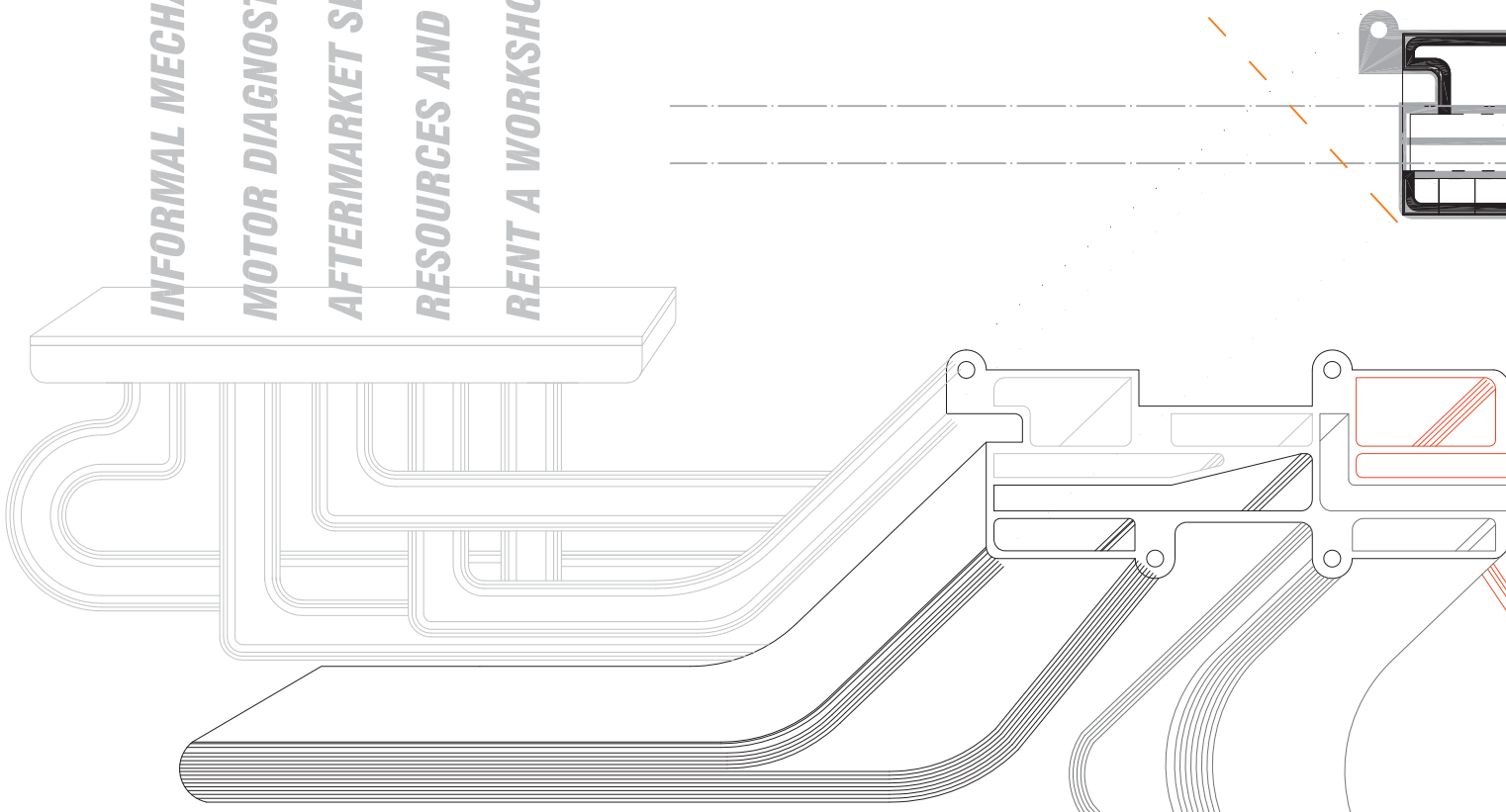
INFORMAL MECHANIC

MOTOR DIAGNOSTICS

AFTERMARKET SERVICE

RESOURCES AND TRAINING

RENT A WORKSHOP



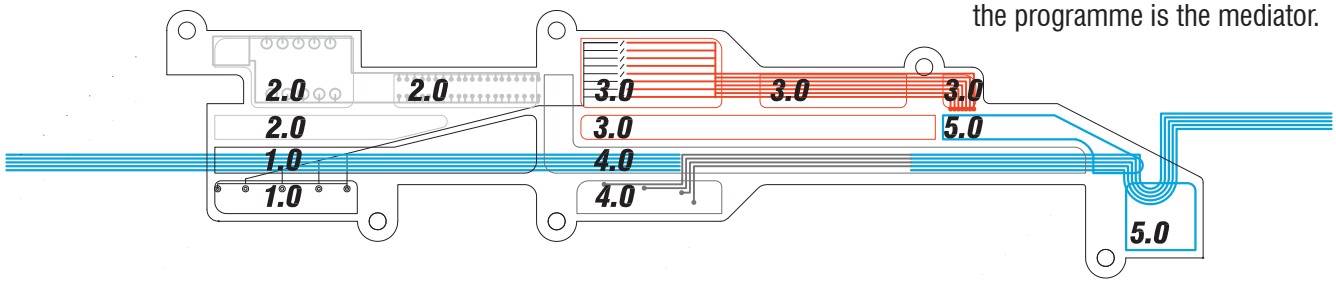
BREAKER YARD, CAR RECYCLING

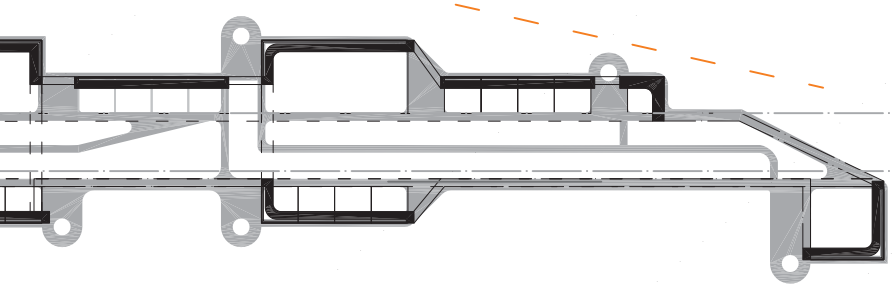
GENERATING A PROGRAMMATIC 'GASKET'. A DEVICE THAT BOTH DIVIDES AND CONNECTS COMPONENTS OF PROGRAMME.

B. MEDIATING PLACE AND PROGRAMME

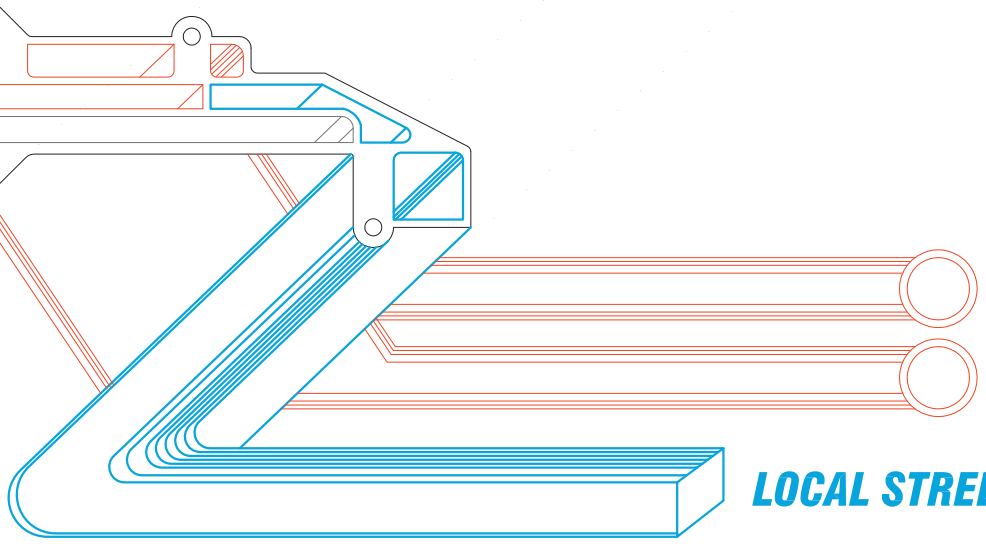
URBAN GASKET

A gasket is a seal used in the engines of a motor vehicle. It is an element that mediates and accounts for discrepancies between two parts. For this thesis the gasket is a metaphor for the programming of this thesis, every activity is inspired by the site and enhanced through built form, where the programme is the mediator.





JULES STREET



JUST IN TIME SECOND HAND PARTS PROCESSING AND SALES

LOCAL STREET RACING, SHISA NYAMA

PIMP MY RIDE, CAR CUSTOMISATION AND DISPLAY

C. AREAS SCHEDULE

PROGRAMME BREAK DOWN.

Defining spaces through m2, volume, users and spacial description

Devotion Workshop and Resource Centre

Building TYPE		m2	No of People	Volume	Description
Street facing workshop pods		4x7x20 840m2	20	6-10m	repairs
	wheel alignment	44m2	2		
	tyre stations	88m2	4		
	exhausts	44m2	2		
	shocks	44m2	2		
Side-on long duration workshops		3.6x9x12 486m2	12	6-10m	engine repairs, electrical repairs
basic tooling storage and dispensary		100m2	2	4m	tooling dispensary, plug-ins for workshop hubs
30	tooling trolley	90m2		4	
2	ac servicer	10m2		4	
2	battery station	10m2		4	
	electric tooling	60m2		4	
Reception		20m2	2	4m	
Interactive Waiting Lounge		60m2	10	6m	Lounge and Display Zone
Administration Office		30m2	2	4m	
Car Wash Bays		75m2	5	6m	Oil Sumped, Water Recycling
Holding Area 20 bays					
Ablutions public and Staff					
	male: 3wc, 2urinals	10m2		3	
	whb, 3	9m2		3	
	female: 3wc	6m2		3	
	whb, 3	9m2		3	

Resource Centre

Diagnostics Area			10	8m	Drive in, car plugin, connect up and electronic fix
	fuel injection test	44m2	2	8	
	diagnostic testers	88m2	4	8	
	emissions analysis	44m2	2	8	
	engine testing system	88m2	4	8	

Training Centre

Training Auditorium	50m2	20	10m	Workbenches around Motorcar
Research Archives/ multimedia library	50m2			
Tea kitchen	10m2			
Ablutions				
Meeting room/hall	150m2	100	5m	Community and club Meetings

Shared Facilities

Changerooms

Building TYPE		m2	No of People	Volume	Description
Male Changerooms	male: 3wc, 2urinals	10m2		3	
	3whb, 5 showers	30m2		3	
Female Changerooms	female: 5wc,	10m2		3	
	3whb, 5 showers	30m2		3	
Cleaning Cupboards					

Dining

Refectory			100	5m	Indoor Outdoor, Renovate Existing
	seating	84m2			
	servery	45m2			trays, bread, cold meats, hot foods, beverages, tea/coffee, cutlery
	counter seating	30m2			
	patio	50m2			
Kitchen			10	5m	Renovate Existing
	goods entry			6	
	cold stores	10m2		3	
	dry stores	20m2		3	
	recycling	10m2		3	
	refuse	10m2		3	
	crockery store	10m2		3	
Chefs Office		16m2			
Ablutions				3m	
	male: 3wc, 3urinals	12m2			

	3whb,	10m2			
	female: 4wc,	10m2			
	3whb,	10m2			

Production, Gallery, Museum

Briefing Room: Past	75m2	50	5m	Shows site, car and current projects history
materials gallery	500m2			for visitors and clients
tour route				
hall of heros	500m2		10m	display current and past race car champions, living exhibit
De-briefing Room:Future	75m2	50	5m	Shows site, car and current projects future
Exhibition Spaces	200m2	4x50	10m	Explains the processes
Co-ordinators Office	30m2	2	3m	
Multimedia Center	100m2		8m	design/pimp a car, see it being 'built'
Ablutions Visitors	40m2		3m	

Congregation

Administration		2	5m	
Congregation Space	700m2	500	15m	Multi-functional
Chair Store	100m2	4x125 chairs		
Quiet Room, Cry Chapel	56m2	2x20	10m	Sound proof, undobstructed Views
Lobby	?	500	?	
Choir and Musician area	100m2	20	7m	Faces both the street and church interior
Backstage/Alter	150m2	5	7m	
Sound and display room	10m2	1	3m	
Refreshments/ tea kitchen	30m2	10	5m	
Ablutions				
male: 3wc, 10urinals	30m2			
10whb,	20m2			
female: 11wc,	20m2			
10whb,	10m2			

Panelbeating

			6-10m	
Engineer Shop	88m2	8	6-10m	
Metalwork Dissembly,	22m2	2	6-10m	
Bodywork Bay	44m2	2	6-10m	
Assembly repair	22m2	2	6-10m	
Foremans Office	16m2			
Storeroom	20m2	~	5m	

Spraypainting

			6-10m	
Fire Wall		~	6-10m	
Spray Room/Booth	22m2	2	6-10m	
Painter Store	20m2	~	5m	
Compressor Room	10m2	~	3m	
Polishing Area	88m2	2	6m	
Foremans Office	16m2			
tooling store	20m2	~	5m	

Accessories, Interiors and Electronics

		6-10m
sewing room	25m2	
Foremans Office	16m2	
Storeroom Tools	50m2	
Materials Storeroom	100m2	
electronics	88m2	
work space	88m2	

Recycling Centre

Building TYPE	m2	No of People	Volume	Description
2nd Hand Car Purchasing Office	30m2	2	3m	trolley pusher accomodation...buy and sell
Car Storage	750m2	50cars		vertical +roof storage
Cleaning Bays/Car Wash	75m2	5	4m	oil sump, filter and recycle
Co-ordinators Office	32m2			
Dis-Assembly Plant			10m	
Breaker Bays	175m2	8	6m	

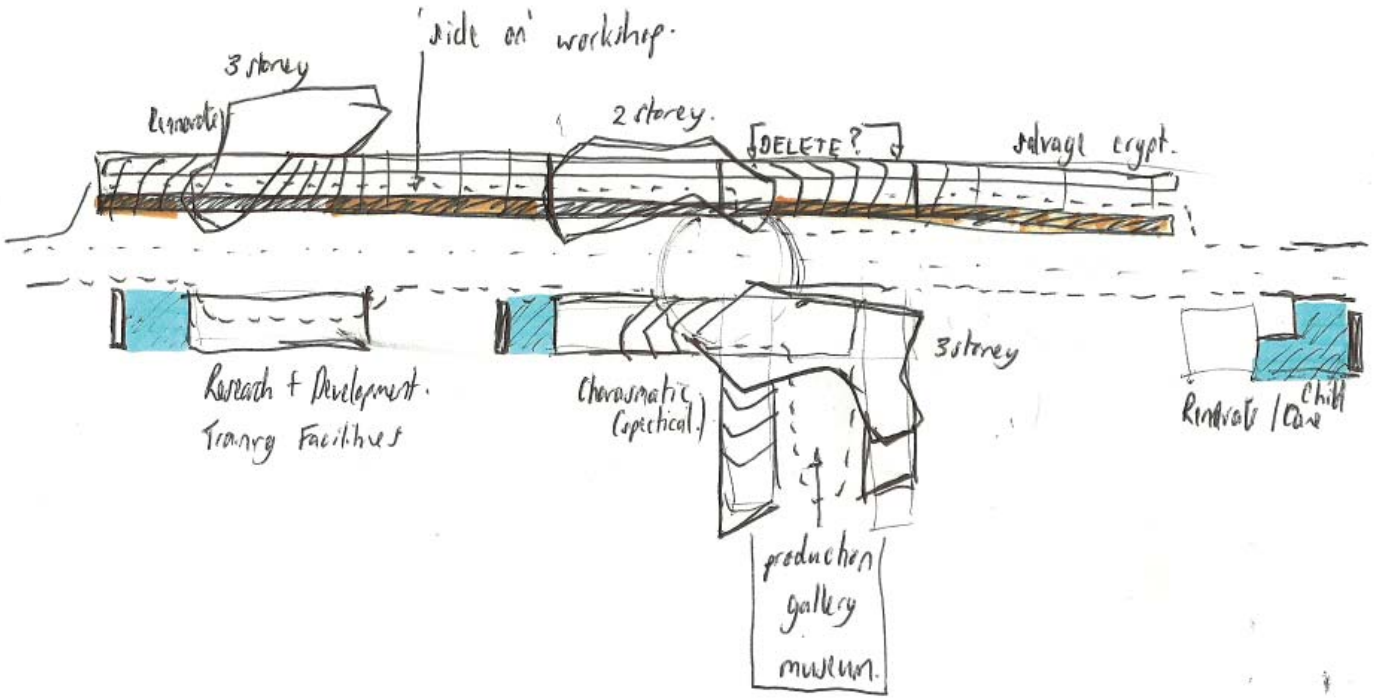
Washing Stalls	50m2	4	4m	
Tool Storage Room	30m2		5m	
Recycling Bins	100m2		8m	steel, glass, plastic, refuse
Testing Plant	160m2	16	15m	
test stations	10m 2 each			overhead suspended tooling harness
Packaging Area	40m2	4	10m	

Warehouse/Supermarket	250m2 each		10m	
Dispensary	45m2	4	10m	for smaller/ expensive goods…adjustable
Tellars	40m2	2	5m	
Dispach	30m2	2	10m	larger network of buyers
Loading zone				
Sales Office	32m2			

Racing Strip and Street Arena

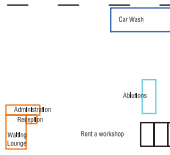
Building TYPE	**m2**	**No of People**	**Volume**	**Description**
the tree	500m length for racing		2	racing lights, 5 bulb
the finishline	500m length for braking		2	computerised finish line
Pits Area				
car inspection				
Racers prep area				
spectator seating		500		
pit ablutions				
removable road barracades				waterfilled, detour signs
roadside barriers and bollards				concrete and steel, standard and custom
public ablutions		?		
Shisa Nyama				
braai areas	160m2		40	
meat cold store				
seating, benches				
Management and Sales	30m2			
Cleaning Area				

D. ON SITE MASSING



BASEMENT NORTH

GRND FLOOR NORTH



1st FLOOR NORTH

1st FLOOR SOUTH



GRND FLOOR SOUTH

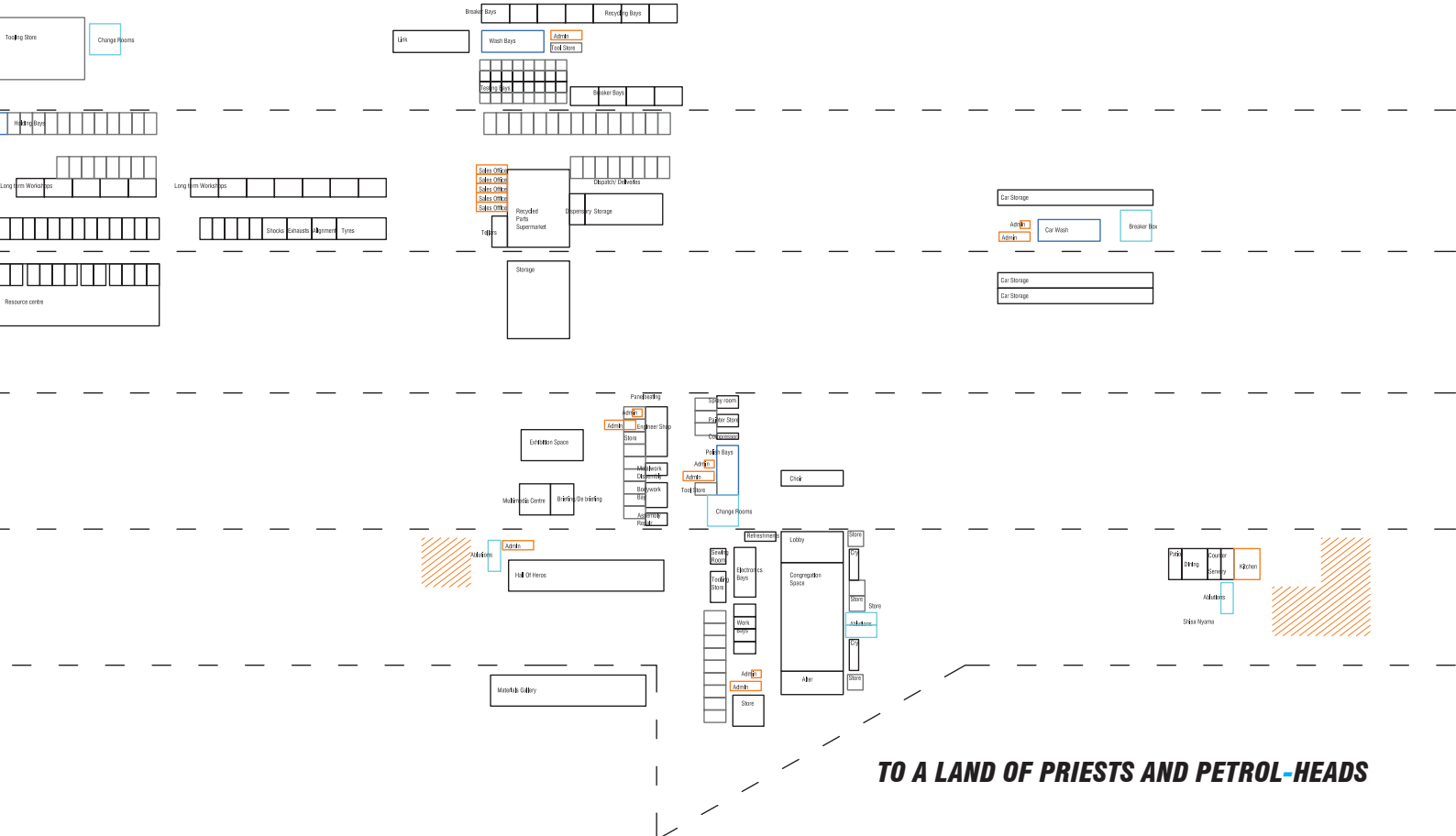
BASEMENT SOUTH



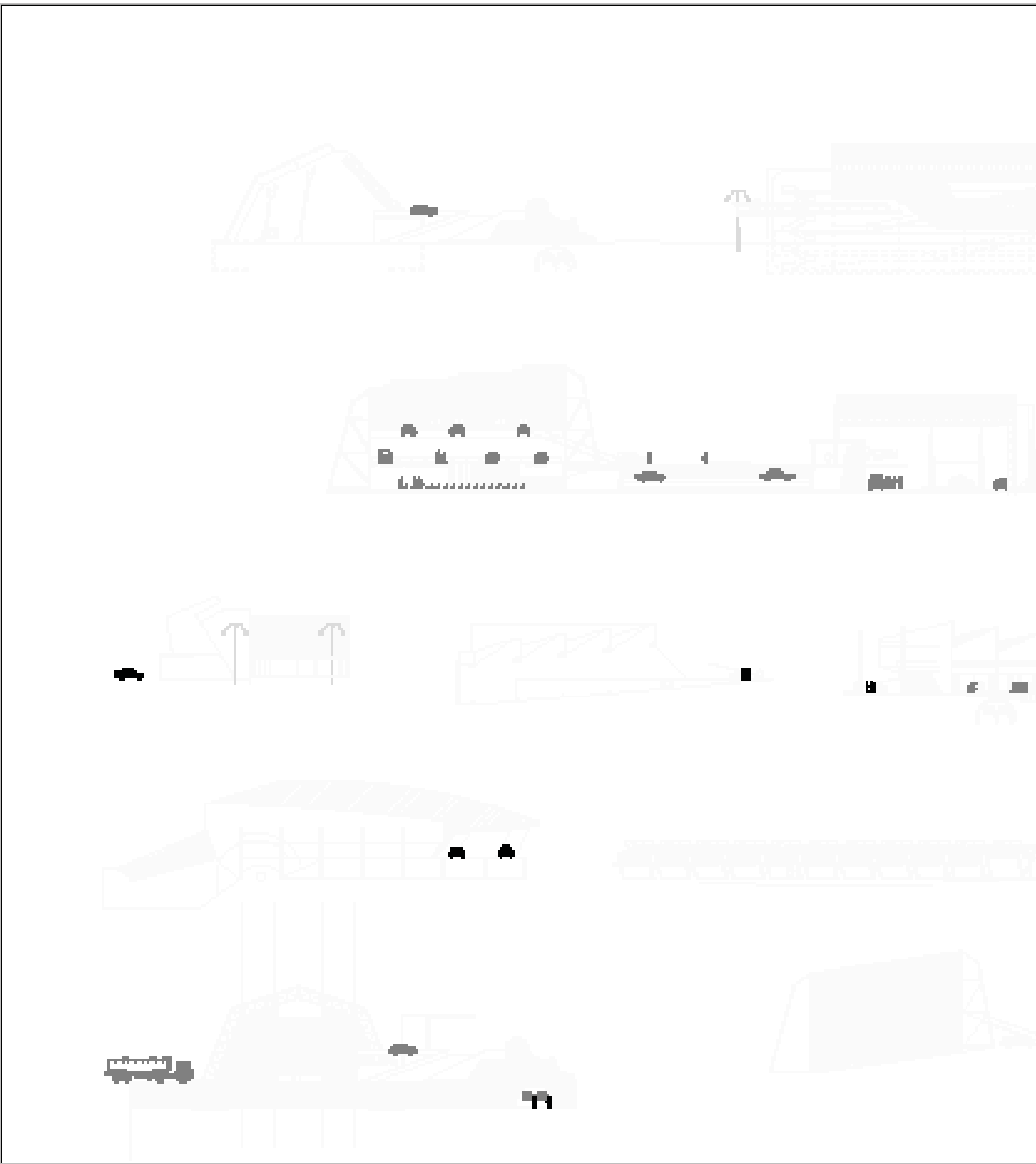
A TIGHT FIT

The programmatic choices posed two problems: The limited available land, and the vertical scale of the proposed programme next to the existing residential.

The Basement levels create extra floor space while still keeping the buildings at a residential scale



E. EXPLORING FORM

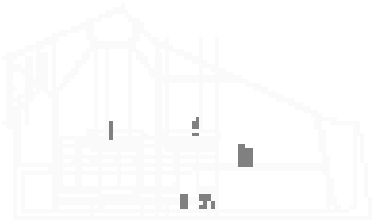


THE HUMBLE SHED

Condensed onto these pages are investigations into structure, form and volume. The constant amongst the exploration was the adaptability of the humble shed, the same adaptability that made this thesis possible.



















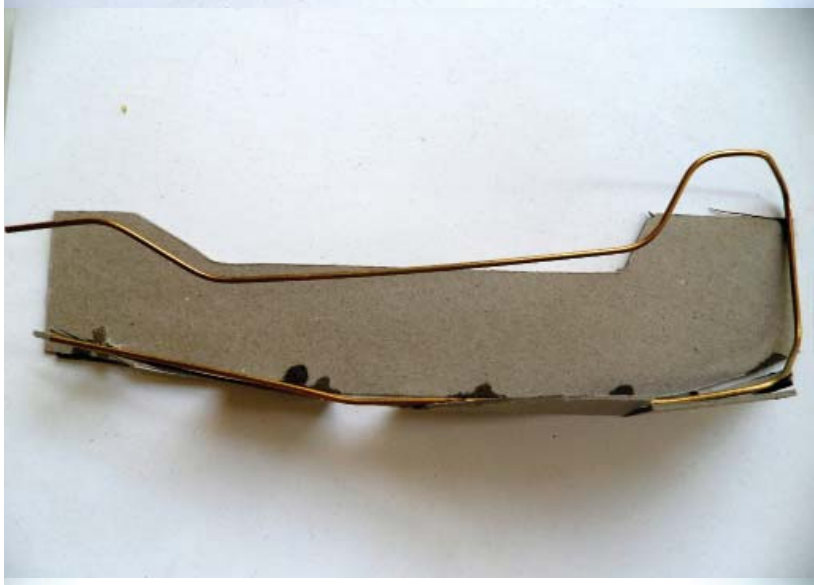


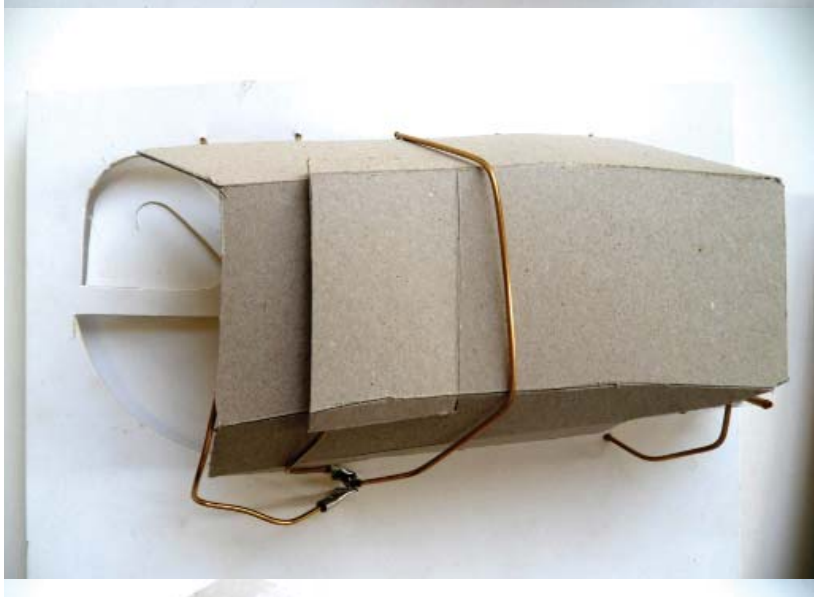


EXPLORING SOUL

Left, Early concept models that attempted to bring about a feeling of soul. The models, made from recycled car parts, used light and shadow to create space.







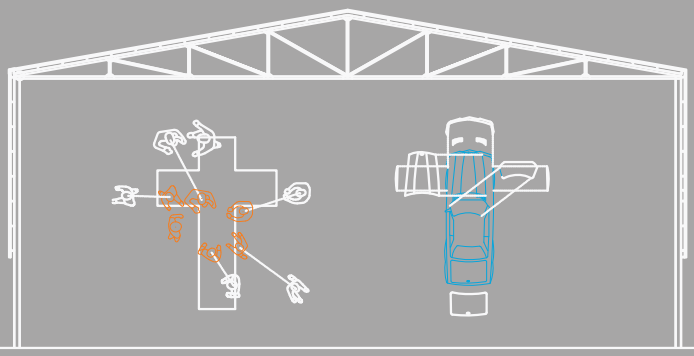


EXPLORING SHED

Investigating, through the use of models, the relationship between the industrial shed typology that is used and the soul and ethos of this project.

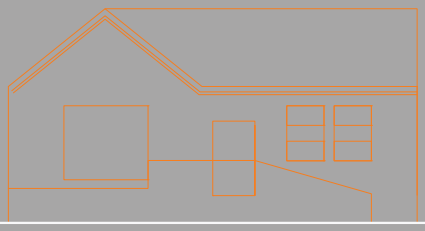
THE FLEXIBLE SHED

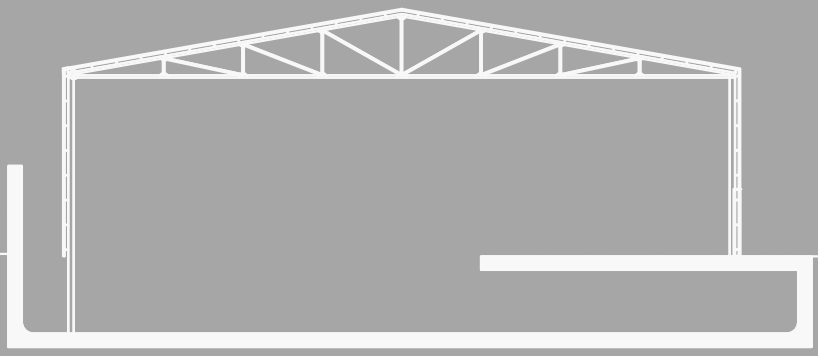
Clear volumes can be easily adapted for both industrial and cultural functions



THE HUMBLE SHED

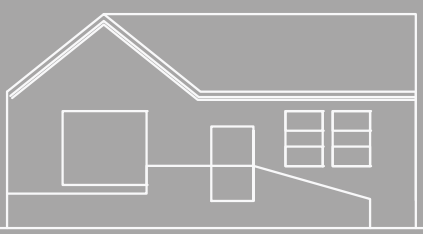
Sinking the shed into a basement brings the buildings down to the scale of surrounding residential.

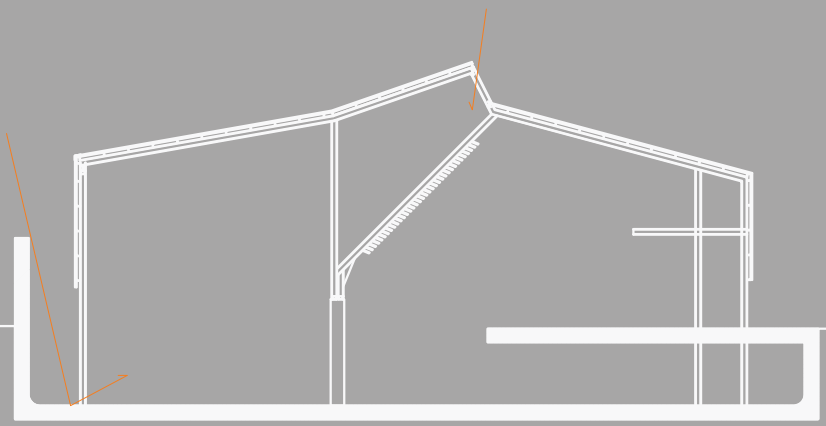




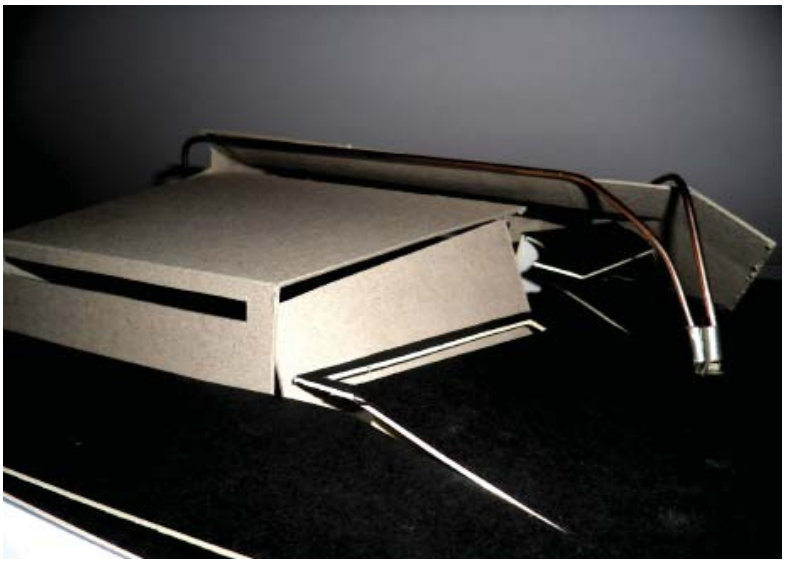
THE SOULFUL SHED

By adjusting the sections of the buildings the internal qualities of light can be explored .





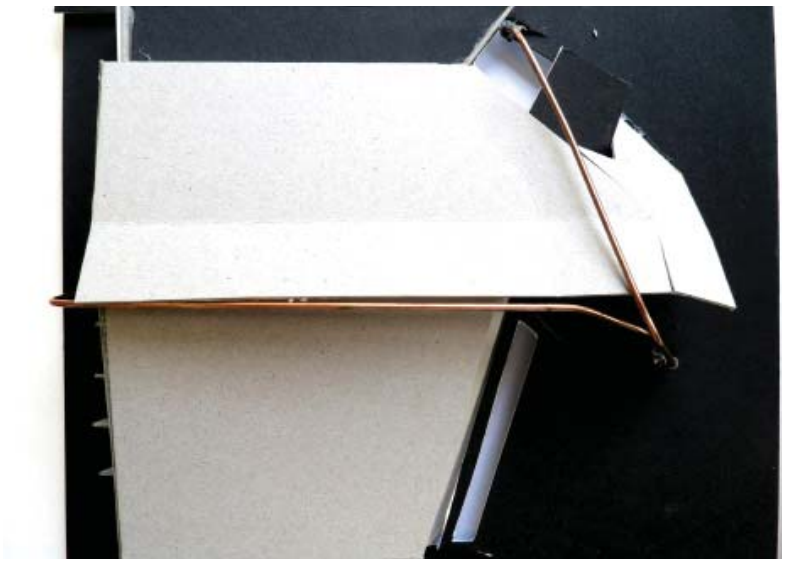




3 DESIGN PRINCIPLES

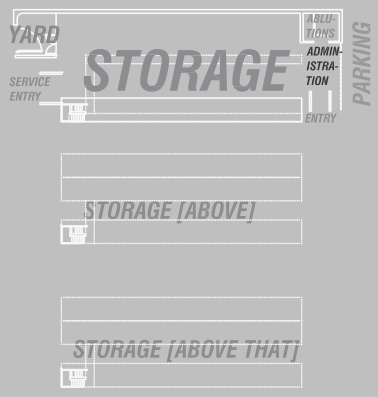
The model pictured on the right adopts the 3 design principles used to evolve the existing shed typology (pictured above)

1. Be Flexible
2. Be Humble
3. Be Soulful

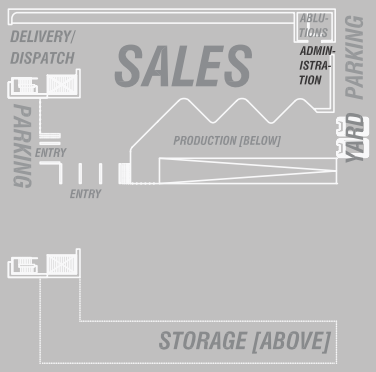


IN CONCLUSION... PART 4

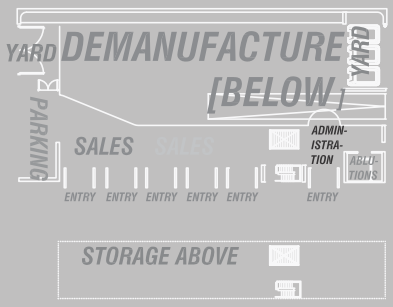
1.0 THE STORAGE SHED



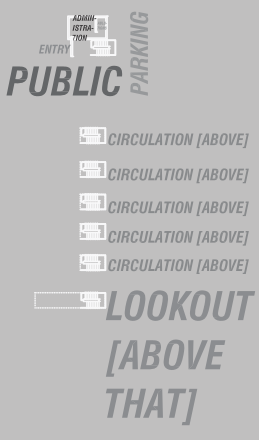
2.0 THE SALES SHED



3.0 THE DEMANUFACTURE SHED



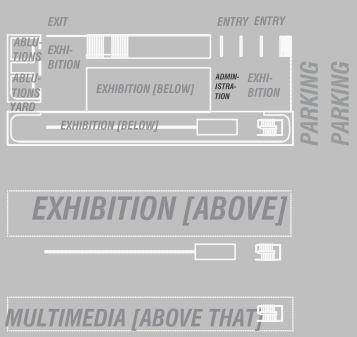
6.0 THE WELCOME SHED



7.0 THE MEETING SHED



8.0 THE DISPLAY SHED

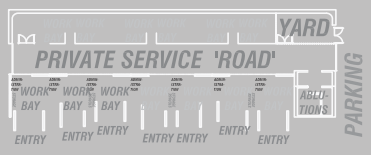


BASED ON THE PRINCIPLES OF INDUSTRIAL SPACE MAKING.

Industrial buildings are made viable through the flexibility and adaptability of their main volume. As important as the main volumes are the service spaces they require.

These 10 diagrams show the relationships between the served and service space for 10 different programmes. The diagrams also show the need for a public interface for the buildings, which is something that the existing ‘industrial park’ typology doesn’t account for.

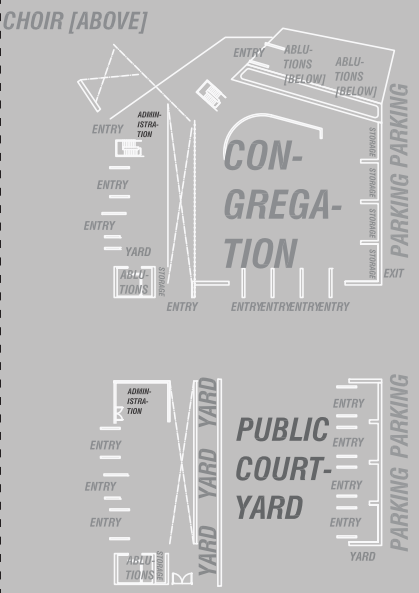
4.0 THE 'RENT-a-SHED'



5.0 THE SERVICE SHED



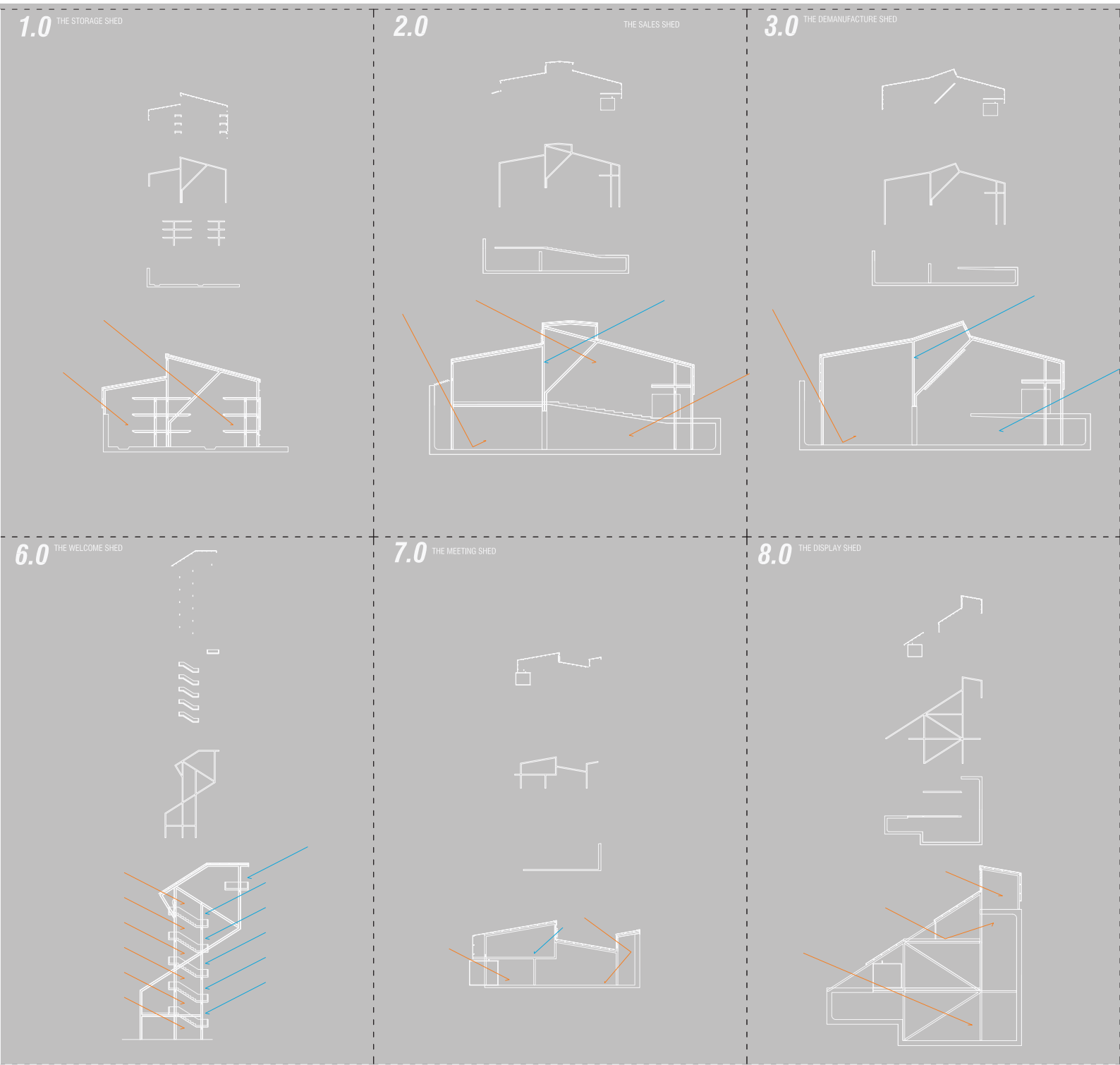
9.0 THE CONGREGATION SHED



10.0 THE DINING SHED

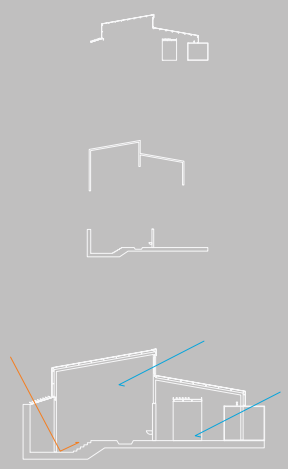


CONCLUSION CONTINUED...

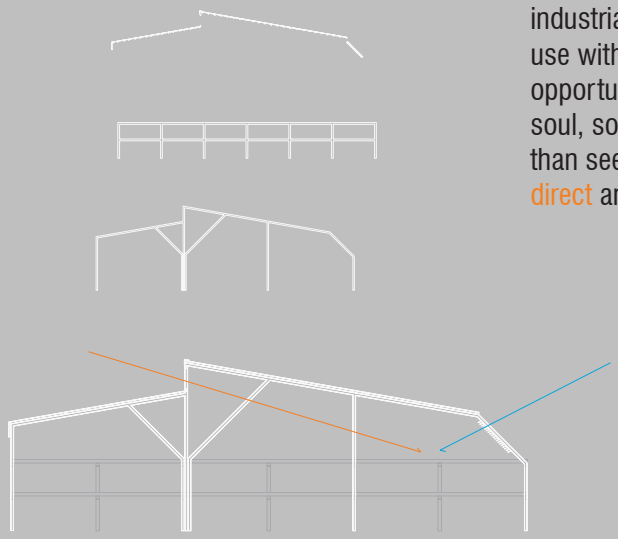


ROOFED WITH THE PRINCIPLES OF RELIGIOUS SPACE.

4.0 THE 'RENT-A-SHED'

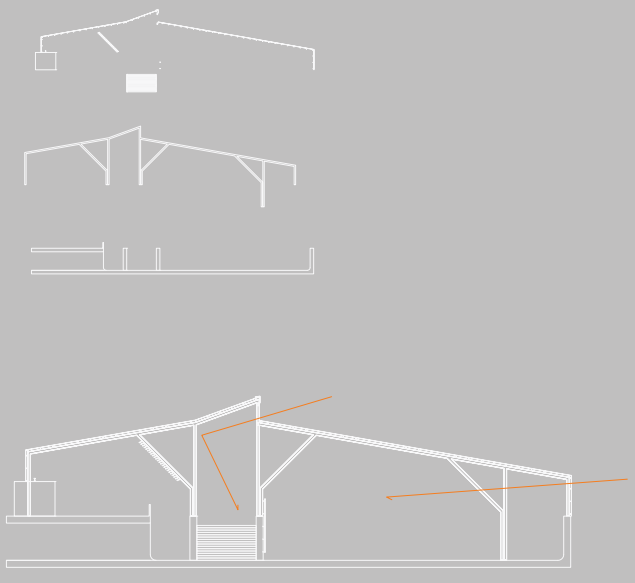


5.0 THE SERVICE SHED

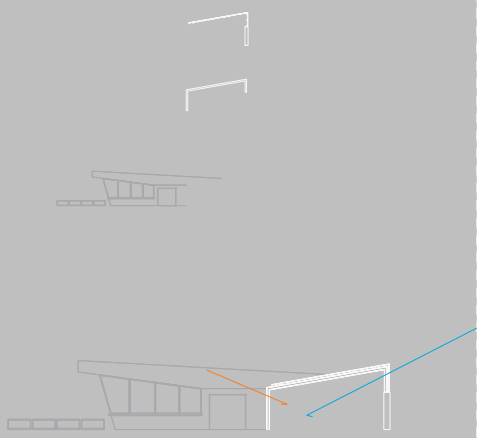


The approach to light may be the one distinguishing factor between the modern church and an industrial shed. To bathe industrial use with religious light creates the opportunity to create a place of soul, something that is felt rather than seen. The diagrams indicate direct and indirect sunlight

9.0 THE CONGREGATION SHED



10.0 THE DINING SHED



10 BUILDINGS 1 SOUL

Final Design

1.0 *AFTERLIFE SCRAP YARD*

2.0 *CAR DE MANUFACTURE PLANT*

3.0 *COMPONENTS TESTING AND REPAIR PLANT*

4.0 *DEVOTION WORKSHOP*

5.0 *TOOLING RESOURCE CENTRE*

6.0 *ADMINISTRATION TOWER*

7.0 *TRAINING CHAPEL*

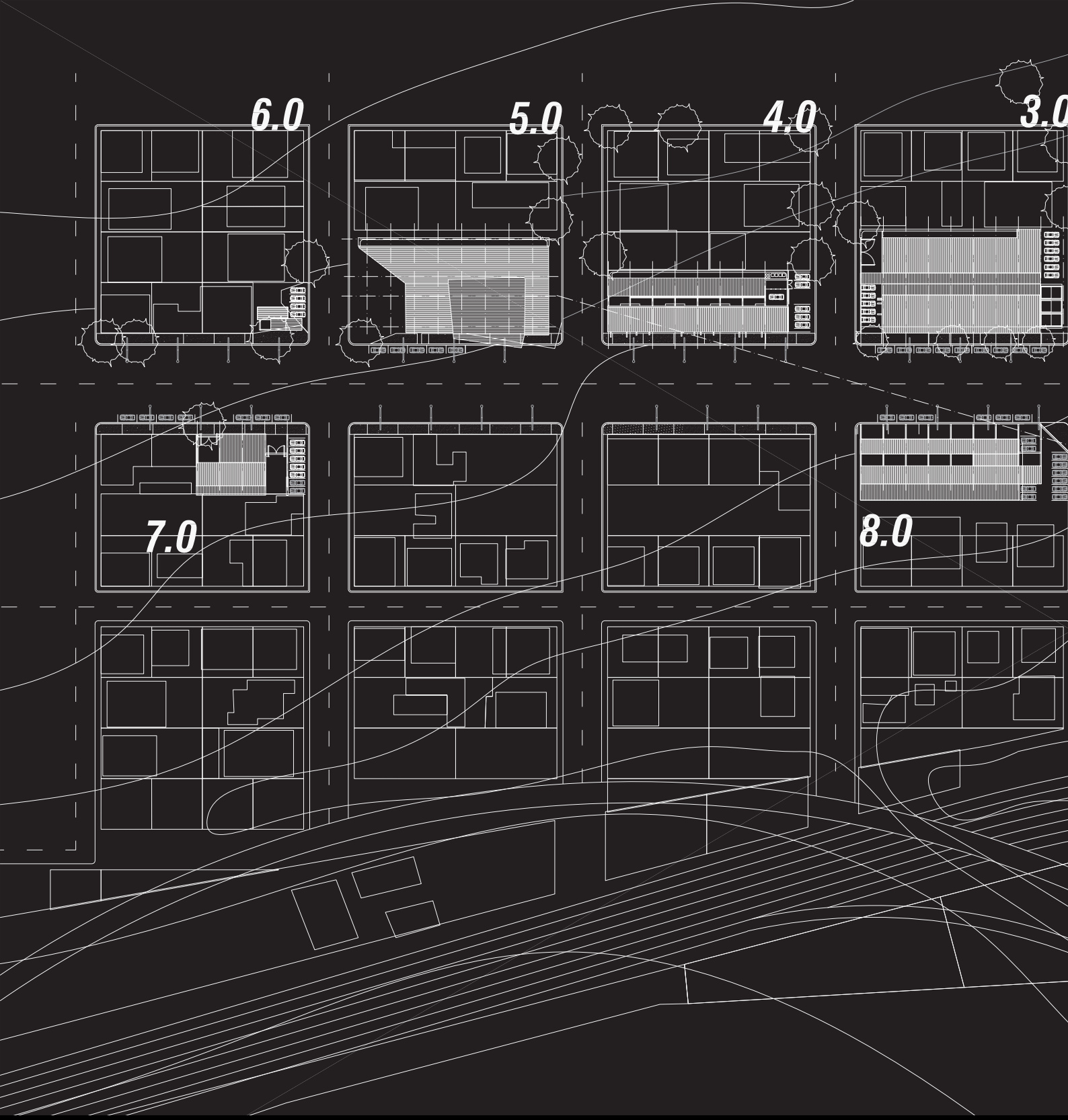
8.0 *MOTOR MUSEUM AND GALLERY*

9.0 *CONGREGATION HALL*

10.0 *DINING HALL AND SHISA NYAMA*

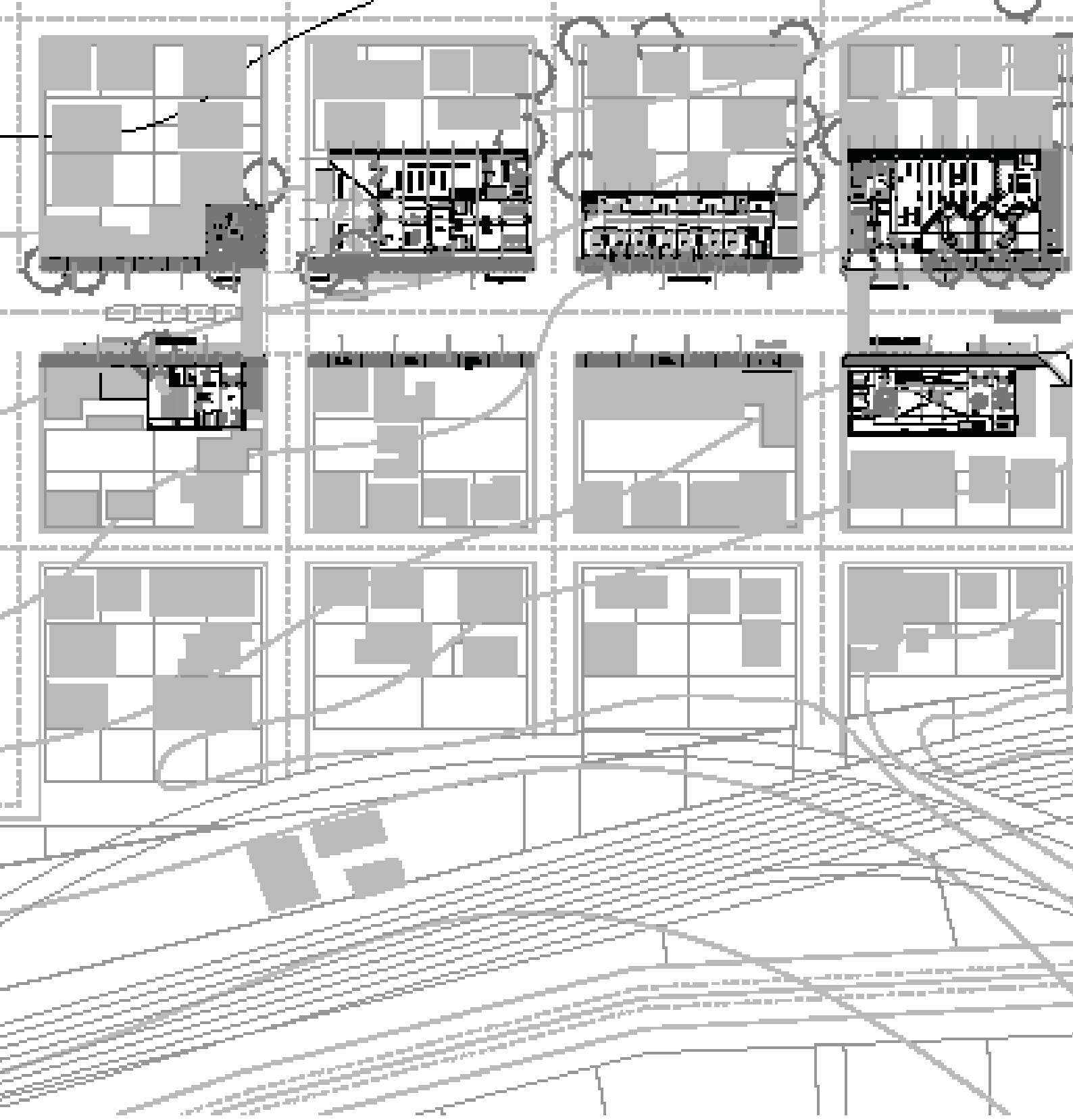
THE JEPPESTOWN MOTOR-MINISTRY

PART 5

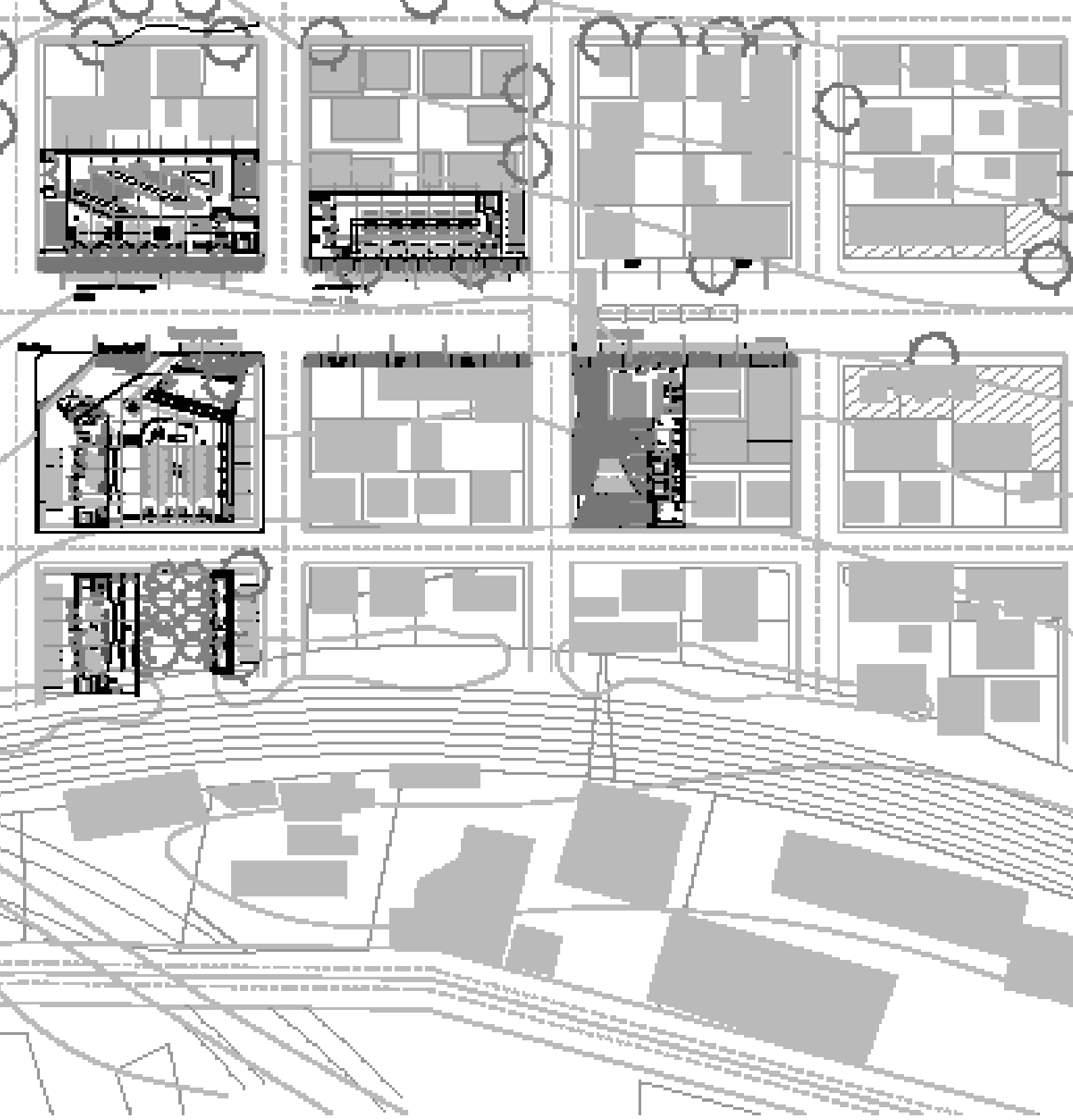


SITE PLAN


2.0
1.0
10.0
9.1
9.2



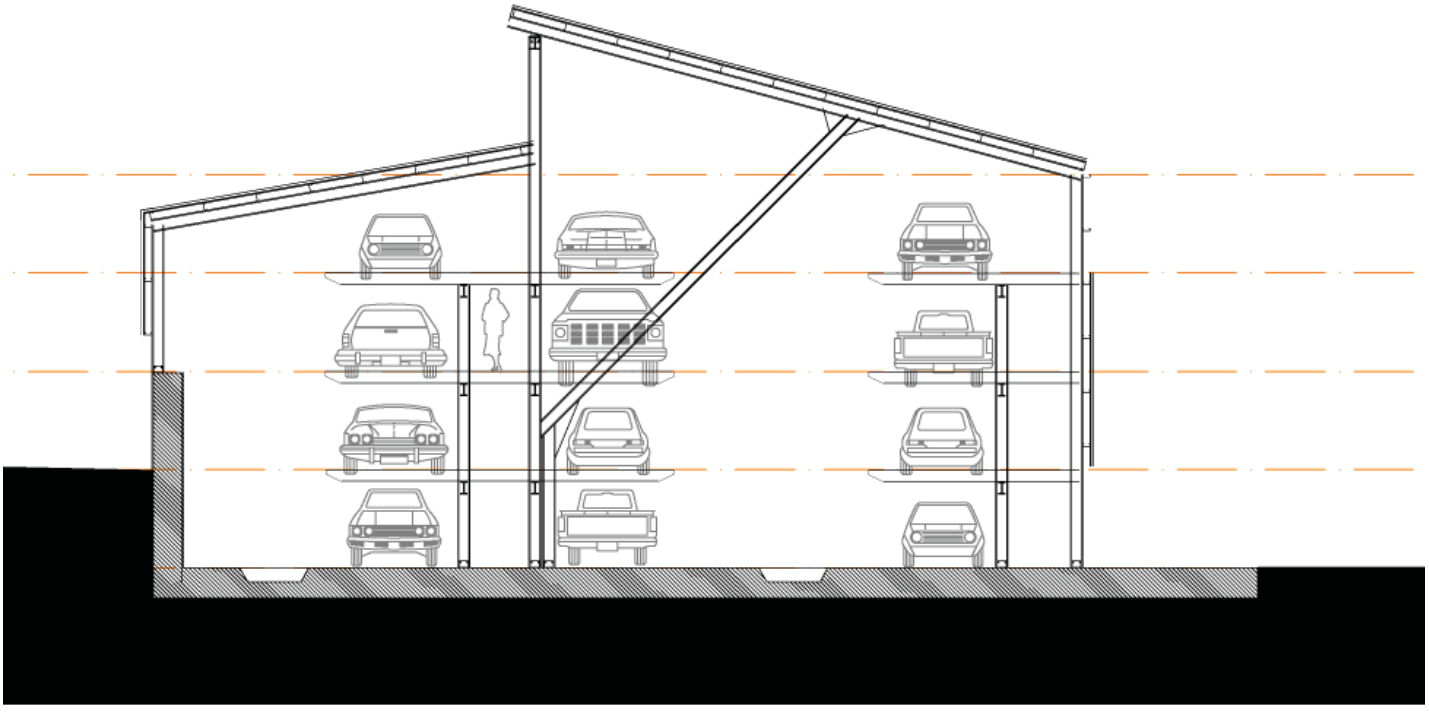
URBAN PLAN



1.0
AFTER-LIFE CAR SCRAPYARD



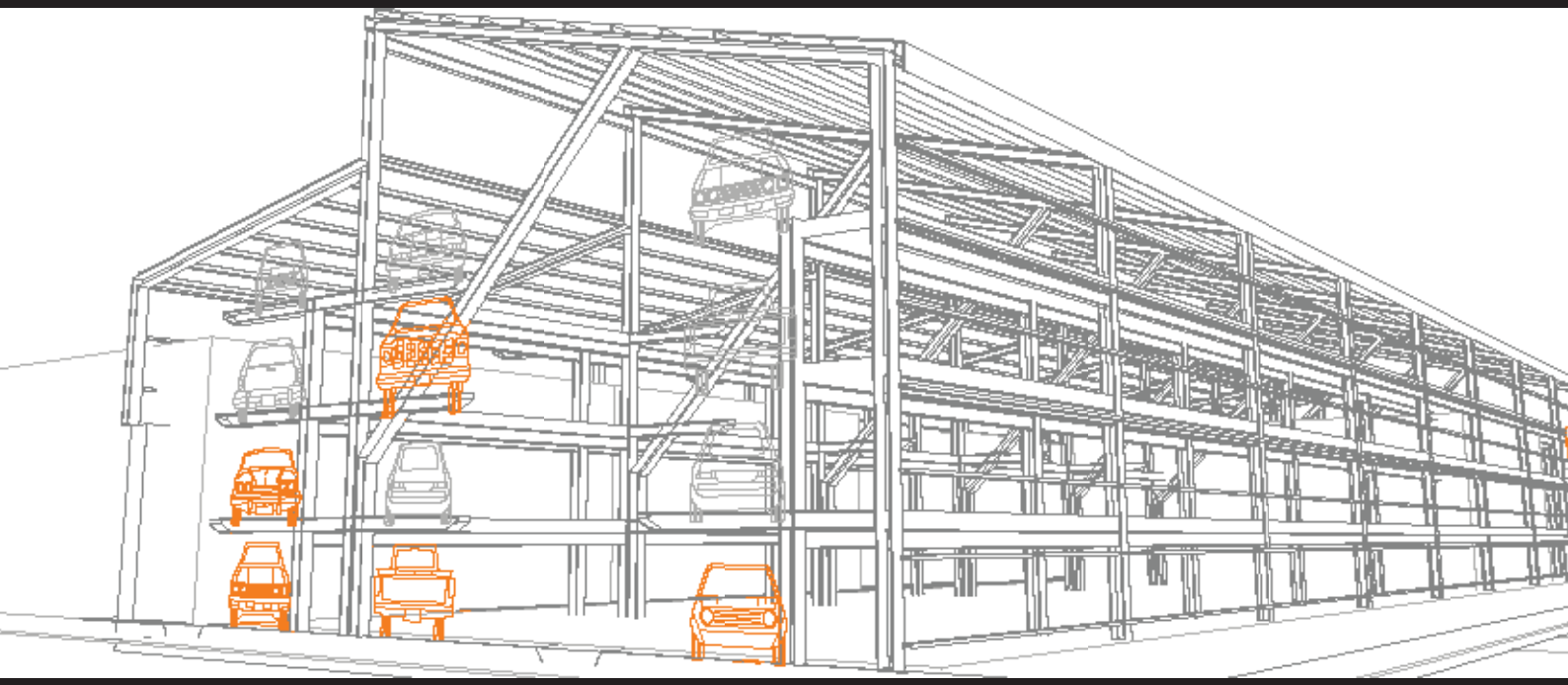
2 FAILING CAR SALES LOTS AND DISUSED OFFICE CONVERSIONS

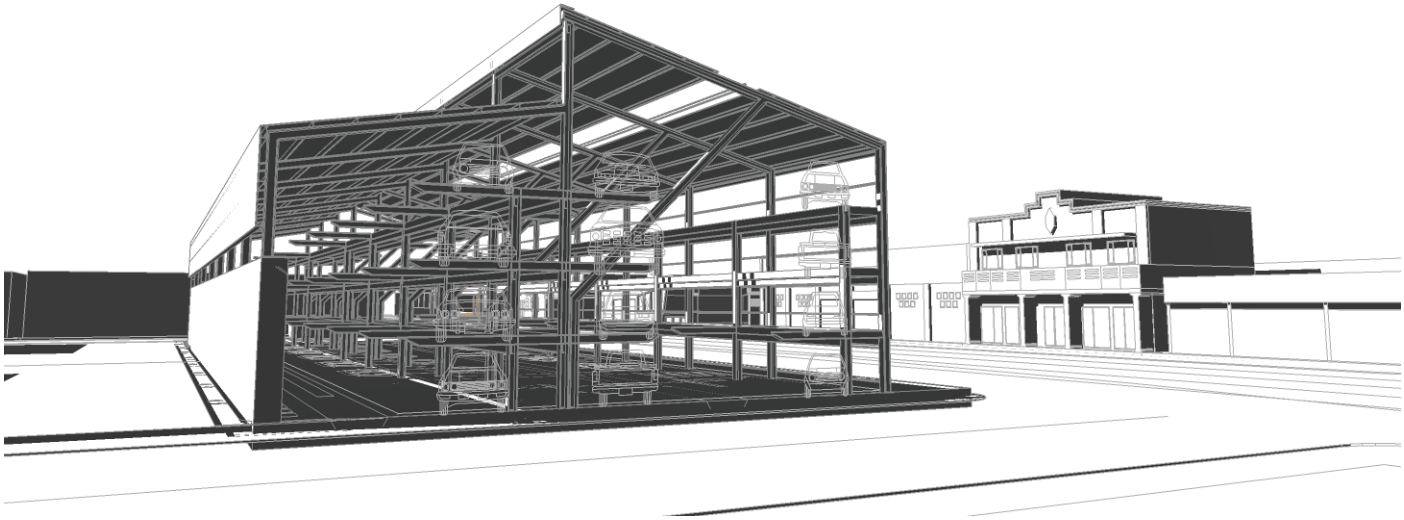


Cross-Section

THE STORAGE SHED

This has been conceived as an open frame, the skeleton of a warehouse is provided with hanging frames for scrap motor cars. The skin is limited to just give the cars protection from the elements, and the framework allows for easy conversion into a closed shed in the future if required.



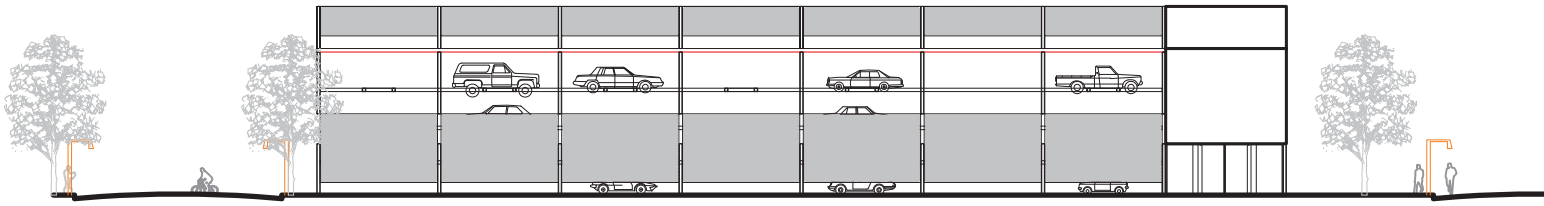


THE STORAGE SHED continued...

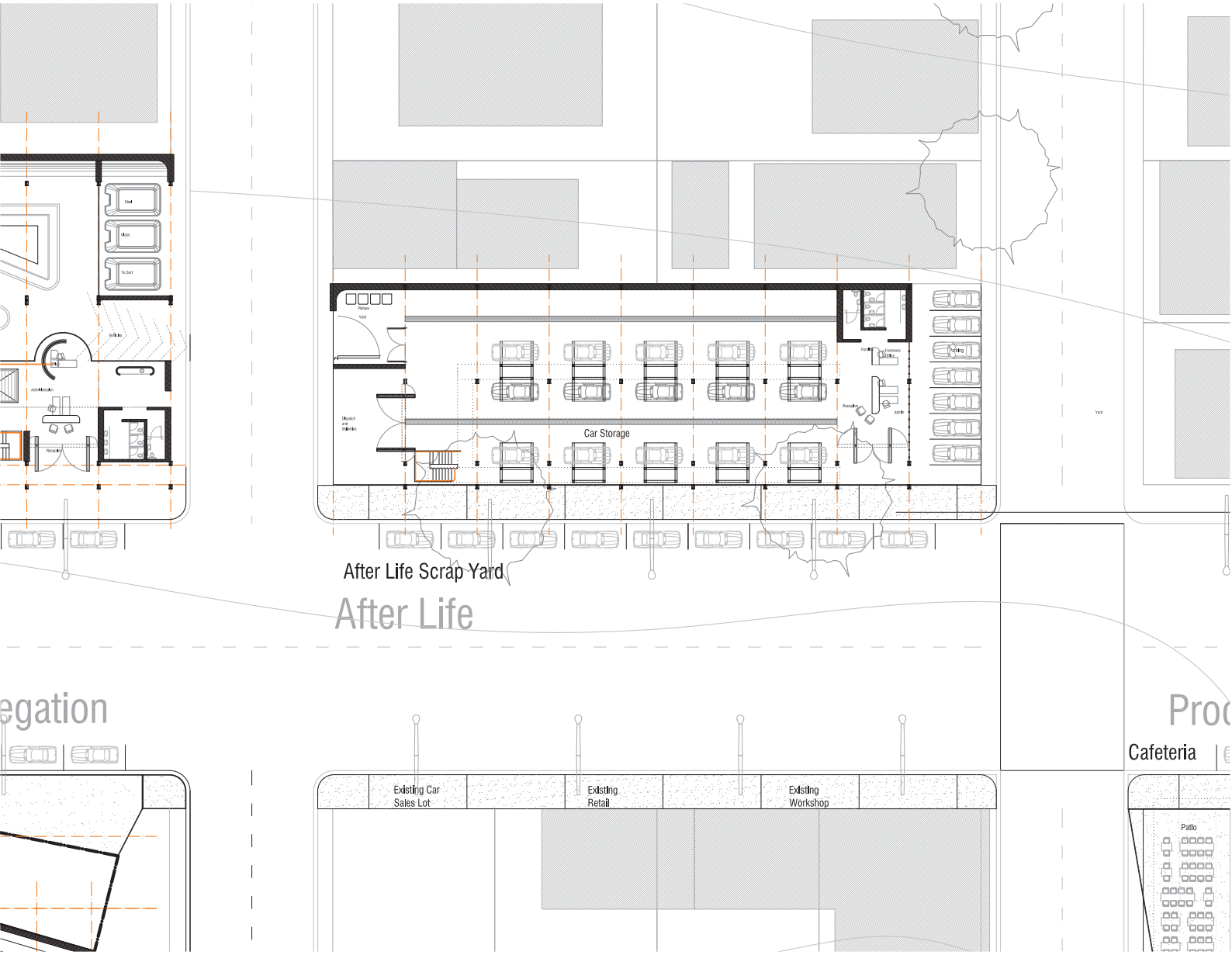
Above: The scale of the new relates to the existing fabric seen across the road.

Right: The plan consists of a administration core to the east, a main storage body for scrap cars in the centre and a service yard to the west.

Below: The facades indicate the solid, enclosed cores and the light open skeleton that is the storage body.



South Elevation





East Elevation

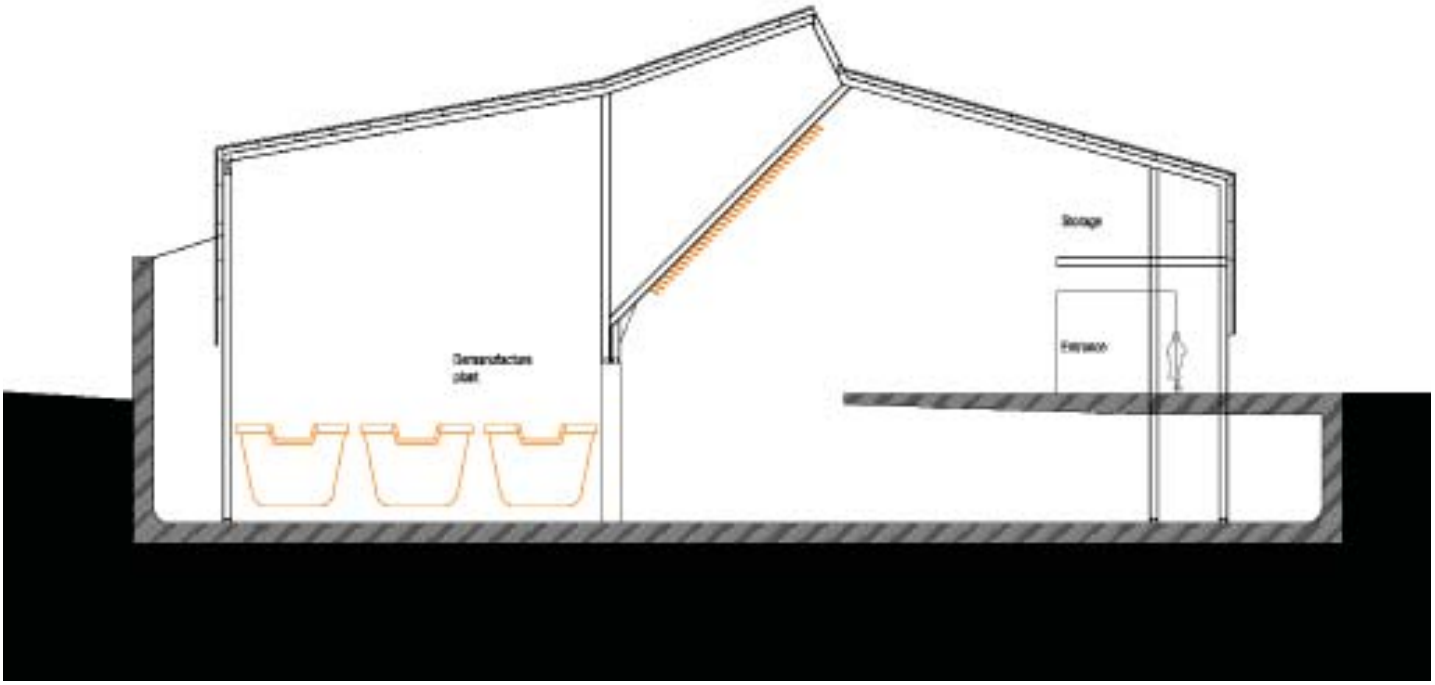
West Elevation

TO A LAND OF PRIESTS AND PETROL-HEADS

2.0

BREAKER PLANT AND SECOND HAND PARTS TRANS-PLANT CENTRE

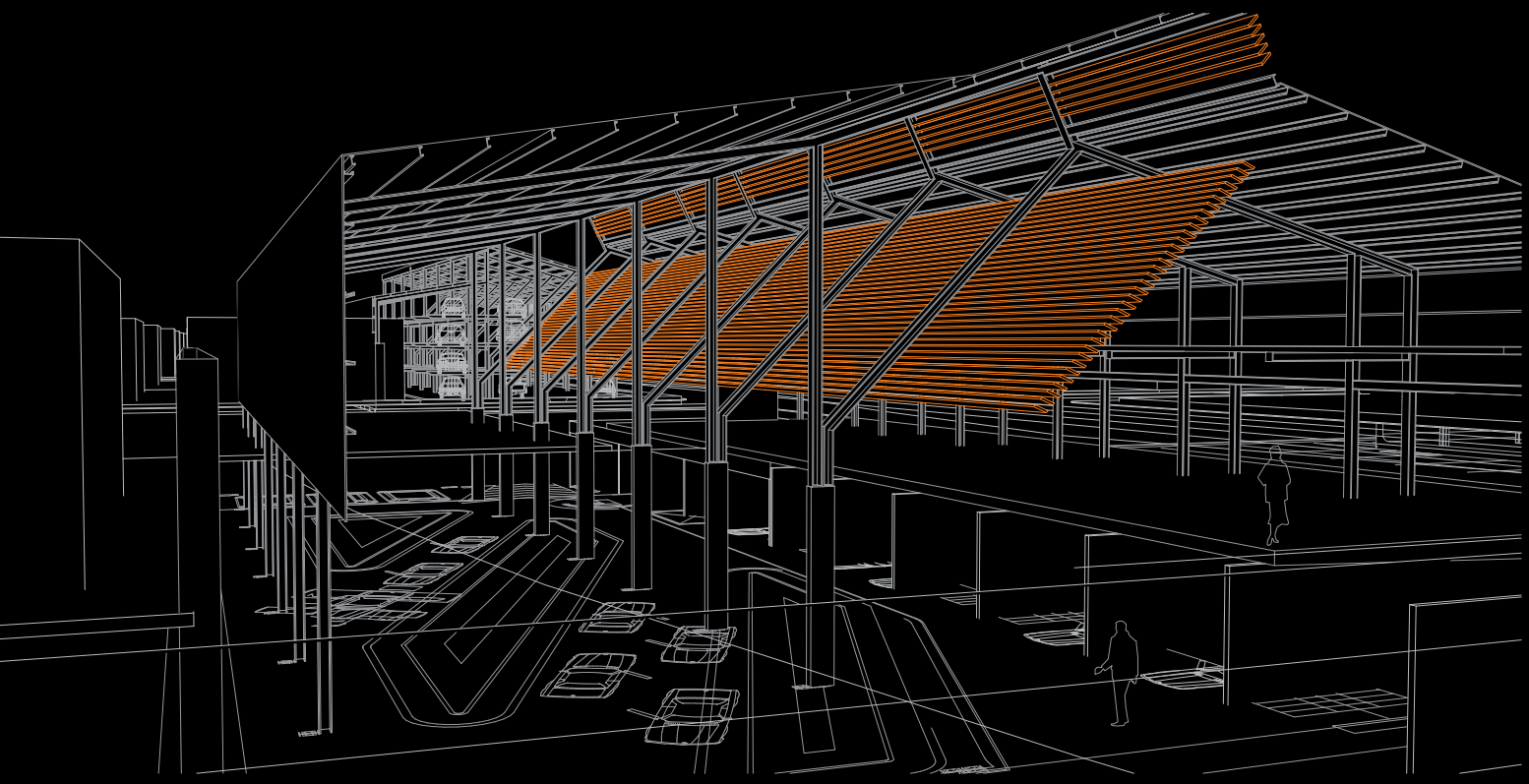


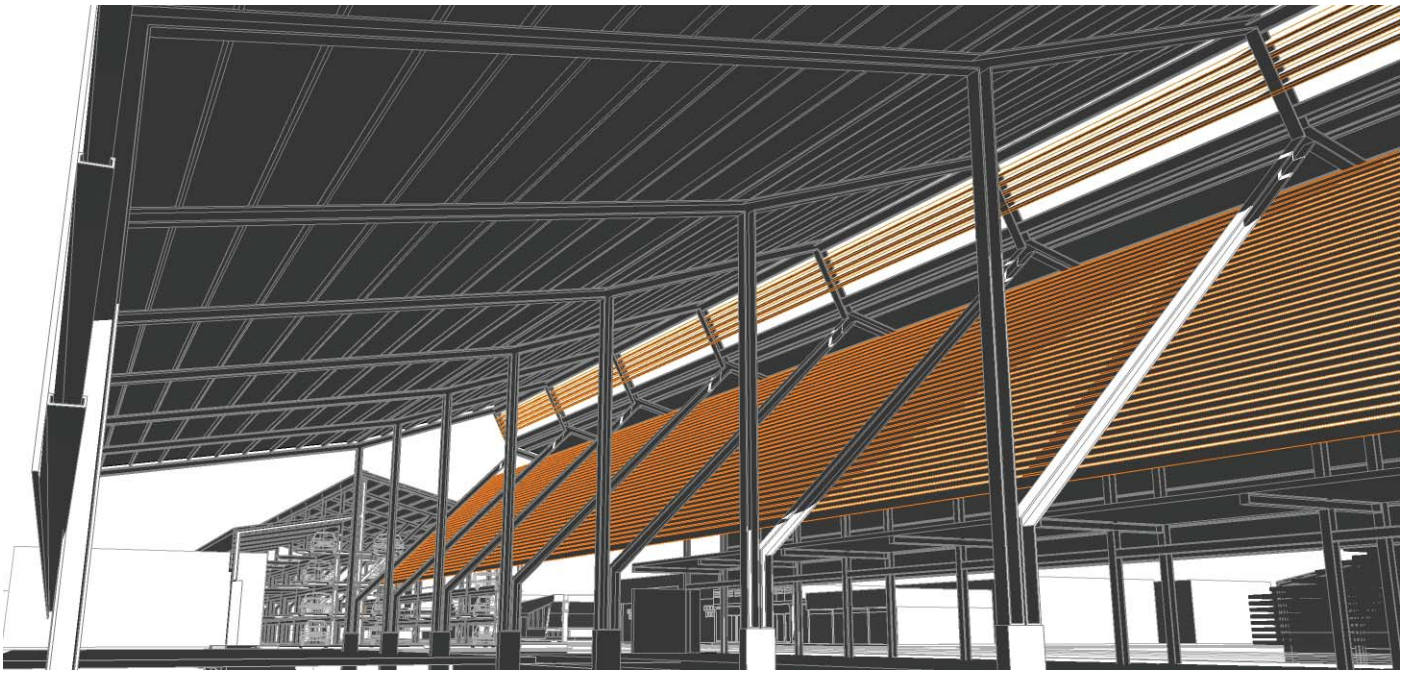


Cross-Section

THE DE MANUFAC-TURE SHED

The process of breaking down cars into viable organs inspired a space with similar qualities to a crypt. The approach to light is direct and purposeful creating an ambient space befitting its use.





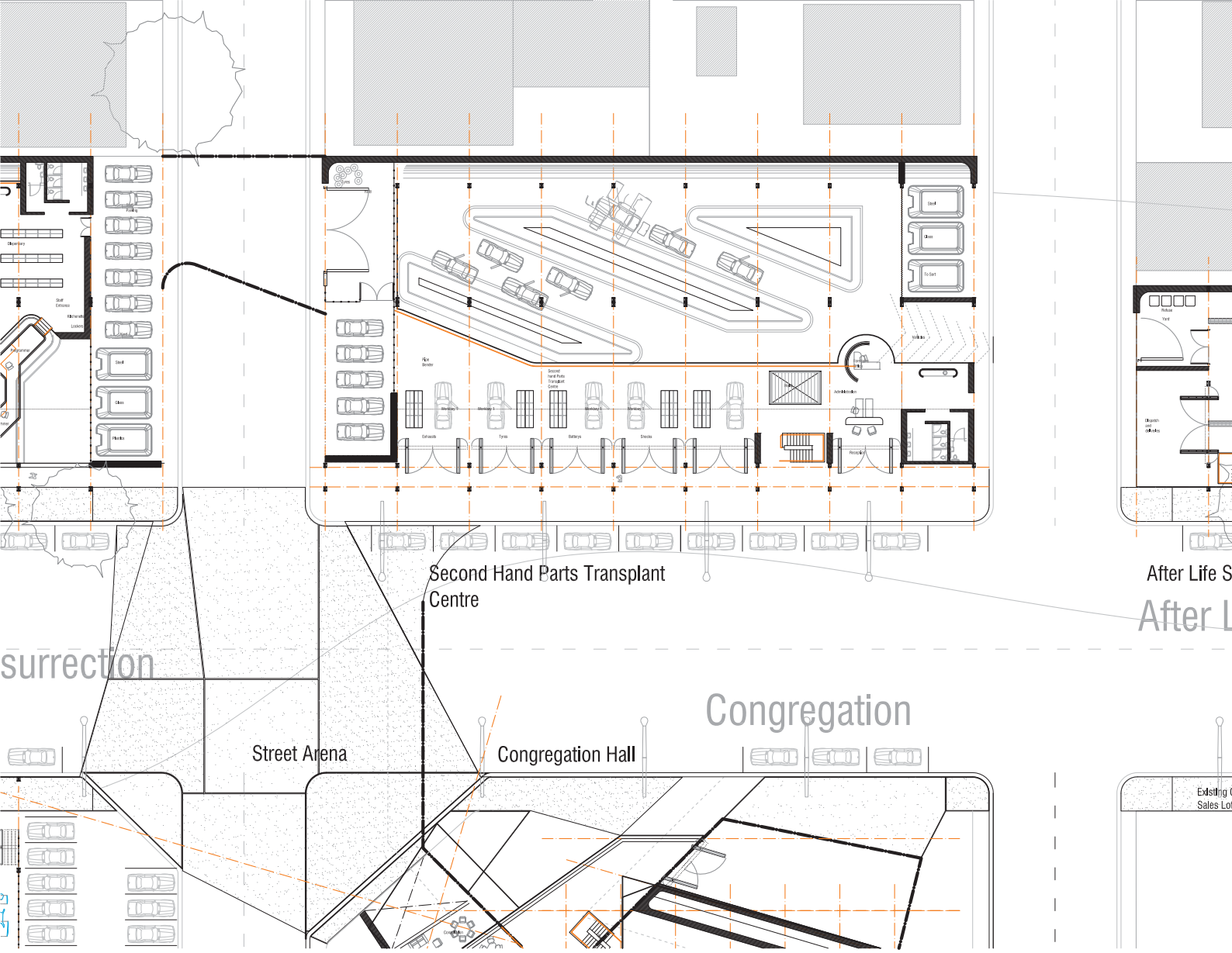
THE DE MANUFAC-TURE SHED contin-ued...

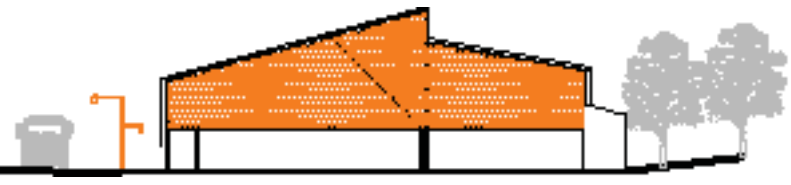
Above: The direct but controlled light that enters the apex of the roof can be seen.

Right: The parts transplant centre is on the ground floor with views don into the car breaker facility below

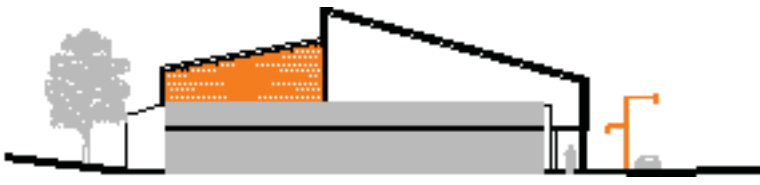


South Elevation





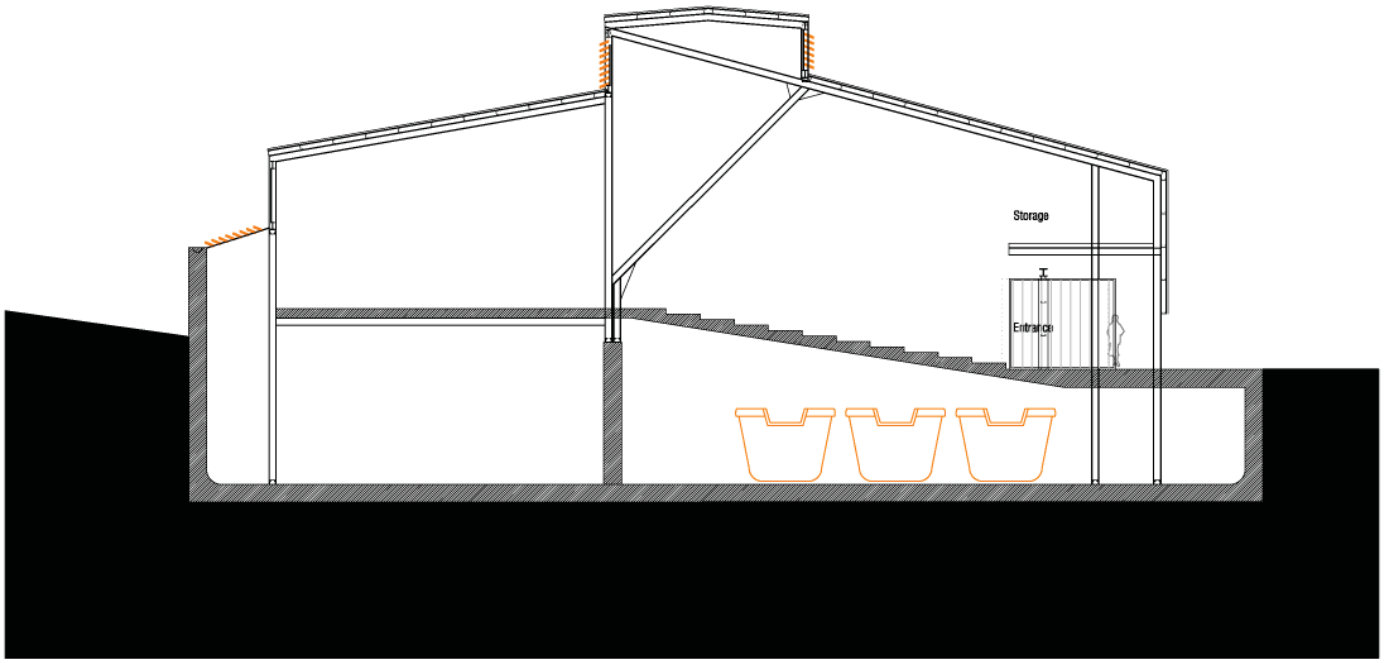
East Elevation



West Elevation

3.0
SECOND HAND PARTS PROCESSING AND SALES

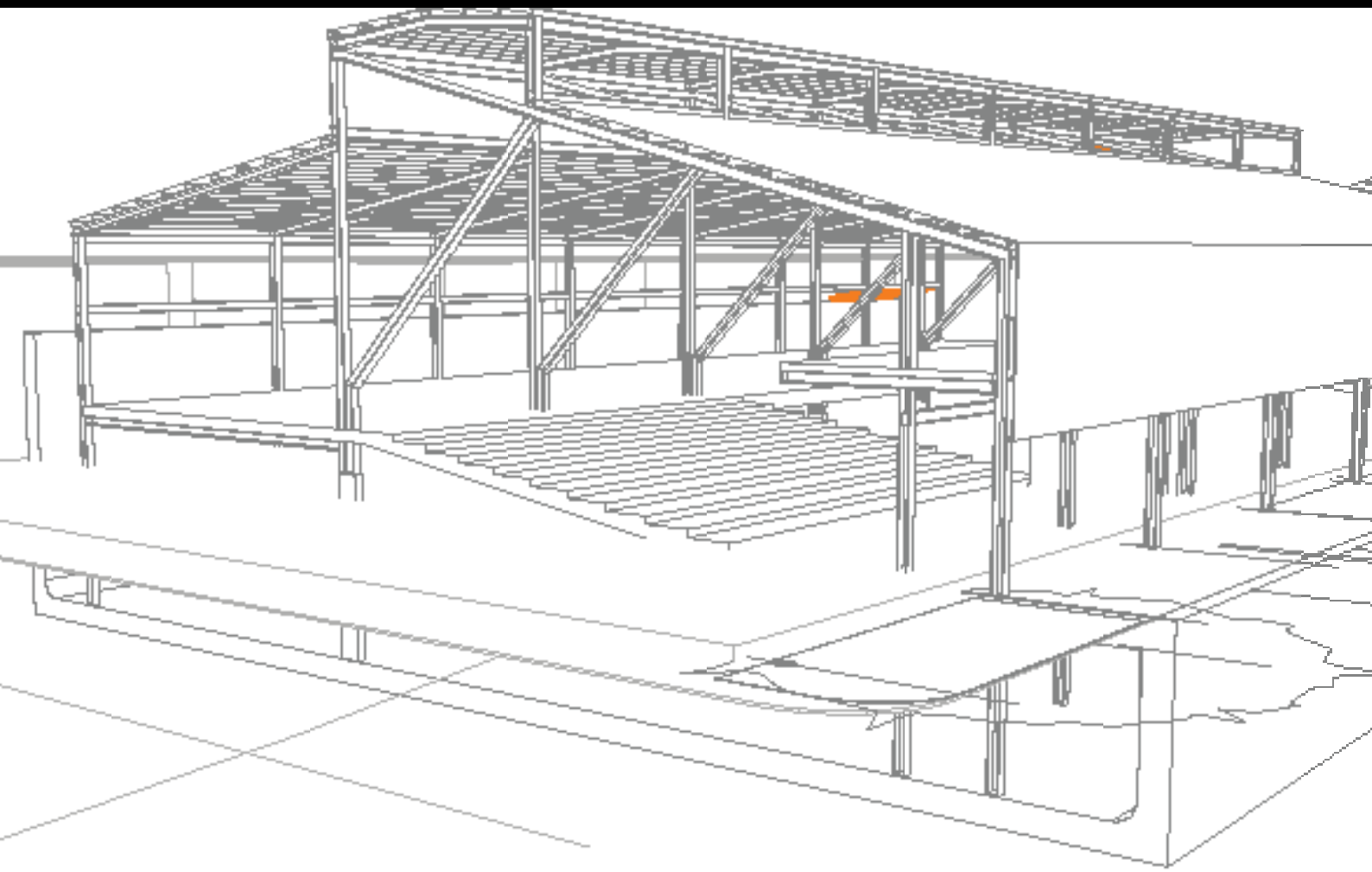


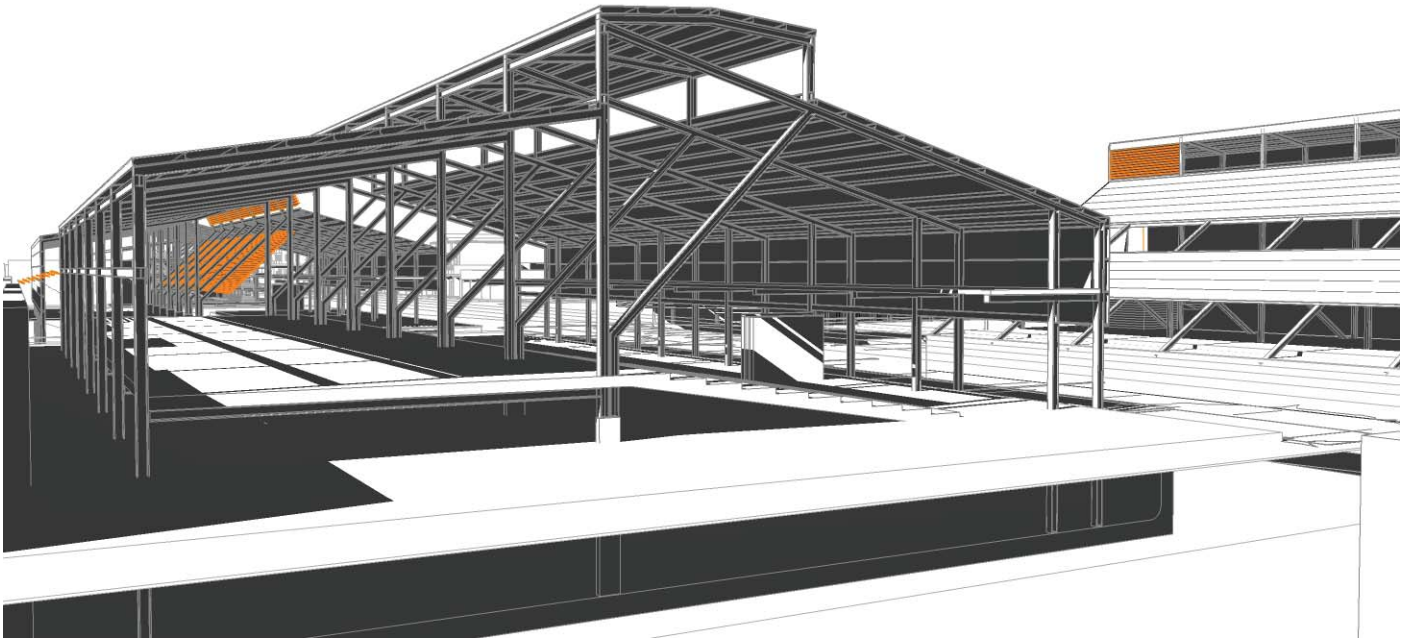


Cross-Section

THE SALES SHED

The building is comprised of two levels, production in the basement (visible from the street as well as upper volumes) and Sales on the ground floor. The roof breaks open at the apex to allow for both direct and indirect sunlight creating a light, etherial space below.





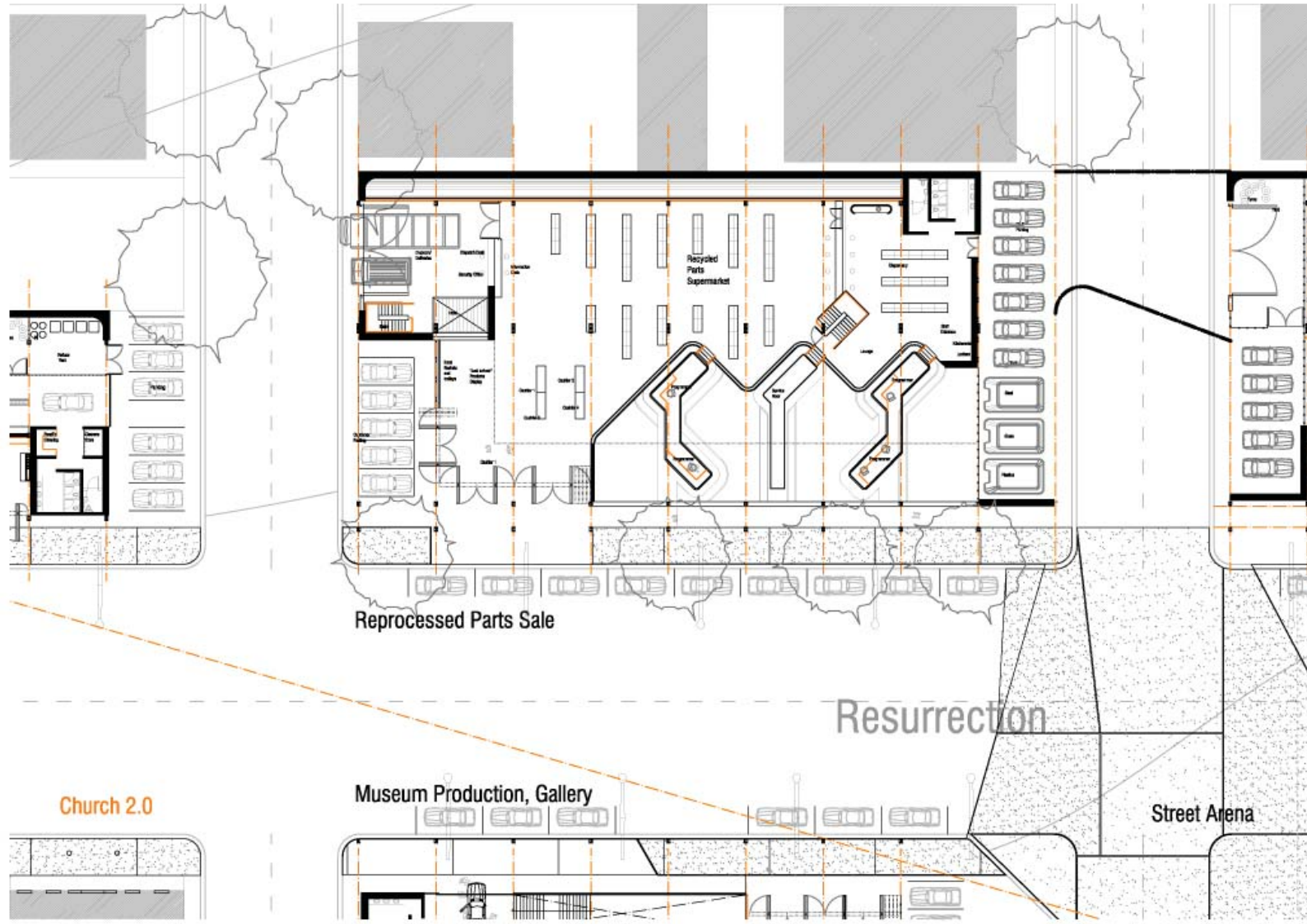
THE SALES SHED continued...

Above: perspective showing the internal quality of light of the sales shed
Next Page: The plan allows for the pedestrian to see down into the re-manufacture plant below. The Spare parts Supermarket opens onto the street corner to draw the consumer to the main body behind.



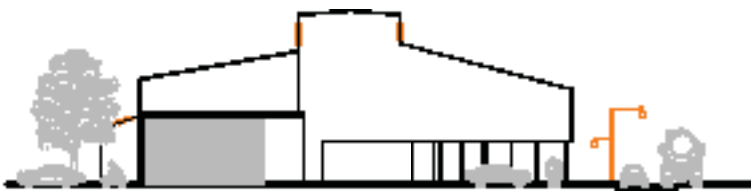


South Elevation





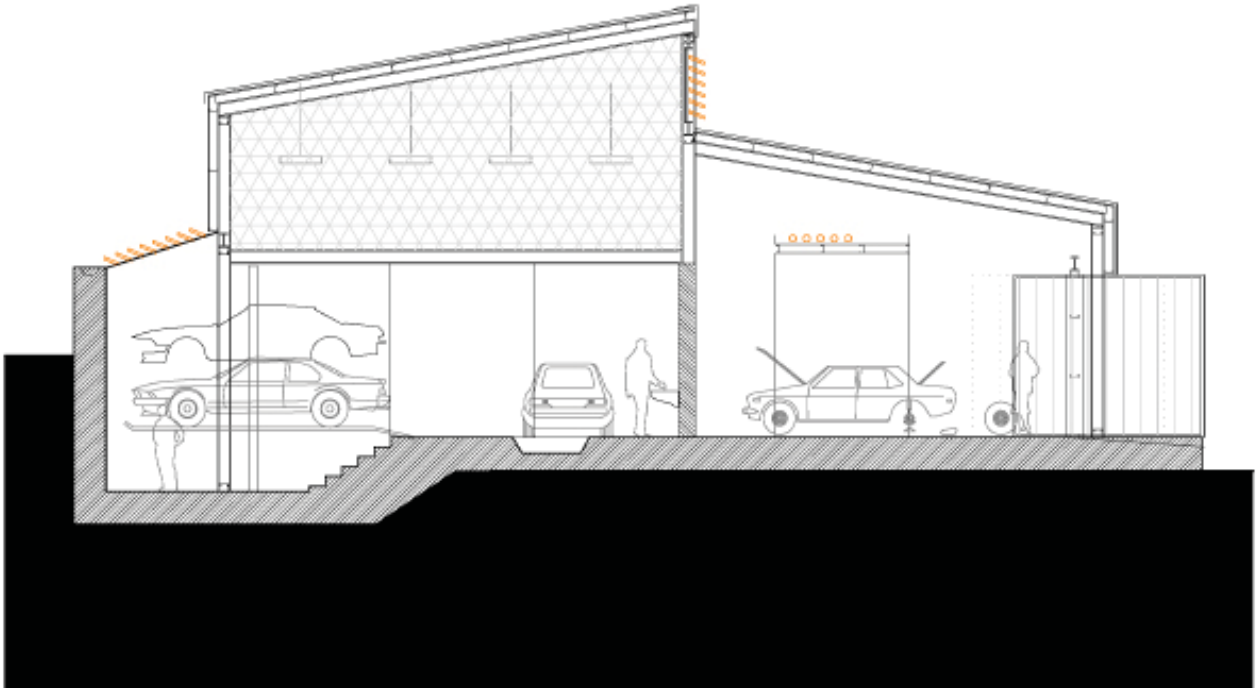
East Elevation



West Elevation

4.0
RENT-A-WORKSHOP FACILITY

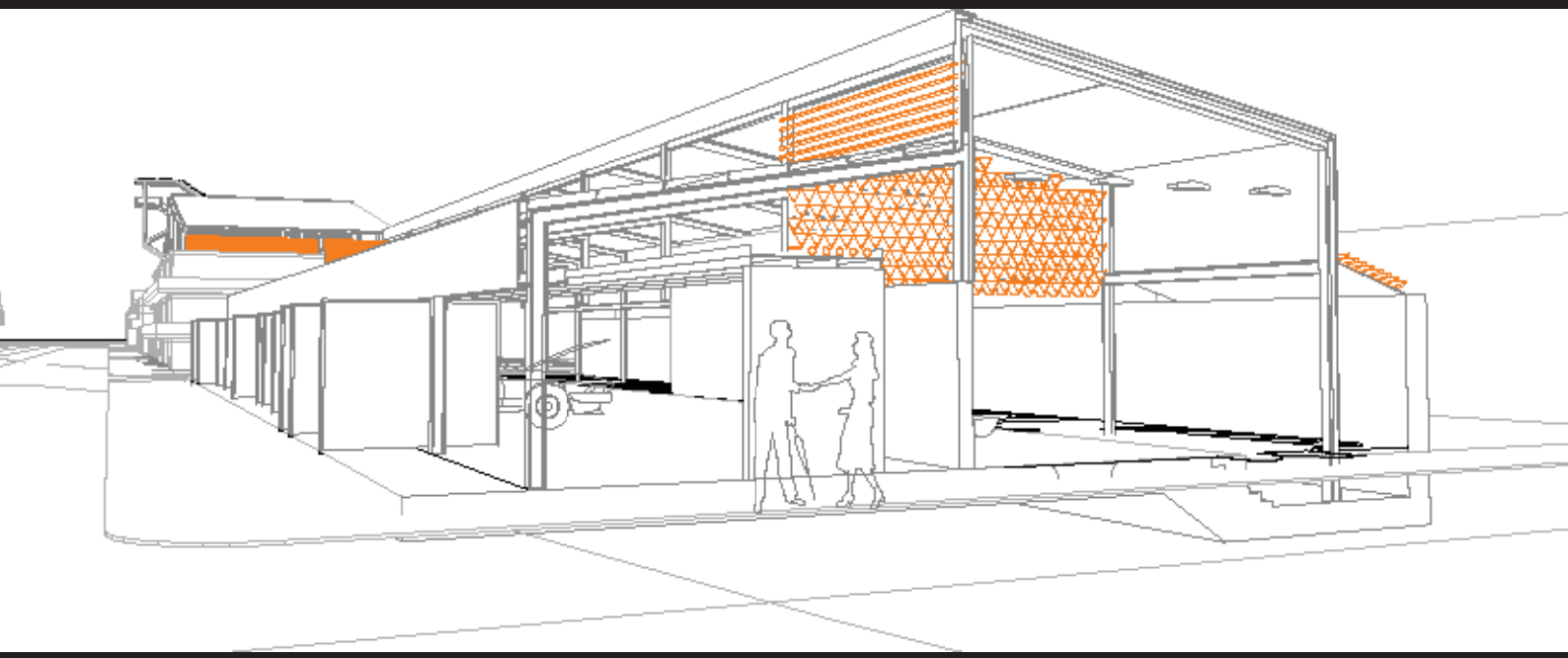


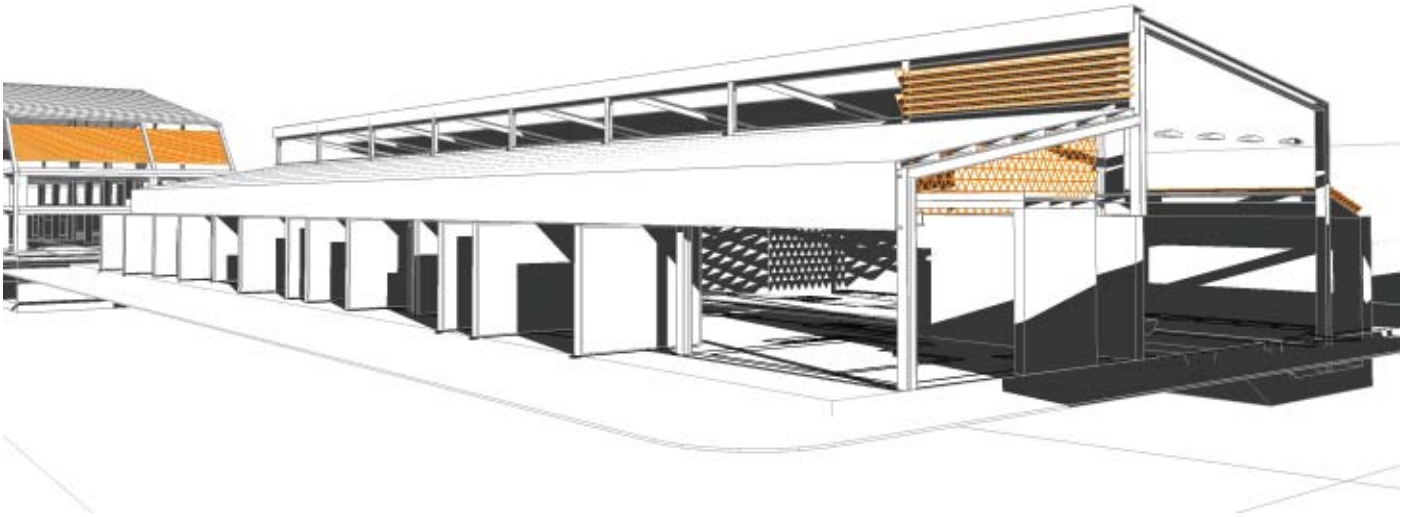


Cross-Section

THE RENT a SHED

Stripped down to the fundamental elements for a micro- business owner: a flexible enclosure and connectivity to a client base and tooling resource.





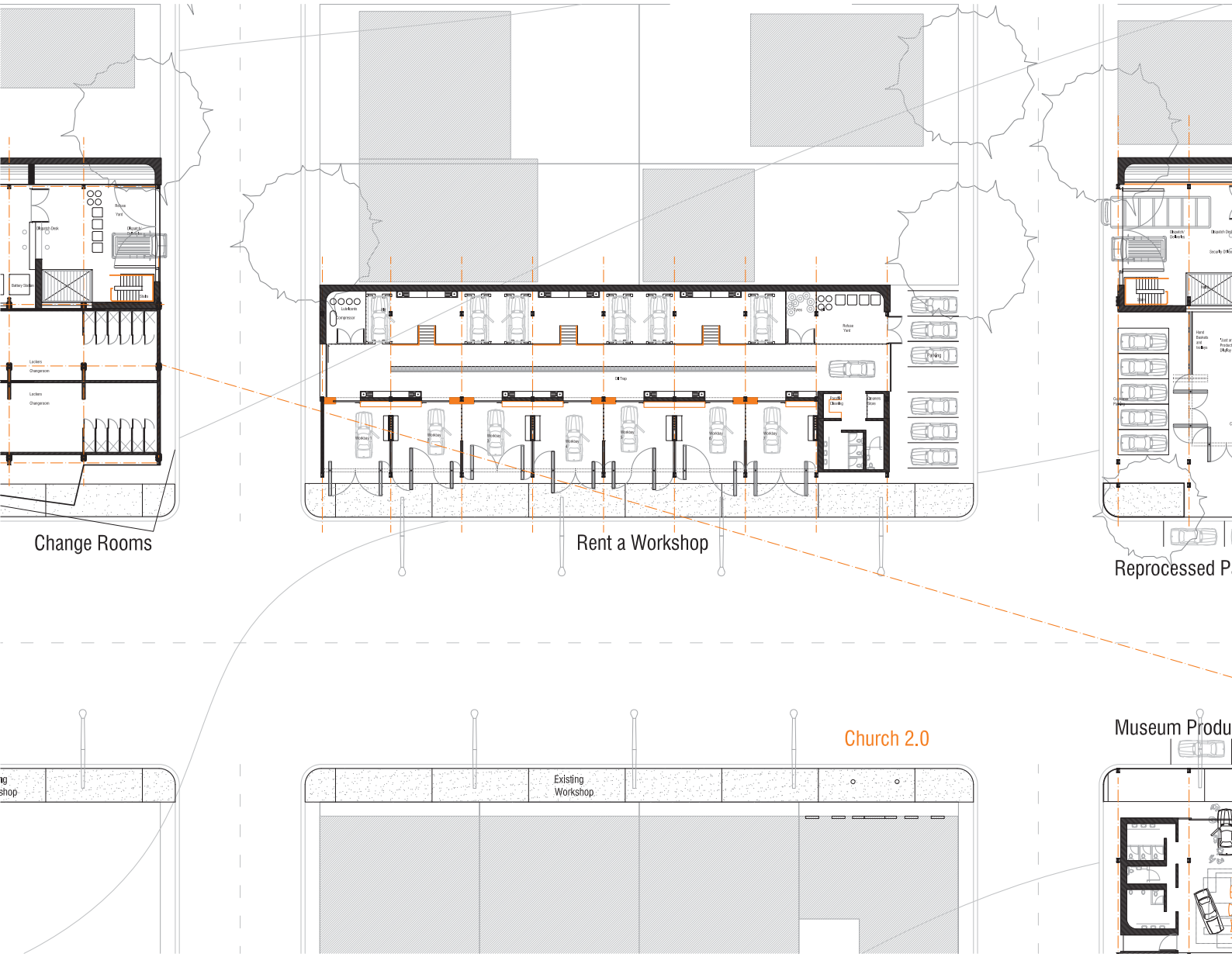
THE RENT a SHED continued...

Above: The Informality of use can be read into the street facade of this building, each workshop pod has its own entrance onto Jules Street.

Right: Workshop pods face the street and conceal a service street behind with additional workshop space for long term vehicle repair.



South Elevation



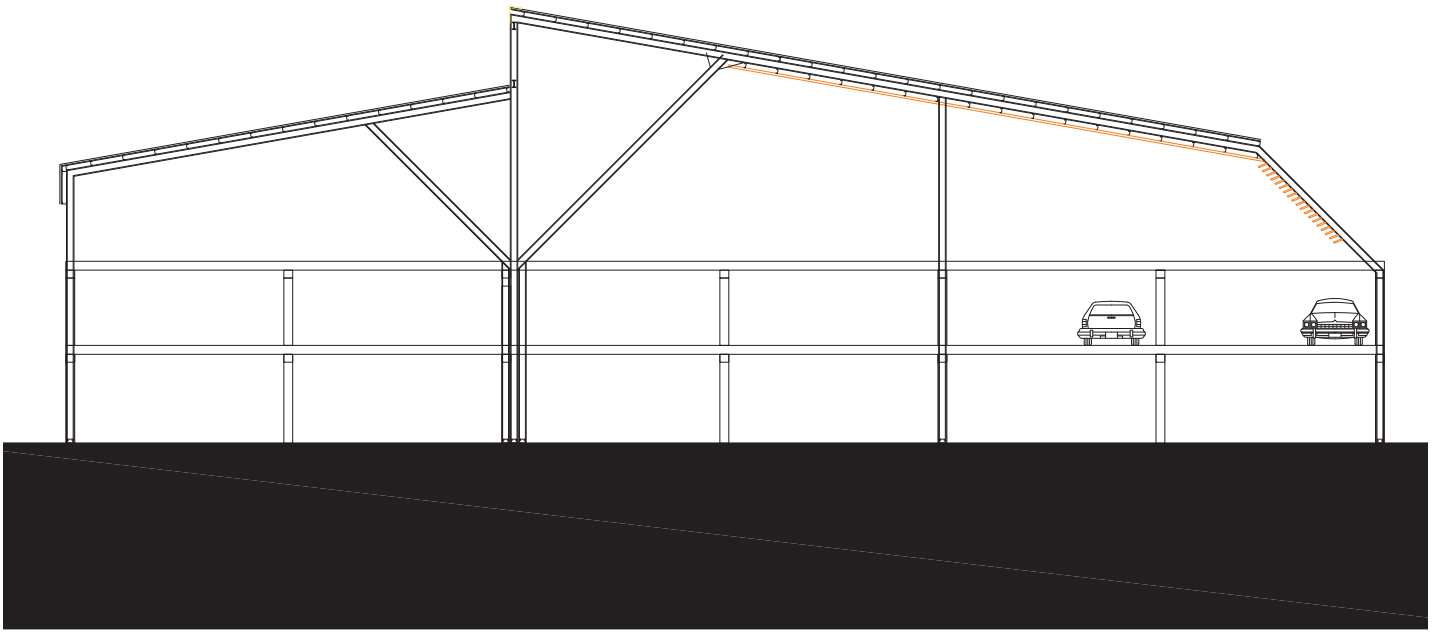


East Elevation

West Elevation

5.0
TOOLING RESOURCE CENTRE

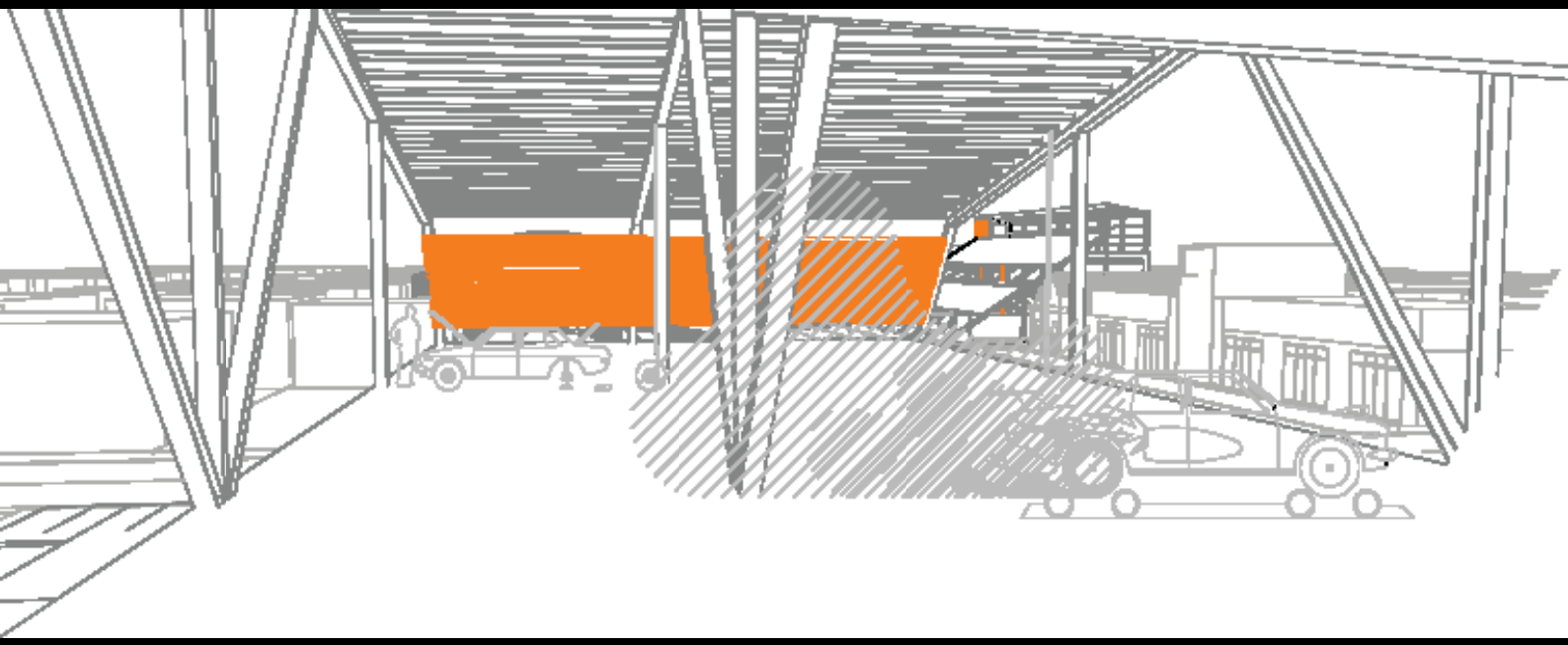


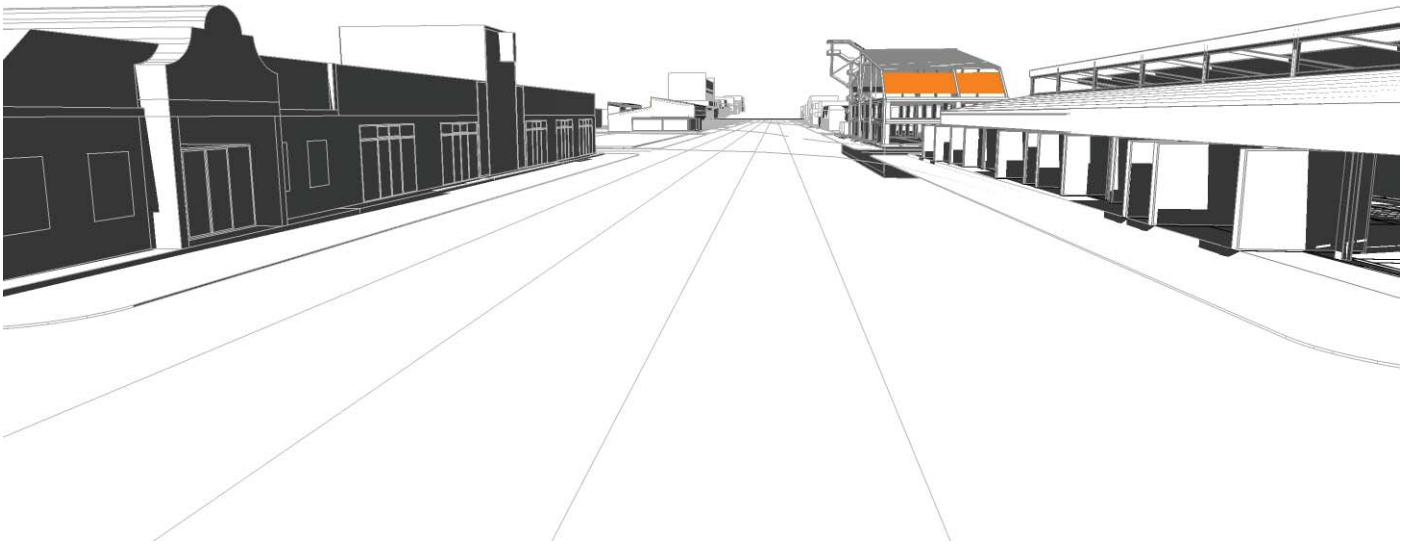


Cross-Section

THE SERVICE SHED

The community centre for an industrial population. The building is comprised of service space: Change rooms, a washing yard, tooling resource and an outdoor public yard for the community to use. The building is entirely a skin which wraps over the existing 3 storey car sales structure.

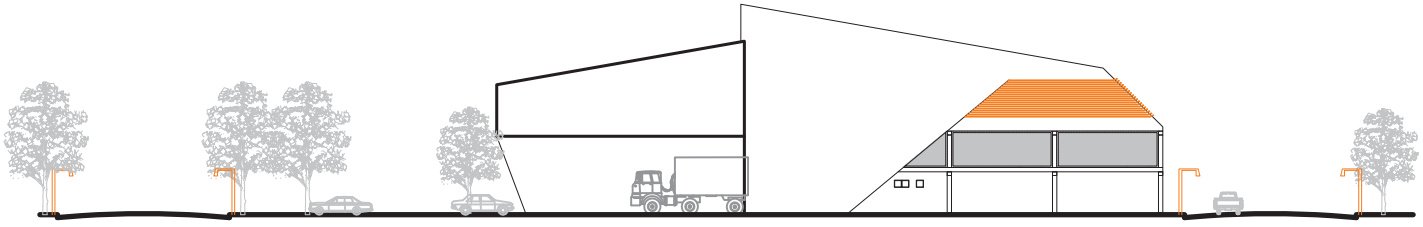




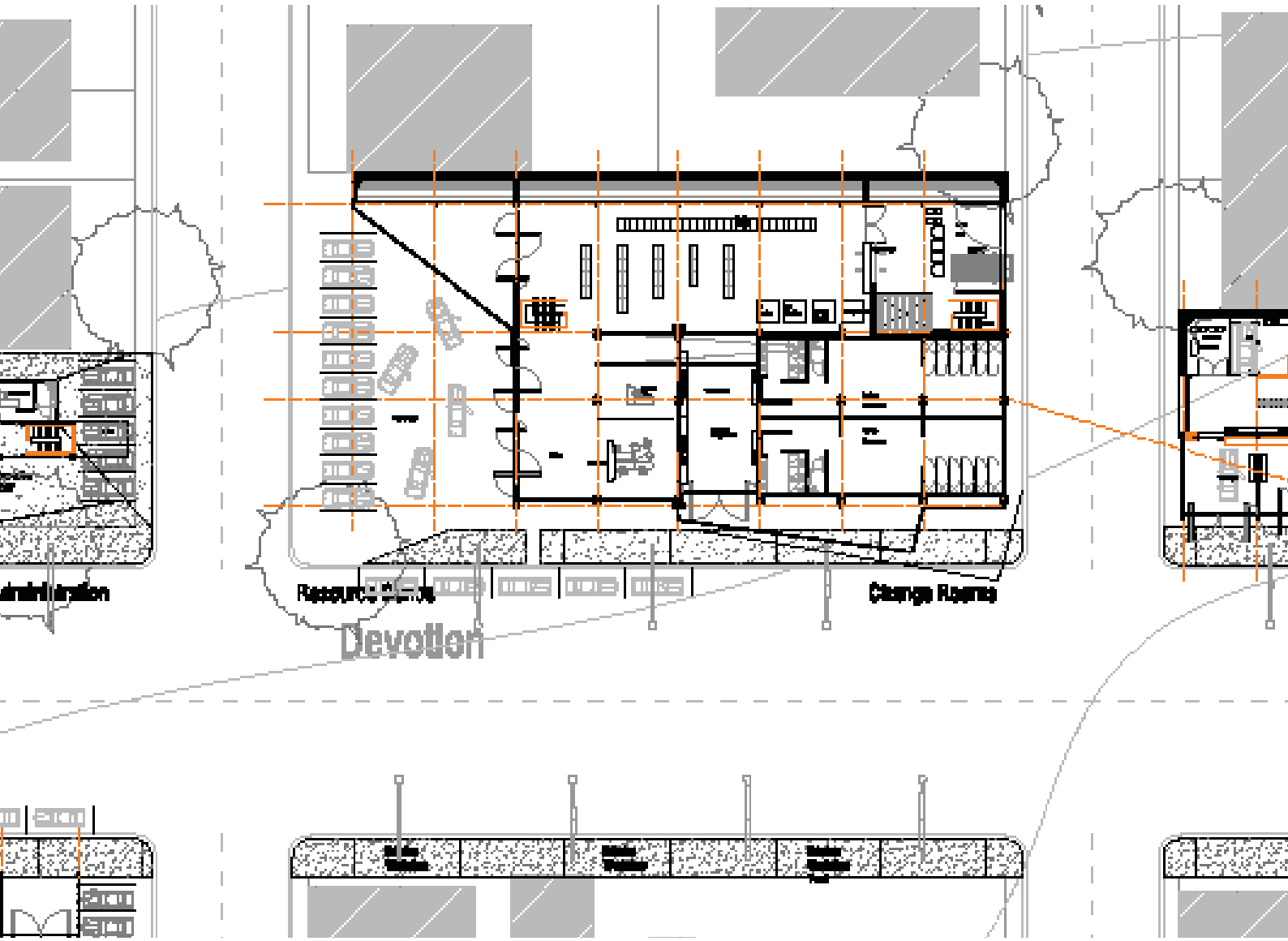
THE SERVICE SHED continued...

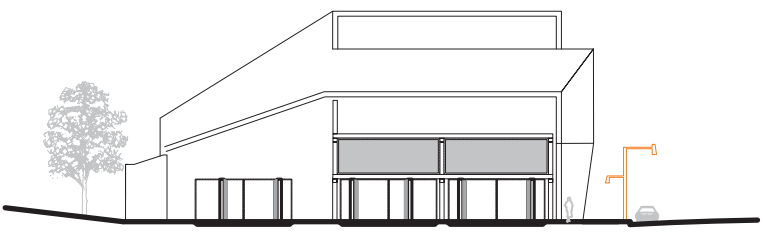
Above: The (unfinished) model shows the increased scale of the service shed in the landscape. The building has had this nature since 1976 when it had the highest car sales on the strip, with 3 levels of stock.

Right: Tooling Resource to the north, change rooms to the south east, and a public service yard to the south west.

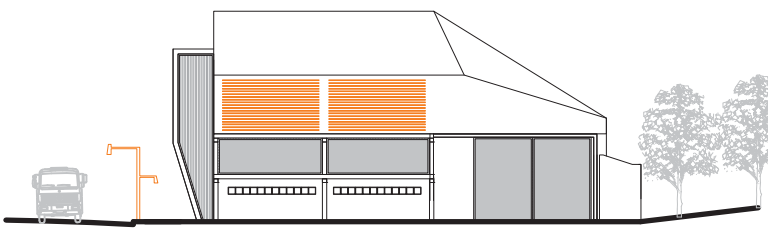


South Elevation





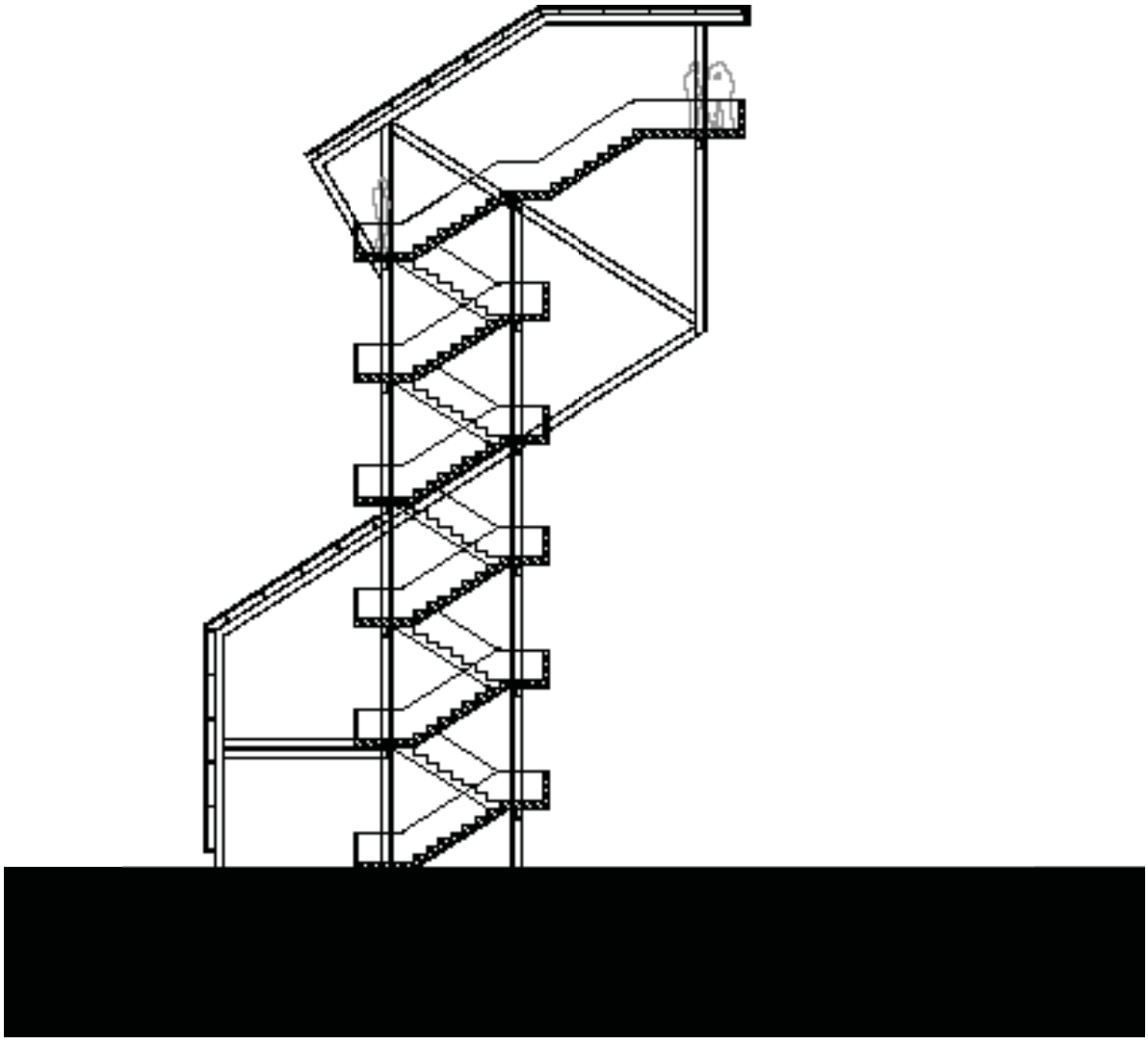
West Elevation



East Elevation

6.0
ADMINISTRATION TOWER

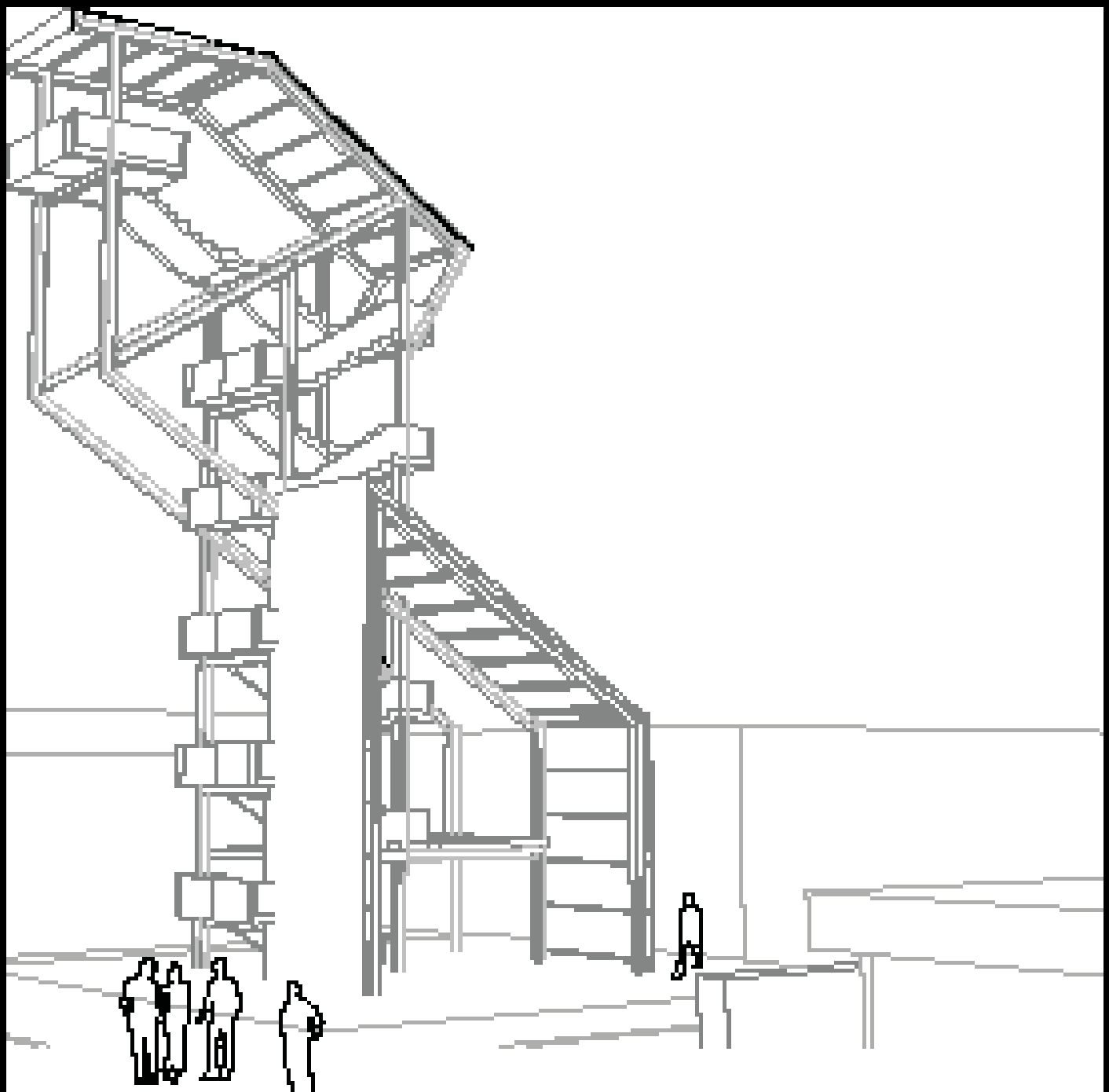


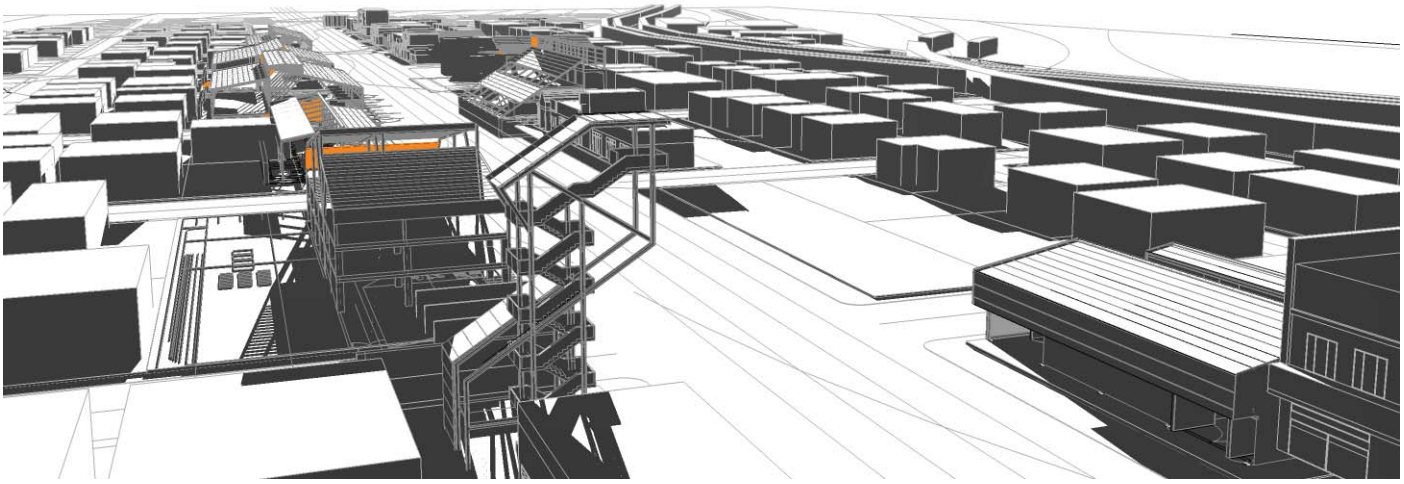


Cross-Section

THE WELCOME SHED

A church is recognised by steeple, a petrol station by large, vertical signage. This tower acts as a beacon for visitors, attracting them to the administration and providing a vantage point to orientate themselves in this community.





THE WELCOME SHED continued...

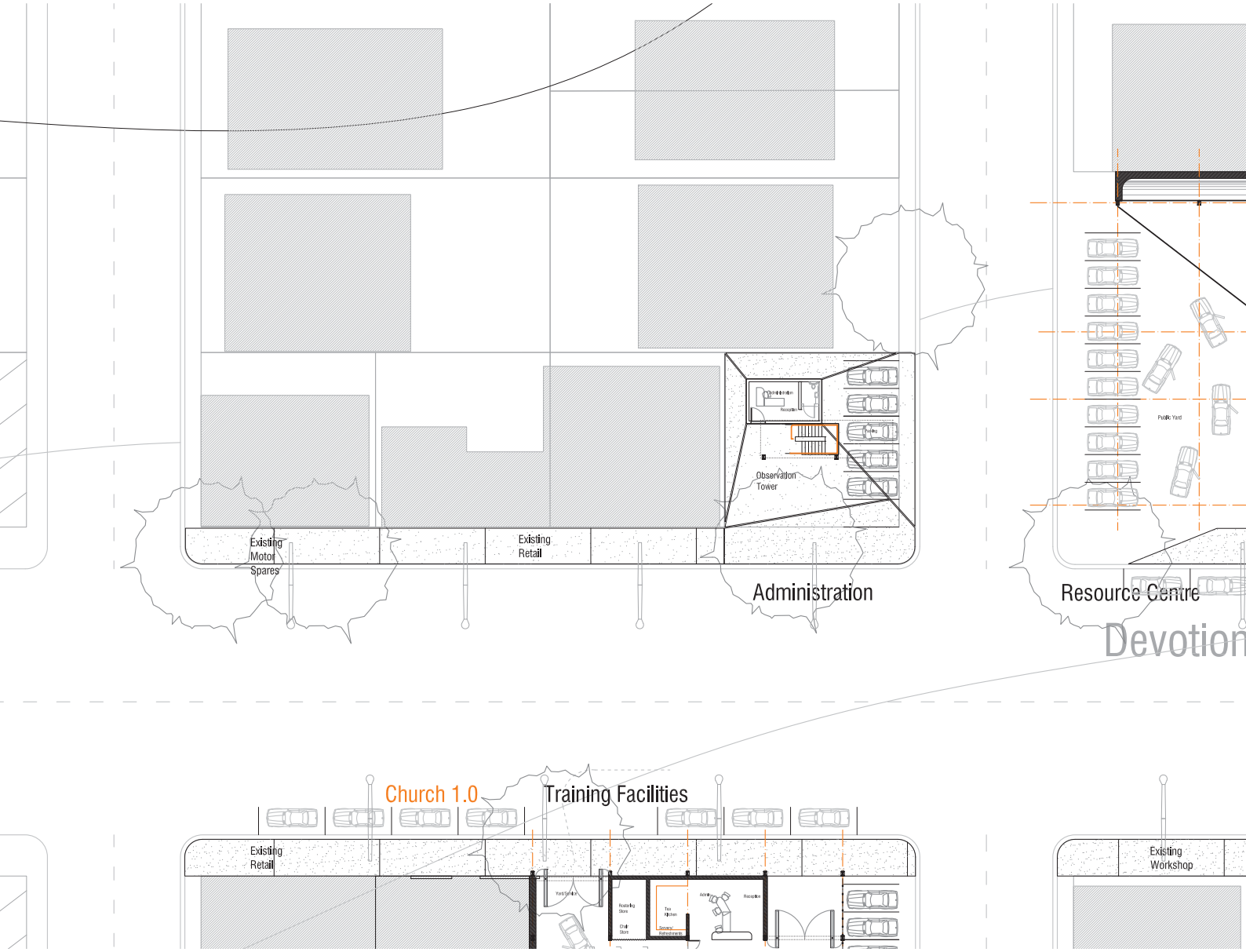
Above: The vantage point of the tower with views over the entire motor ministry as well as the motor strip.

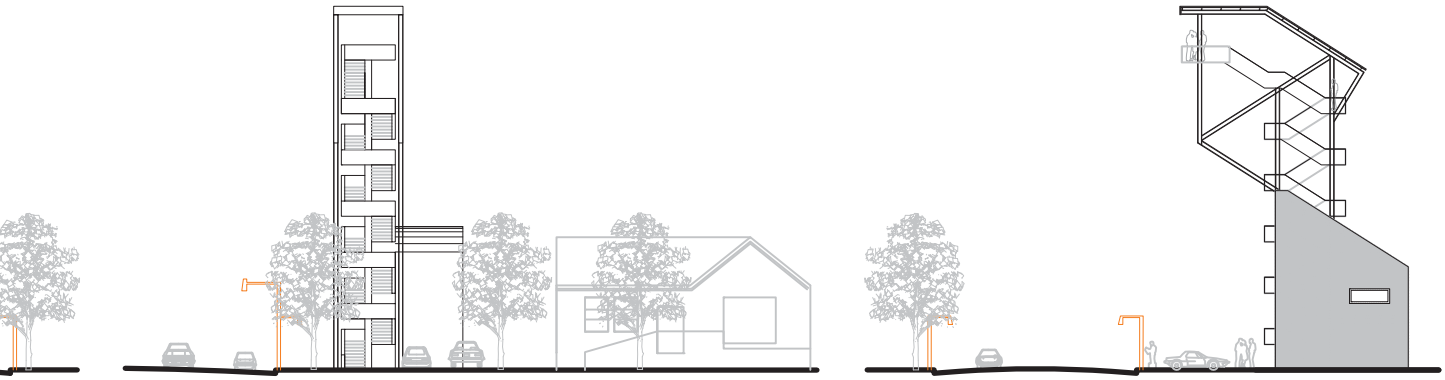
Right: The administrative function is consumed into the tower itself.

Below: The signage function can be seen on the elevations below.



South Elevation



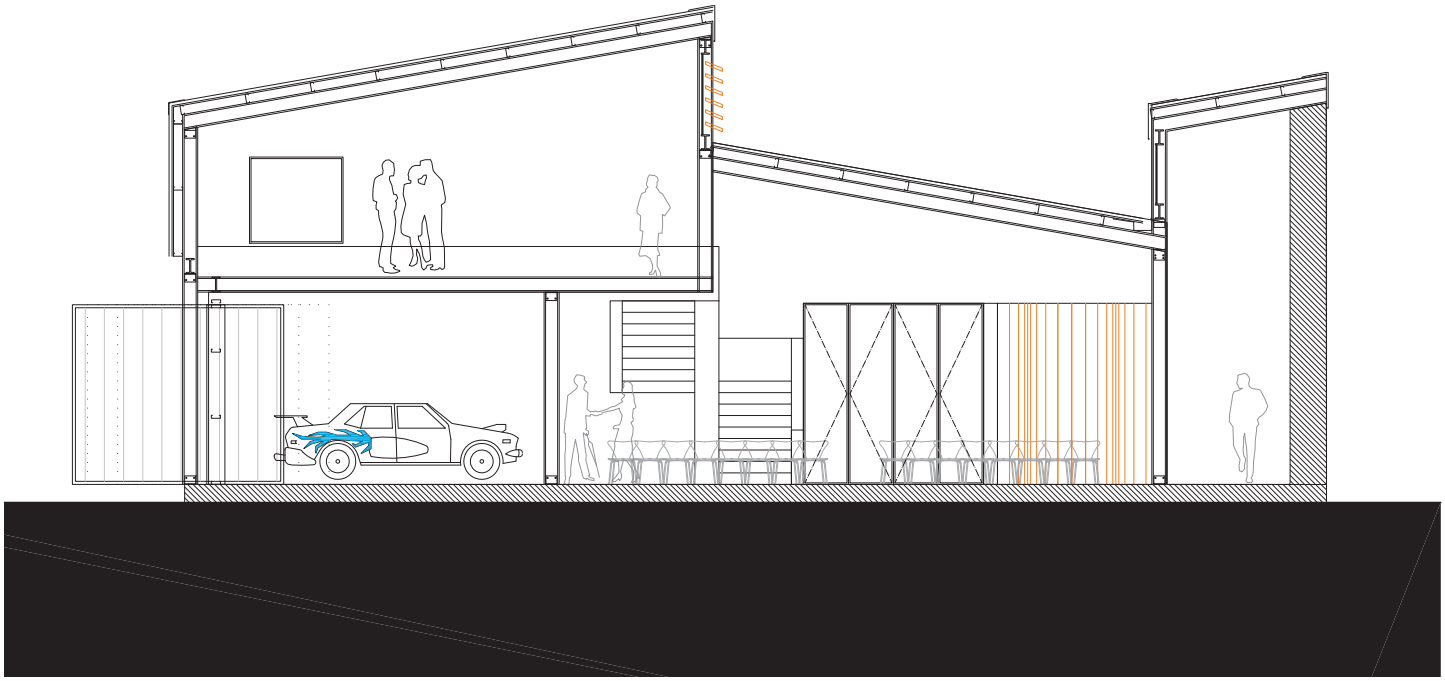


East Elevation

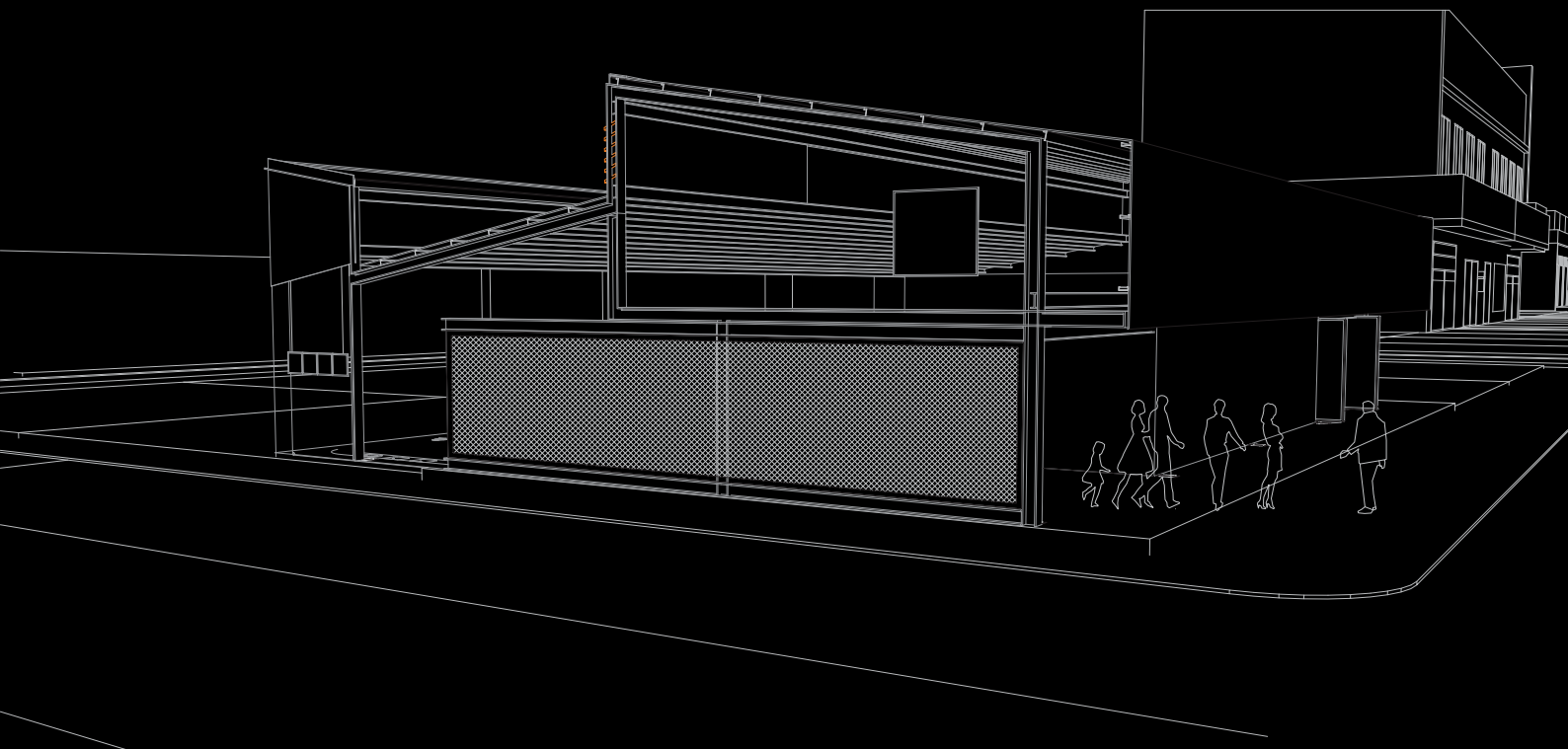
West Elevation

7.0
TRAINING FACILITY



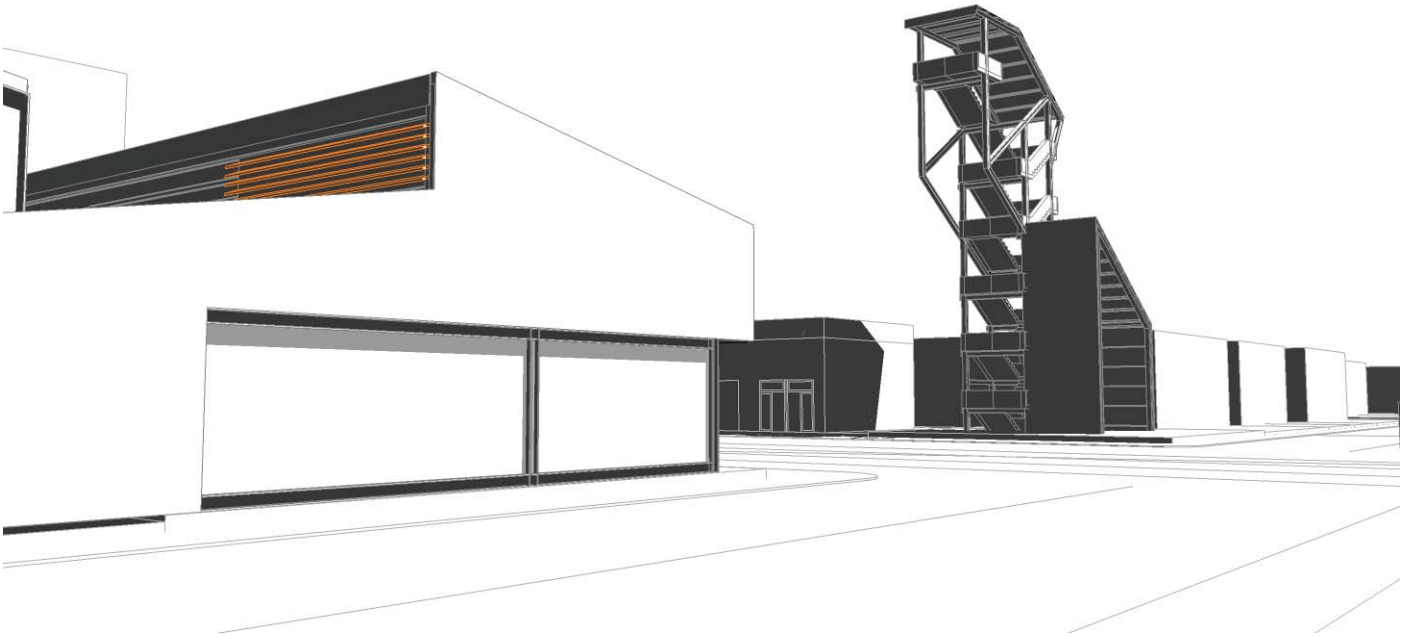


Cross-Section



THE MEETING SHED

The building provides a chapel-like space for the purpose of meeting: be it computer software training for motor vehicle diagnostics or Sunday school for the adjacent church.



THE MEETING SHED continued...

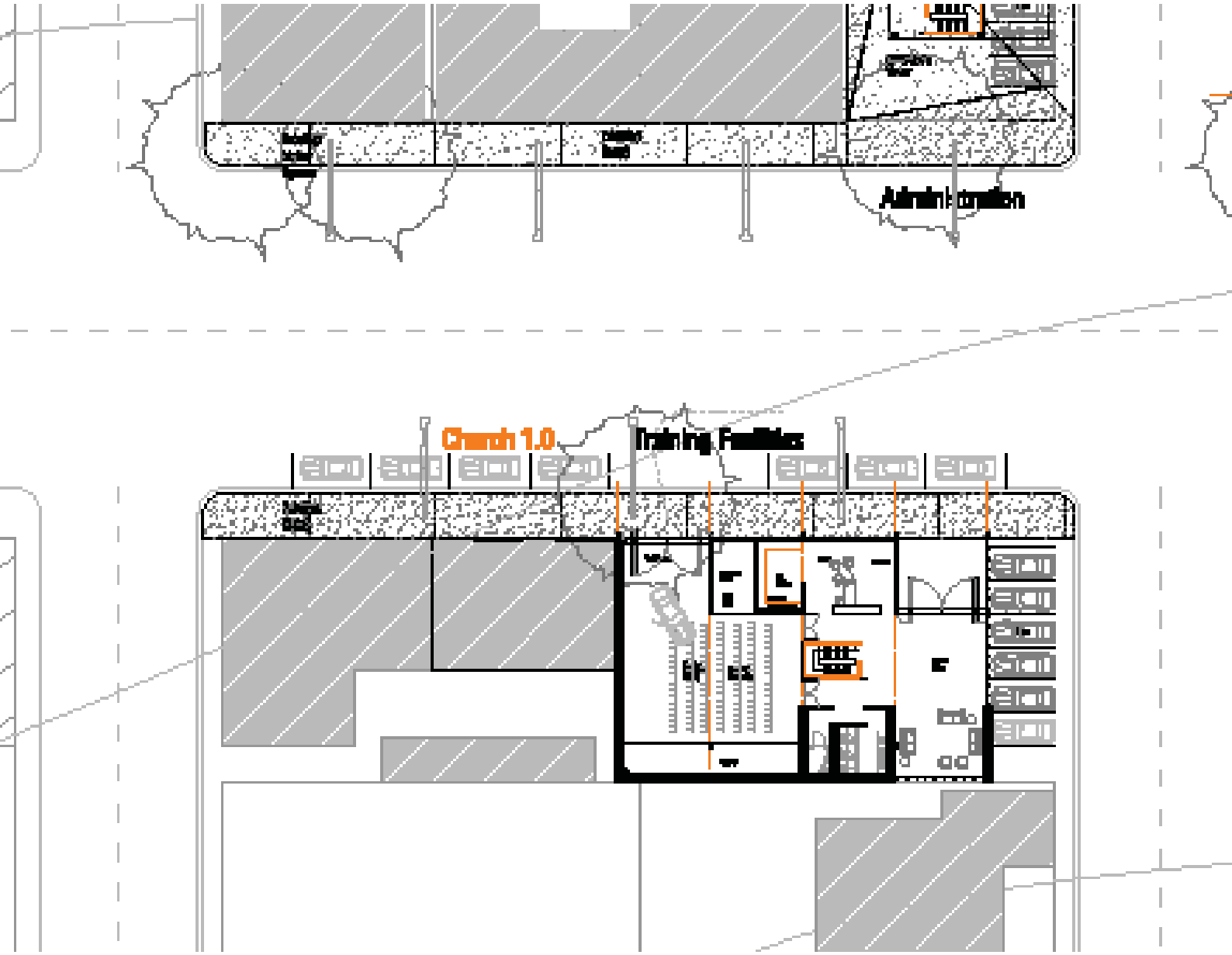
Above: The lowest scale building of the development, the meeting shed, is highly accessible to the public.

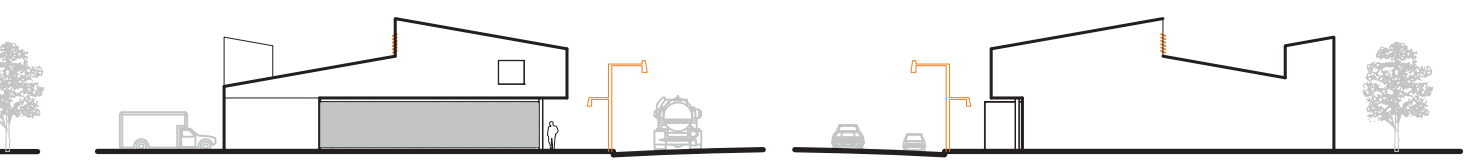
Right: The main meeting space has the ability for a car to be driven directly into it for motor related training.

Below: The existing context of Jules street can be seen on the facade below.



North Elevation



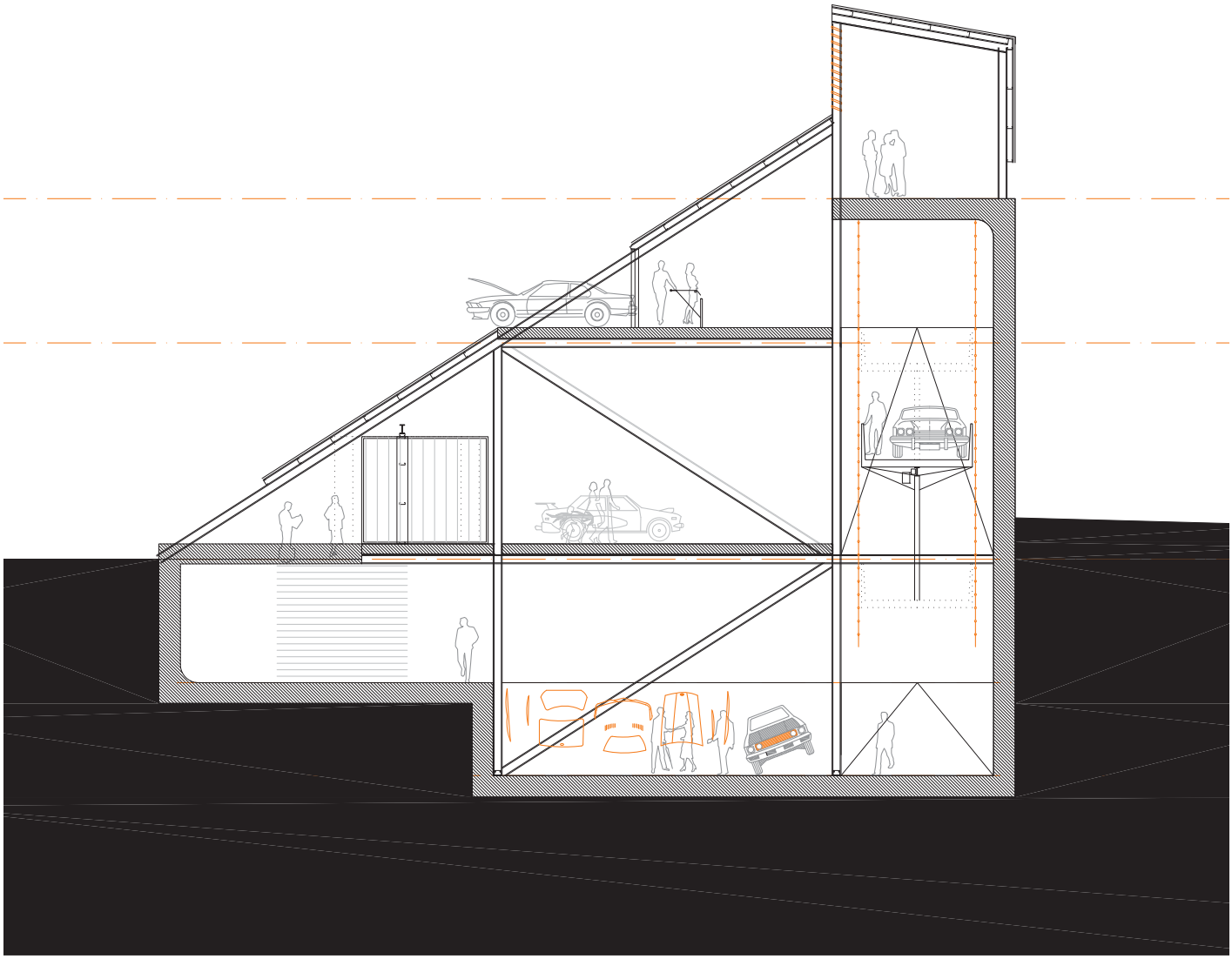


East Elevation

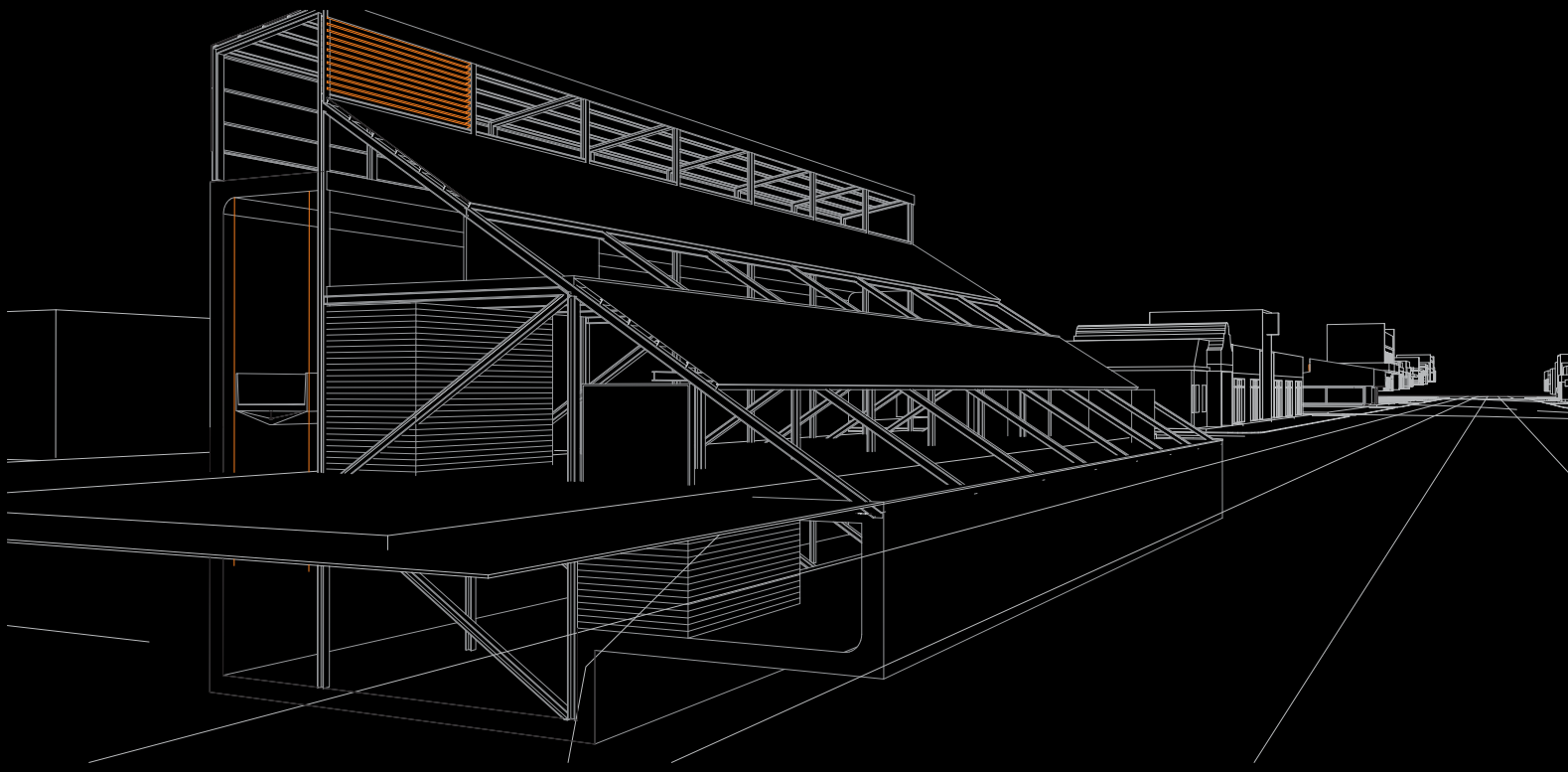
West Elevation

8.0 MOTOR MUSEUM/GALLERY



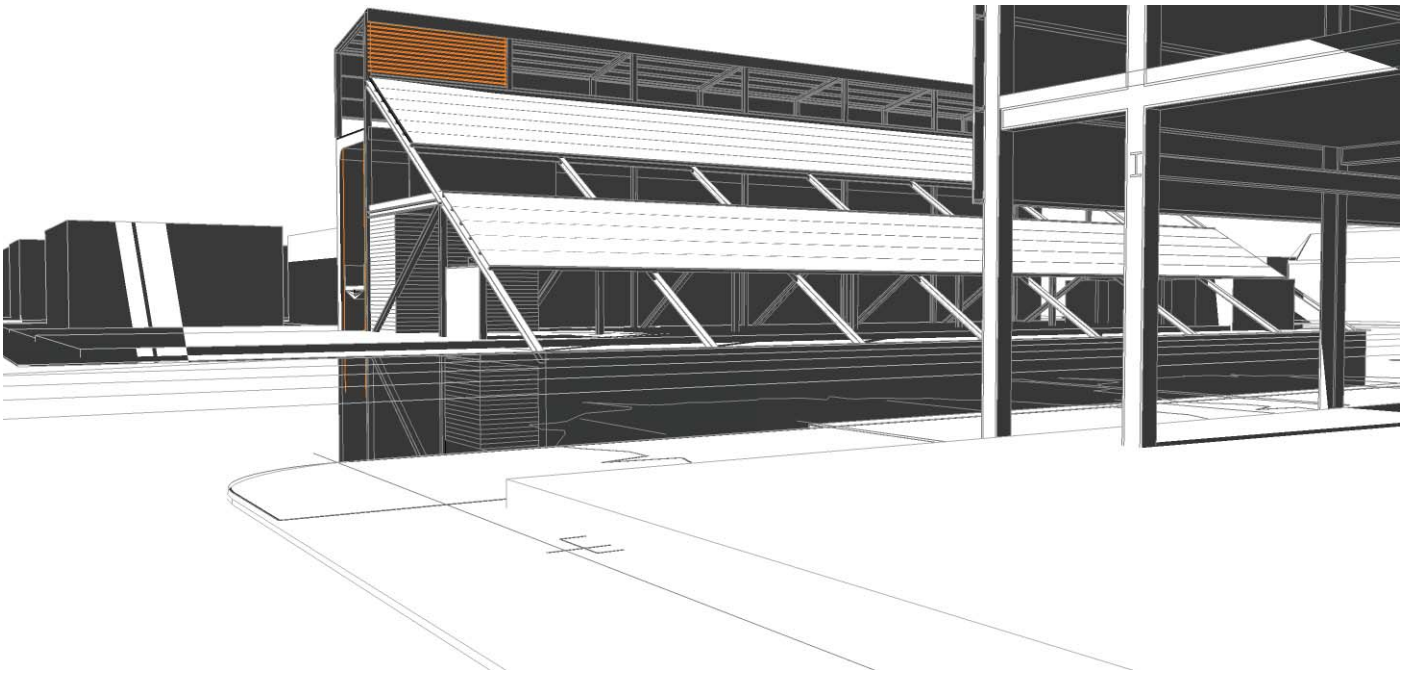


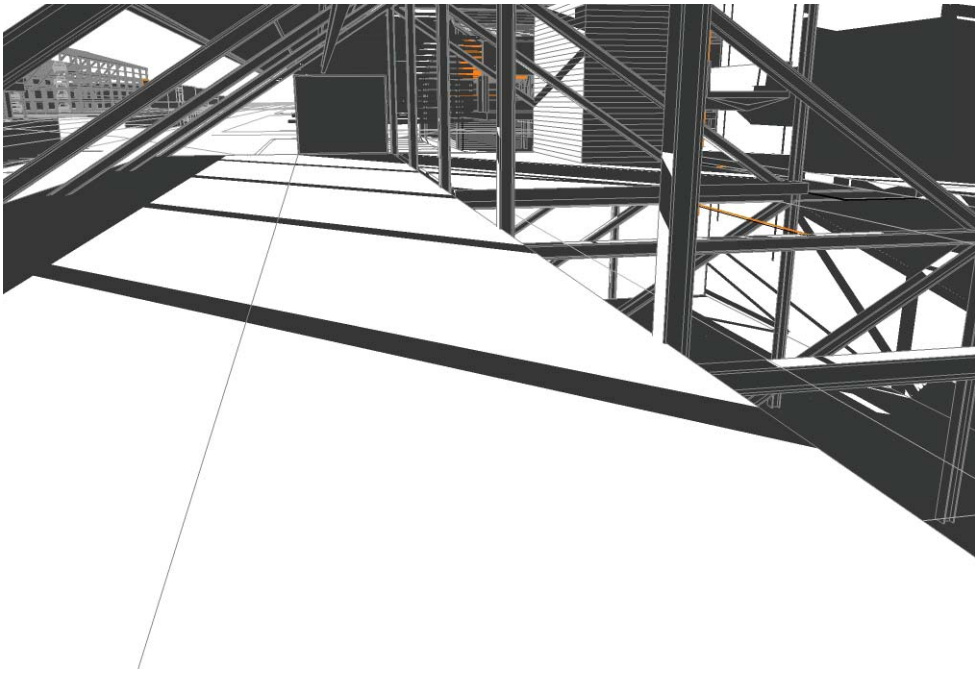
Cross-Section



THE DISPLAY SHED

The section of this building aims to extend forward to absorb the pedestrian on the pavement and then retreat backwards to draw the pedestrian in: either physically to enter the space or visually with views upwards as well as into the buildings underbelly.

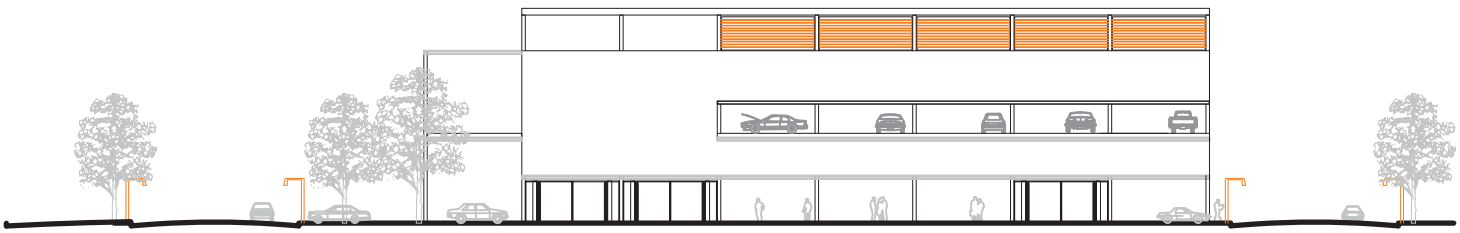


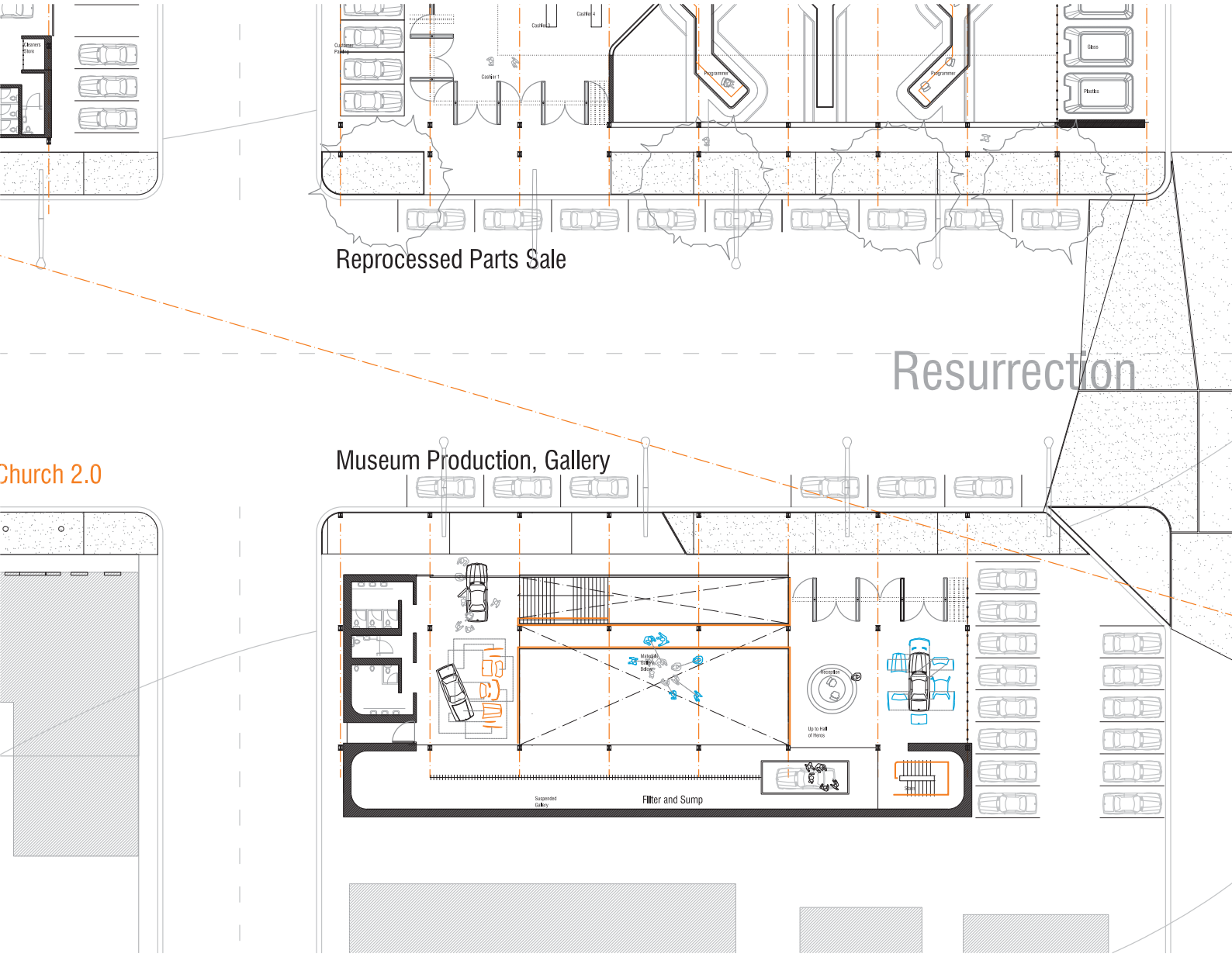


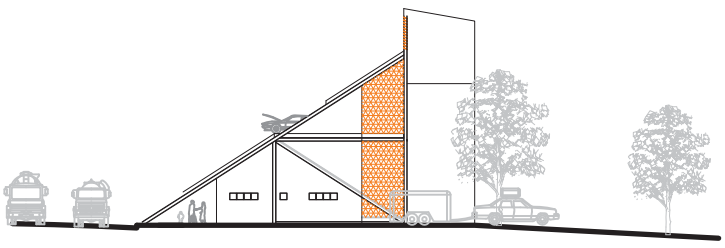
THE DISPLAY SHED continued...

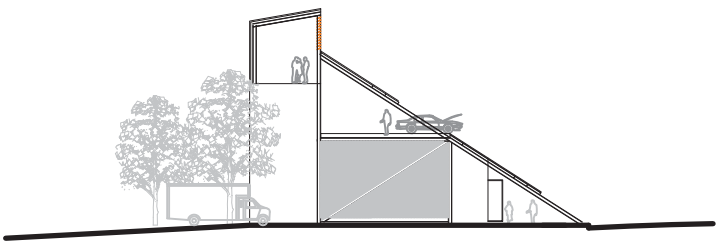
Above and Right: The relationship with the pavement, reinforcing views to within.

Next Page Right: The plan consists of two main exhibition spaces on ground level with a central void for views into the galleries lower display level. The core to the south is a vertical exhibition space



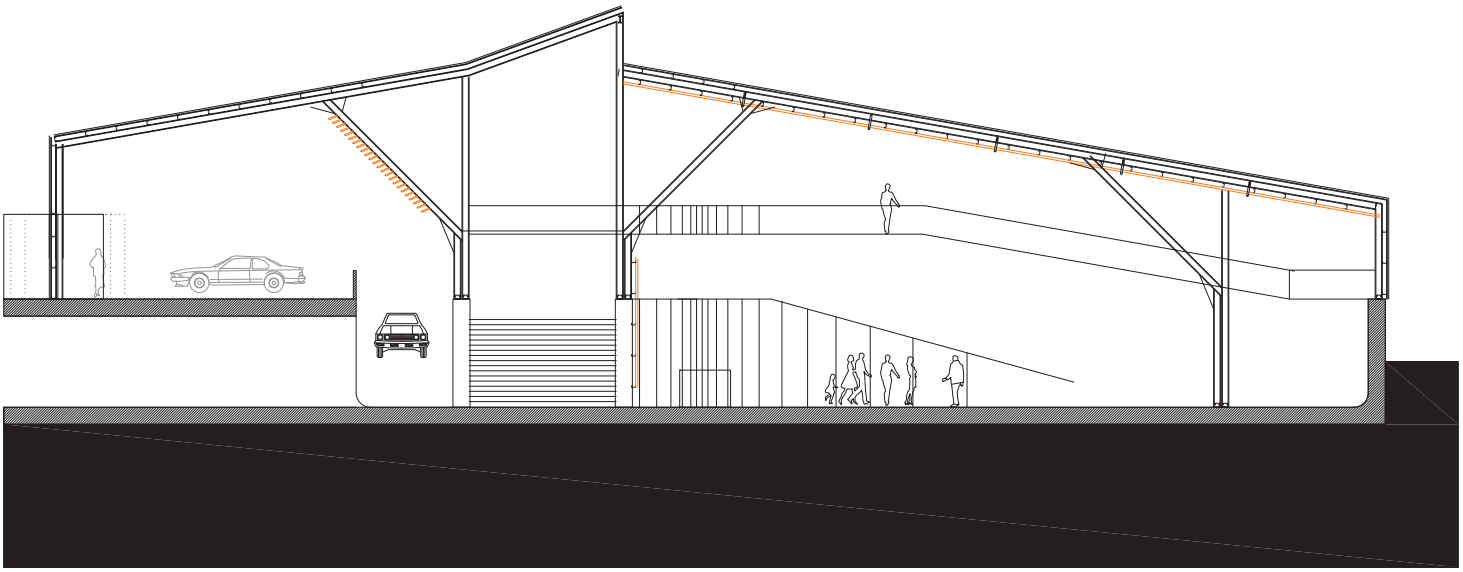

Reprocessed Parts Sale
Resurrection
Church 2.0
Museum Production, Gallery
Filter and Sump



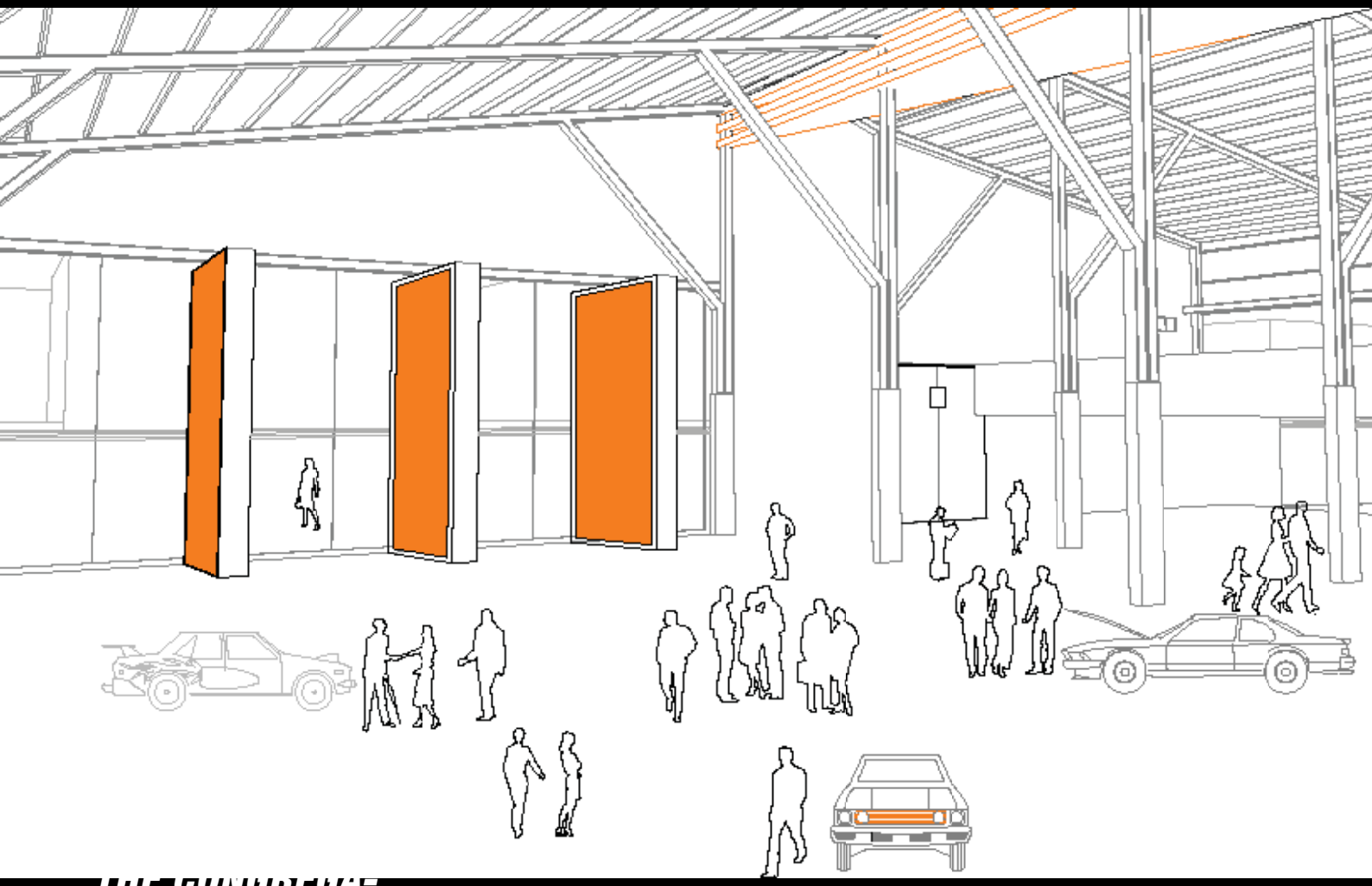


9.0
CONGREGATION HALL AND EXHIBITION SPACE



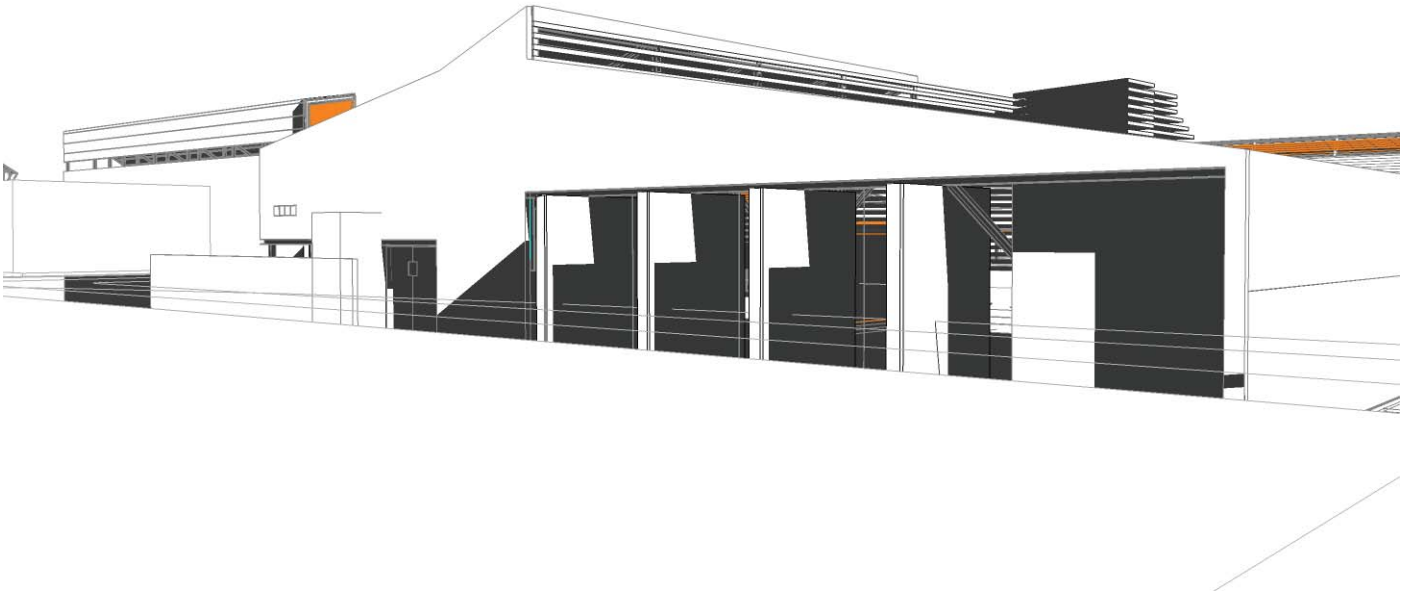


Cross-Section



THE CONGREGATION SHED

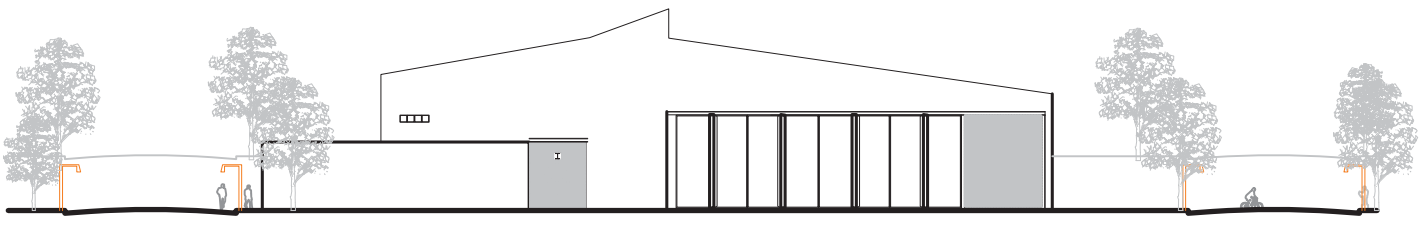
A hybrid space that brings together a religious congregation and a motor congregation under one roof. The dirt of the motor industry is limited through level changes to the western wing but the main gathering space allows for weddings, funerals (which require a larger space than is currently available on Jules Street) and motor exhibitions.



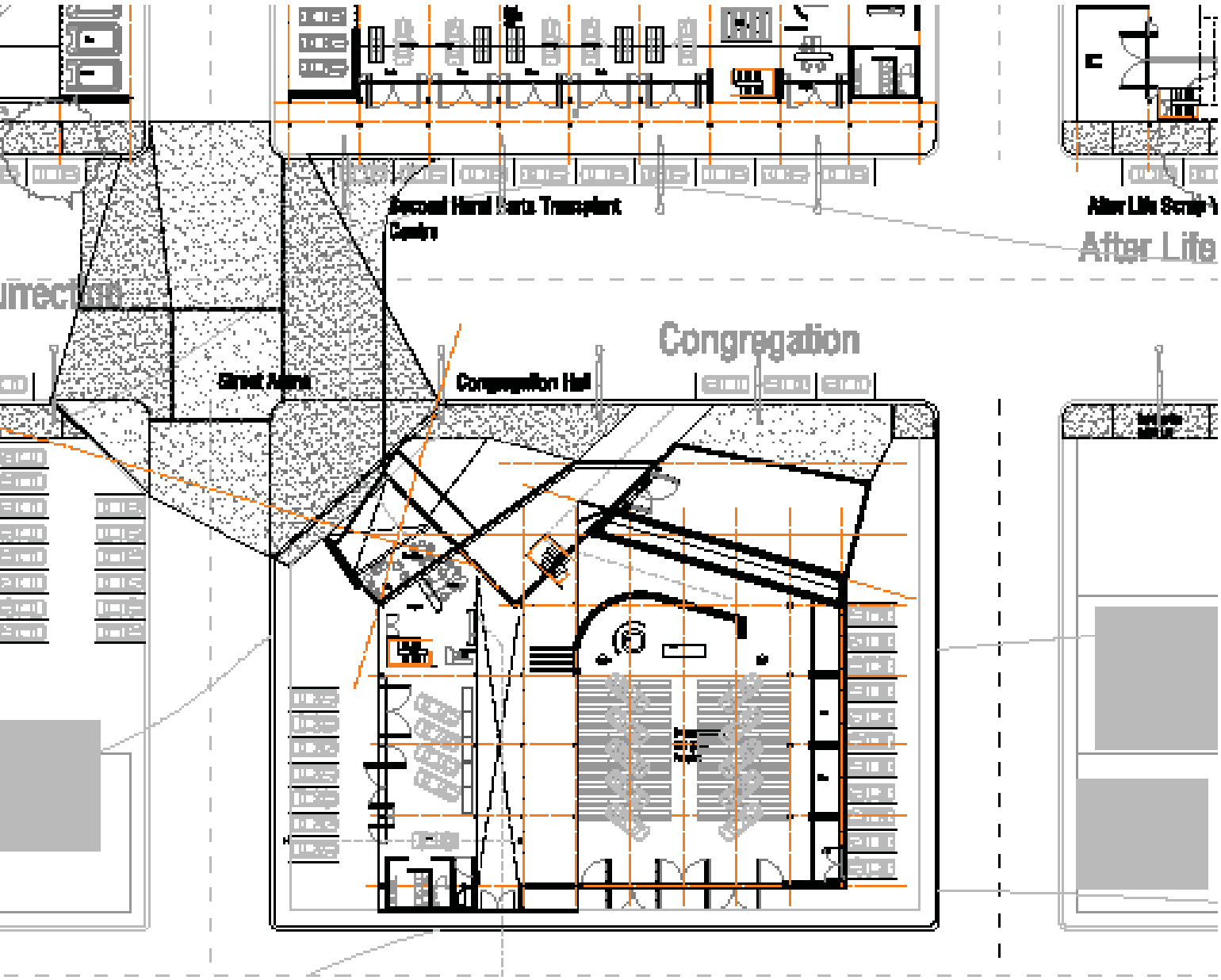
THE CONGREGATION SHED continued...

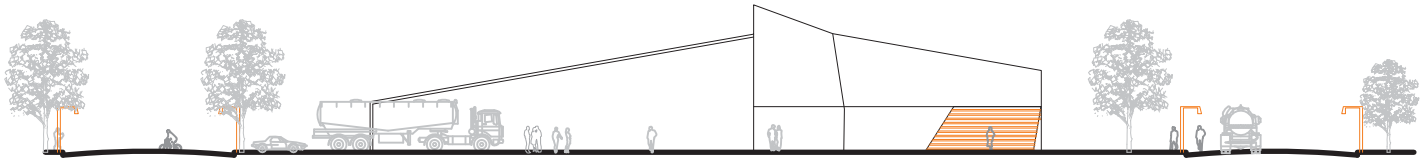
Above: The south elevation opens to a public courtyard for interaction after functions.

Right: The plan offers two ceremonial entrances to the main hall, the first: From Jules street off-axis and around the back of the alter. and The second, on axis, through 4 pivot doors from the south.

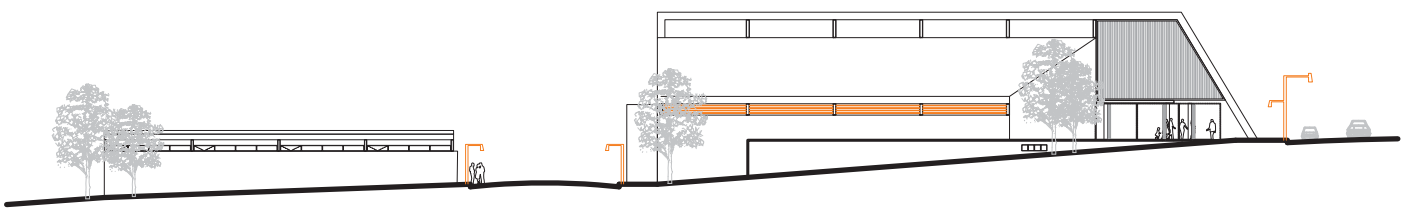


South Elevation

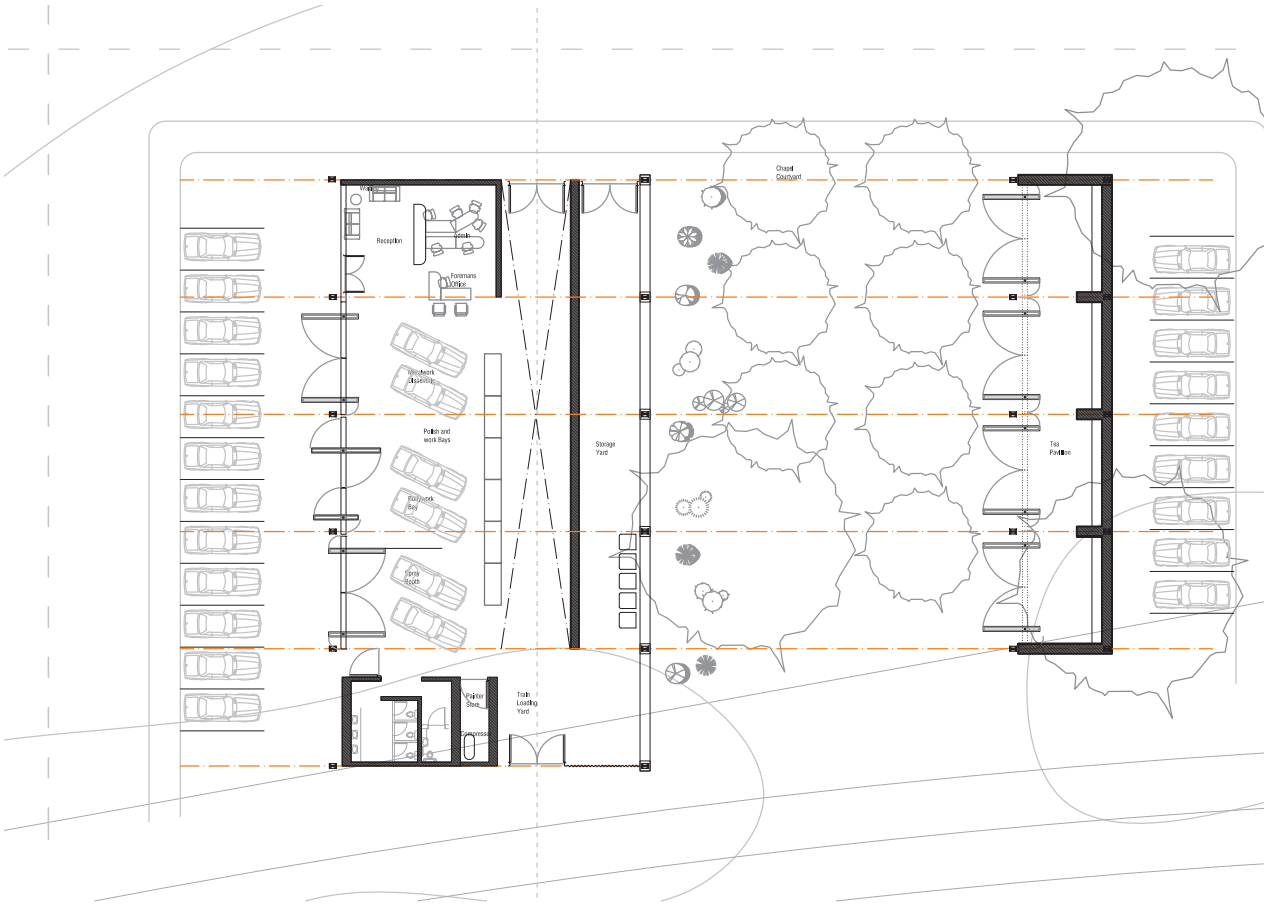




North Elevation



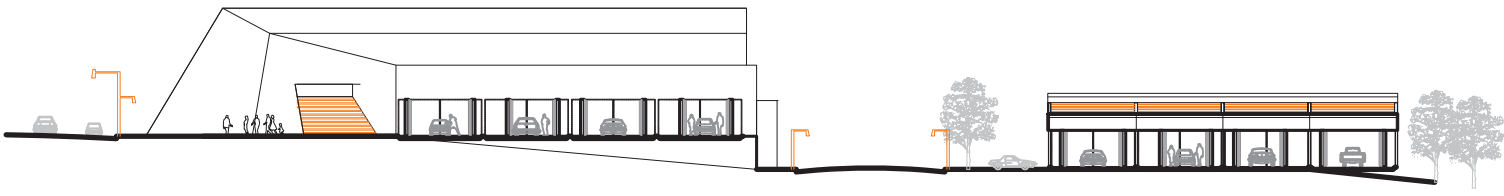
East Elevation



THE CONGREGA-TION SHED continued...

Above: The plan of the public courtyard is defined by a tea pavilion to the east and the car resurrection workshop to the west, retaining views over industria to the south.

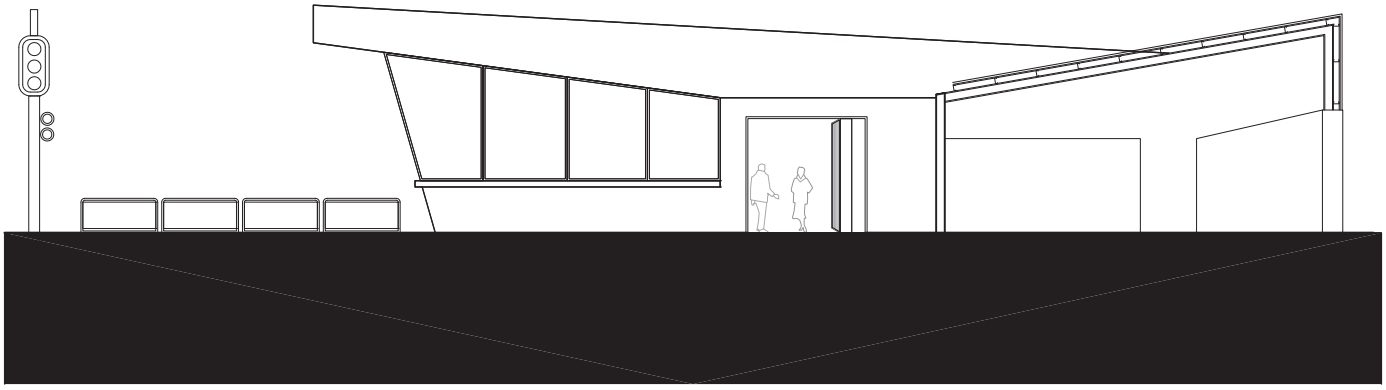
Below, The use of the sloping ground allows for a low scale entrance from Jules Street.



West Elevation

10.0 DINING HALL AND SHISA-NYAMA BUY AND BRAAI

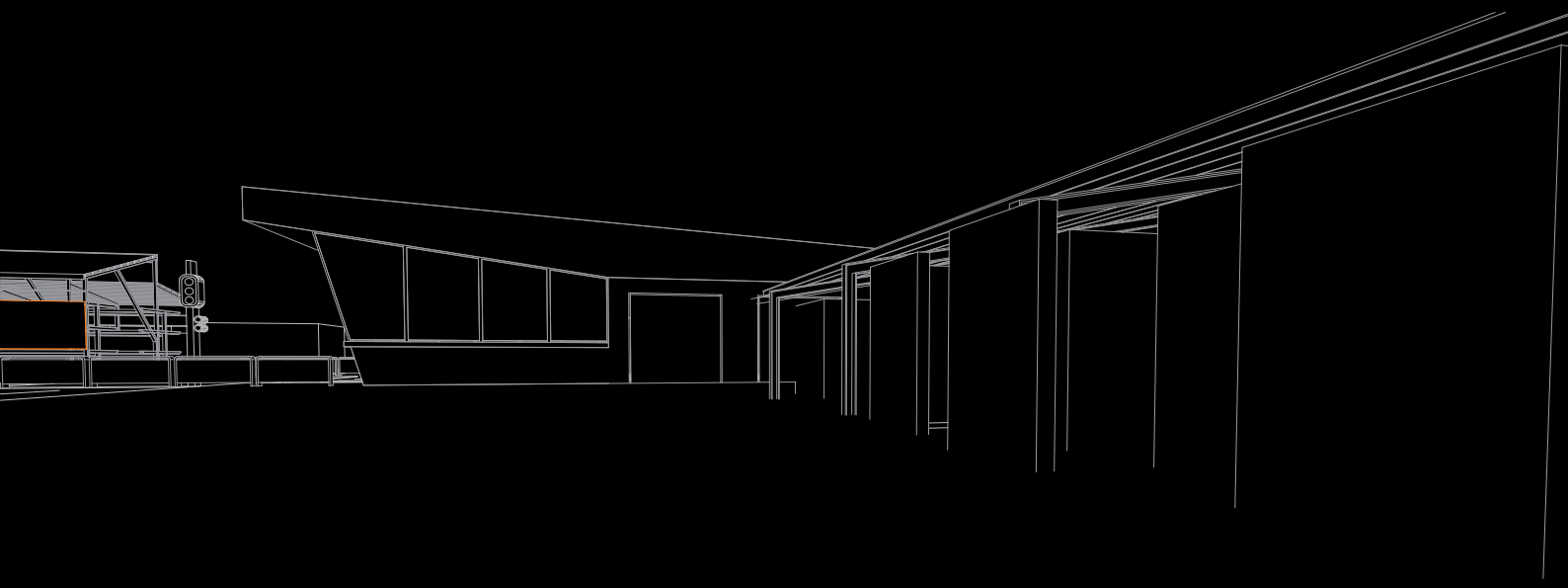


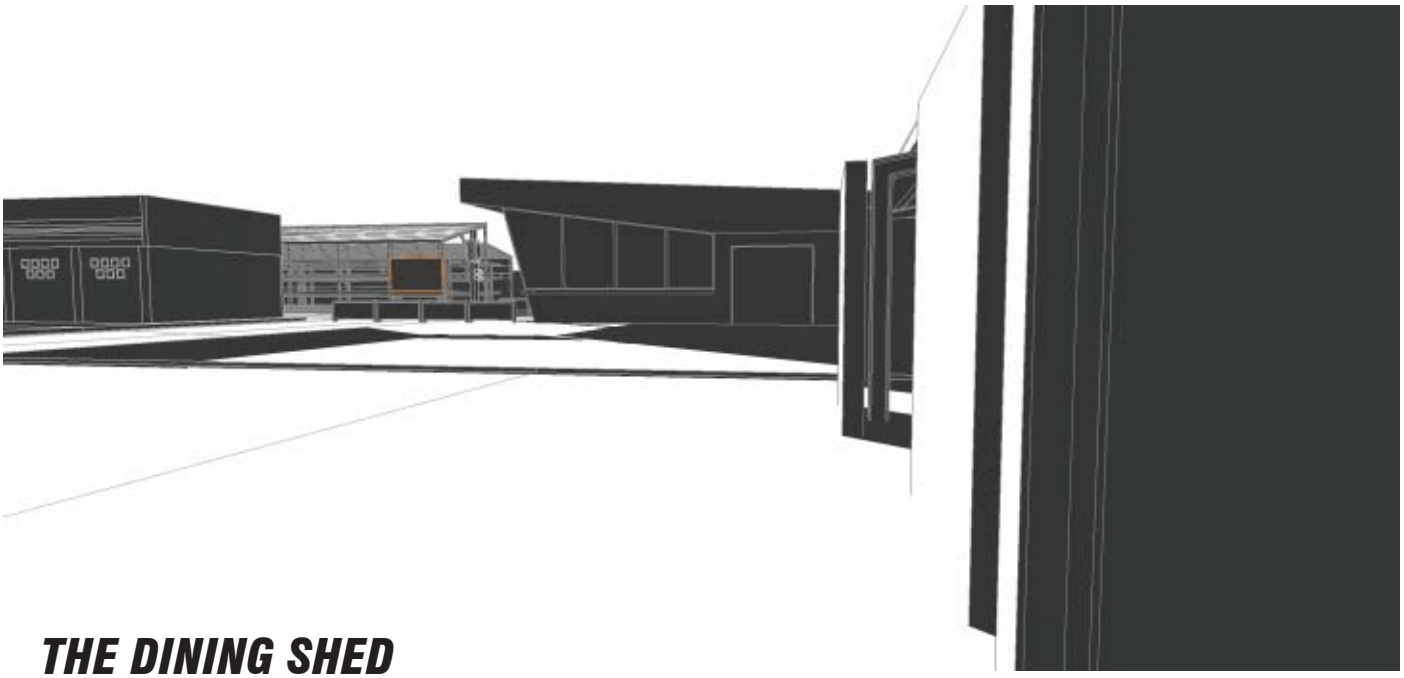


Cross-Section

THE DINING SHED

The existing road house structure is retained and becomes the main internal dining space. The kitchen and services are housed in an extension that extends towards the south and creates a courtyard for the Shisa Nyama.

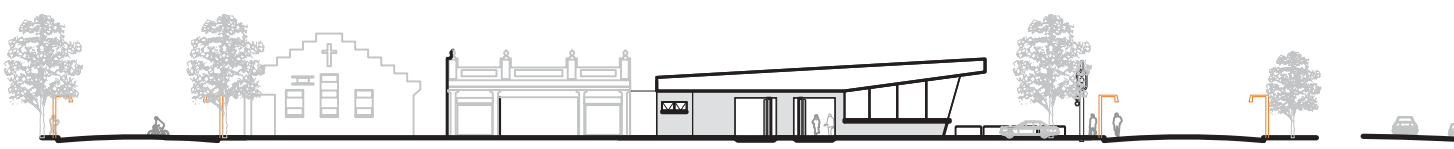




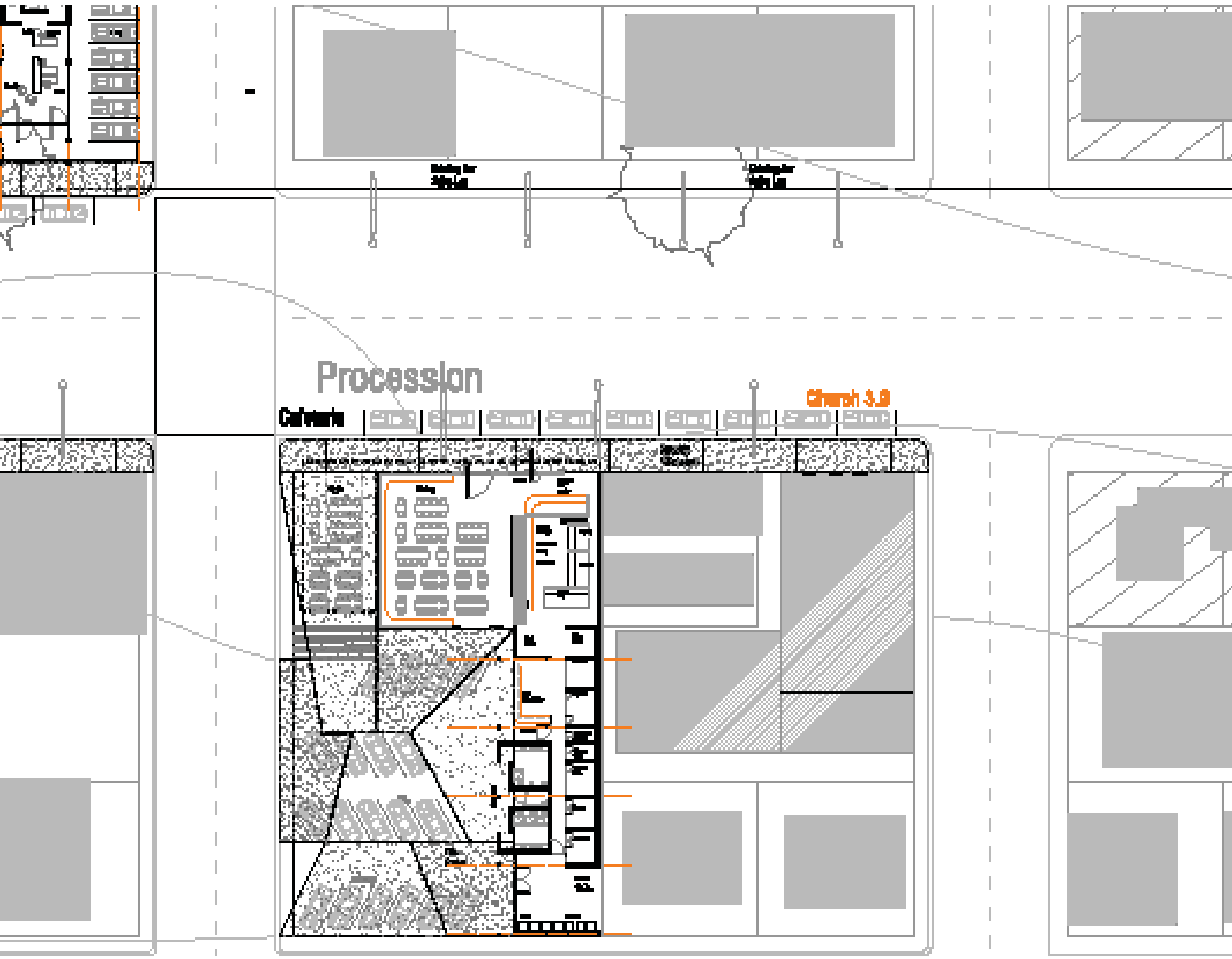
THE DINING SHED continued...

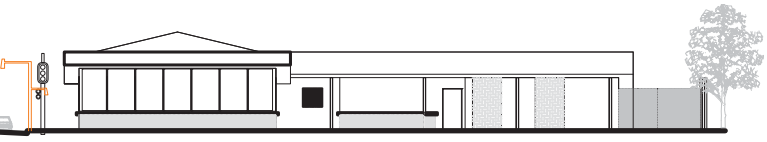
Right: The plan show (in grey) the existing structure with indoor dining and servery. The kitchen storage and service extension to the south has a meat and charcoal sales counter directly onto the Shisa Nyama square.

The elevations show the response to the existing building, the only change on the north facade is the replacement of the garage doors to the same pivot doors used throughout the development.



North Elevation

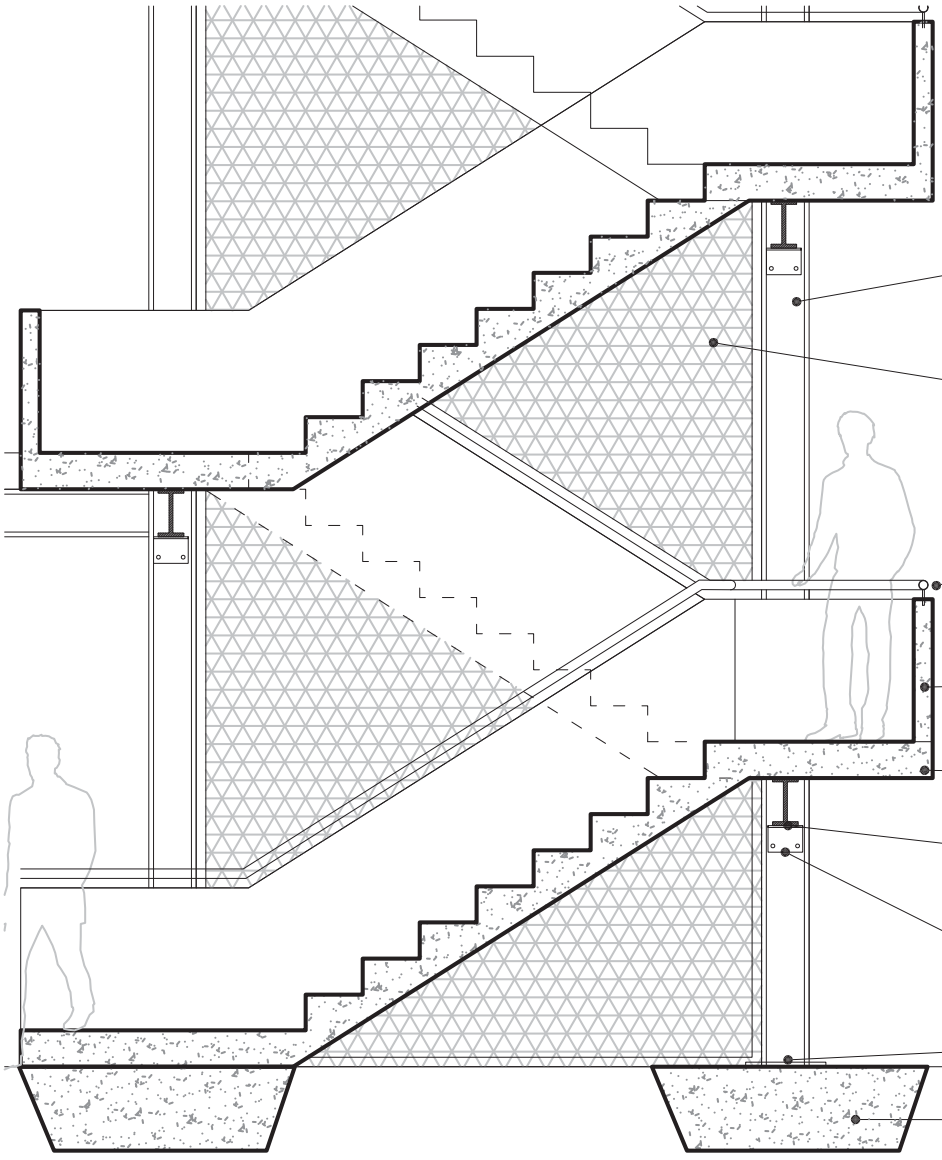




West Elevation



South Elevation



254x254mm hot rolled m/s H–Column

Steel mesh fabric screen secured to 75x50x20x2mm cold formed lip channel to manufacturers specifications

50mm dia, stainless steel handrail secured with 10mm dia s/s pins drilled and adhered to concrete

900mm high concrete balustrade wall

precast concrete tread, riser and landing to struct eng detail

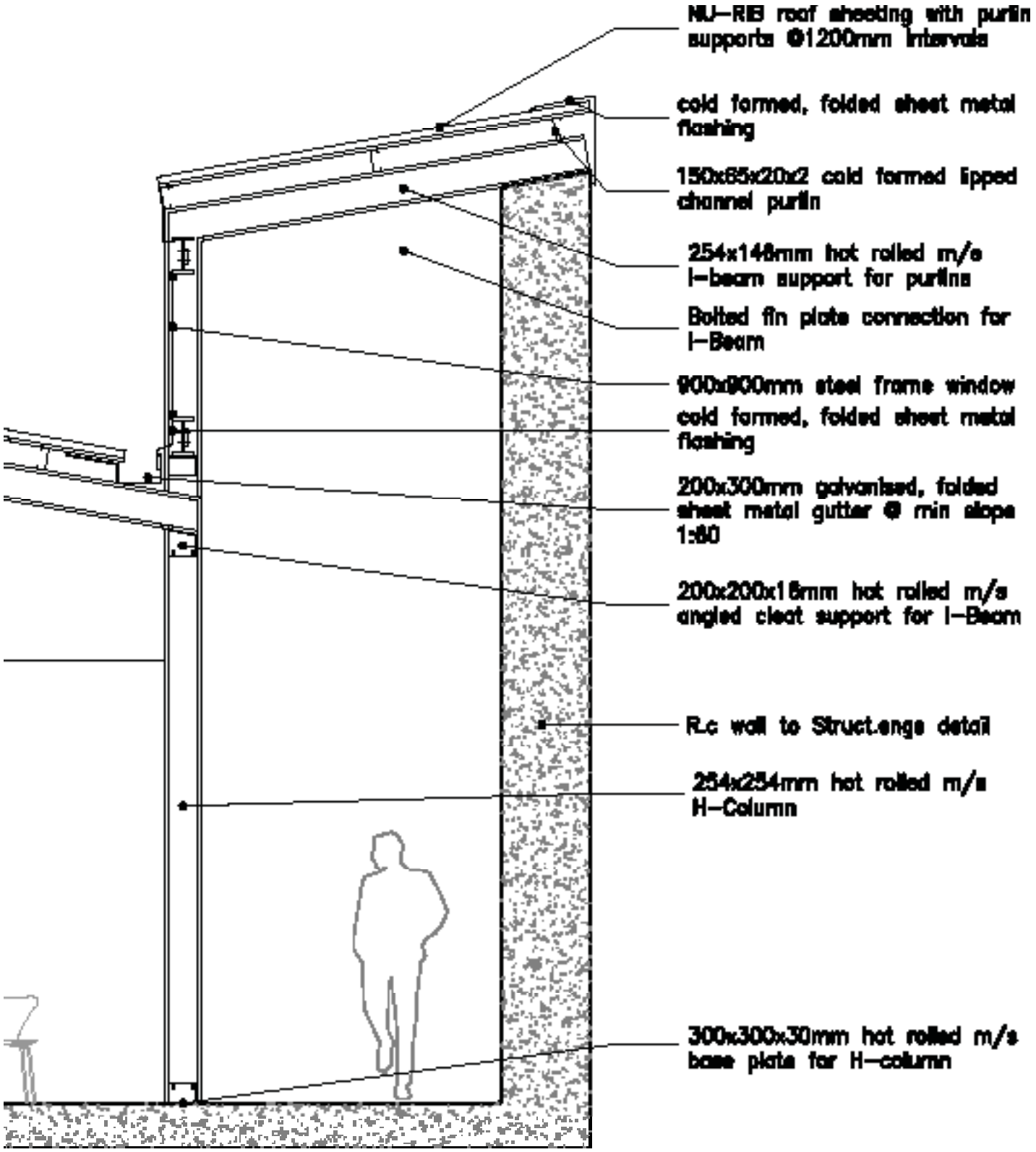
254x146mm hot rolled m/s I–beam support for concrete

200x200x16mm hot rolled m/s angled cleat support for I–Beam

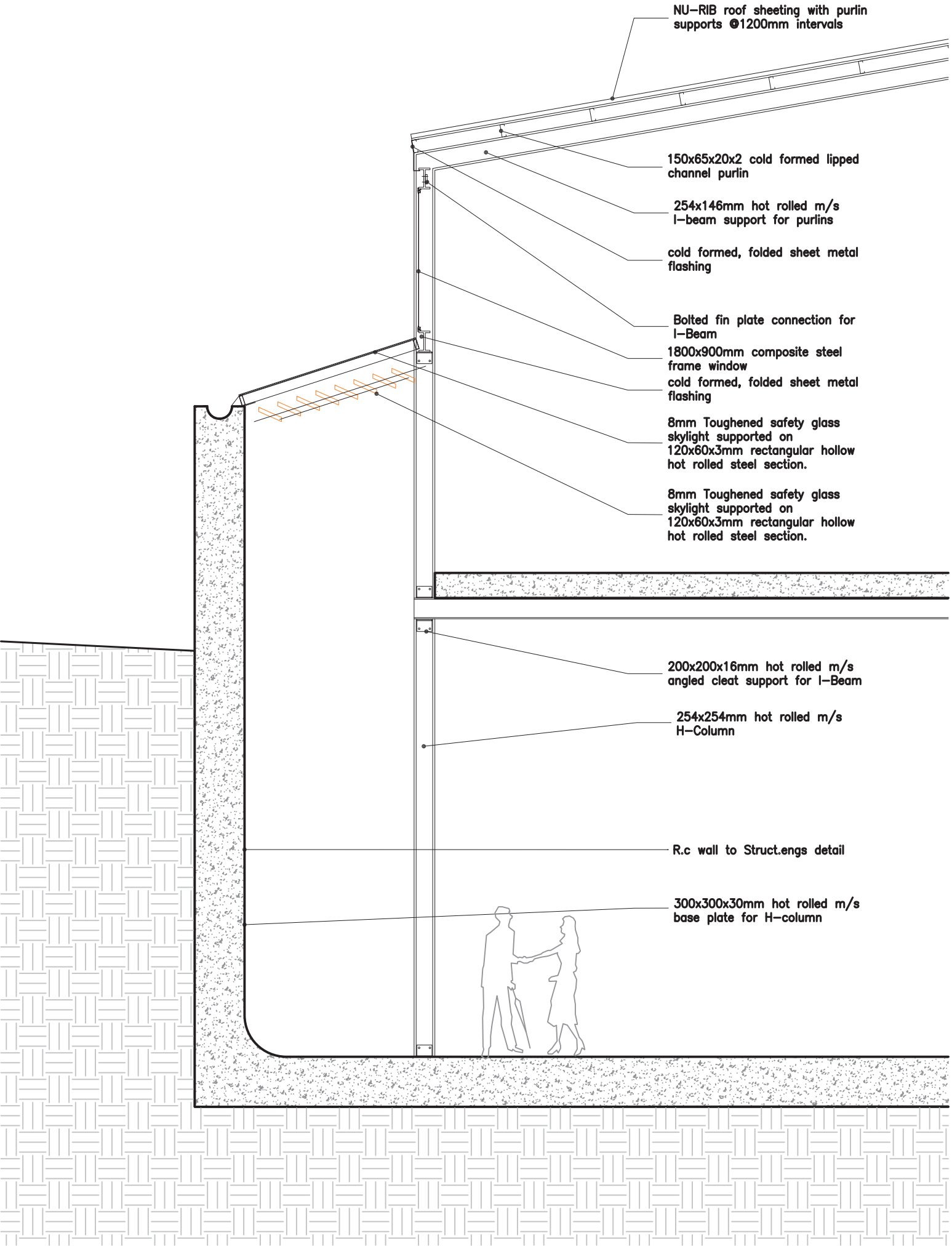
300x300x30mm hot rolled m/s base plate for H–column

R.c foundations to Struct.engs detail

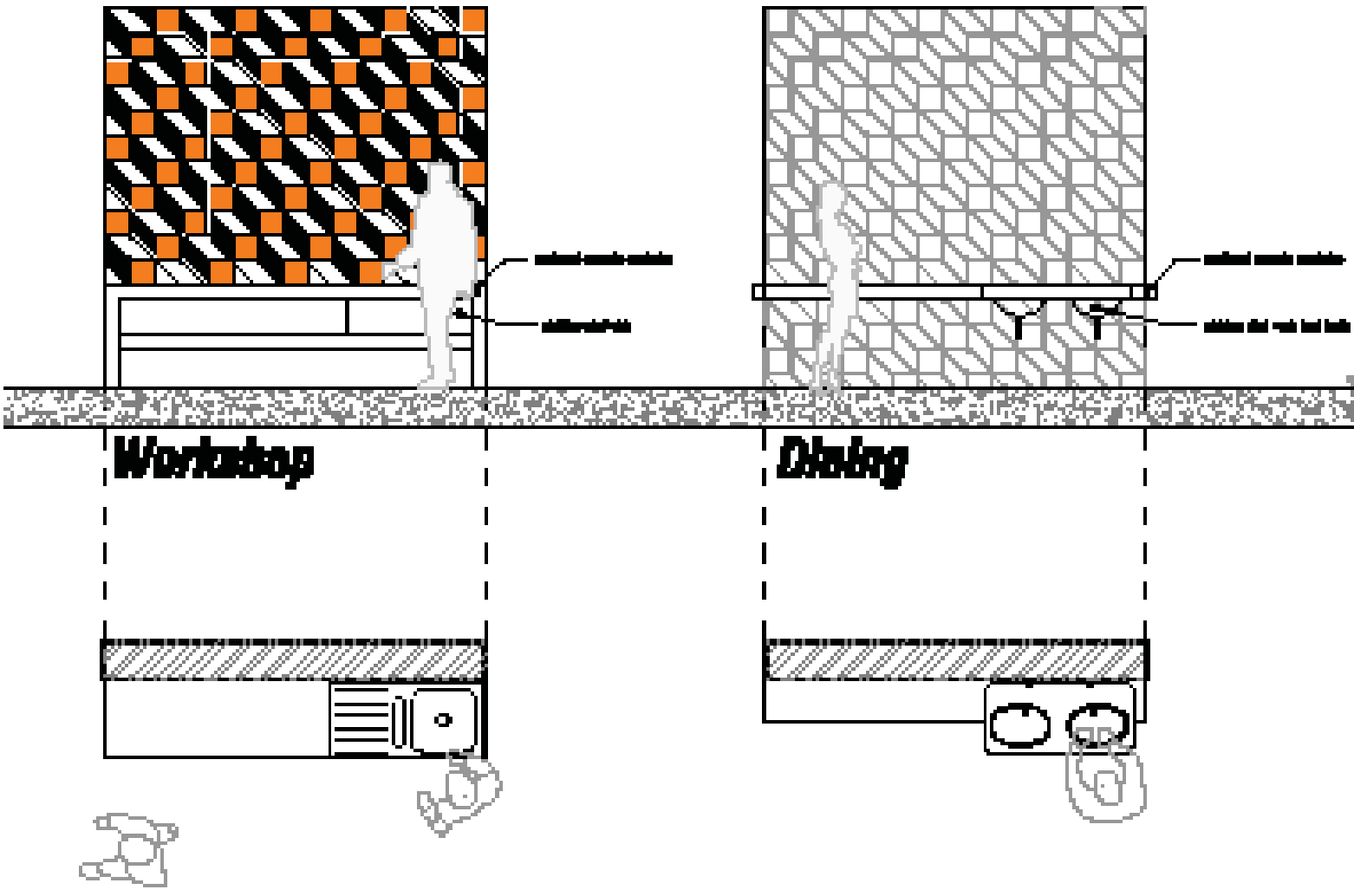
DETAIL 1:
Administration
Tower Stairwell


NU–REI roof sheeting with purlin supports @1200mm intervals
cold formed, folded sheet metal flashing
150x65x20x2 cold formed lipped channel purlin
254x146mm hot rolled m/s I–beam support for purlins
Bolted fin plate connection for I–Beam
900x900mm steel frame window
cold formed, folded sheet metal flashing
200x300mm galvanised, folded sheet metal gutter @ min slope 1:80
200x200x16mm hot rolled m/s angled cleat support for I–Beam
R.c wall to Struct.engs detail
254x254mm hot rolled m/s H–Column
300x300x30mm hot rolled m/s base plate for H–column

DETAIL 2:
Training facilities lights scoop and steel frame Structure.

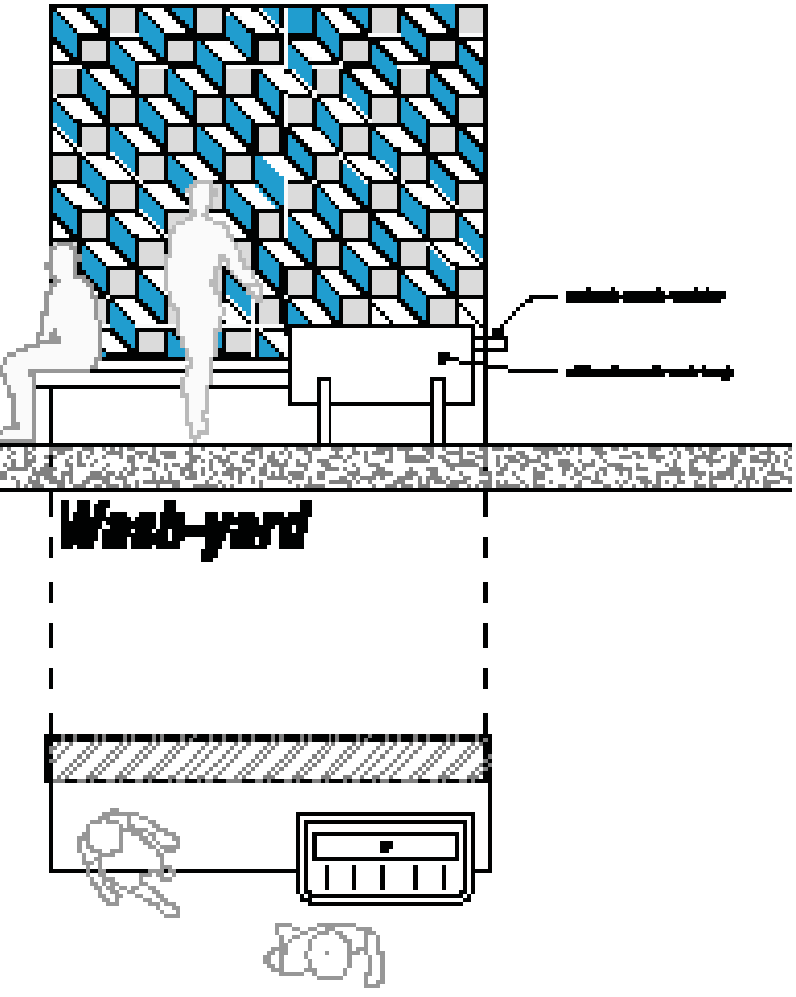

NU–RIB roof sheeting with purlin supports @1200mm intervals
150x65x20x2 cold formed lipped channel purlin
254x146mm hot rolled m/s I–beam support for purlins
cold formed, folded sheet metal flashing
Bolted fin plate connection for I–Beam
1800x900mm composite steel frame window
cold formed, folded sheet metal flashing
8mm Toughened safety glass skylight supported on 120x60x3mm rectangular hollow hot rolled steel section.
8mm Toughened safety glass skylight supported on 120x60x3mm rectangular hollow hot rolled steel section.
200x200x16mm hot rolled m/s angled cleat support for I–Beam
254x254mm hot rolled m/s H–Column
R.c wall to Struct.engs detail
300x300x30mm hot rolled m/s base plate for H–column

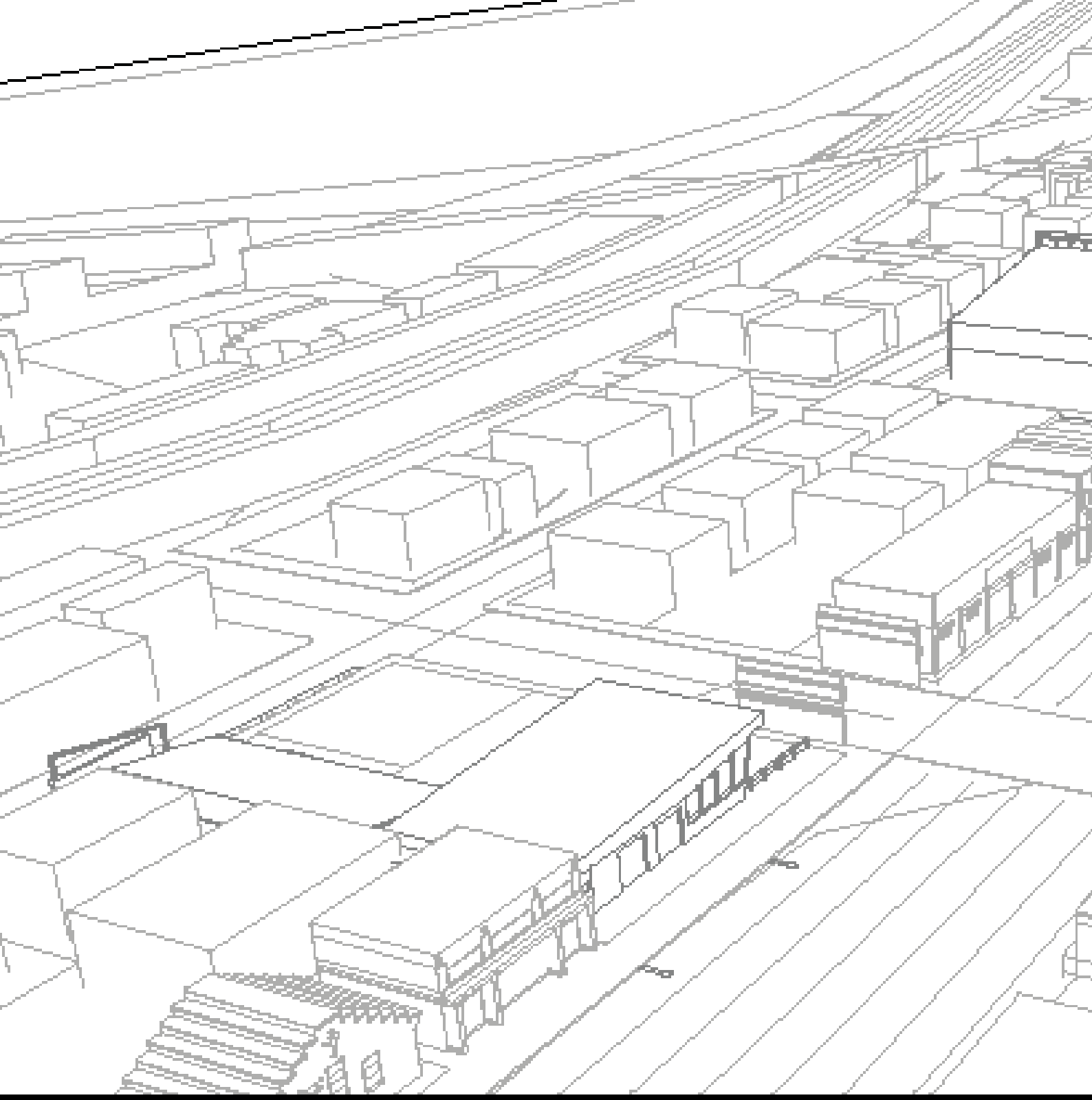
DETAIL 3:
Parts Supermar-
ket Light well and
steel frame
Structure.


Workshop
Dining

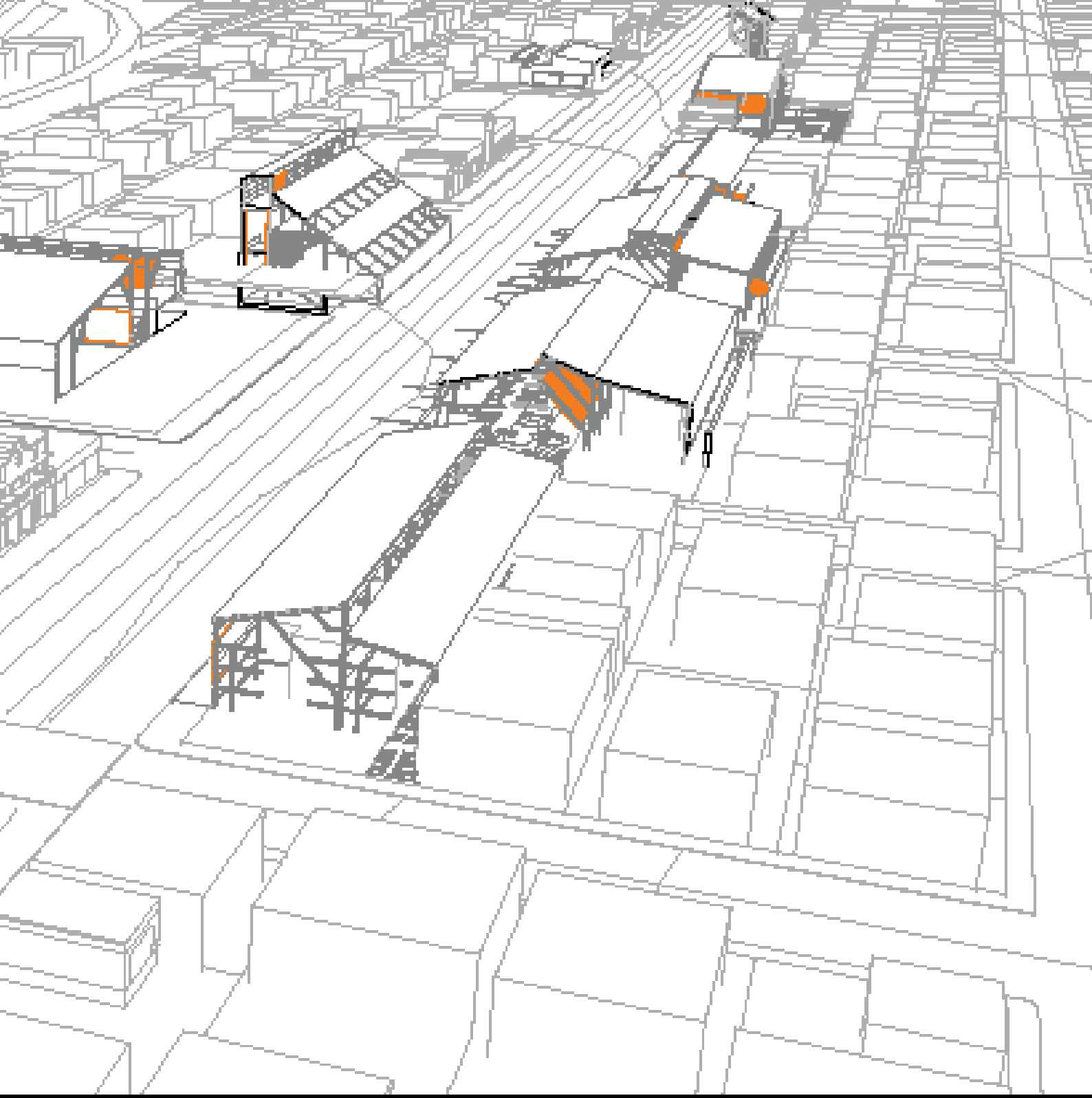
DETAIL 4:
A Cleansing Ritual

Different responses to the activity of cleansing for both industrial and cultural space





AMEN



IN CONCLUSION... PART 5.

A USERS-GUIDE TO THE LAND OF PRIESTS AND PETROL-HEADS

FINAL DRAWINGS



GALLERY PAVEMENT VIEW...

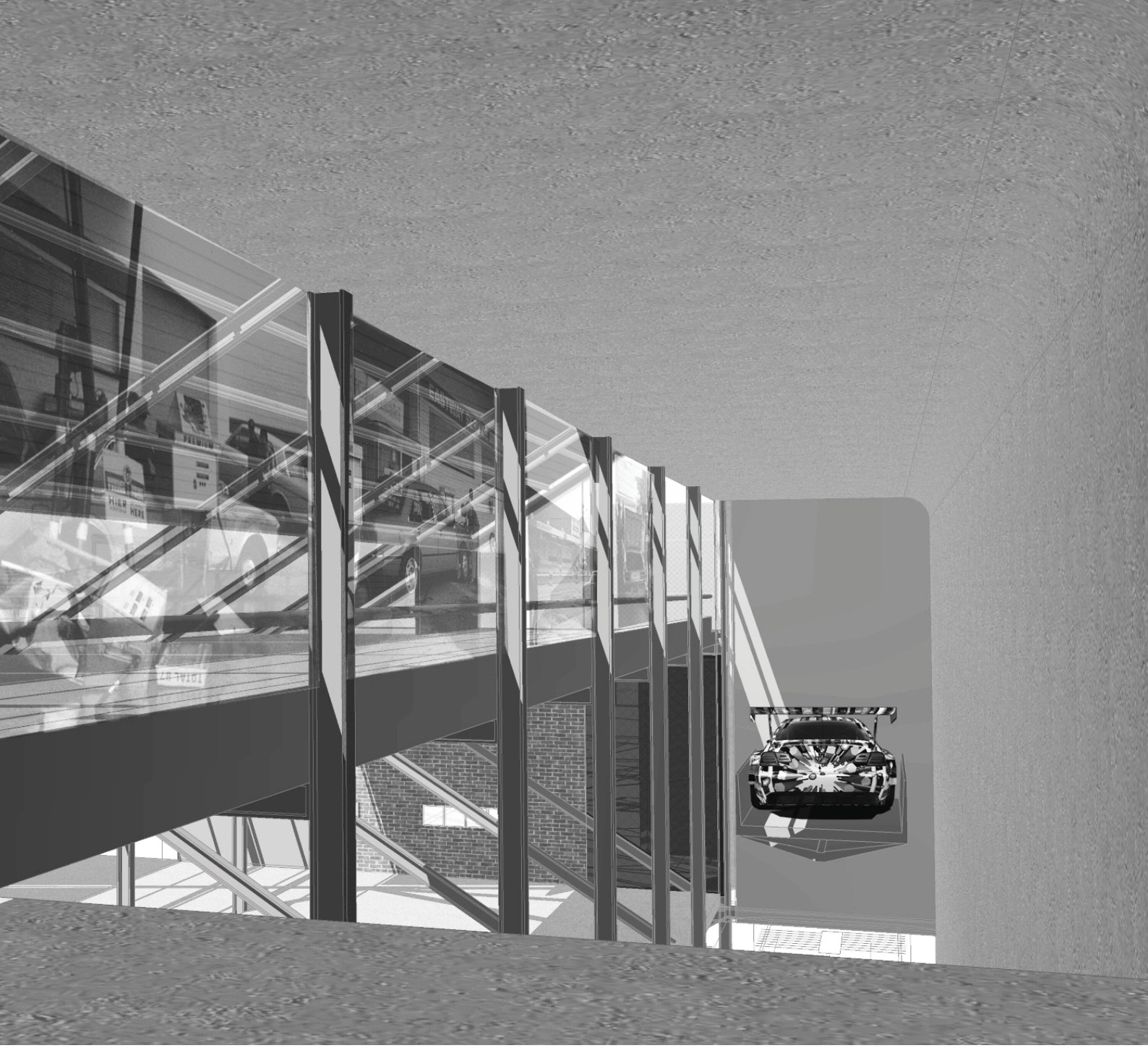
Across the road: Lookout tower (far distance) than tooling re-source, workshops and parts supermarket.





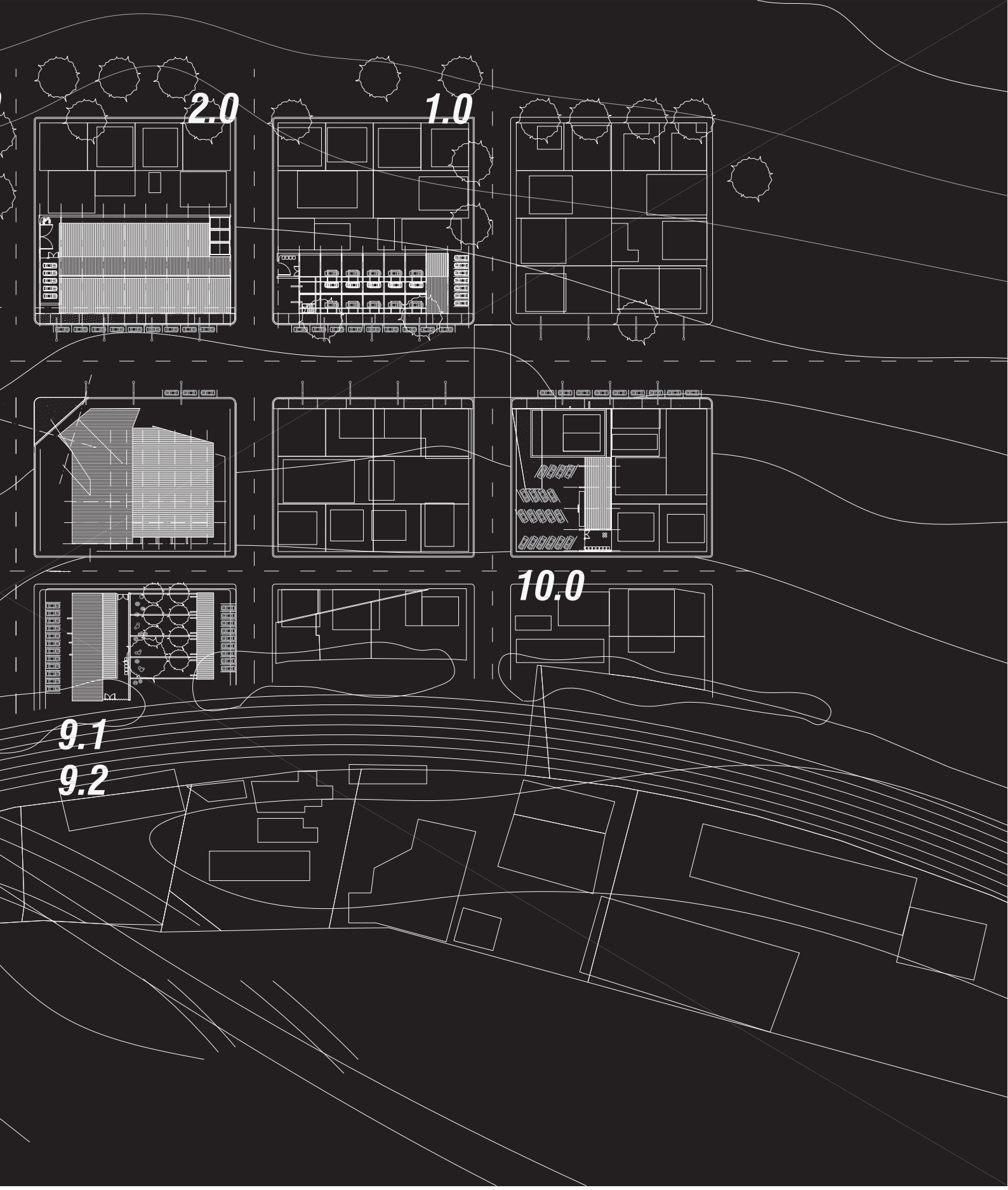
GALLERY
INTERIOR VIEW...

Across the road: Parts Supermarket and breaker facilities.

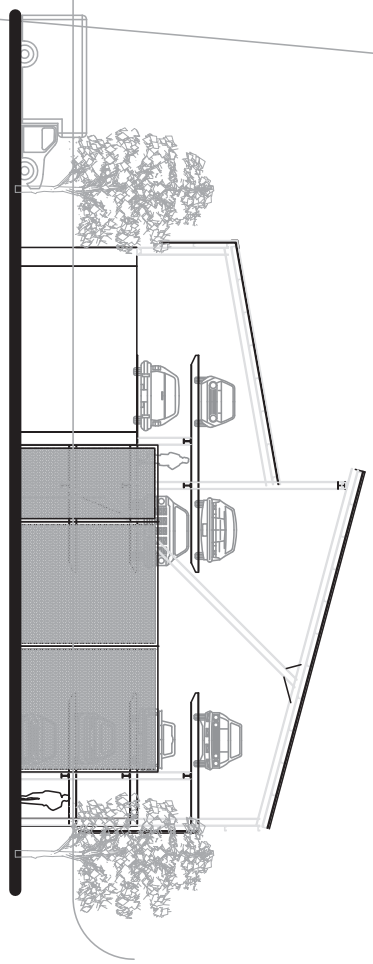


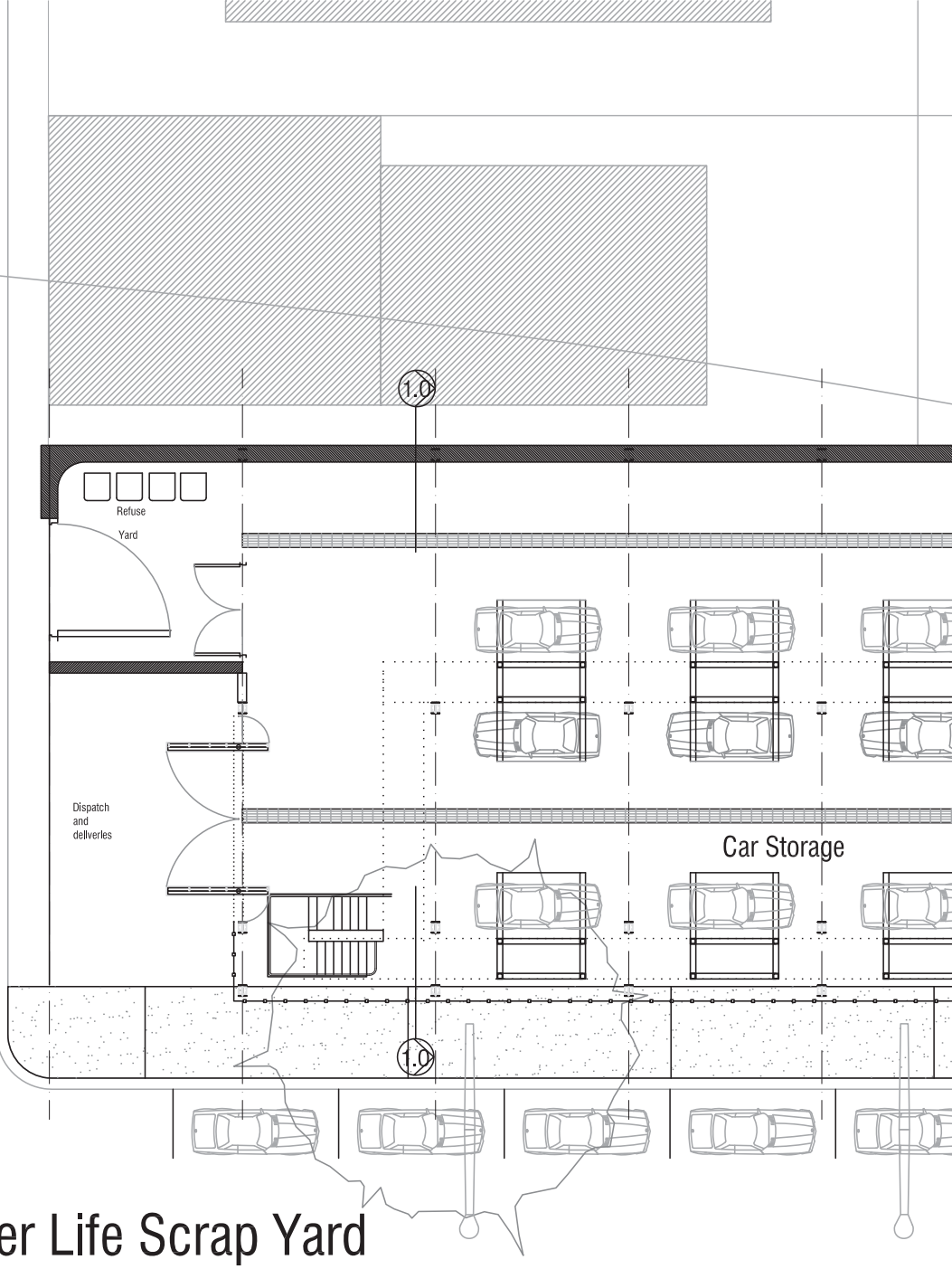


N SITE PLAN

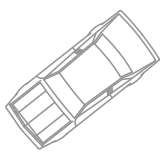

2.0
1.0
10.0
9.1
9.2

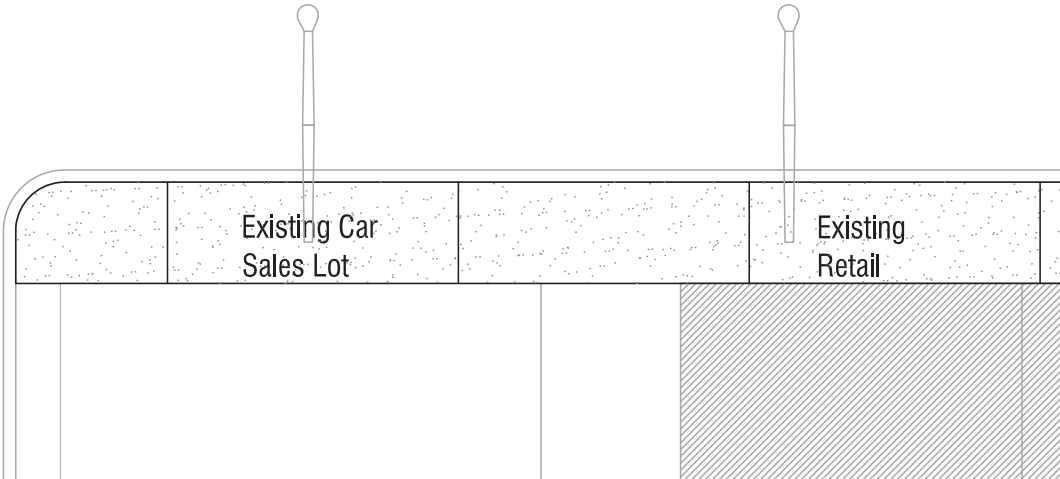
WEST ELEVATION 1:200

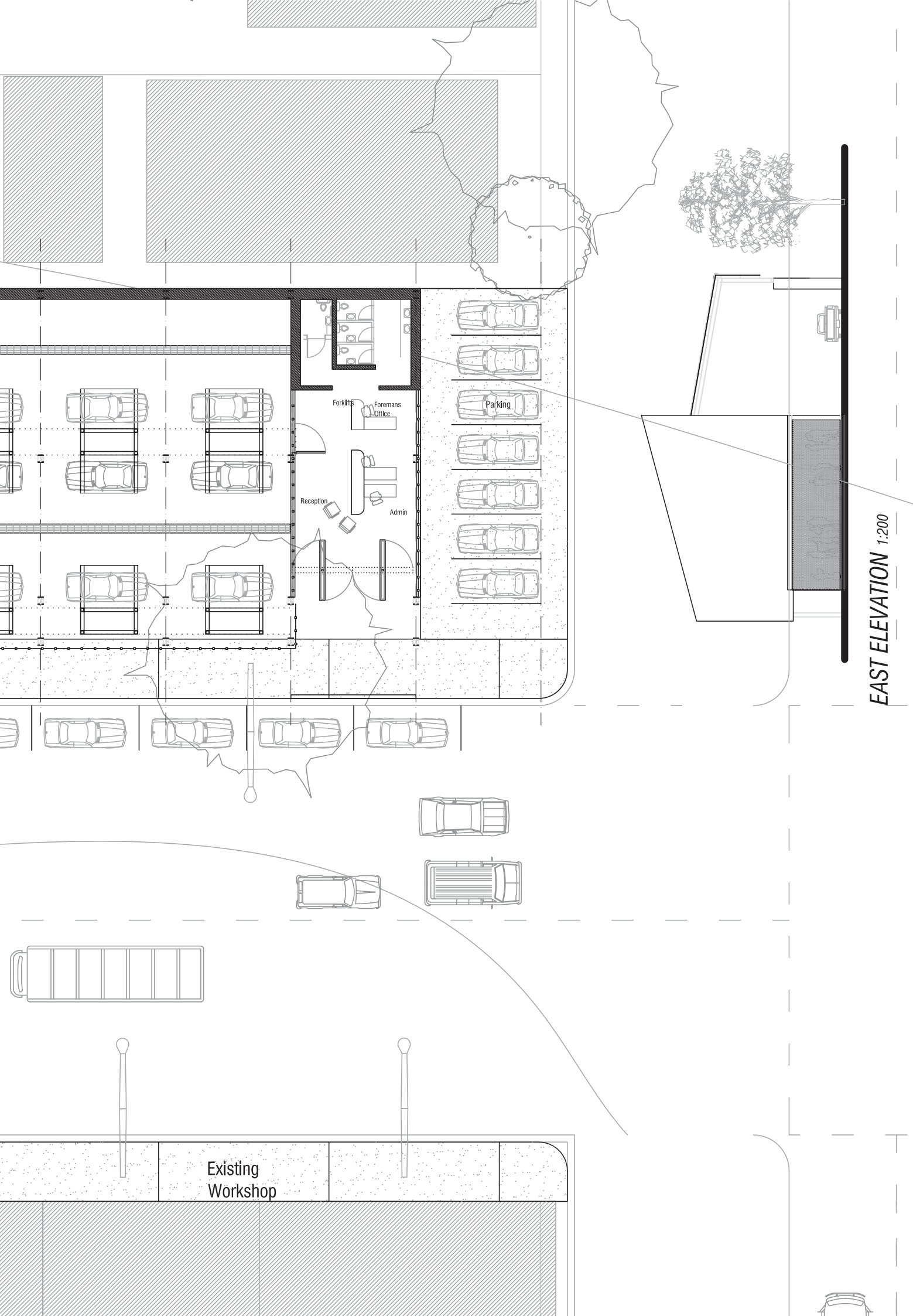




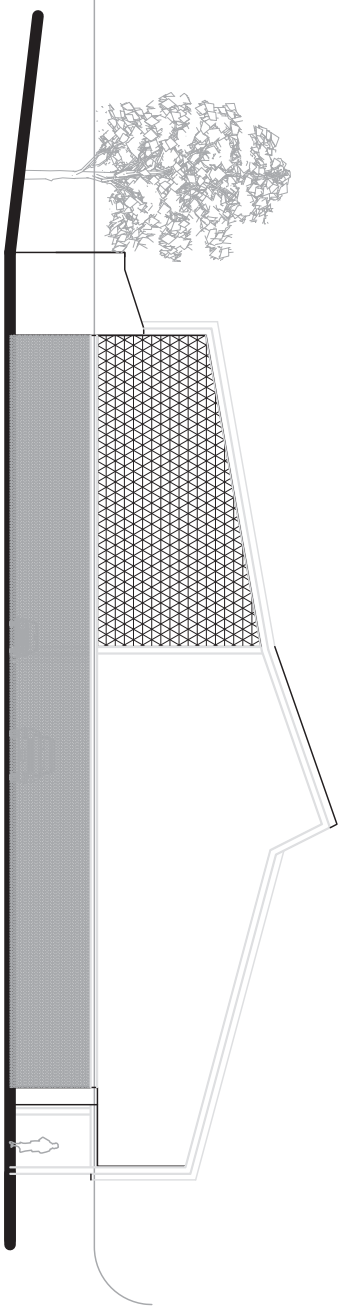
After Life Scrap Yard



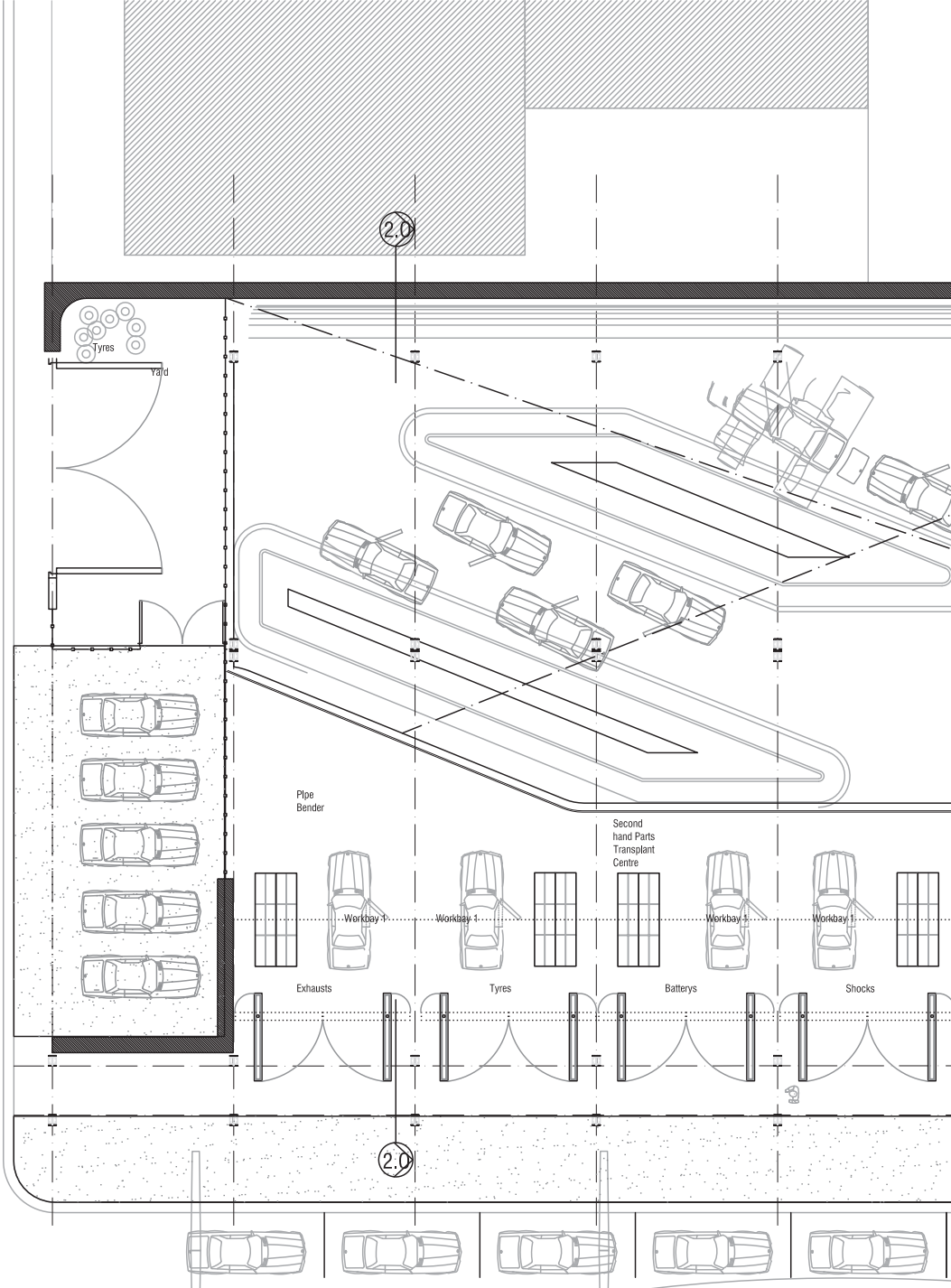




EAST ELEVATION 1:200



WEST ELEVATION 1:200

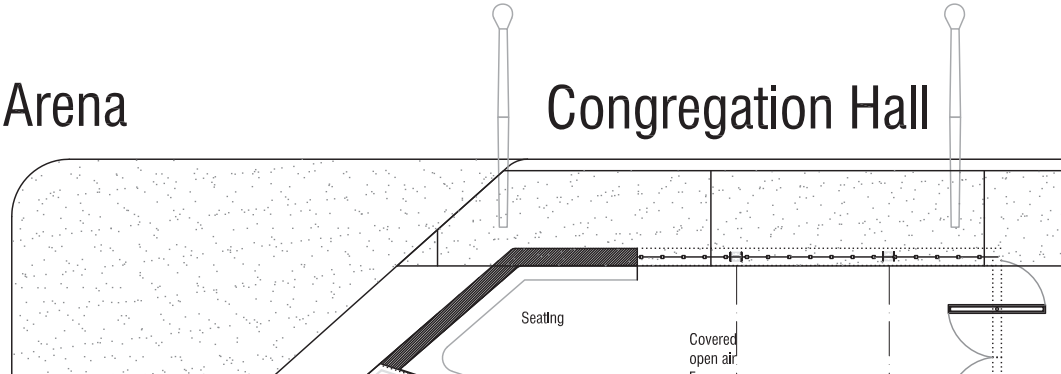


Second Hand Parts Transplant Centre

Street Arena

Congregation Hall



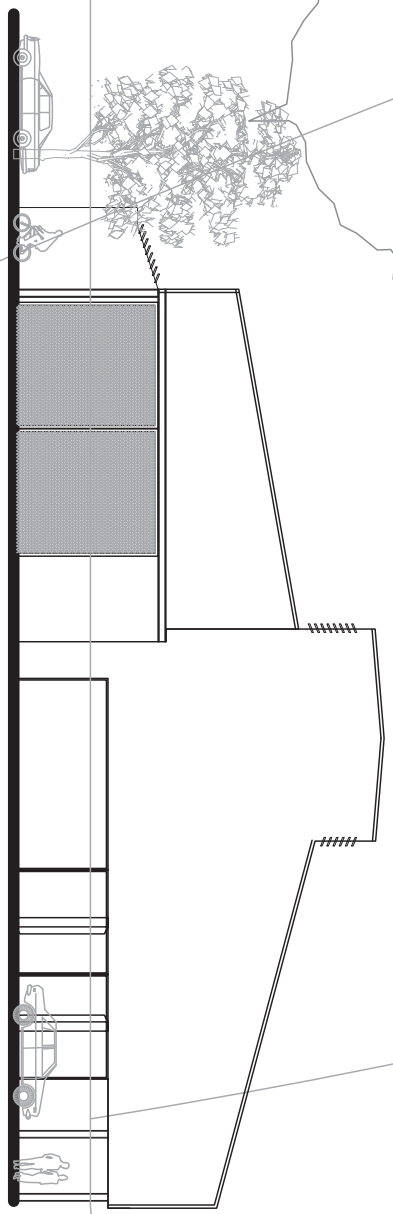


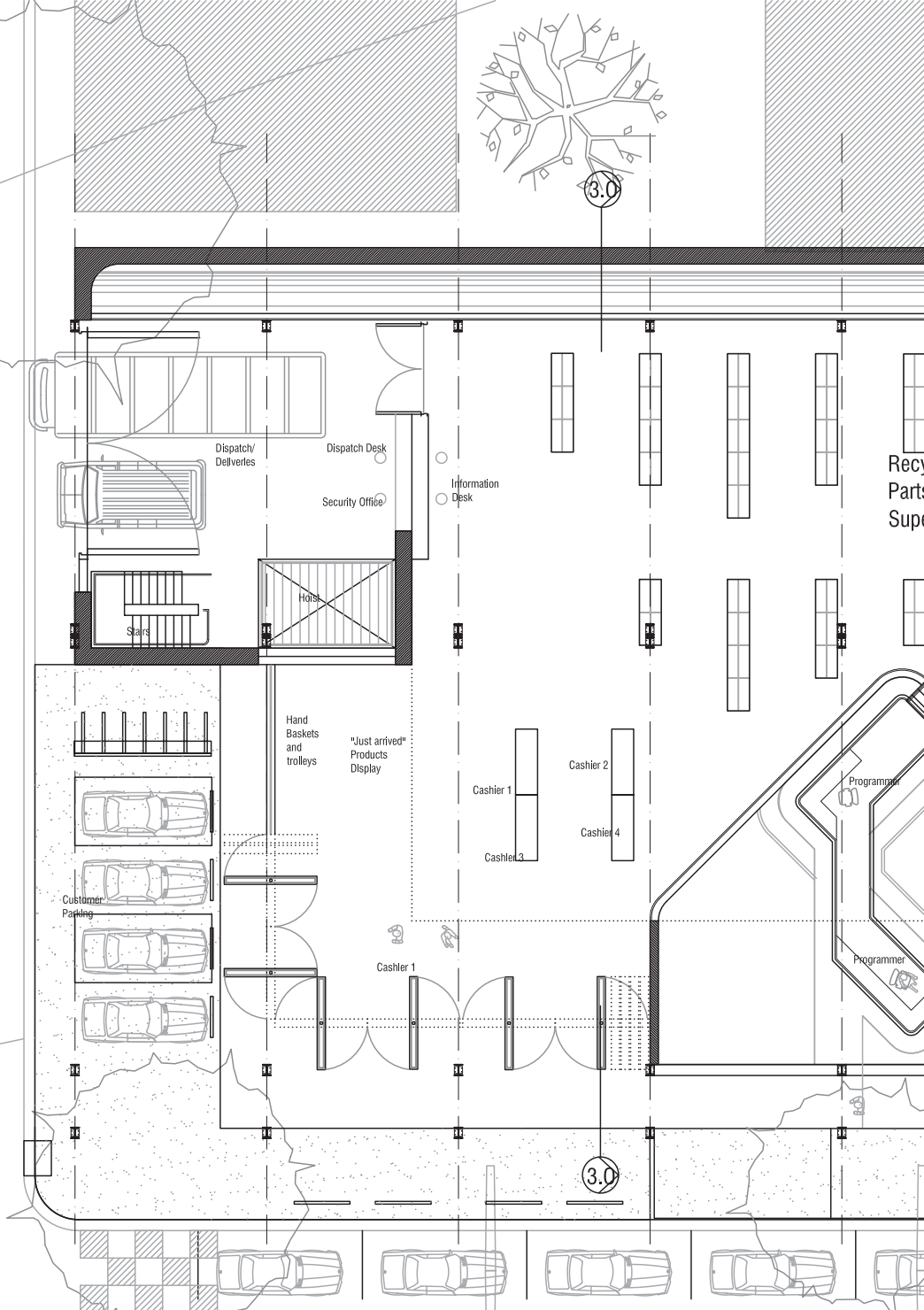
WEST ELEVATION 1:200

EAST ELEVATION 1:200

V 1:200

WEST ELEVATION 1:200

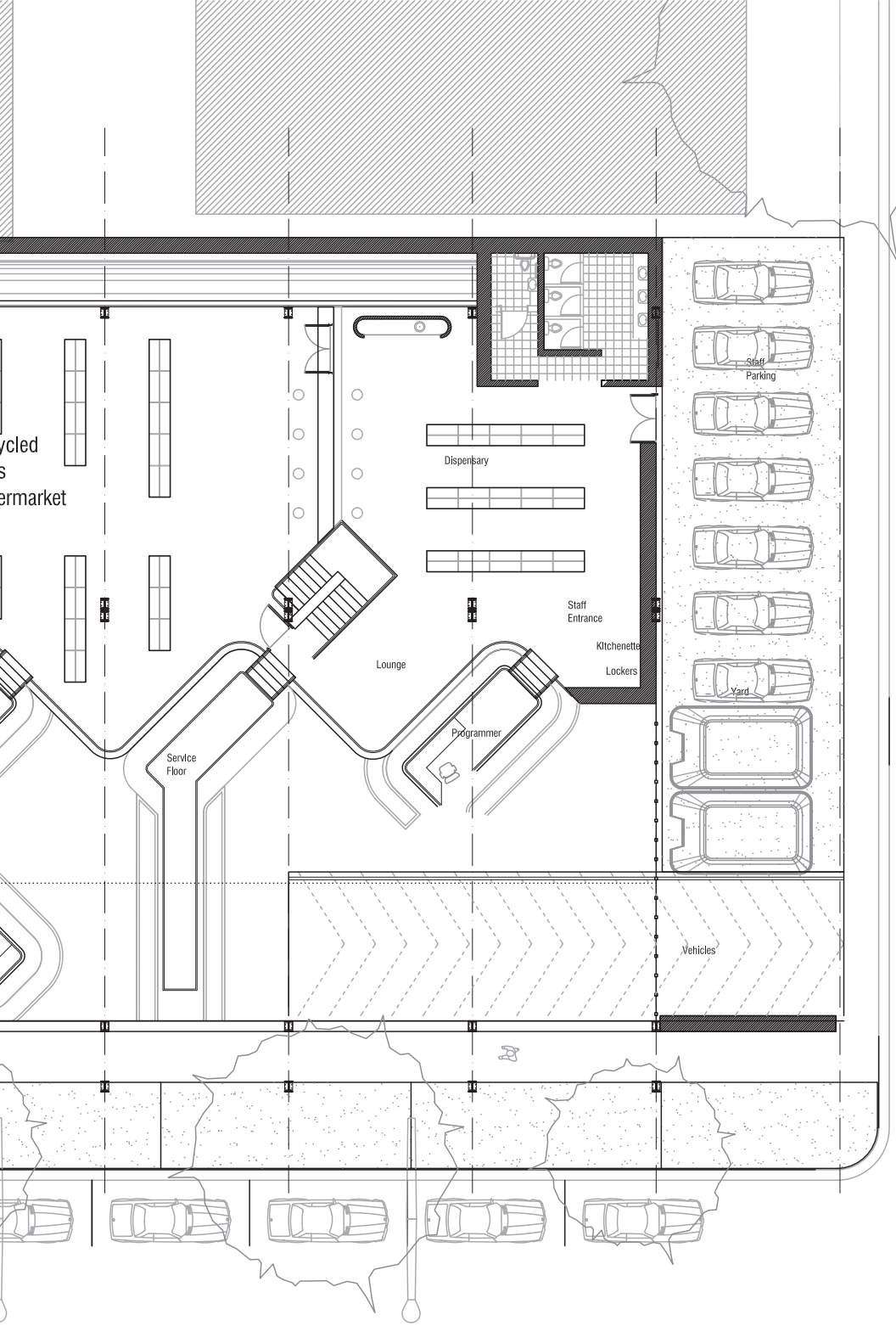


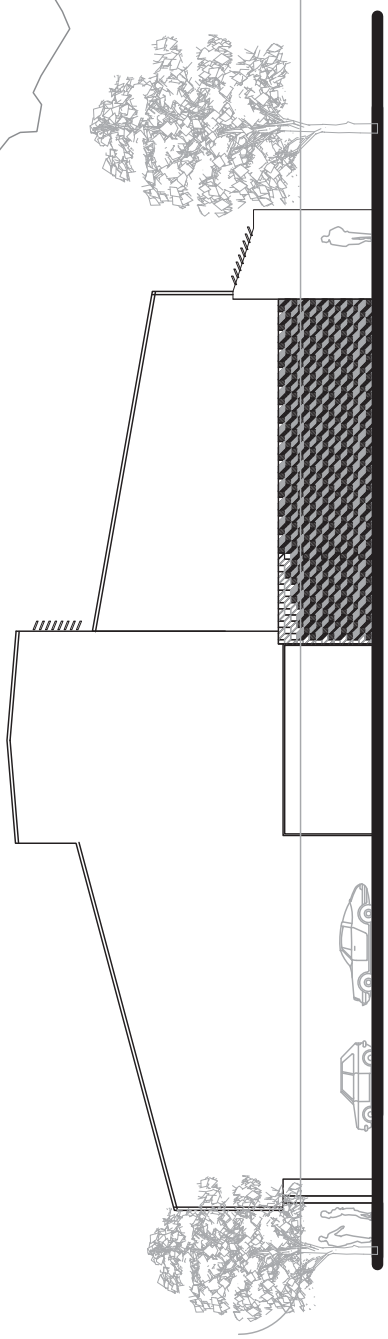


Reprocessed Parts Sale

Museum Production, Gallery



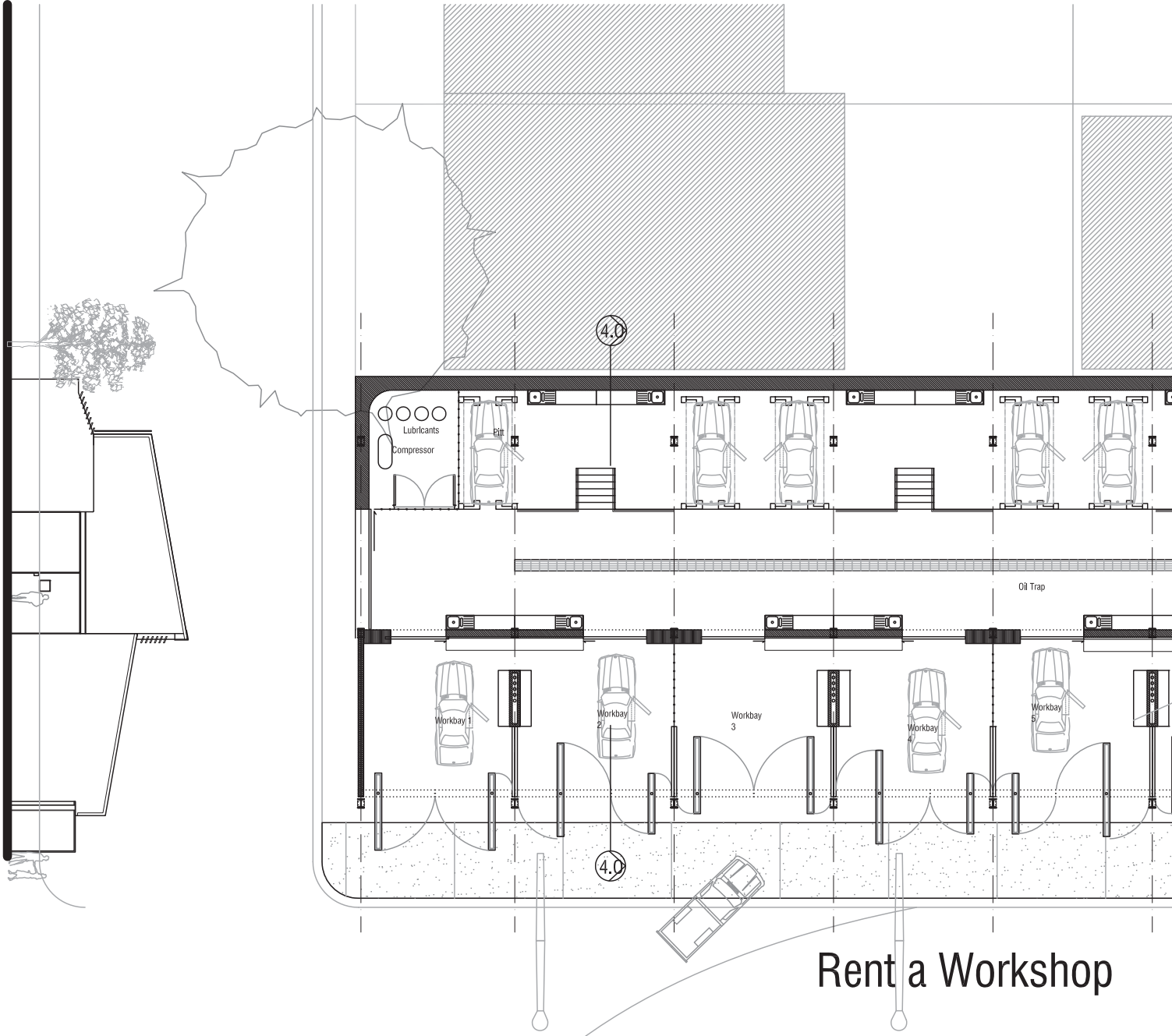




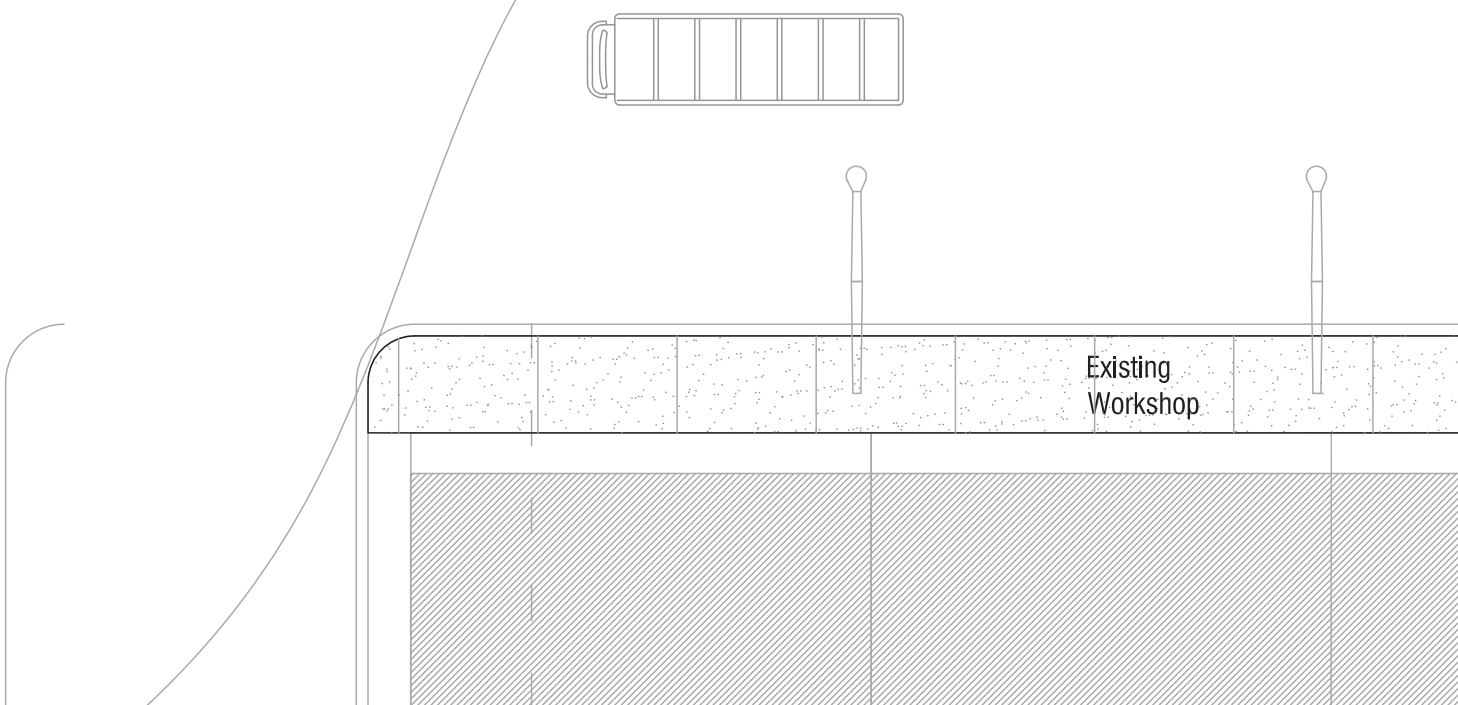
EAST ELEVATION 1:200

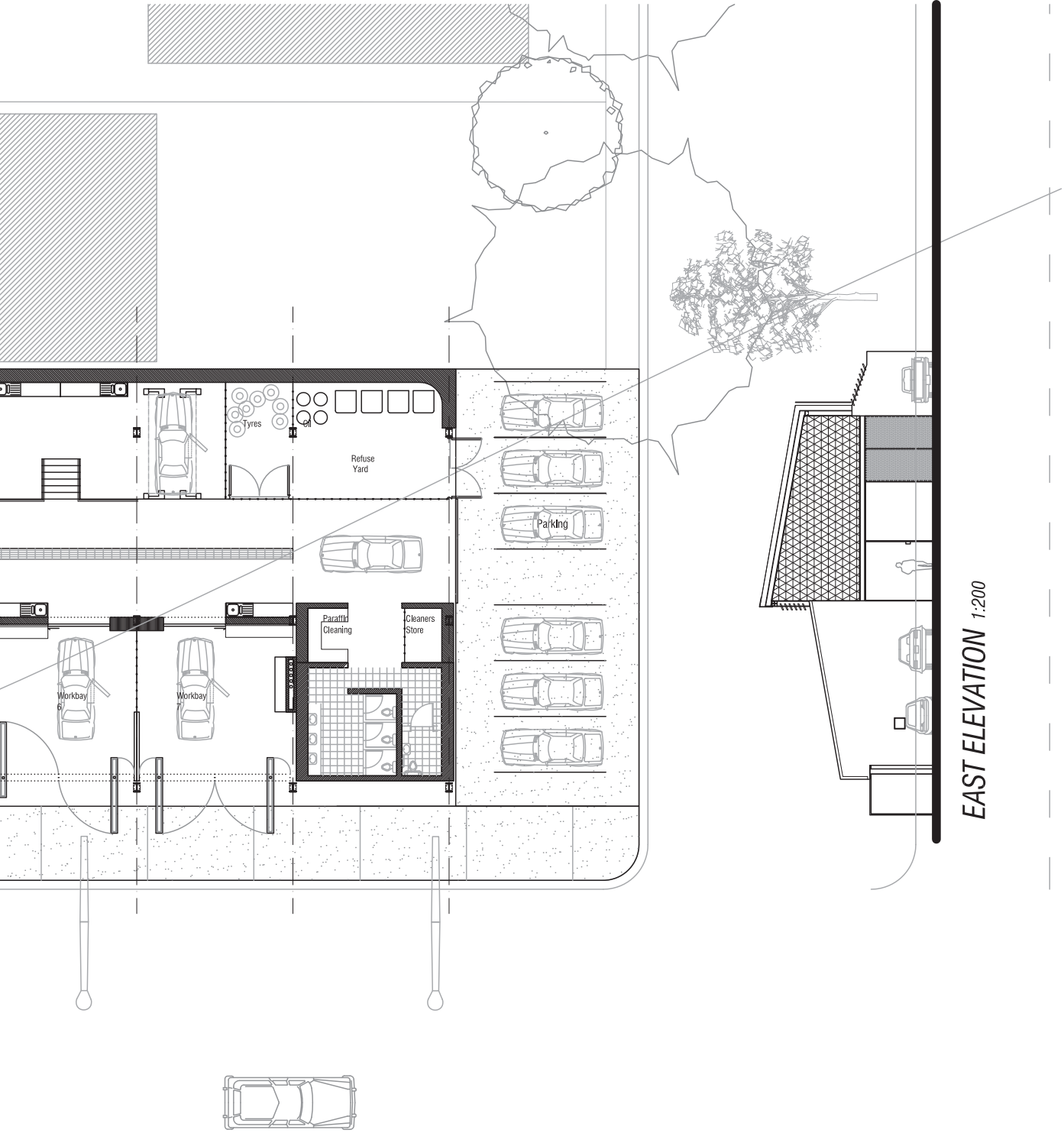
EAST ELEVATION 1:200

WEST ELEVATION 1:200



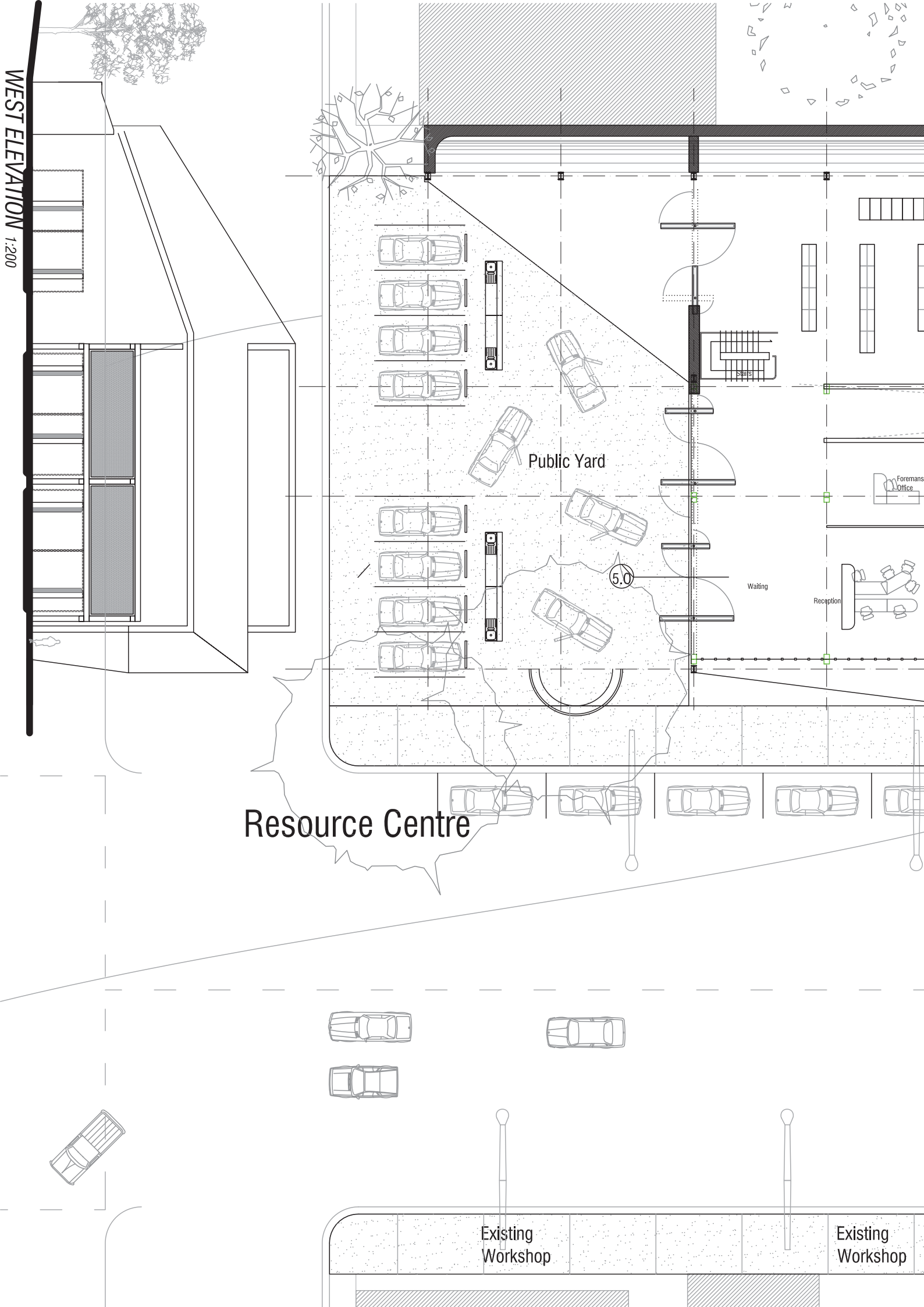
Rent a Workshop

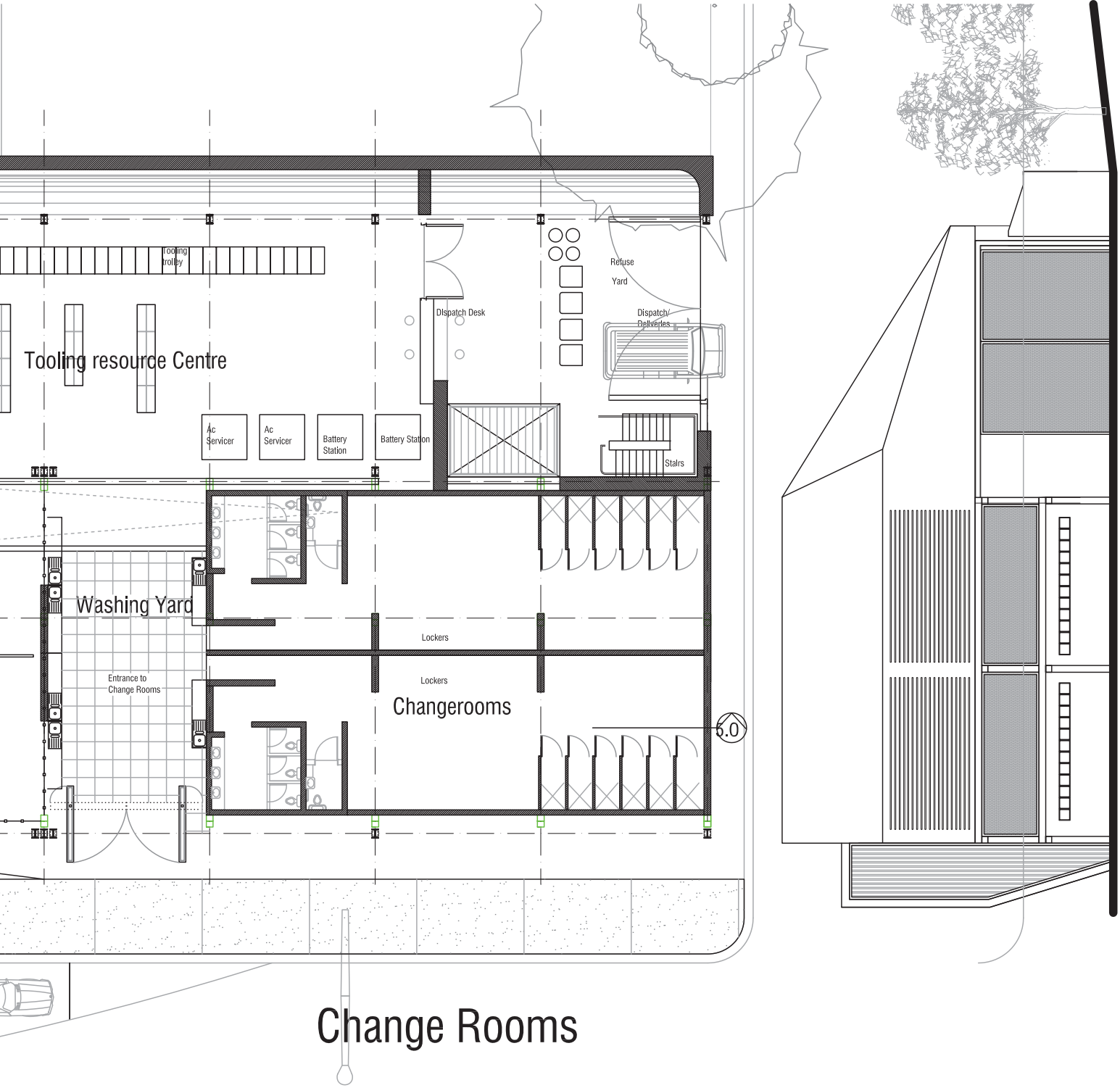




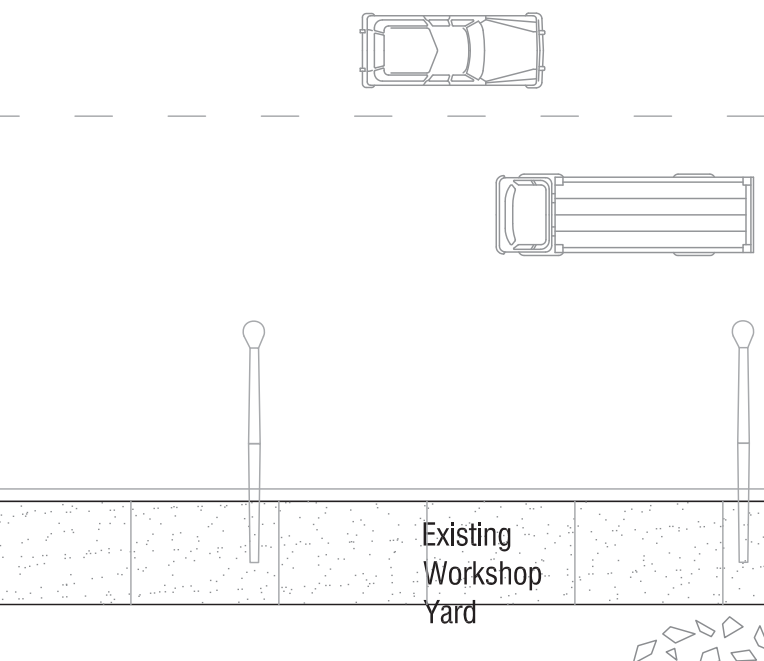
EAST ELEVATION 1:200

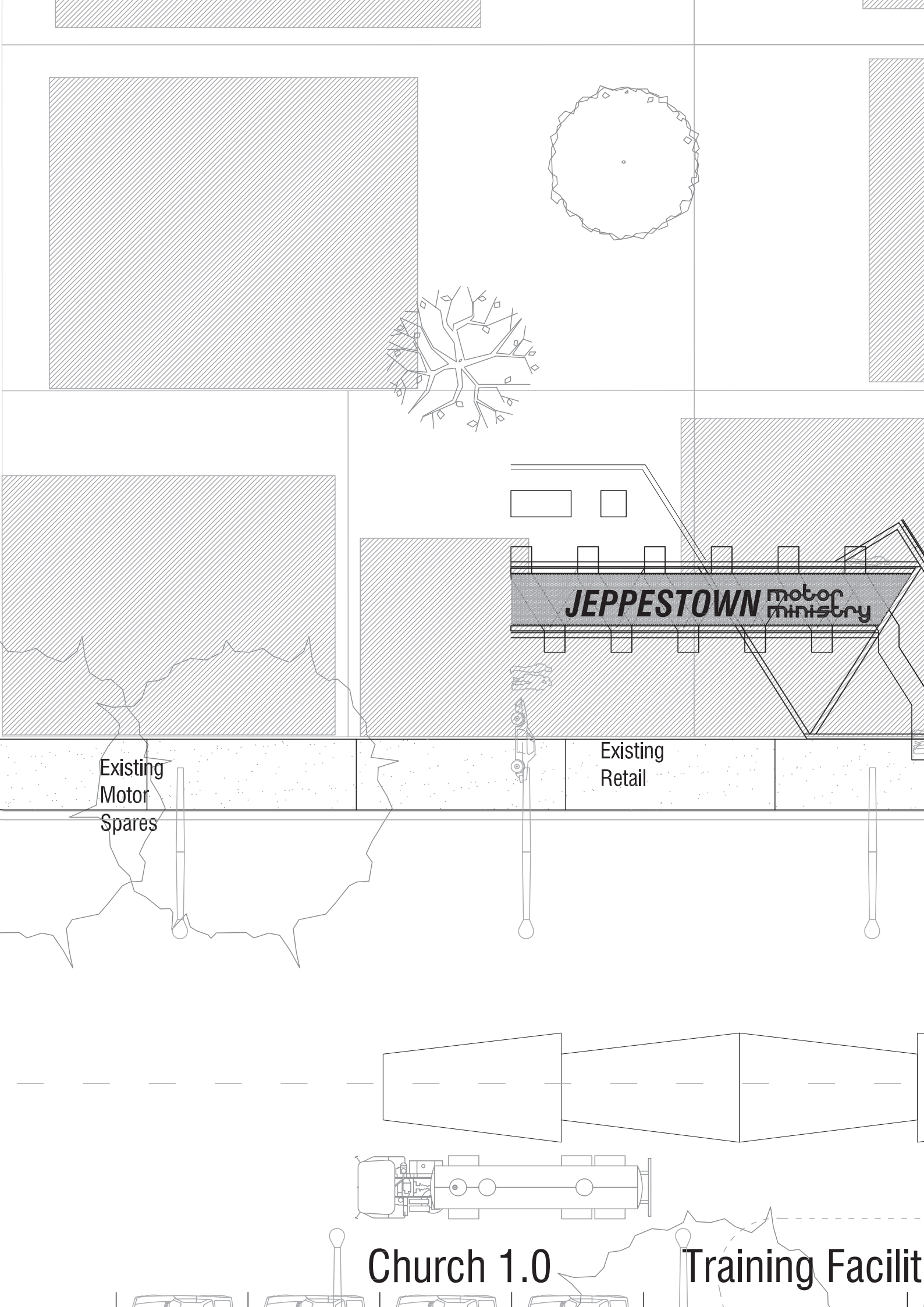
Church 2.0

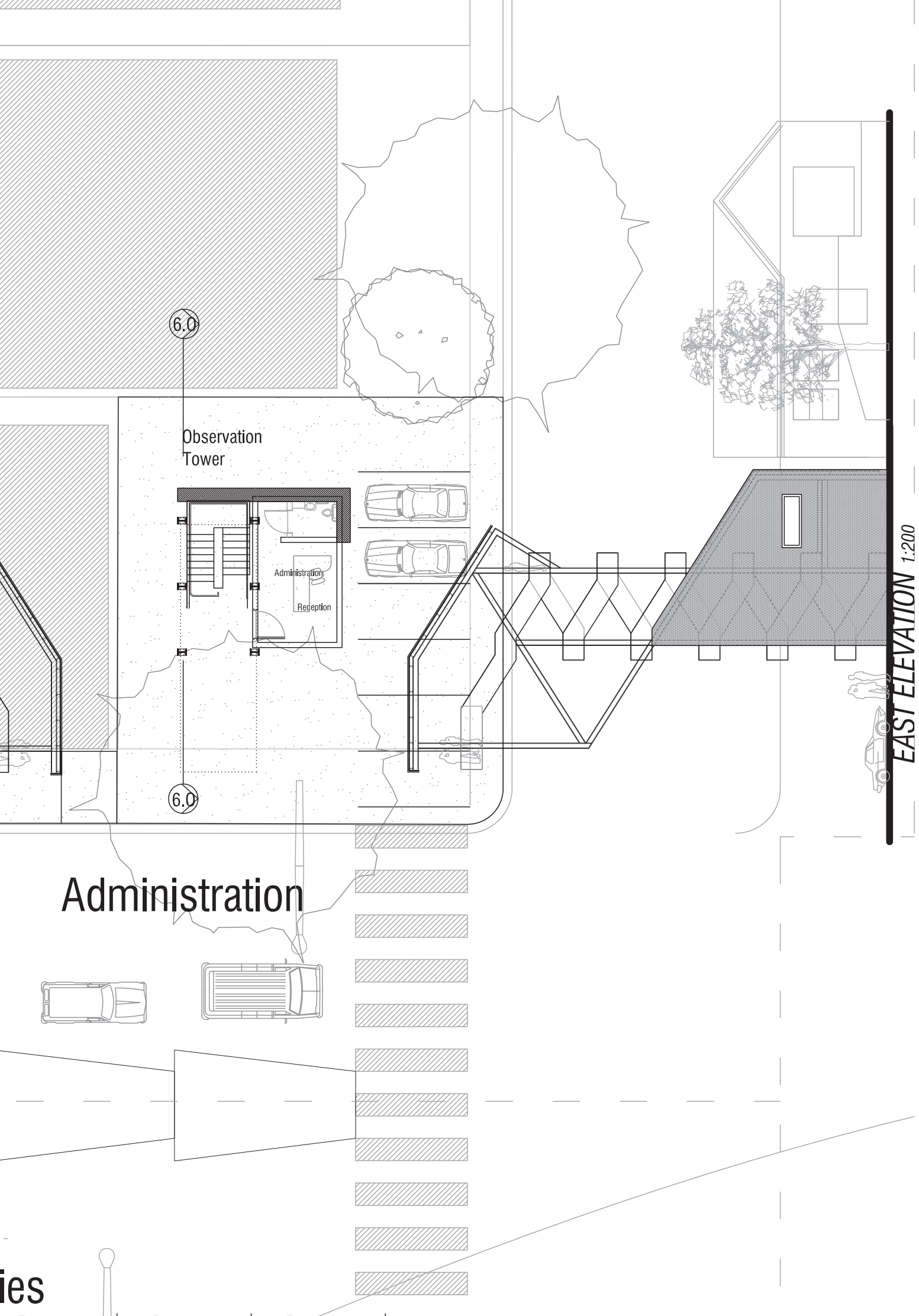

WEST ELEVATION 1:200
Public Yard
Stairs
Foremans Office
Waiting
Reception
5.0
Resource Centre
Existing Workshop
Existing Workshop

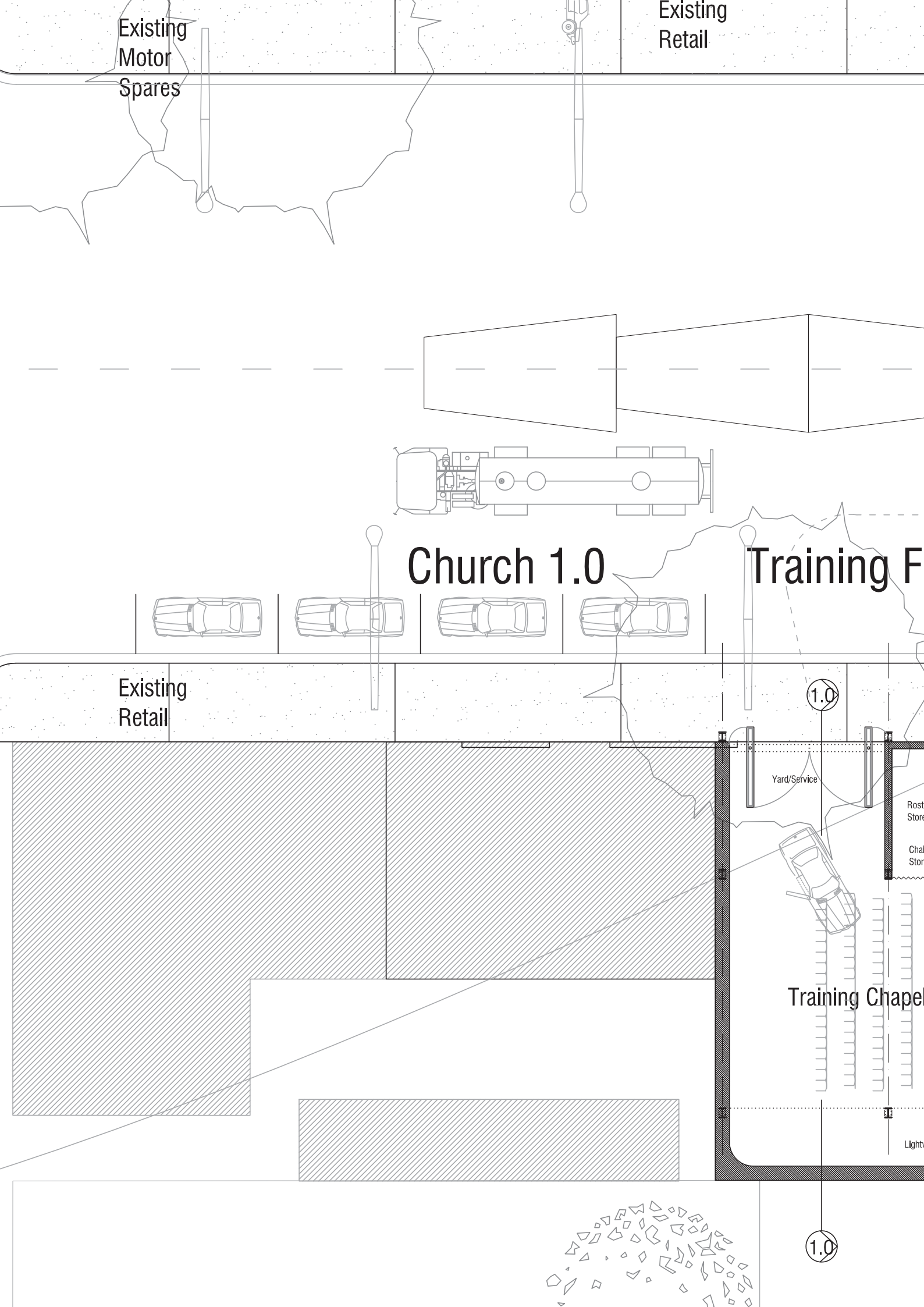


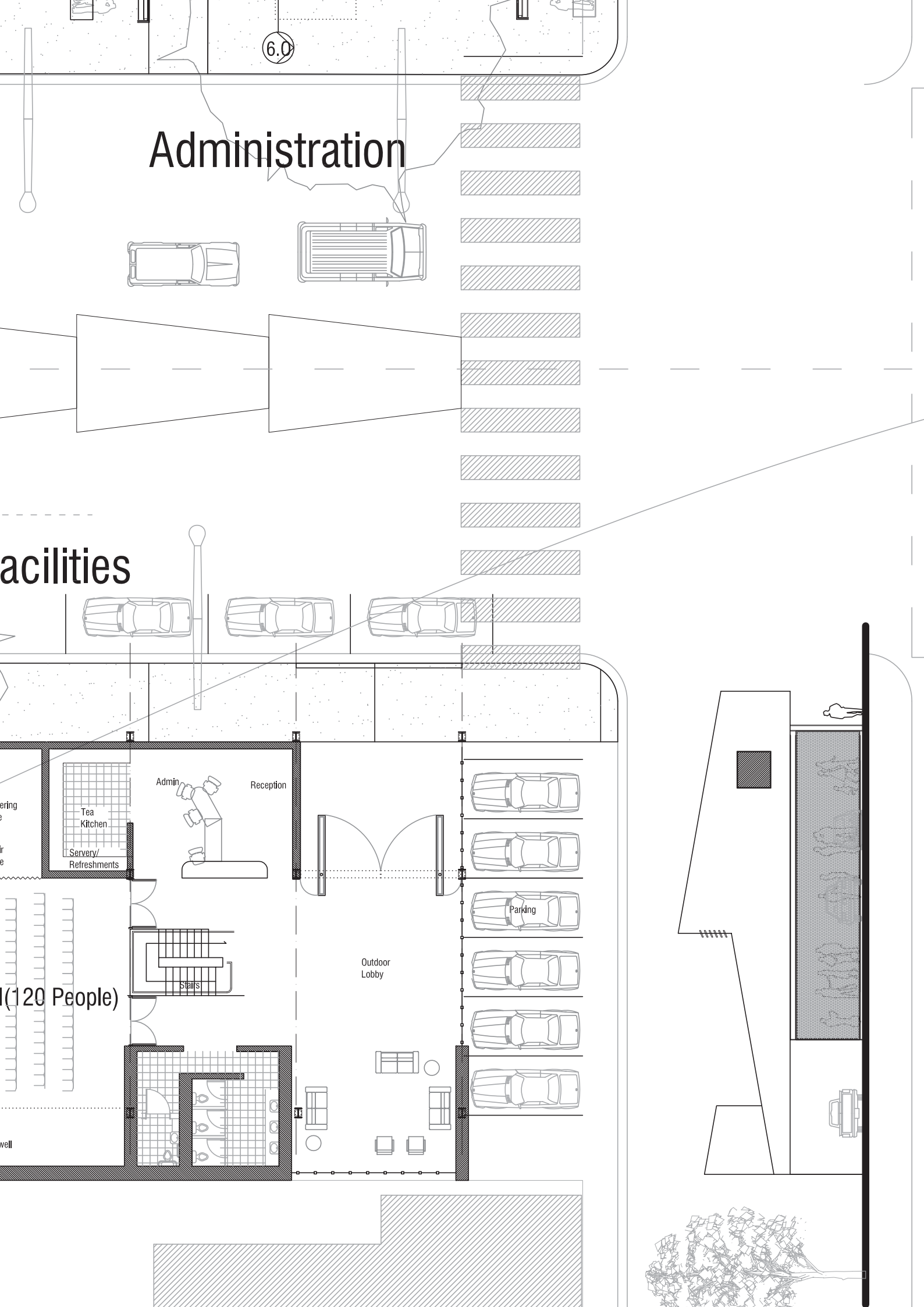
Change Rooms

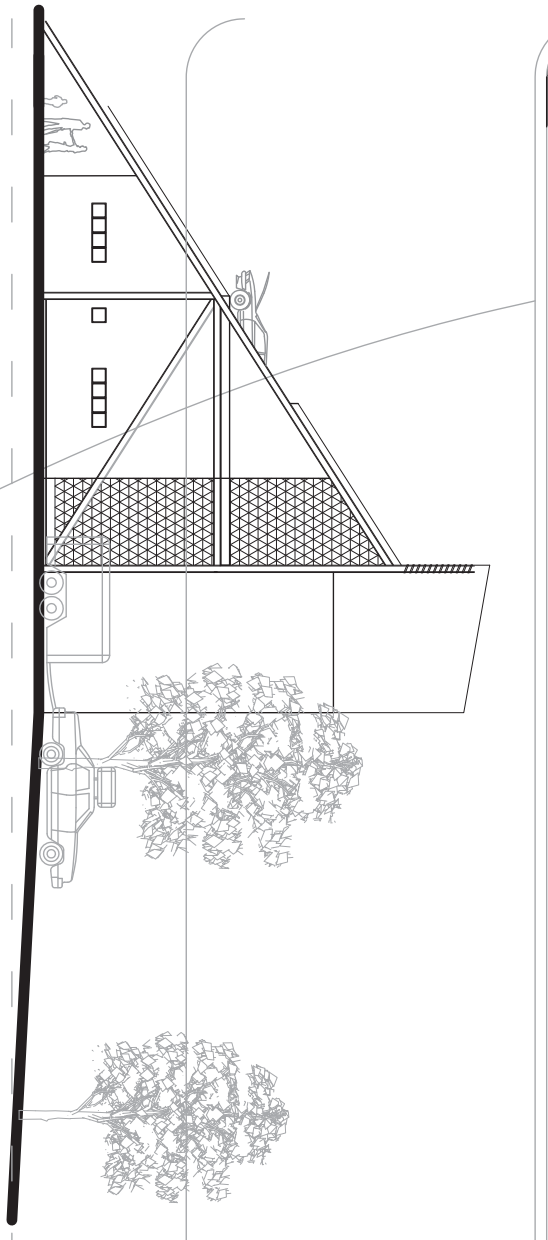



JEPPESTOWN motor ministry
Existing
Motor
Spares
Existing
Retail
Church 1.0
Training Facilit

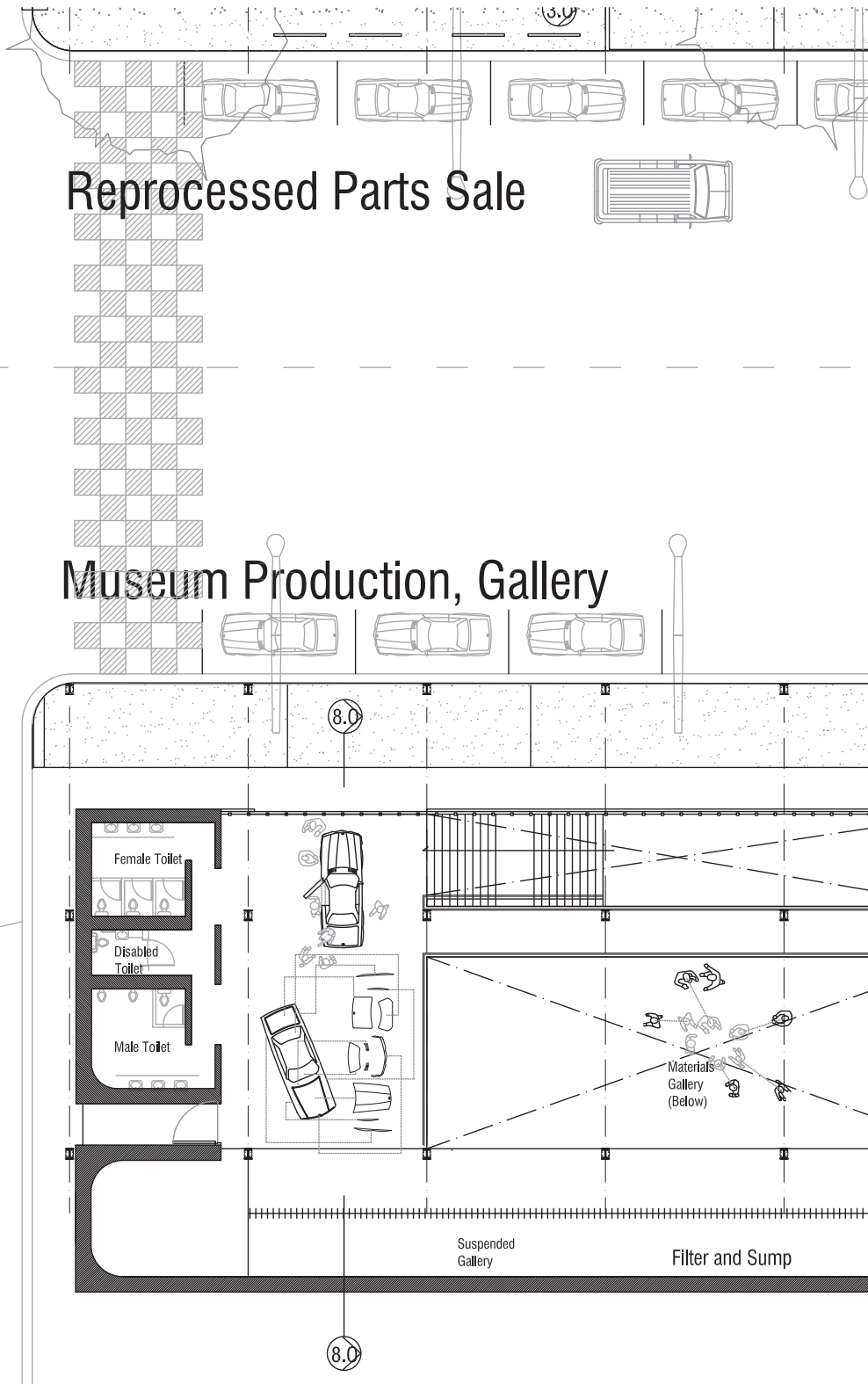

6.0
Observation
Tower
Administration
Reception
6.0
EAST ELEVATION 1:200
Administration
ies


Existing
Motor
Spares
Existing
Retail
Church 1.0
Training F
Existing
Retail
1.0
Yard/Service
Rost
Store
Chai
Stor
Training Chapel
Lightv
1.0


6.0
Administration
acilities
Admin
Reception
Tea
Kitchen
Servery/
Refreshments
Parking
Outdoor
Lobby
Stairs
l(120 People)



WEST ELEVATION 1:200



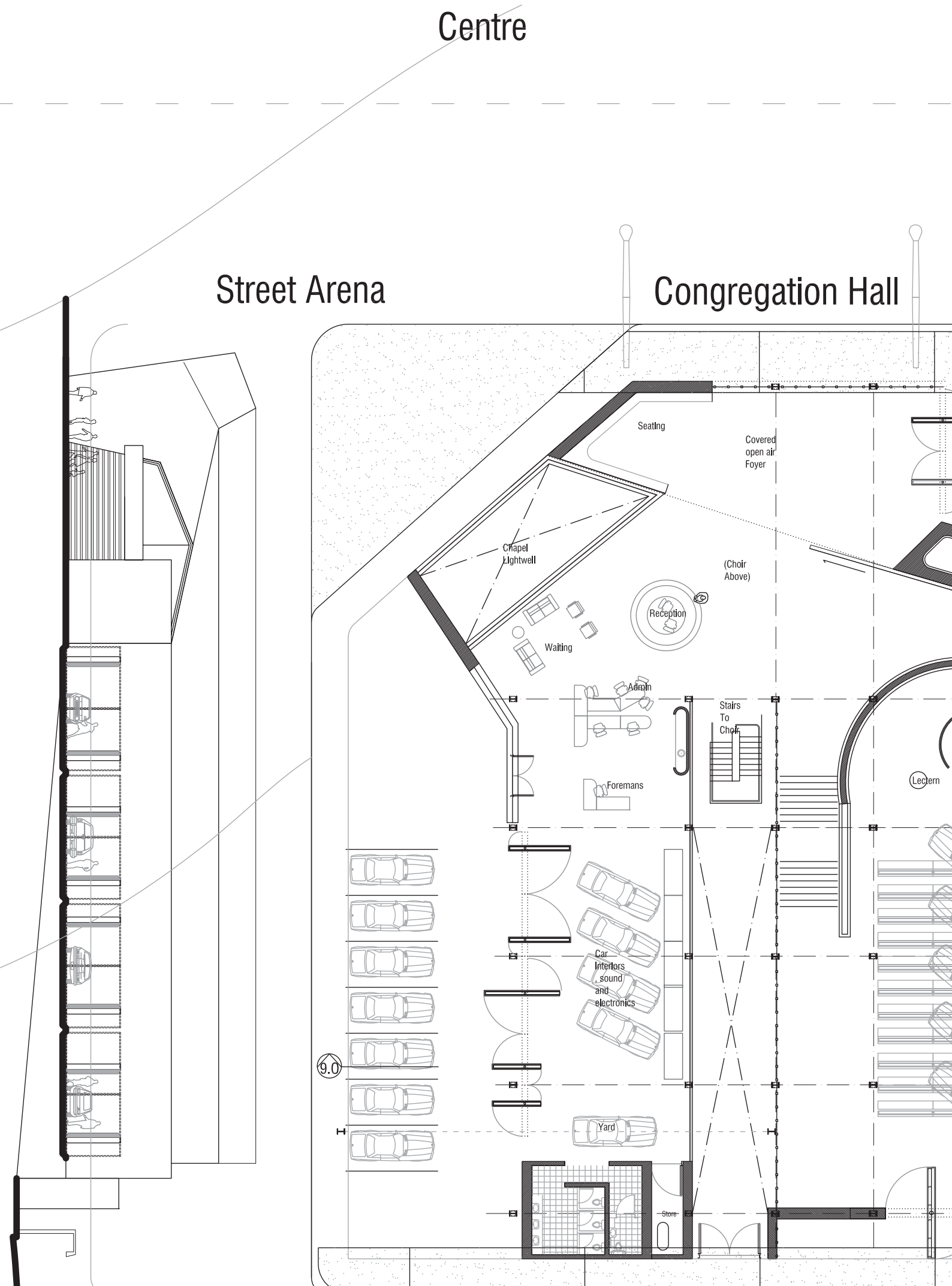
EAS

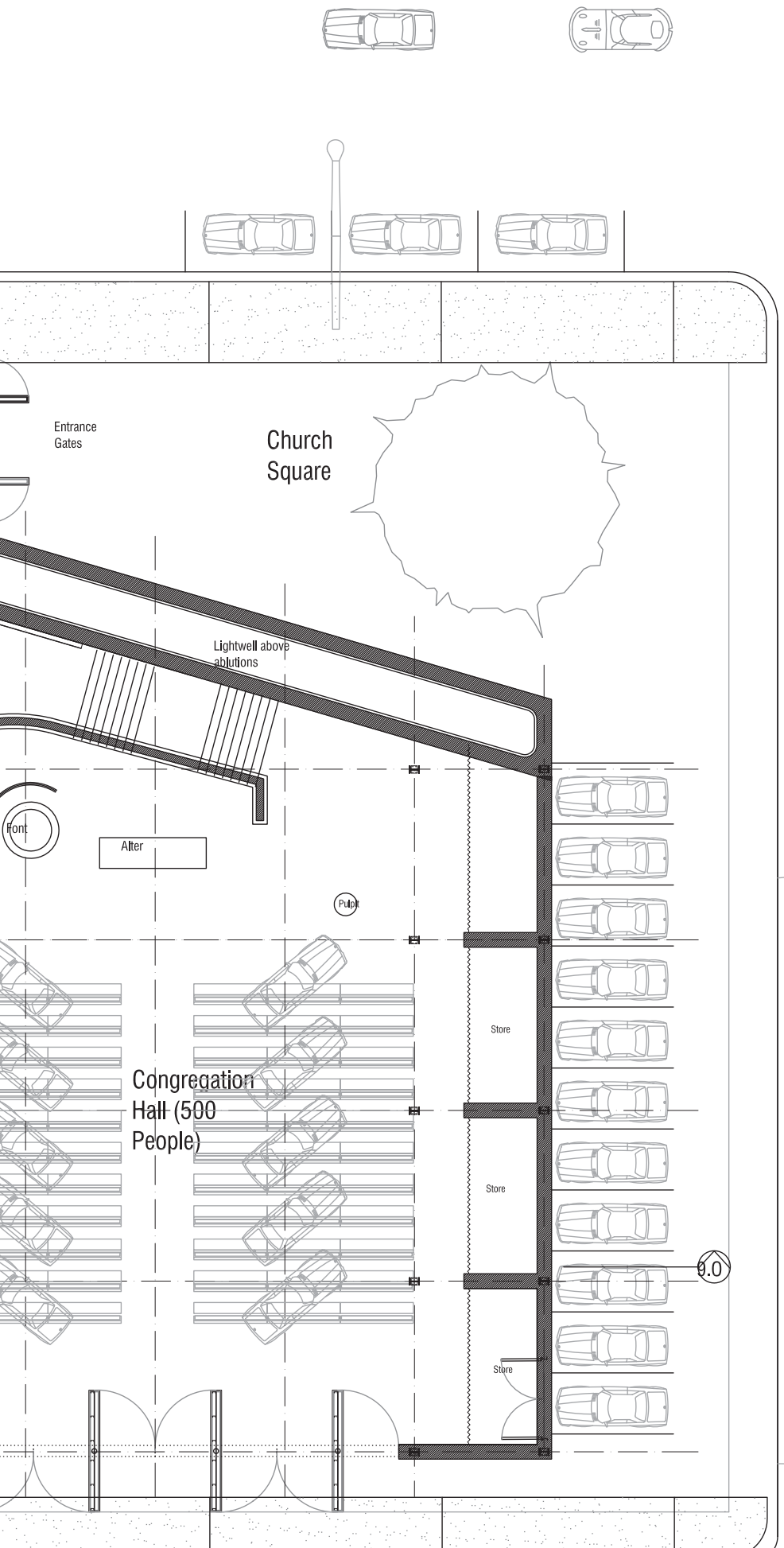
Reception

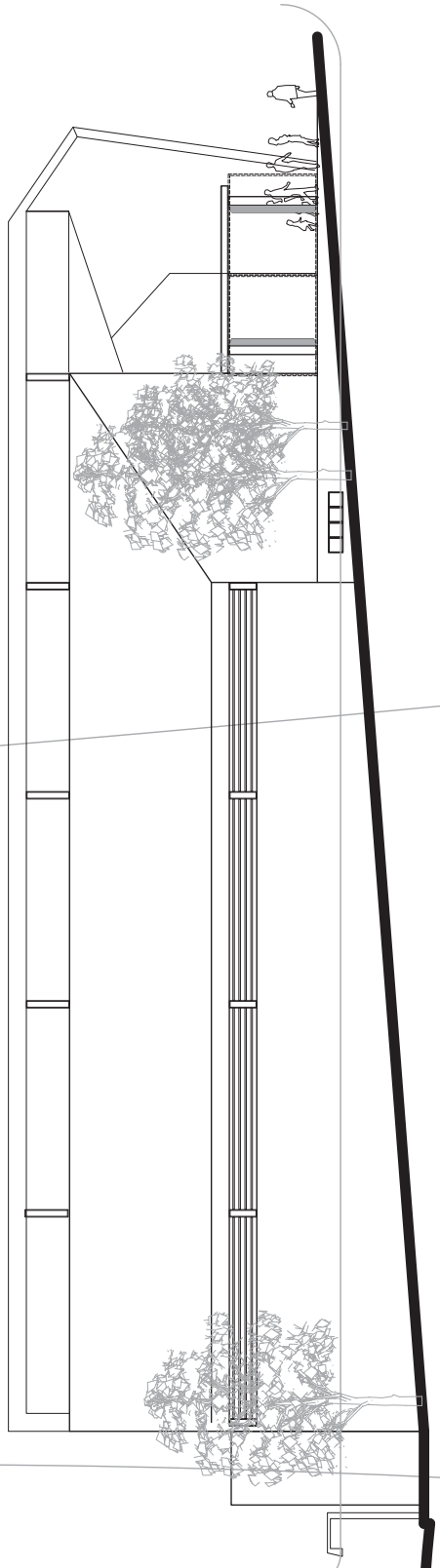
Up to
Hall of
Heros

Stairs

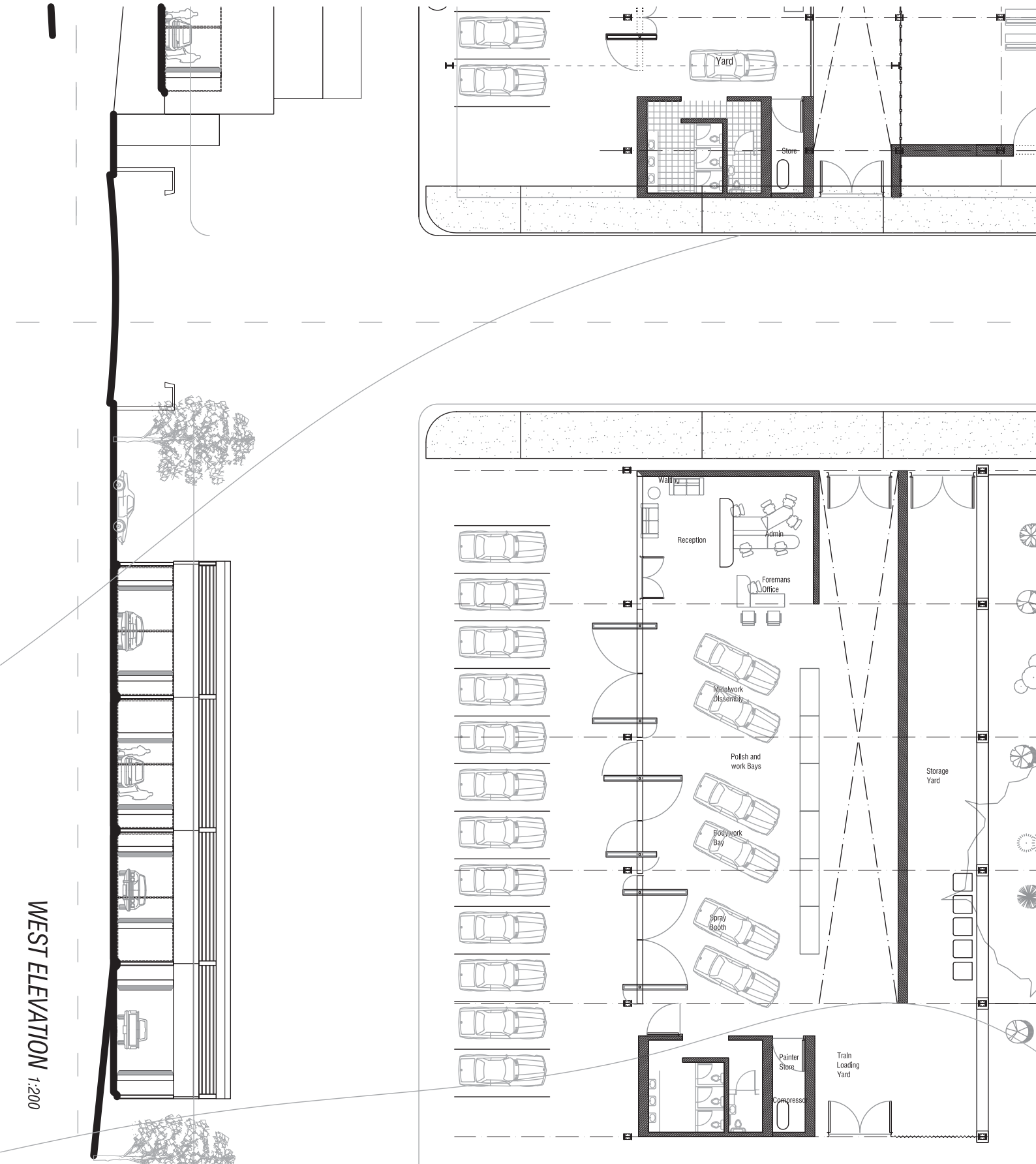
EAST ELEVATION 1:200


Centre
Street Arena
Congregation Hall
Seating
Covered
open air
Foyer
Chapel
Lightwell
(Choir
Above)
Reception
Waiting
Admin
Stairs
To
Choir
Foremans
Lectern
Car
Interiors
sound
and
electronics
9.0
Yard
Store

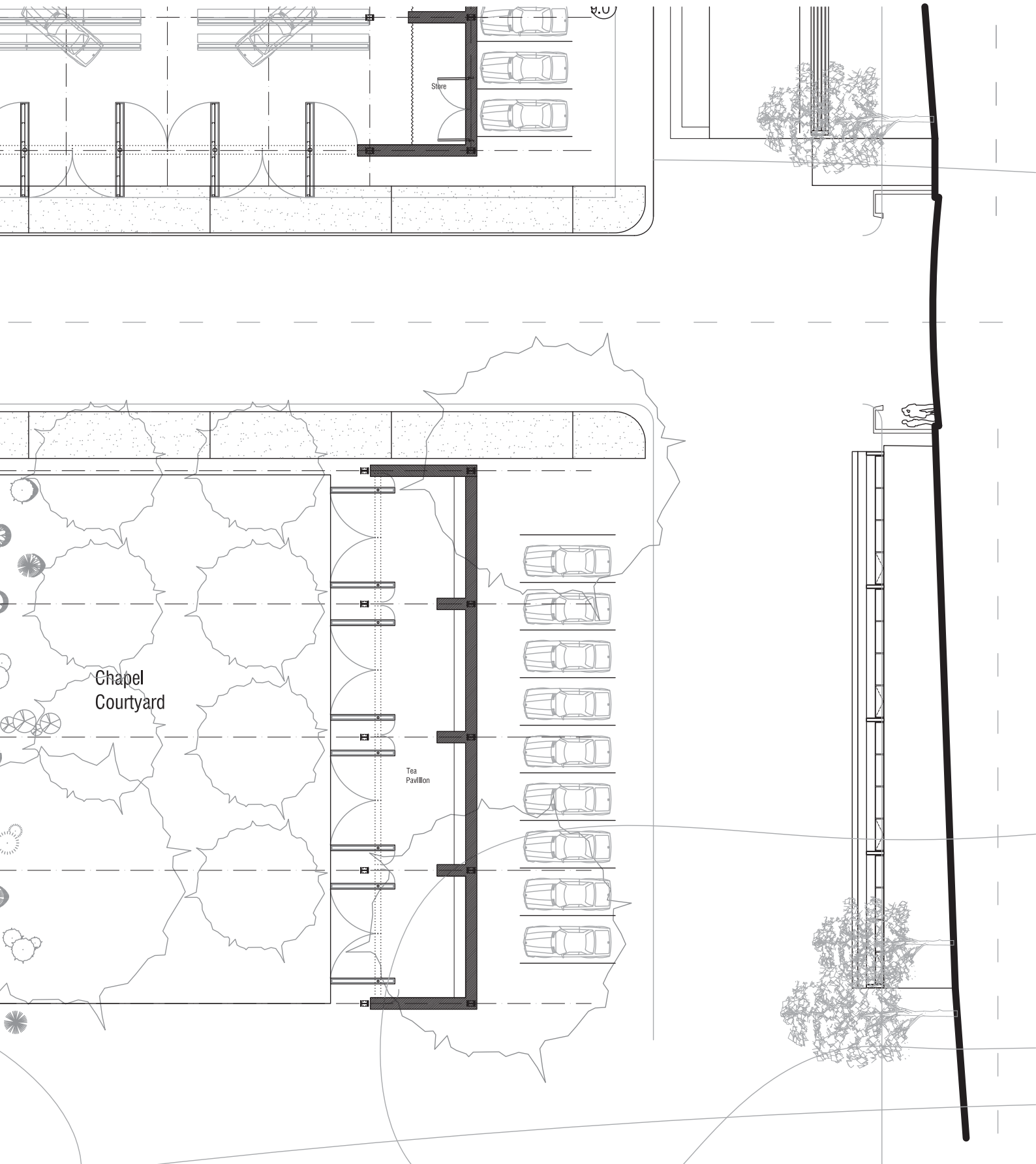


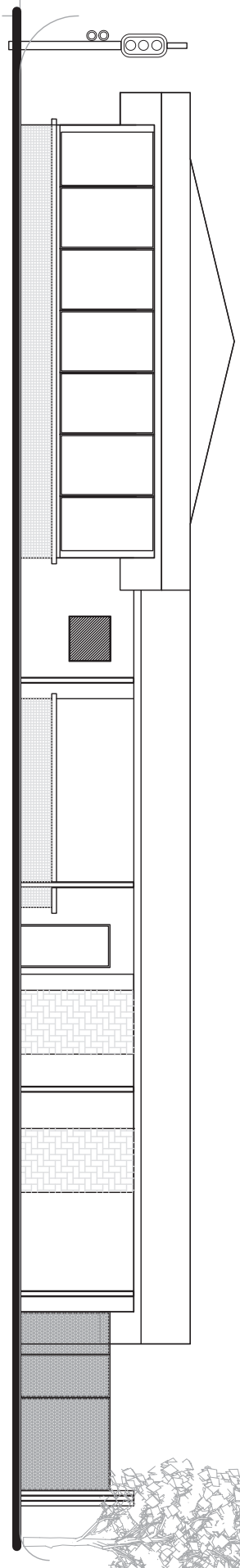


EAST ELEVATION 1:200



WEST ELEVATION 1:200


Store
Chapel
Courtyard
Tea
Pavillion



WEST ELEVATION 1:200

Cafeteria

Patio

Dining

Waiting

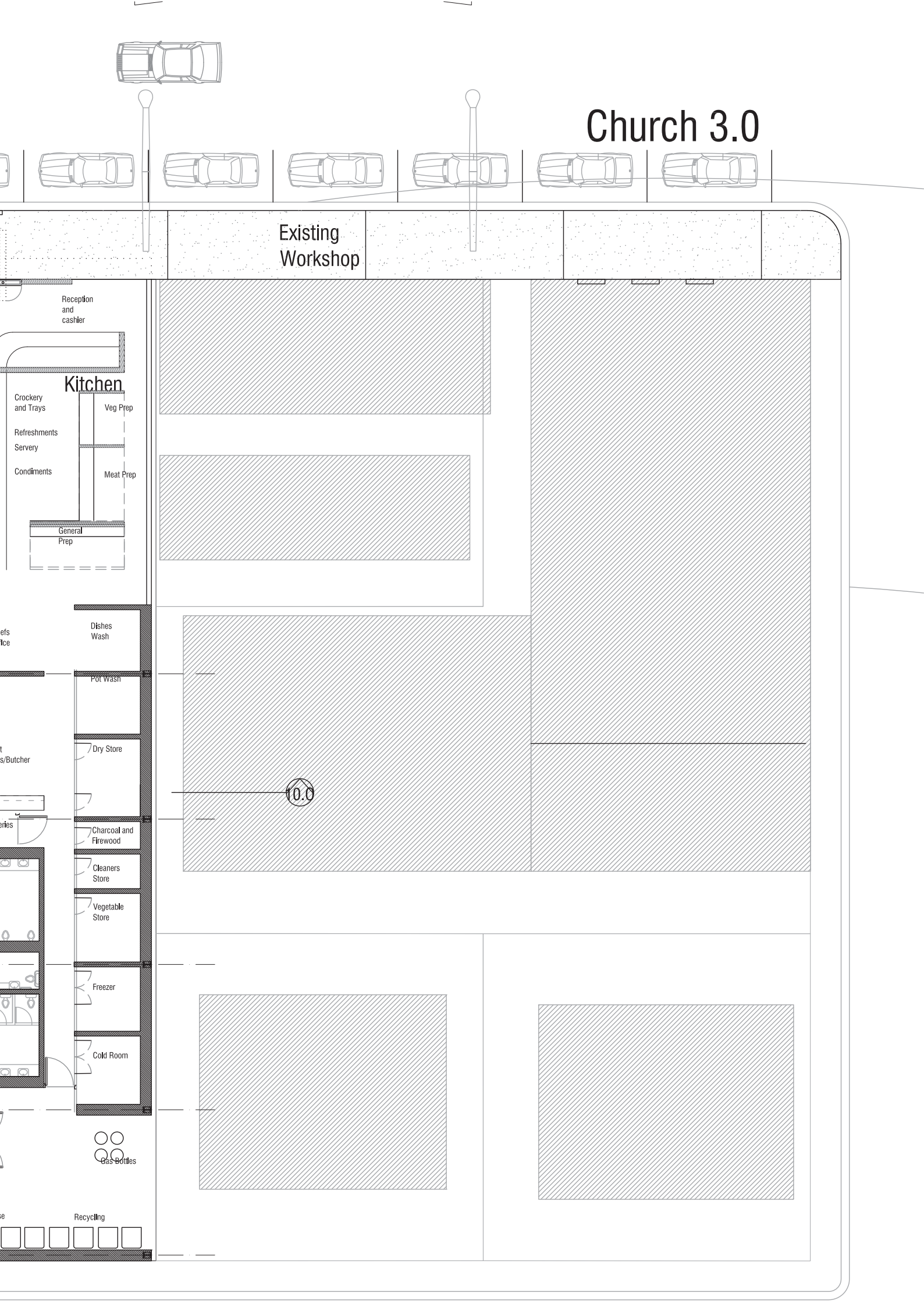
Dishes Return

Braai Facilities

Shisa Nyama

Parking

10.0


Church 3.0
Existing
Workshop
Reception
and
cashier
Kitchen
Crockery
and Trays
Veg Prep
Refreshments
Servery
Condiments
Meat Prep
General
Prep
Dishes
Wash
Pot Wash
Dry Store
Charcoal and
Firewood
Cleaners
Store
Vegetable
Store
Freezer
Cold Room
Gas Bottles
Recycling
10.0

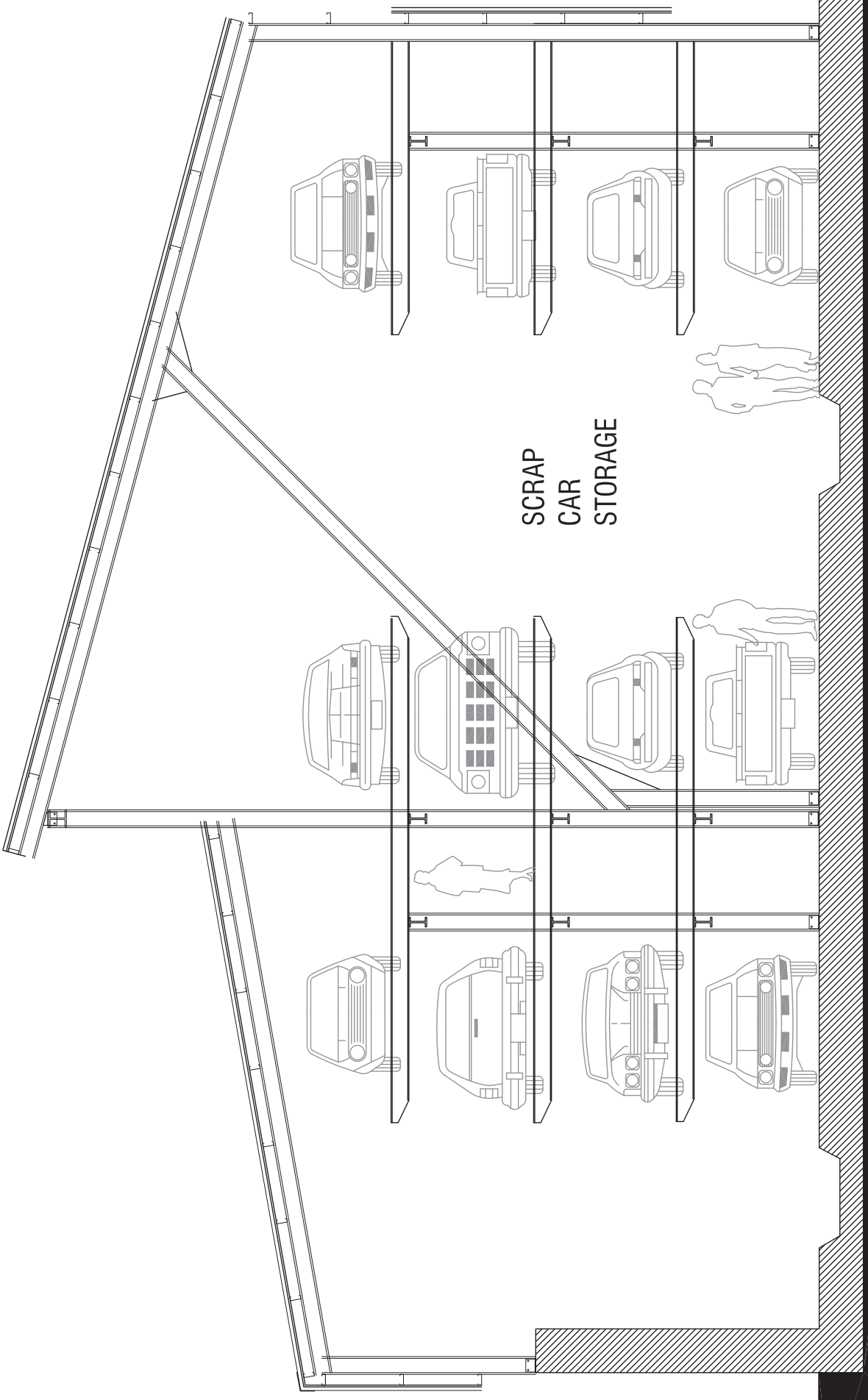
STREET VIEW...

Across the road: Lookout tower (far distance) than tooling re-source, workshops

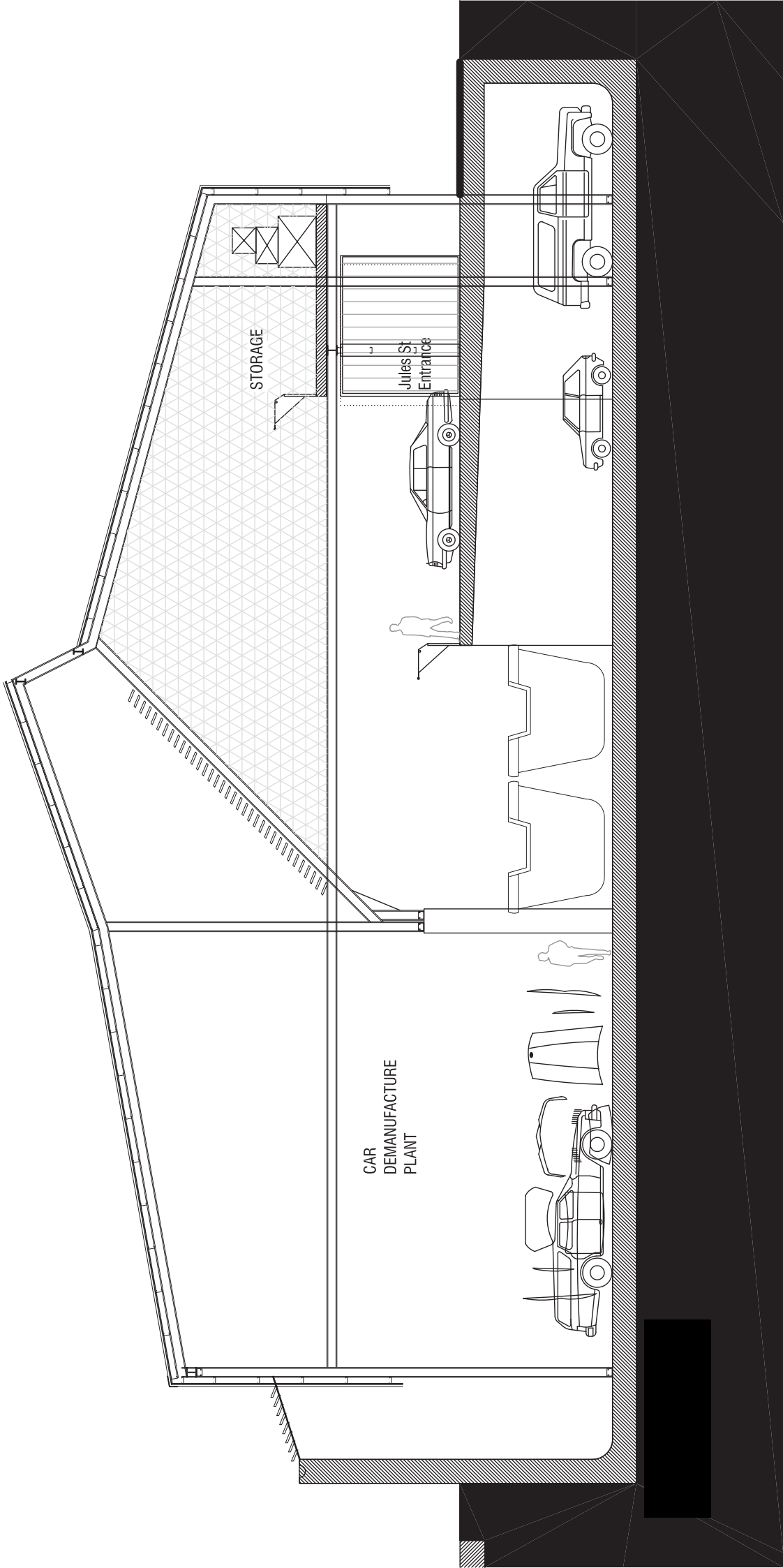




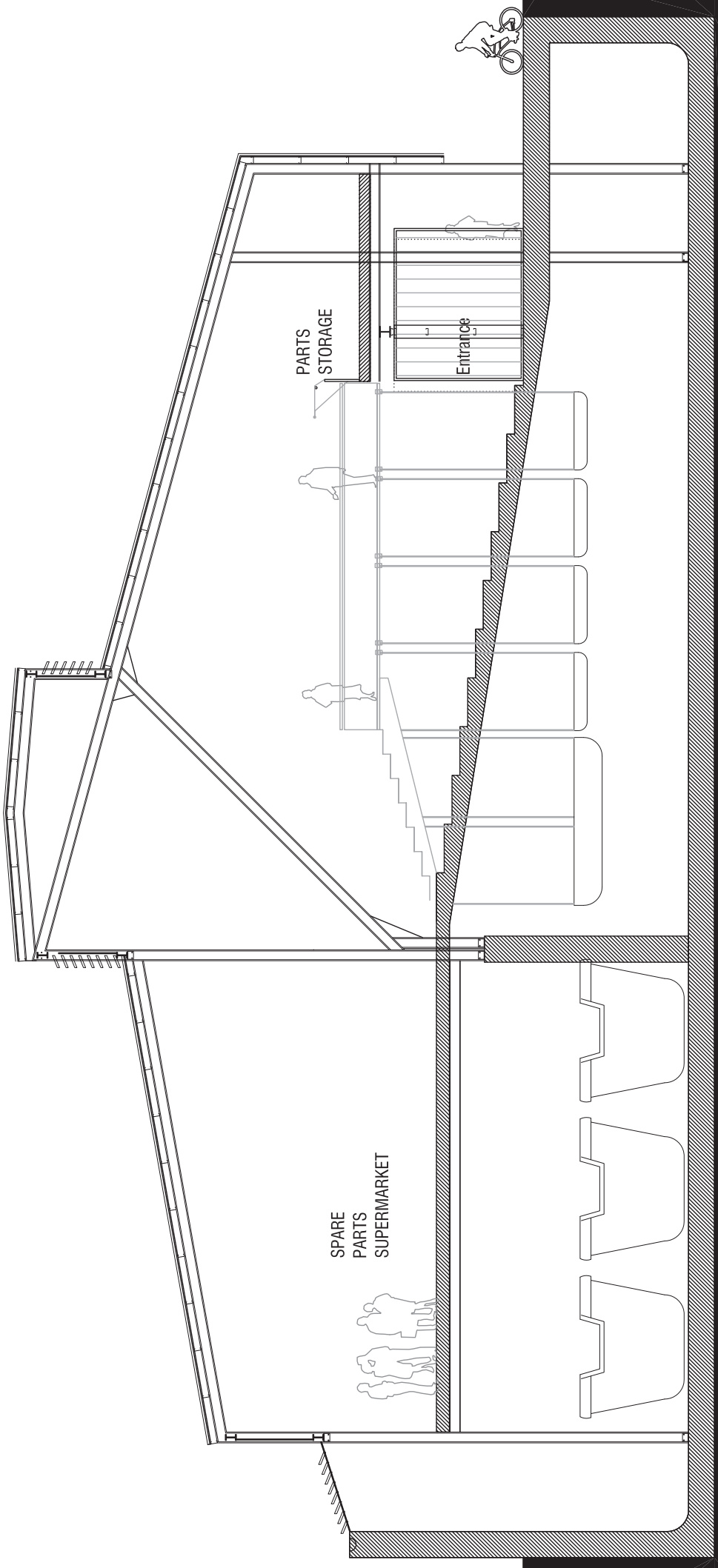
SECTION 1



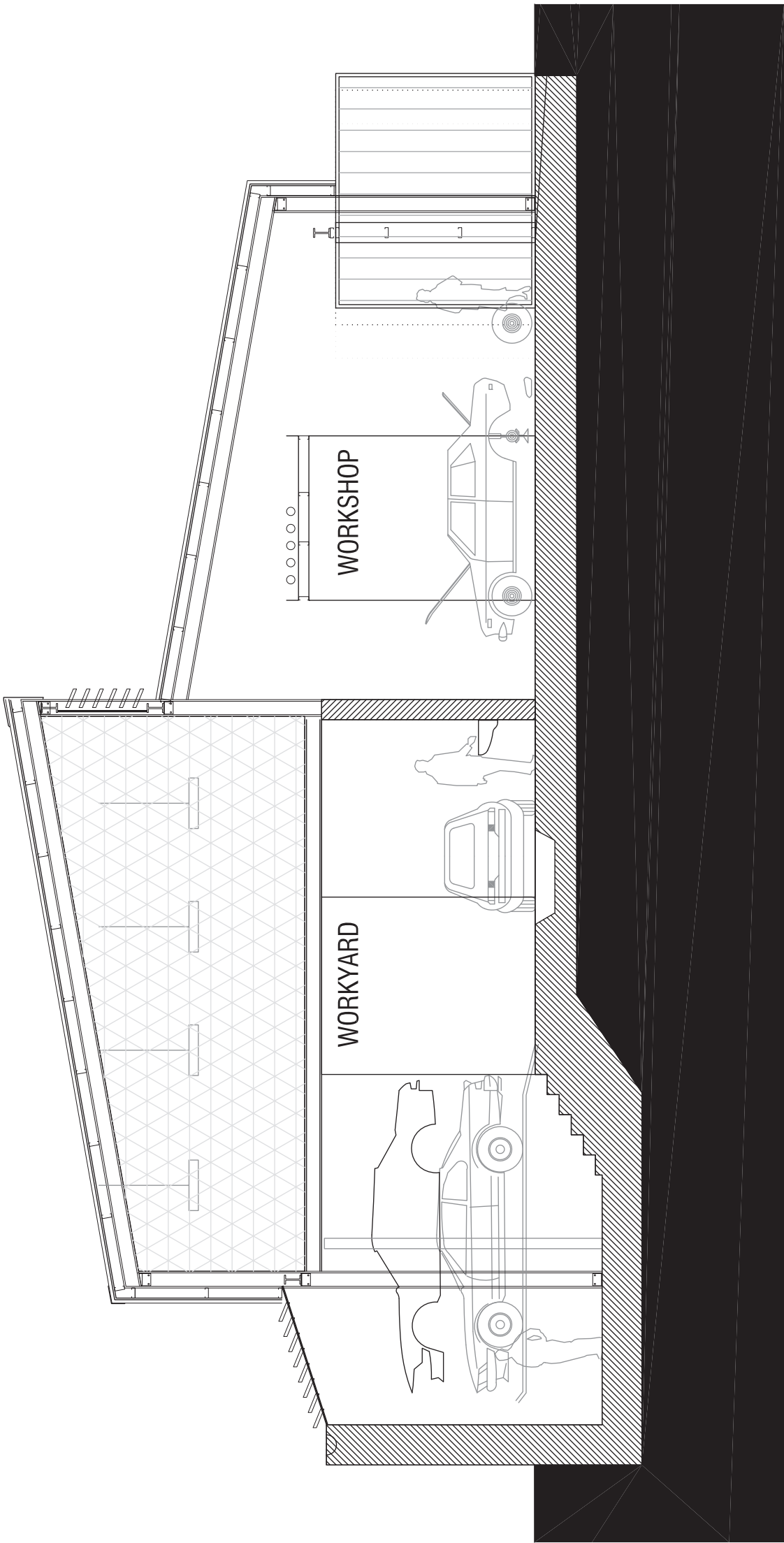
SECTION 2



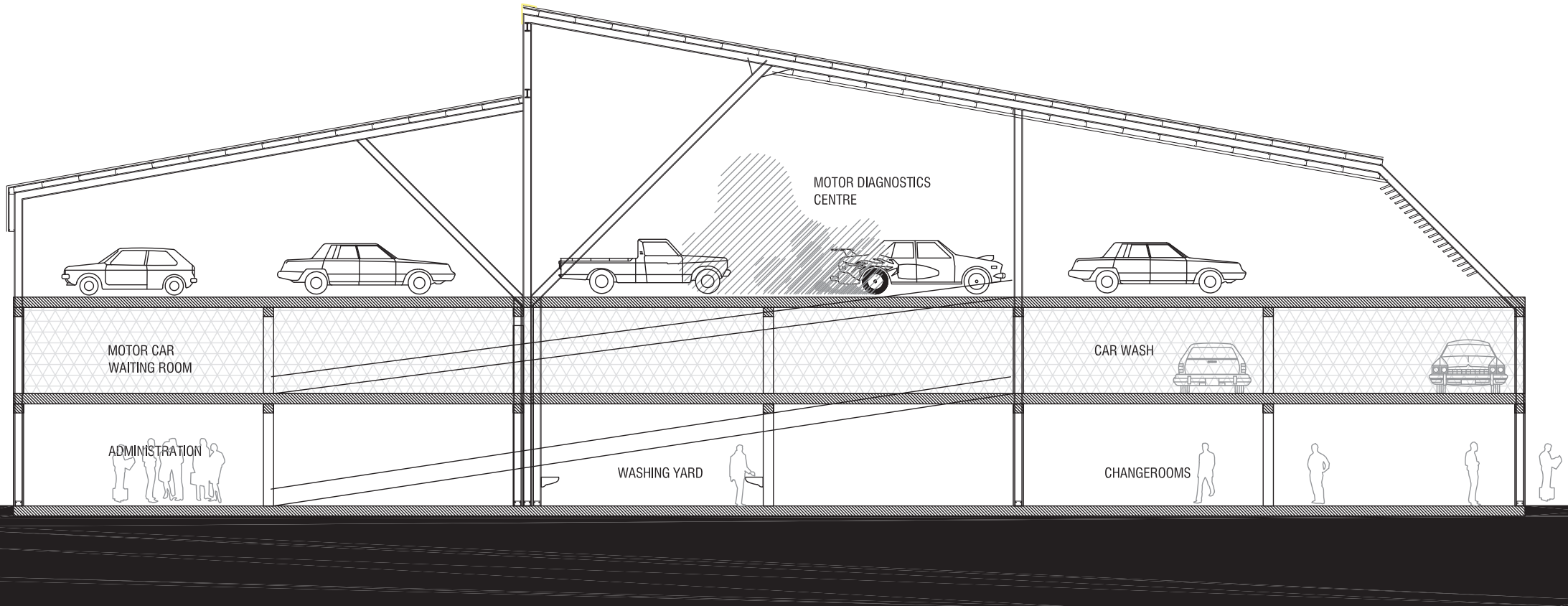
SECTION 3



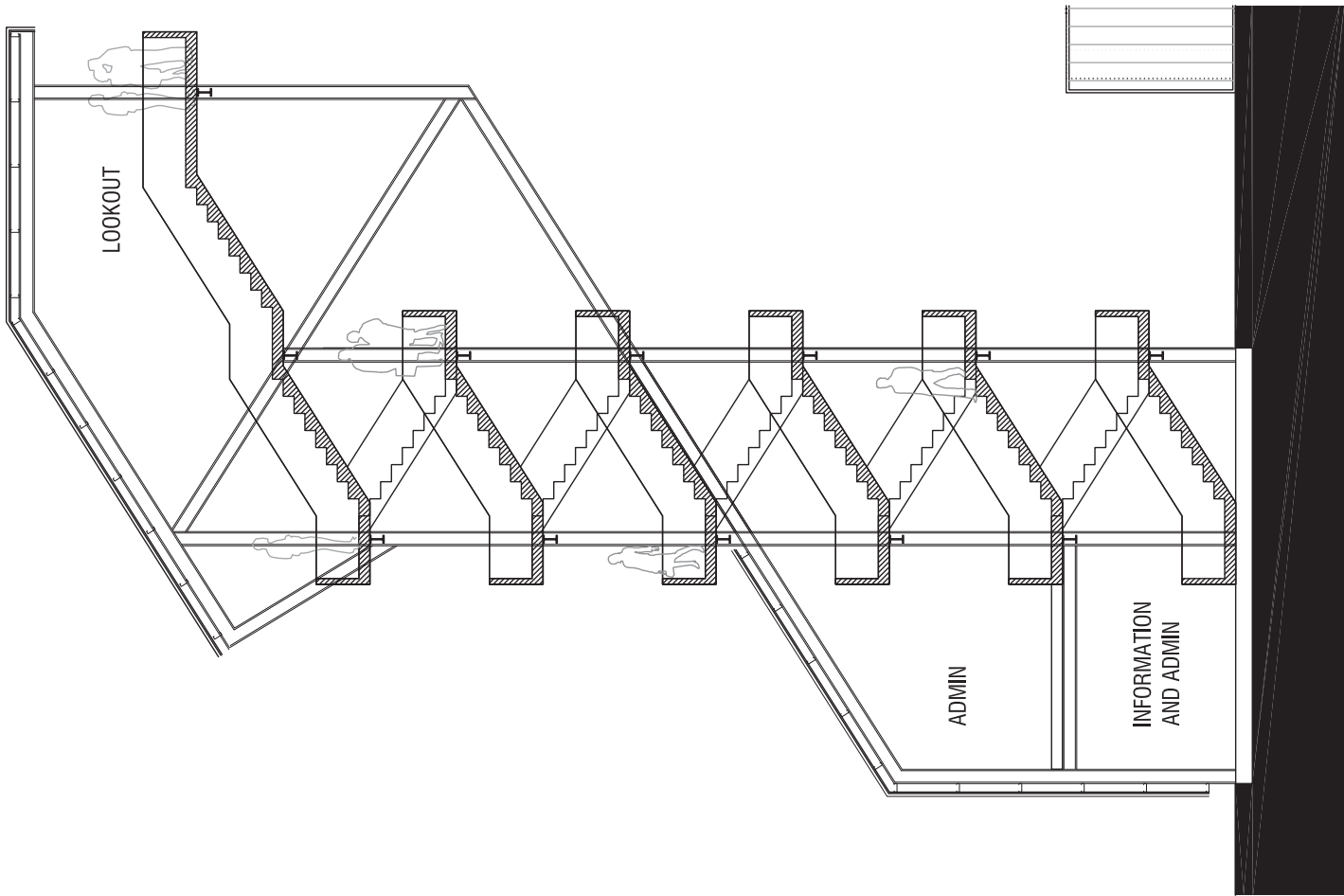
SECTION 4



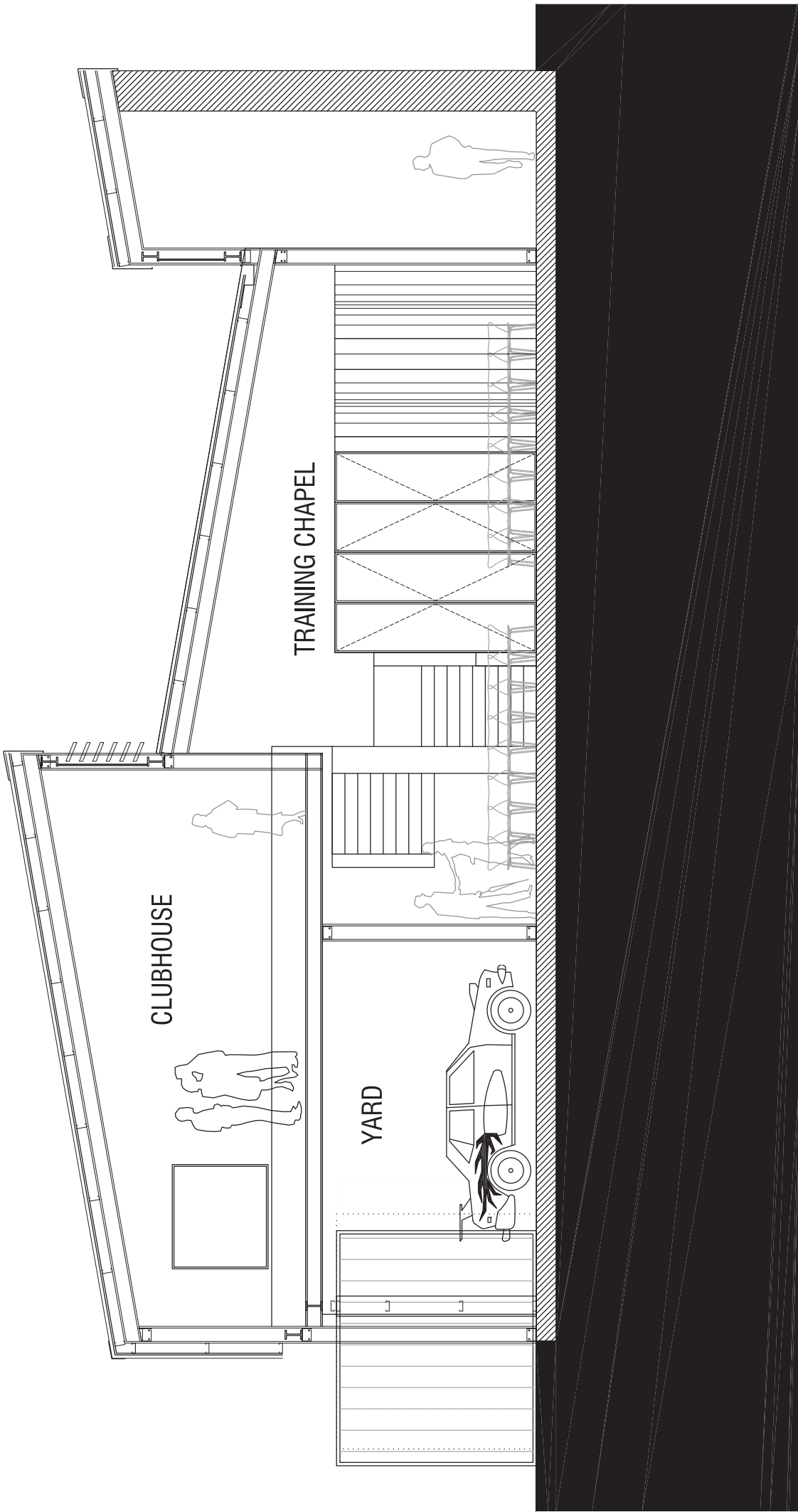
SECTION 5


MOTOR DIAGNOSTICS
CENTRE
MOTOR CAR
WAITING ROOM
CAR WASH
ADMINISTRATION
WASHING YARD
CHANGEROOMS

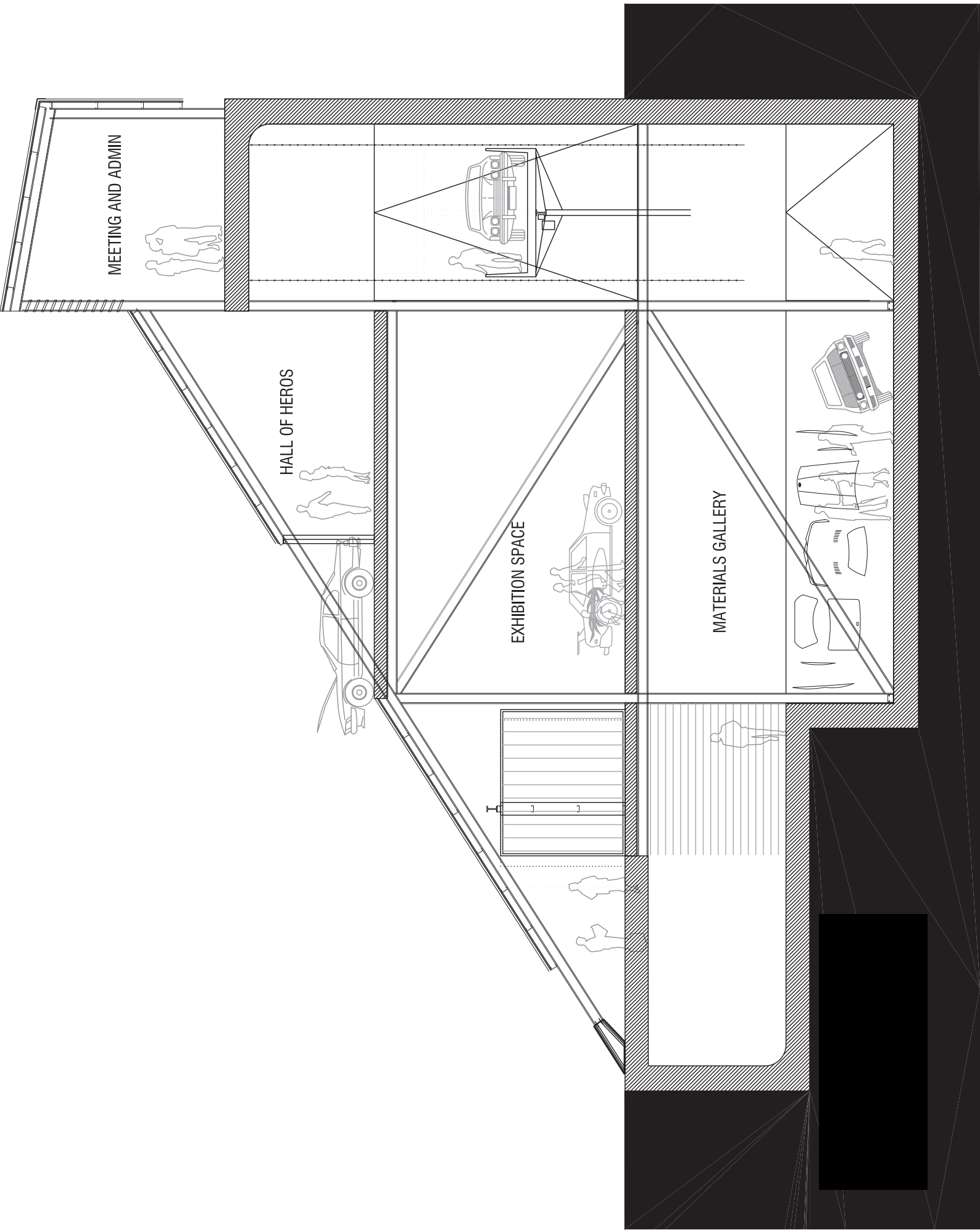
SECTION 6



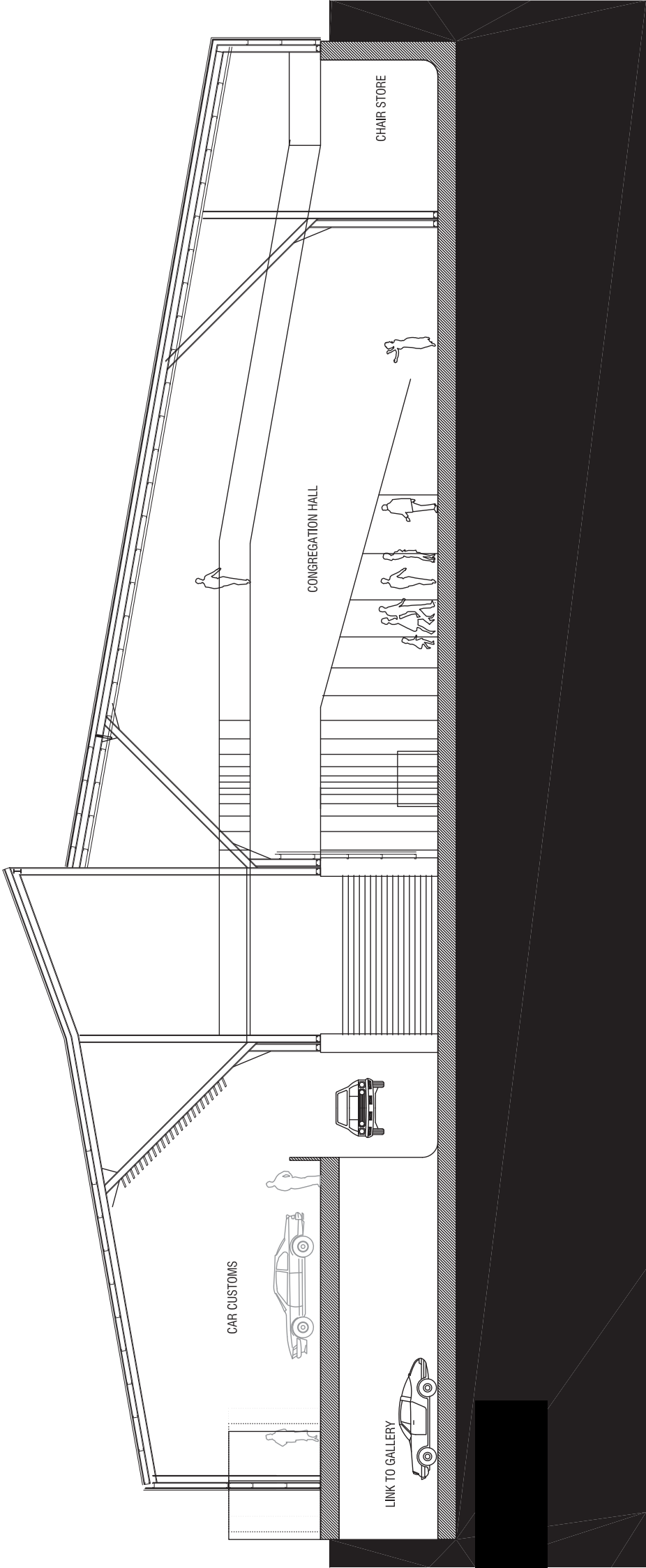
SECTION 7



SECTION 8


MEETING AND ADMIN
HALL OF HEROS
EXHIBITION SPACE
MATERIALS GALLERY

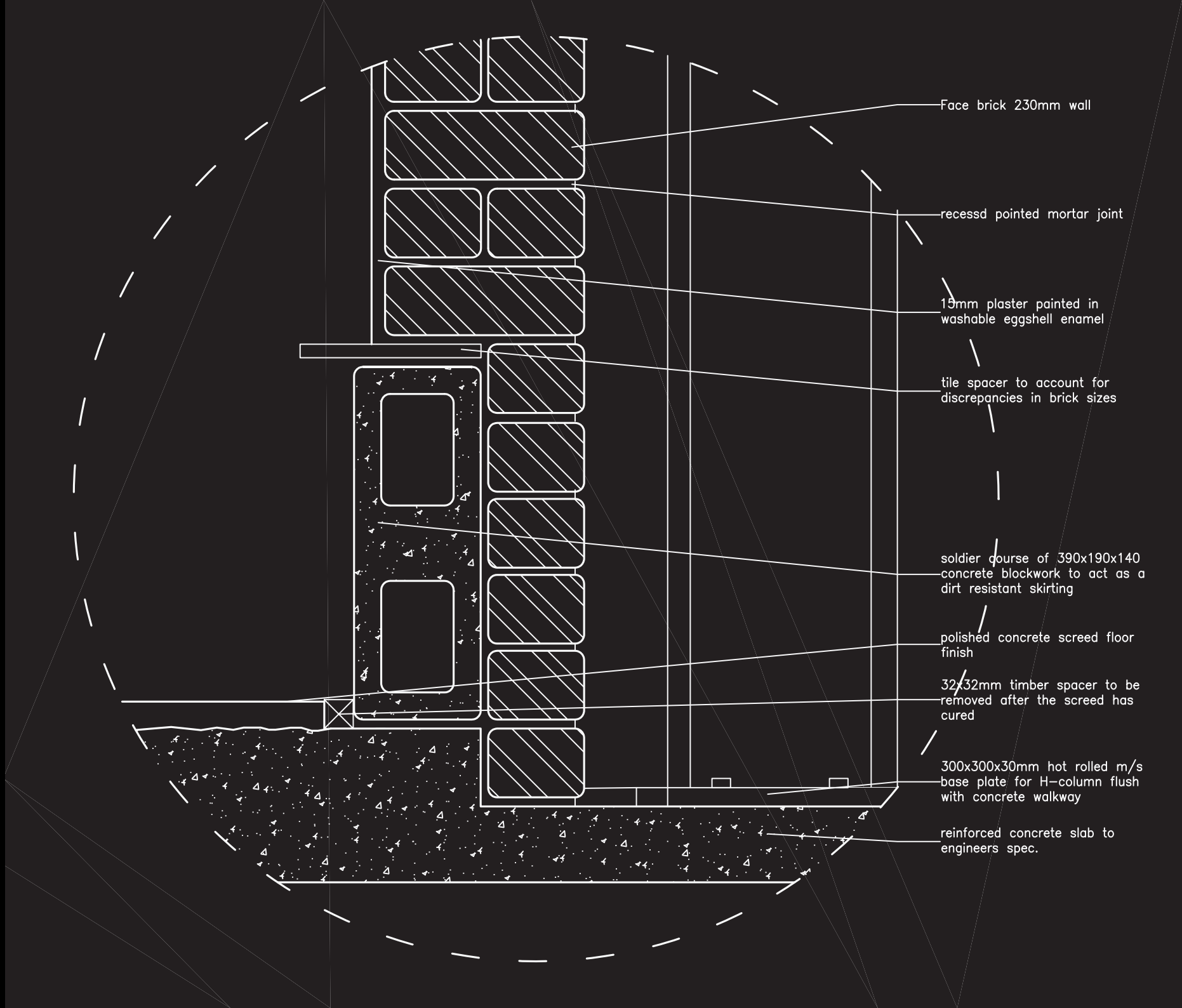
SECTION 9

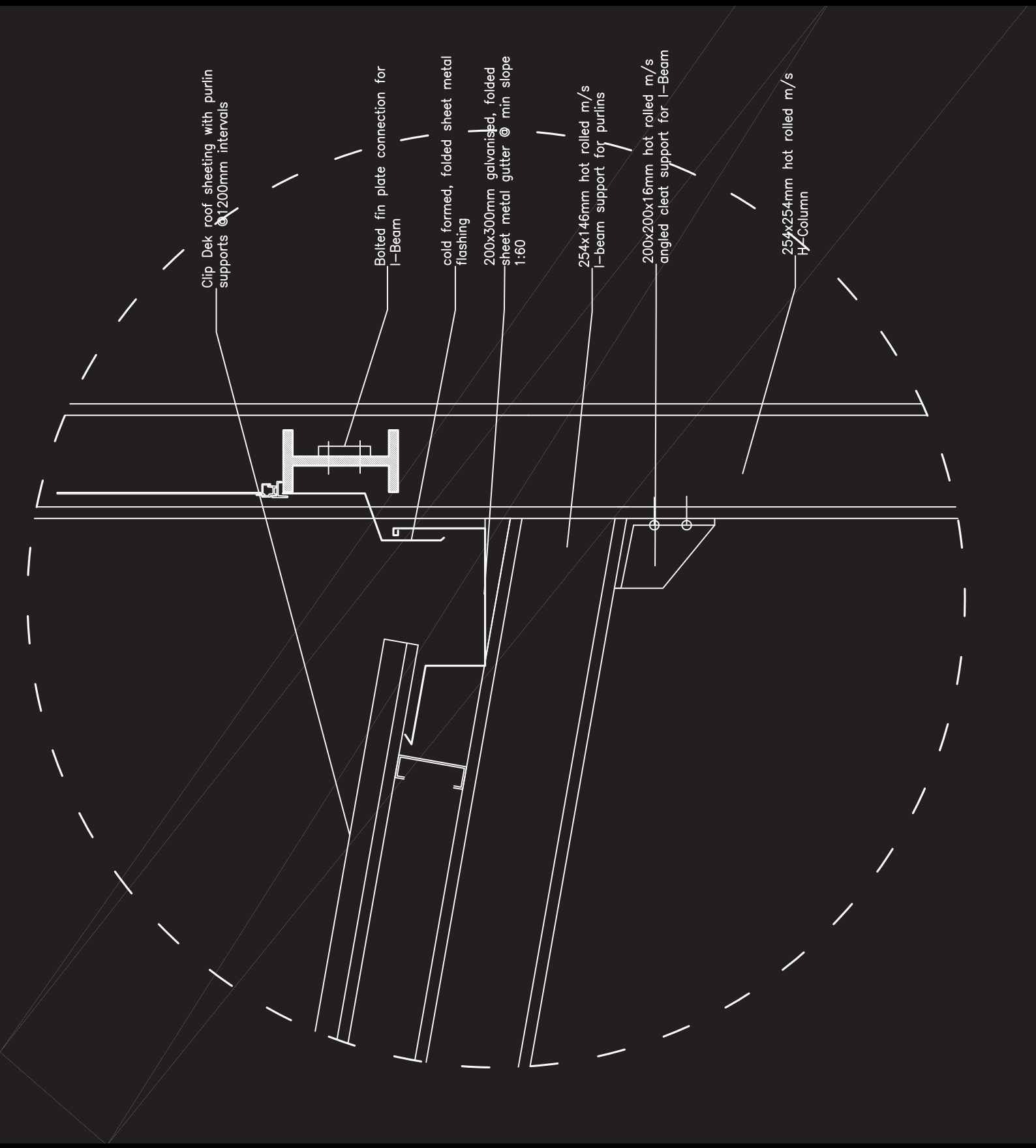


SECTION 10

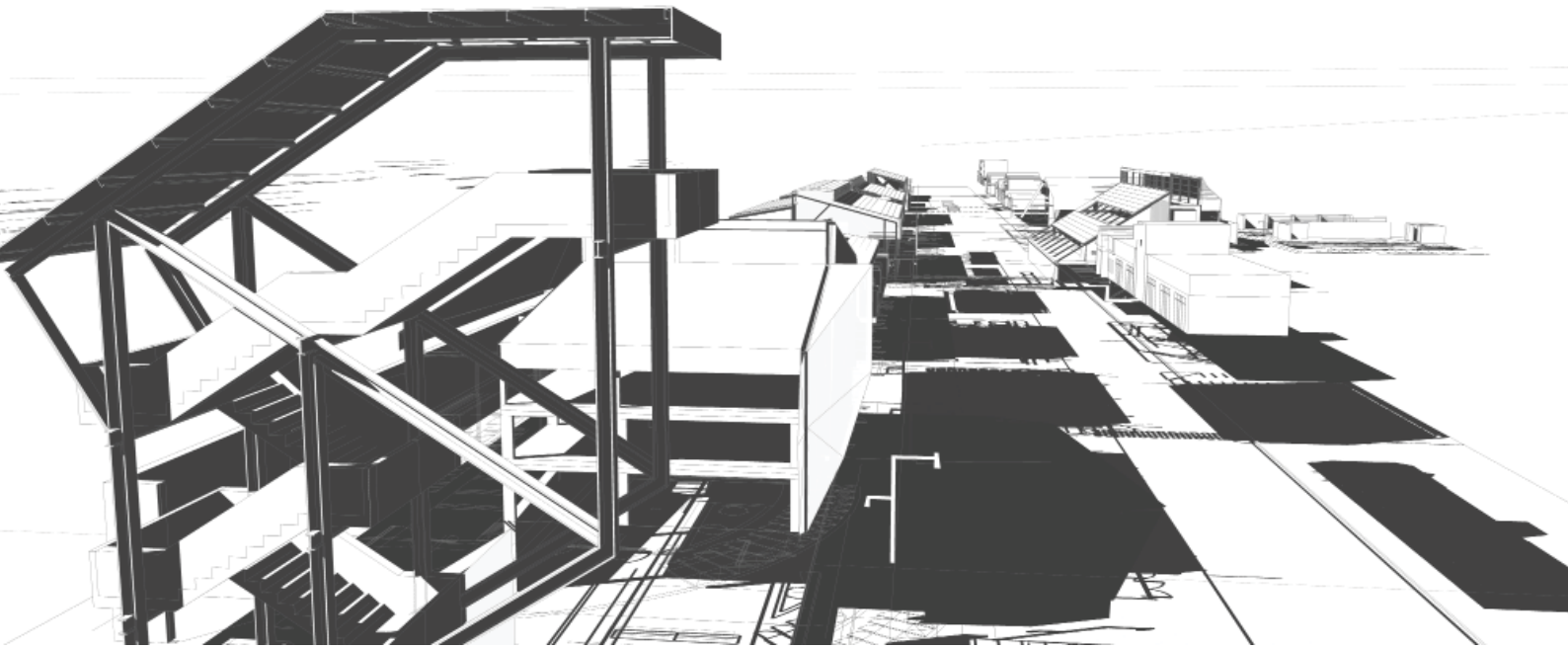


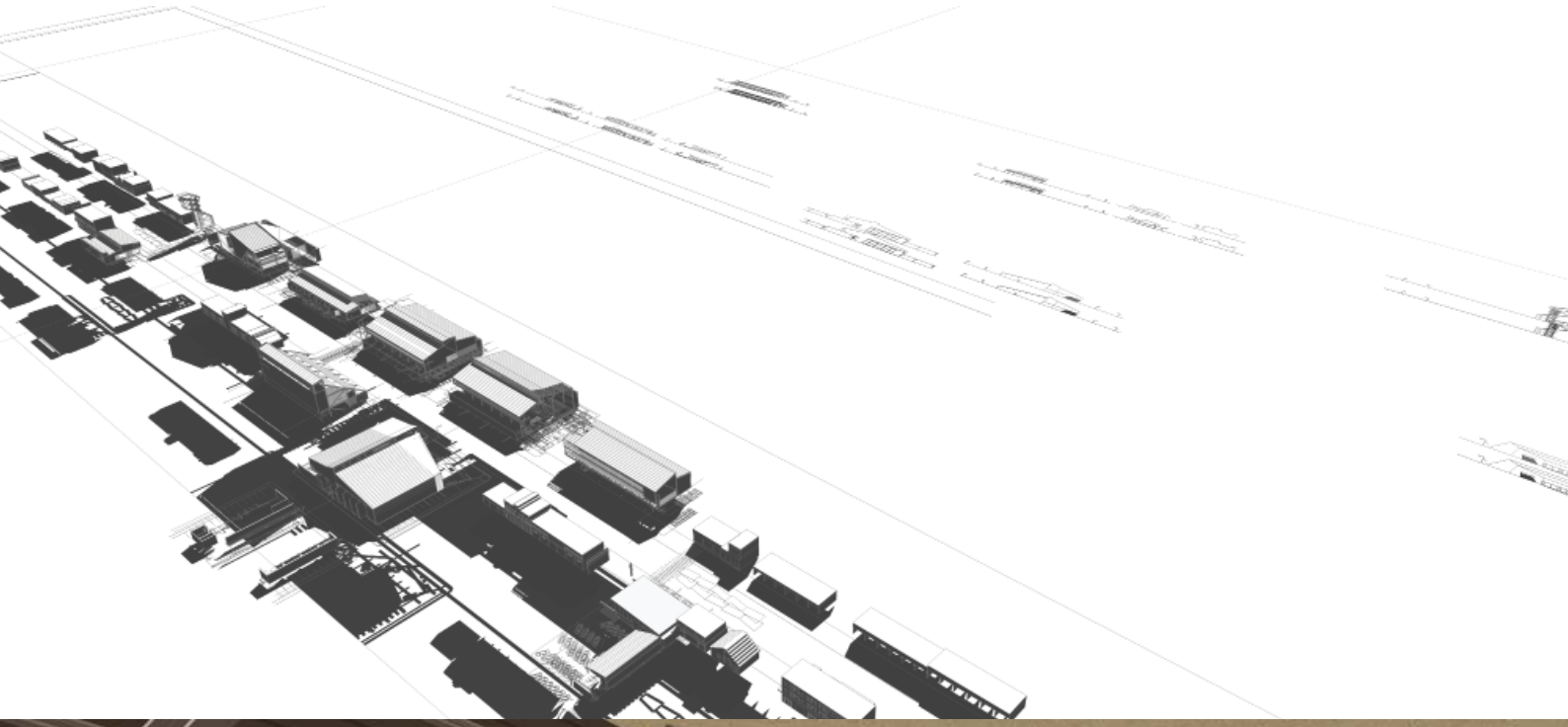
SKIRTING DETAIL





STEEL JOINTING







VIEW FROM LOOK-OUT TOWER

AERIAL VIEW OF COMPLEX

GALLERY INTERIOR WITH MATERIALS

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APPENDIX

All unreferenced photographs in this document is the work of Sergio Duarte and Kay Hausler.

All unreferenced graphic work in this document is the work of Sergio Duarte.

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