

CHAPTER 5: CONSOLIDATION - 2.3.1. SOCIO-ECONOMIC INTRODUCTION

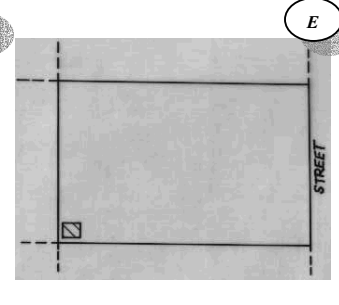
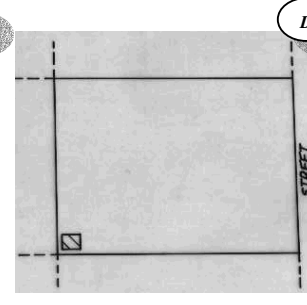
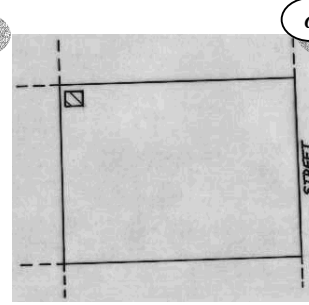
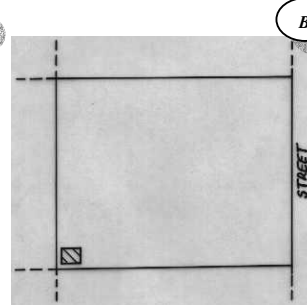
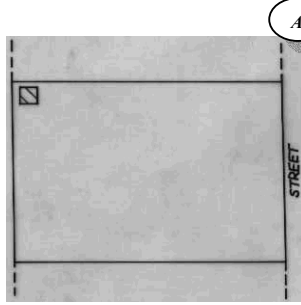
EXT. 10: TYPOLOGY 3

THE HOUSEHOLD	A	B	C	D	E
HOUSEHOLD PROFILE	<p>Family type: <i>Single woman-headed family</i> Family size: 3</p> <p>Tenants: <i>No</i> No. of tenants: <i>NA</i> Household size: 3</p>	<p>Family type: <i>Single nuclear family</i> Family size: 4</p> <p>Tenants: <i>No</i> No. of tenants: <i>NA</i> Household size: 4</p>	<p>Family type: <i>Single nuclear family</i> Family size: 3</p> <p>Tenants: <i>No</i> No. of tenants: <i>NA</i> Household size: 3</p>	<p>Family type: <i>Single nuclear family</i> Family size: 4</p> <p>Tenants: <i>No</i> No. of tenants: <i>NA</i> Household size: 4</p>	<p>Family type: <i>Single nuclear family</i> Family size: 6</p> <p>Tenants: <i>No</i> No. of tenants: <i>NA</i> Household size: 6</p>
EMPLOYMENT AND INCOME	<p>No. of sources of income: 1 Sources of income: <i>Mother</i> Employment: <i>Entrepreneurial/informal (traditional doctor)</i> Location: <i>From home.</i></p>	<p>No. of sources of income: 1 Sources of income: <i>Father</i> Employment: <i>Full time</i> Location: <i>ADT in Brooklyn.</i></p>	<p>No. of sources of income: 1 Sources of income: <i>Father</i> Employment: <i>Entrepreneurial/informal</i> Location: <i>Spaza shop run from home.</i></p>	<p>No. of sources of income: 2 Sources of income: <i>Father</i> Employment: <i>Part time and grant</i> Location: <i>At the council in Pretoria central.</i></p>	<p>No. of sources of income: 1 Sources of income: <i>Father</i> Employment: <i>Part time</i> Location: <i>Furniture shop in town (Russels).</i></p>
EXPENDITURE	<p>The expense that is indicated as 'other' refers to other expenses not covered by the expenditure items listed below. All households pay taxes, sanitation, and waste removal as well as for food and education. Water and electricity are also a common expense.</p>				
WATER	X	X	X	X	X
ELECTRICITY	X	X	X	X	X
TRANSPORT	X	X	X	X	X
TELEPHONE	X	X	X	X	X
EDUCATION	X	X	X	X	X
FOOD	X	X	X	X	X
CLOTHING	X	X	X	X	X
ACCOUNTS		X			X
SAVINGS	X		X	X	
TAXES	X	X	X	X	X
SANITATION	X	X	X	X	X
WASTE	X	X	X	X	X
OTHER					

CHAPTER 5: CONSOLIDATION - 2.3.2. PHYSICAL CHANGES

EXT. 10: TYPOLOGY 3

INITIAL  
STRUCTURE



**Description:** Water Closet  
**Materials used:** Precast concrete  
**Material supplier:** Government  
**Cost:** Subsidy  
**Funding:** Government  
**Builder:** Government  
**Date of Constr.:** Unknown  
**Problems:** None

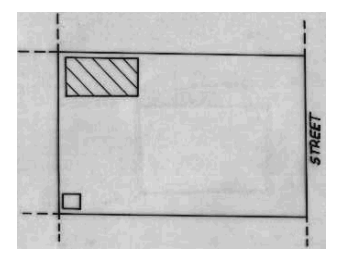
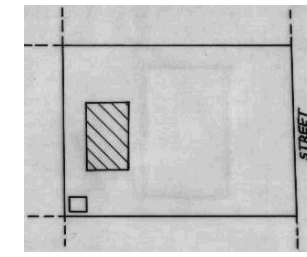
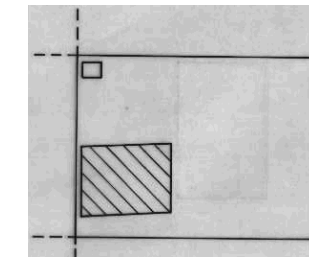
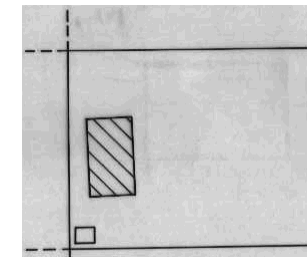
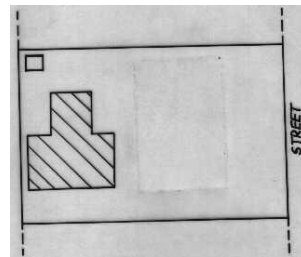
**Description:** Water Closet  
**Materials used:** Precast concrete  
**Material supplier:** Government  
**Cost:** Subsidy  
**Funding:** Government  
**Builder:** Government  
**Date of Constr.:** Unknown  
**Problems:** None

**Description:** Water Closet  
**Materials used:** Precast concrete  
**Material supplier:** Government  
**Cost:** Subsidy  
**Funding:** Government  
**Builder:** Government  
**Date of Constr.:** Unknown  
**Problems:** None

**Description:** Water Closet  
**Materials used:** Precast concrete  
**Material supplier:** Government  
**Cost:** Subsidy  
**Funding:** Government  
**Builder:** Government  
**Date of Constr.:** Unknown  
**Problems:** None

**Description:** Water Closet  
**Materials used:** Precast concrete  
**Material supplier:** Government  
**Cost:** Subsidy  
**Funding:** Government  
**Builder:** Government  
**Date of Constr.:** Unknown  
**Problems:** None

ADDITION  
1



**Description:** Temporary structure  
**Materials used:** Corrugated iron and wooden boards (temporary materials)  
**Material supplier:** Phase 3 (moved from previous home)  
**Cost:** Unknown  
**Funding:** Unknown  
**Builder:** Unknown  
**Date of Constr.:** Unknown  
**Problems:** None

**Description:** Temporary structure  
**Materials used:** Corrugated iron (temporary materials)  
**Material supplier:** Unknown  
**Cost:** R900  
**Funding:** Savings  
**Builder:** Material supplier  
**Date of Constr.:** 1996  
**Problems:** Water gets in on rainy days.

**Description:** Temporary structure  
**Materials used:** Corrugated iron (temporary materials)  
**Material supplier:** Bought in the neighbourhood  
**Cost:** Unknown  
**Funding:** Savings  
**Builder:** Owner  
**Date of Constr.:** 1996  
**Problems:** None

**Description:** Temporary structure  
**Materials used:** Corrugated iron (temporary materials)  
**Material supplier:** Unknown  
**Cost:** R600  
**Funding:** Savings  
**Builder:** Material supplier  
**Date of Constr.:** 1997  
**Problems:** Leakage, wind, heat, cold.

**Description:** Temporary structure  
**Materials used:** Corrugated iron (temporary materials)  
**Material supplier:** Bought in the neighbourhood.  
**Cost:** R500  
**Funding:** Savings  
**Builder:** Material supplier  
**Date of Constr.:** 1997  
**Problems:** None

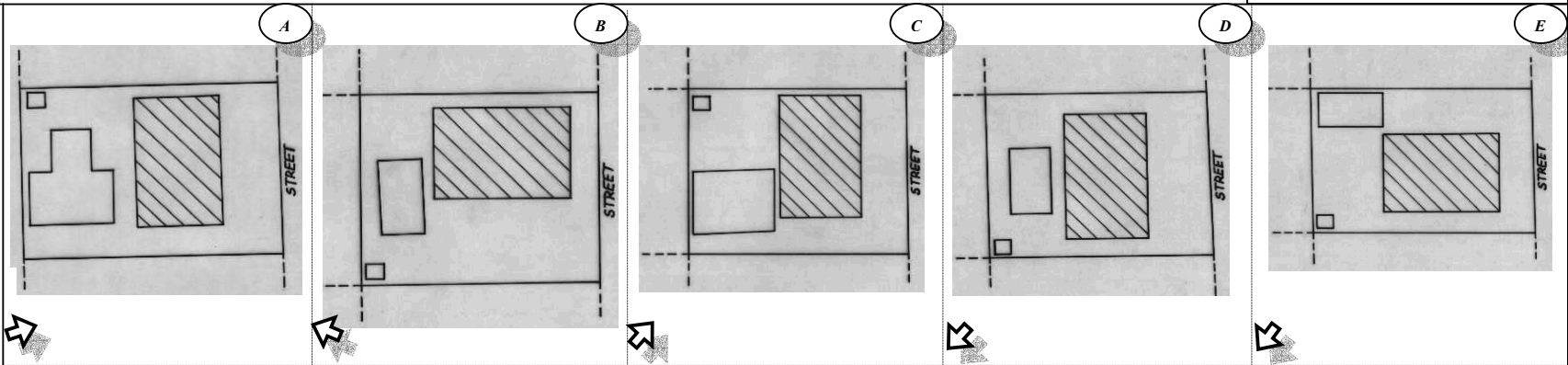
\*NOTE

1. Information about the structures is limited, e.g. costs, date of construction, etc. Respondents were reluctant to provide all the information either because of a lack of trust or poor memories.

CHAPTER 5: CONSOLIDATION - 2.3.2. PHYSICAL CHANGES

EXT. 10: TYPOLOGY 3

ADDITION 2



**Description:** Roof structure  
**Materials used:** Steel and corrugated iron structure.  
**Material supplier:** Government  
**Cost:** Subsidy  
**Funding:** Government  
**Builder:** Government  
**Date of Constr.:** Unknown  
**Problems:** None

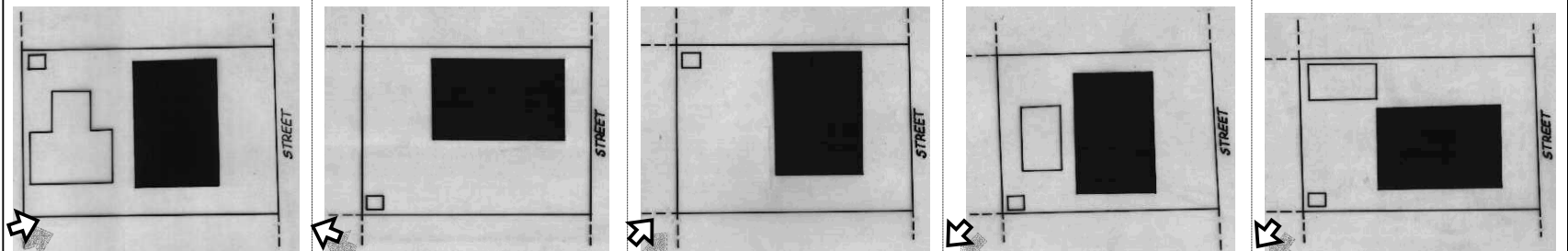
**Description:** Roof structure  
**Materials used:** Steel and corrugated iron structure.  
**Material supplier:** Government  
**Cost:** Subsidy  
**Funding:** Government  
**Builder:** Government  
**Date of Constr.:** Unknown  
**Problems:** None

**Description:** Roof structure  
**Materials used:** Steel and corrugated iron structure.  
**Material supplier:** Government  
**Cost:** Subsidy  
**Funding:** Government  
**Builder:** Government  
**Date of Constr.:** Unknown  
**Problems:** None

**Description:** Roof structure  
**Materials used:** Steel and corrugated iron structure.  
**Material supplier:** Government  
**Cost:** Subsidy  
**Funding:** Government  
**Builder:** Government  
**Date of Constr.:** Unknown  
**Problems:** None

**Description:** Roof structure  
**Materials used:** Steel and corrugated iron structure.  
**Material supplier:** Government  
**Cost:** Subsidy  
**Funding:** Government  
**Builder:** Government  
**Date of Constr.:** Unknown  
**Problems:** None

ADDITION 3



**Description:** Completed house  
**Materials used:** Bricks (permanent materials)  
**Material supplier:** Erastene  
**Cost:** R2 000  
**Funding:** Savings  
**Builder:** Private contractor  
**Date of Constr.:** 1998  
**Problems:** None

**Description:** Completed house  
**Materials used:** Bricks (permanent materials)  
**Material supplier:** Unknown  
**Cost:** Unknown  
**Funding:** Savings  
**Builder:** Private contractor  
**Date of Constr.:** 1998  
**Problems:** Funding. Relied on not paying accounts, so that they could finish their home.

**Description:** Completed house  
**Materials used:** Bricks (permanent materials)  
**Material supplier:** Cullinan  
**Cost:** R1 500  
**Funding:** Savings  
**Builder:** Private contractor  
**Date of Constr.:** 2000  
**Problems:** None

**Description:** Completed house  
**Materials used:** Bricks (permanent materials)  
**Material supplier:** Bronkhorspruit  
**Cost:** Unknown  
**Funding:** Loan at work (interest charged)  
**Builder:** Private contractor  
**Date of Constr.:** 2000  
**Problems:** Materials are expensive. Financing is difficult.

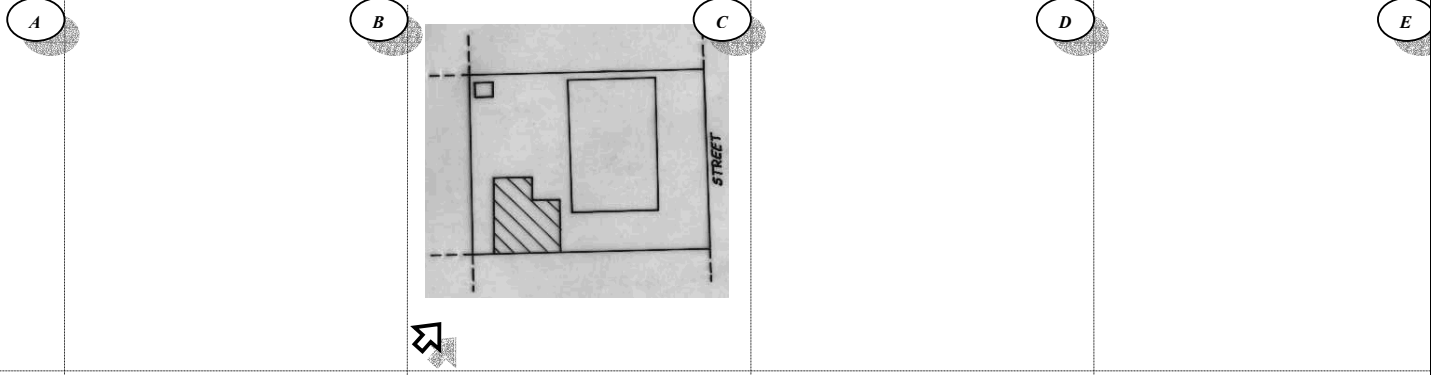
**Description:** Completed house  
**Materials used:** Bricks (permanent materials)  
**Material supplier:** Reiten  
**Cost:** R3 000  
**Funding:** Husbands retrenchment money  
**Builder:** Private contractor  
**Date of Constr.:** 1999  
**Problems:** None

\*NOTE

1. Information about the structures is limited, e.g. costs, date of construction, etc. Respondents were reluctant to provide all the information either because of a lack of trust or poor memories.

CHAPTER 5: CONSOLIDATION - 2.2.3. PHYSICAL CHANGES

EXT. 10: *TPOLOGY 3*



**Description:** Garage  
**Materials used:** Bricks (permanent materials)  
**Material supplier:** Cullinan  
**Cost:** R1 000  
**Funding:** Savings  
**Builder:** Private contractor  
**Date of Constr.:** 2001  
**Problems:** None

**\*NOTE**

1. Information about the structures is limited, e.g. costs, date of construction, etc. Respondents were reluctant to provide all the information either because of a lack of trust or poor memories.

CHAPTER 5: CONSOLIDATION - 2.3.2. PHYSICAL CHANGES

EXT. 10: TYPOLOGY 3

HOW HAS THE UNIT CHANGED OVER TIME IN TERMS OF:

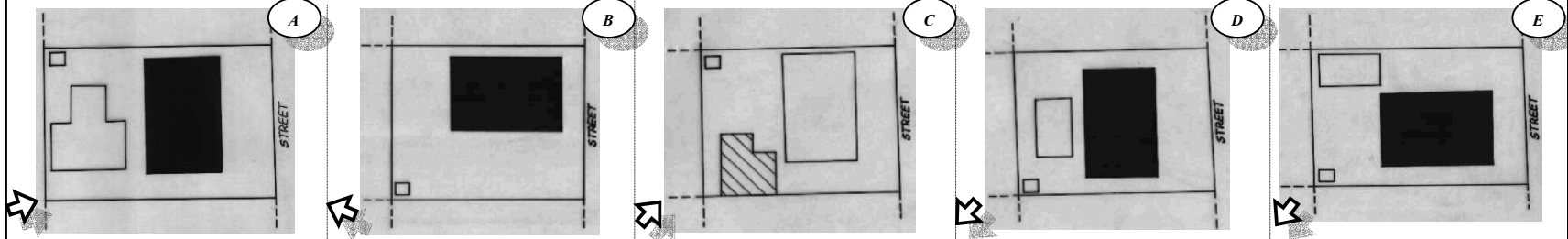
	A	B	C	D	E
<b>NUMBER OF EXTENSIONS AND THE TREND IN USE OF MATERIALS</b>	There have been two extensions, one done with the use of temporary materials (temporary structure) and the other with permanent materials (house).	Two extensions have been made. The first was a shack (temporary materials) that was demolished before the construction of the house. The second was a house (permanent materials).	Three extensions were undertaken here. The first of which was a shack (temporary materials). It was destroyed in order to construct their actual home (permanent materials) and the third was the construction of the garage.	There is one shack and one completed house on this erf, which totals two structures. The shack was constructed with the use of temporary materials and the house, with permanent materials.	Two extensions were made. The first was a shack made of temporary materials. The second was a house constructed of permanent materials.
<b>SIZE</b>	The size of the temporary structure is approximately 30m <sup>2</sup> and the house is 54m <sup>2</sup> .	The size of the shack is unknown since it was destroyed to build the house 54m <sup>2</sup> .	The size of the shack is unknown, but the house is approximately 54m <sup>2</sup> and the garage appears to be around 20m <sup>2</sup> .	The shack covers an area of approximately 15m <sup>2</sup> . The house covers an area of 54m <sup>2</sup> .	The shack is approximately 13m <sup>2</sup> in total and the house is 54m <sup>2</sup> .
	Erf size: 216m <sup>2</sup> Total area-temporary structures: 30m <sup>2</sup> Total area-permanent structures: 54m <sup>2</sup> Total area: 84m <sup>2</sup> Coverage - temporary structures: 14% Coverage - permanent structures: 25% Coverage: 39% Occupational density: 28m <sup>2</sup> /person	Erf size: 200m <sup>2</sup> Total area-permanent structures: 54m <sup>2</sup> Total area: 54m <sup>2</sup> Coverage - permanent structures: 27% Coverage: 27% Occupational density: 14m <sup>2</sup> /person	Erf size: 192m <sup>2</sup> Total area-permanent structures: 74m <sup>2</sup> Total area: 74m <sup>2</sup> Coverage - permanent structures: 39% Coverage: 39% Occupational density: 25m <sup>2</sup> /person	Erf size: 192m <sup>2</sup> Total area-temporary structures: 15m <sup>2</sup> Total area-permanent structures: 54m <sup>2</sup> Total area: 69m <sup>2</sup> Coverage - temporary structures: 8% Coverage - permanent structures: 28% Coverage: 36% Occupational density: 17m <sup>2</sup> /person	Erf size: 187m <sup>2</sup> Total area-temporary structures: 13m <sup>2</sup> Total area-permanent structures: 54m <sup>2</sup> Total area: 67m <sup>2</sup> Coverage - temporary structures: 7% Coverage - permanent structures: 29% Coverage: 36% Occupational density: 11m <sup>2</sup> /person
<b>SHAPE AND CONFIGURATION</b>	The shack takes a 'T' shape (4.4m x 6.7m) whilst the house is a rectangle.	The house has a rectangular shape with dimensions of 6m x 9m.	The shape of the shack is unknown, but the garage takes an 'L' shape (4.4m x 4.6m) and the house a rectangle (6m x 9m).	The shack (5m x 3m) takes the form of a rectangle just like the house (6m x 9m).	This shack (2.6m x 5m) takes a rectangular shape just like the house (6m x 9m).

\*NOTE

- The toilet, roof structure and room under the roof structure have fixed values in terms of area, dimensions and shape. Instead of repeating these values throughout the document, it will be noted here. Toilet - area (1.2m<sup>2</sup>), dimensions (1m x 1.2m) and shape (rectangle). Roof structure - area (54m<sup>2</sup>), dimensions (6m x 9m) and shape (rectangle). Room under roof structure - area (12m<sup>2</sup>), dimensions (4m x 3m) and shape (rectangle).
- Also important to note, when reference is made to extensions, it refers to those made by the dwellers and not by government. This excludes the water closets and roof structures.
- The measurements given are **approximated** from the diagrams representing the situation of the erven and aerial photographs as a cross check. A measuring exercise was not carried out during the interviewing sessions. The measurements are therefore not true representations.
- Information about the structures is limited, e.g. costs, date of construction, etc. Respondents were reluctant to provide all the information either because of a lack of trust or poor memories. As a result, issues of cost and date of construction of extensions have been omitted from this analysis. However, assumptions based on available information have been made.
- All calculations within this section include enclosed structures only, e.g. incomplete roof structures that have been added to the calculation are those that are enclosed but lack internal divisions.
- When discussing privacy, there are two categories, i.e. from the public on the street and from neighbours. In this section, it refers to privacy from the public.
- Reasons for the placing of structures by respondents are mentioned only where reasons were given.

CHAPTER 5: CONSOLIDATION - 2.3.2. PHYSICAL CHANGES

EXT. 10: TYPOLOGY 3



**PLACING OF BUILDINGS:** With the size of the erven being approximately 208m<sup>2</sup> and gross and nett densities estimated at 163p/ha and 266p/ha respectively, space is limited. The amount of space available should, therefore, be optimised for living space of the occupants. As such privacy also becomes an issue for the households.

HOW HAS THE UNIT CHANGED OVER TIME IN TERMS OF:

**PLACING OF BUILDINGS**

The shack is placed at the back of the erf. The roof structure is placed in a central position on the erf with the longer side of the structure parallel to the road frontage. The toilet is also placed at the back of the erf (west).

A large space is created at the front of the erf. Instead of being capitalised as living space, it is used as garden space. This is due to the placing of the roof structure. The amount of space at the back appears reasonable, but odd spaces are created around the structures. Space is not used efficiently.

**PLACING OF BUILDINGS**

It is unknown where the shack was placed. The roof structure (now known as the completed house) was placed close to the road frontage and the eastern boundary, with the short end of the house parallel to the street frontage. The toilet is placed at the back (east).

The roof structure is surrounded by a large space. Space has been used efficiently.

**PLACING OF BUILDINGS**

The house (roof structure) is placed centrally with the longer side facing the road frontage. The garage is placed toward the back of the erf, along the boundary line. The toilet is placed at the back at the opposite corner to the temporary structure. Sufficient space is created at the back of the erf, where privacy has been achieved, but space could have been optimally used (increase living space) if the garden space had been reduced with the shifting of the roof structure closer to the street. Space use is rated mediocre.

**PLACING OF BUILDINGS**

The house is placed centrally on the erf with the longer side parallel to the road frontage. The shack is placed at the extreme back yard in a central position relative to the side boundary lines. The toilet was placed at the back. Whilst a large space exists at the front of the erf, there is little space between the roof structure and the temporary structure. Odd spaces are also created on either side of the temporary structure. Space has not been optimally used for living space.

**PLACING OF BUILDINGS**

The shack is built along the eastern boundary line. The house is placed toward the front of the erf with the shorter end facing the street. The toilet is placed at the back on the opposite corner of the temporary structure.

Sufficient spaces exist at the front for a garden. The placing of the structures creates privacy at the back of the erf with a large functional space (large enough to be flexible as opposed to smaller spaces). Space has been used efficiently.

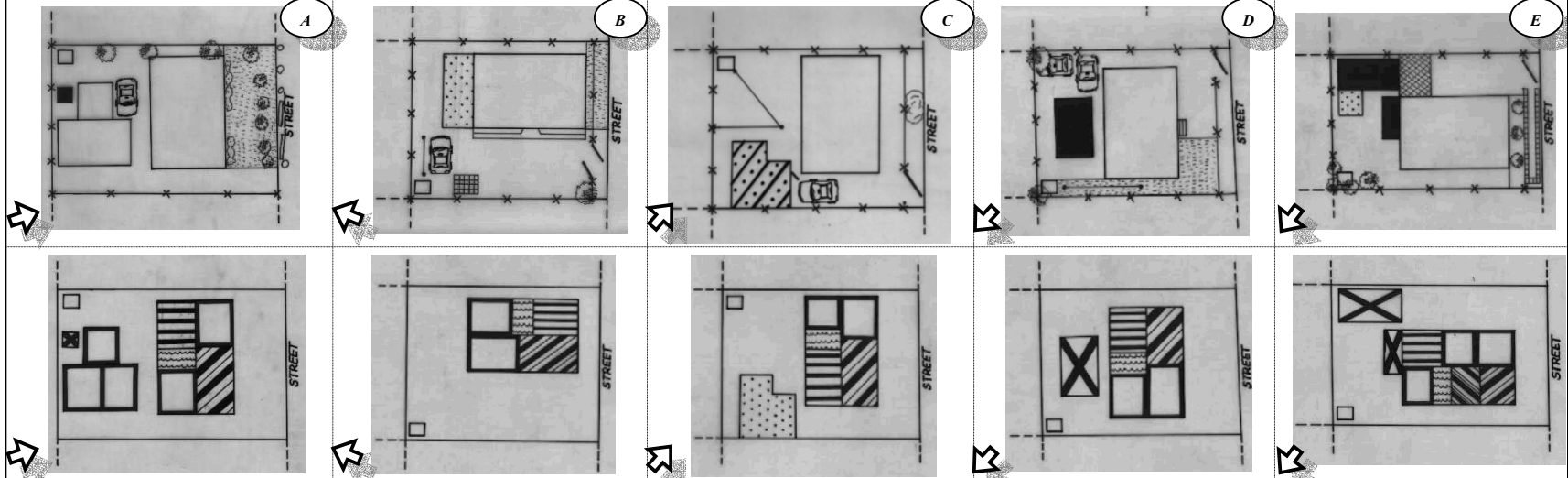
**\*NOTE**

1. The toilet, roof structure and room under the roof structure have fixed values in terms of area, dimensions and shape. Instead of repeating these values throughout the document, it will be noted here. Toilet - area (1.2m<sup>2</sup>), dimensions (1m x 1.2m) and shape (rectangle). Roof structure - area (54m<sup>2</sup>), dimensions (6m x 9m) and shape (rectangle). Room under roof structure - area (12m<sup>2</sup>), dimensions (4m x 3m) and shape (rectangle).
2. Also important to note, when reference is made to extensions, it refers to those made by the dwellers and not by government. This excludes the water closets and roof structures.
3. The measurements given are **approximated** from the diagrams representing the situation of the erven and aerial photographs as a cross check. A measuring exercise was not carried out during the interviewing sessions. The measurements are therefore not true representations.
4. Information about the structures is limited, e.g. costs, date of construction, etc. Respondents were reluctant to provide all the information either because of a lack of trust or poor memories. As a result, issues of cost and date of construction of extensions have been omitted from this analysis. However, assumptions based on available information have been made.
5. All calculations within this section include enclosed structures only, e.g. incomplete roof structures that have been added to the calculation are those that are enclosed but lack internal divisions.
6. When discussing privacy, there are two categories, i.e. from the public on the street and from neighbours. In this section, it refers to privacy from the public.
7. Reasons for the placing of structures by respondents are mentioned only where reasons were given.

CHAPTER 5: CONSOLIDATION - 2.3.3. LAND USE AND THE USE OF SPACE

EXT. 10: *TPOLOGY 3*

HOW IS THE SPACE WITHIN THE HOME BEING USED?



BEDROOMS

- Five bedrooms: House - 2, shack - 3

- Two bedrooms.

- Two bedrooms.

- Two bedrooms.

- Three bedrooms.

KITCHEN

- One kitchen.

- One kitchen.

- One kitchen.

- One kitchen.

- One kitchen.

DINING ROOM

- One dining room.

LOUNGE

- One lounge.

- One lounge.

- One lounge.

- One lounge.

- One lounge.

TOILET

- One toilet - government provision.

- Two toilets - government provision - 1, indoors - 1.

- Two toilets - government provision - 1, indoors - 1.

- Two toilets - government provision - 1, indoors - 1.

- Two toilets - government provision - 1, indoors - 1.

BATHROOM

- One bathroom.

- One bathroom.

- One bathroom.

- One bathroom.

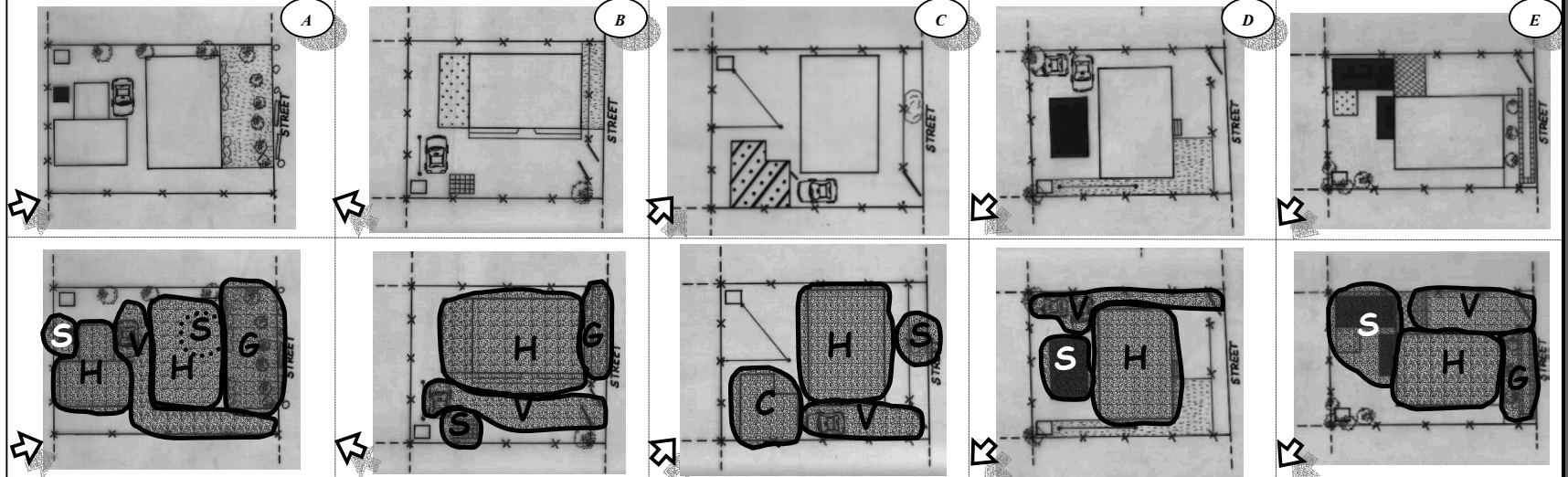
WHY IS IT USED IN THIS WAY?

- \*NOTE**  
1. No reasons for the use of space within the structures could be obtained.

CHAPTER 5: CONSOLIDATION - 2.3.3. LAND USE AND THE USE OF SPACE

EXT. 10: TYPOLOGY 3

HOW IS THE PROPERTY BEING USED IN TERMS OF:



**GARDENING**

There is a well-maintained garden in front of the house.

There is a bit of a garden in front of the house.

There is a well-maintained garden in front of the house.

**RENTAL HSG**

**COMMERCIAL**

This household has a tuck shop that is managed out of their garage.

**SERVICE**

The head of this household provides a service as a traditional doctor from her home.

**AGRICULTURE**

**PARKING**

Space for the parking of vehicles is made possible at the back of the house.

The west side of the property holds the parking space for the vehicles.

Cars can be parked in front of the garage.

Cars are parked on the southern side of the erf.

Cars can be accommodated on the southern side of the erf.

**OTHER**

There is a small storage facility built at the back.

The clothesline is housed at the back of the erf and bricks are also stored here. The house is extended by use of a tent. It is a temporary structure that will be removed when the plans to build the intended braai area are complete.

Clotheslines appear in the backyard. Building materials are housed on the erf.

Clotheslines are on the left-hand side of the property. A storage facility is at the back of the yard.

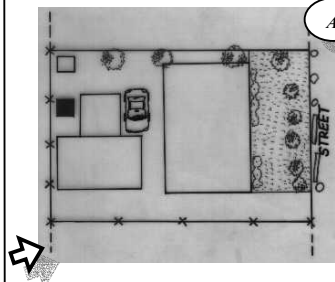
A little storage facility is also built in the back yard. A tent has been added to the existing shack to add more sheltered space.



CHAPTER 5: CONSOLIDATION - 2.3.4. PUBLIC / PRIVATE INTERFACE

EXT. 10: TYPOLOGY 3

PUBLIC/  
PRIVATE  
INTERFACE

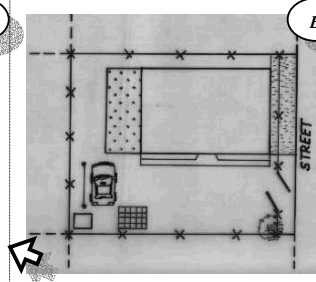


**RELATION TO THE STREET:**  
*Street Boundary Definition*  
Instead of a fence, boulders have been placed on the road side as some sort of border, which leaves the erf quite open to the public, i.e. no privacy is created.

**PRIVACY:**  
*Side and Back Boundaries*  
Two sides of the erf are fenced off with transparent wire fencing, i.e. the back and the eastern boundary. The type of fencing used prevents the creation of private space. The side with no fence has trees planted along the boundary, which defines the space but creates no privacy.

**Placing of units**  
The temporary structure is placed along the back boundary and behind the house. Some semi-private space is created between these structures - the space is private from the public but semi-private from the neighbours.

**Placing of the front door**  
The front door faces the street. The placing of the boulders in combination with the door indicates a desire to interact with the public. In this case it would also be good in attracting business. The back door faces the temporary structure.

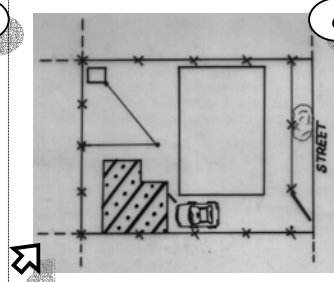


**RELATION TO THE STREET:**  
*Street Boundary Definition*  
The fencing used at the front is transparent wire (1.5m). There is also a gate present. No privacy is created.

**PRIVACY:**  
*Side and Back Boundaries*  
The remaining sides of the erf are fenced off with wire fencing. It does very little to create privacy.

**Placing of units**  
The unit has been placed along the east boundary line and a bit closer to the road frontage. This allows for other activities to take place at the back - a tent at the back of the erf is used to create some semi-private space - a social area.

**Placing of the front door**  
The door of the house is at the side with a back door that faces the other side. Privacy was sought.

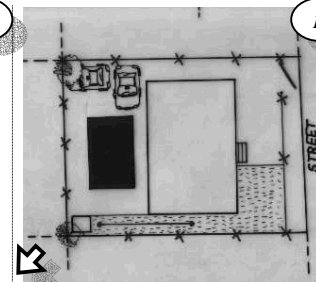


**RELATION TO THE STREET:**  
*Street Boundary Definition*  
There is a presence of a very presentable, tall gate (palisade fencing) at the front. The fencing used is transparent wire. Privacy is not created.

**PRIVACY:**  
*Side and Back Boundaries*  
The same type of fencing surrounds the erf. No privacy is created.

**Placing of units**  
Some semi-private space is created at the back of the erf surrounding the outside toilet, i.e. it is private from the public and one neighbour, but two neighbours can intrude. The placing of the structures enabled this.

**Placing of the front door**  
The house can be entered at the front. The door faces the street enabling interaction to take place. This would be beneficial for the spaza shop that is run from the garage. The back entrance of the house faces the semi-private space created.

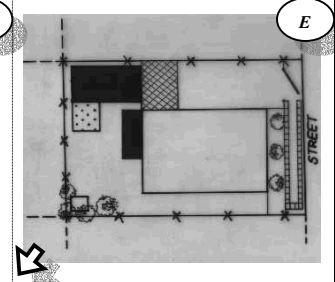


**RELATION TO THE STREET:**  
*Street Boundary Definition*  
The fencing at the front of the house is quite weak and transparent. This prevents private space from being created.

**PRIVACY:**  
*Side and Back Boundaries*  
All the other sides are fenced off utilising the same type of fencing. Privacy is not created.

**Placing of units**  
The only form of privacy is created at the back between the 'now' storage facility and the house, which lie parallel to one another. Neighbours can however intrude. The space is therefore private from the public but not the neighbours.

**Placing of the front door**  
The front door faces the street leaving the house open to interaction with the public. The back entrance faces the temporary structure.



**RELATION TO THE STREET:**  
*Street Boundary Definition*  
There is a gate at the front, but no fence. No privacy is created.

**PRIVACY:**  
*Side and Back Boundaries*  
Transparent fencing is used to fence off the rest of the erf. At the back, one boundary is re-enforced with the placing of a storage facility and the other side with trees.

**Placing of units**  
The structures have been arranged around the toilet area. The house has been placed toward the front of the property. Privacy from the public and one neighbour is created at the back of the erf with the assistance of the placing of a storage facility, the house, and trees as well as fencing.

**Placing of the front door**  
The entrance to the house is at the side. Interaction with the street was not wanted.

1. SOCIO-ECONOMIC STATUS	<ul style="list-style-type: none"> <li>• Four families are single nuclear and one woman-headed.</li> <li>• Family size ranges from 3 to 6 with an average of 4.</li> <li>• None of the families have tenants.</li> <li>• Household size also ranges from 3 to 6 with an average of 4.</li> <li>• Each family has one source of income except for household D that has two sources. On average each household has one source.</li> <li>• The income sources tend to be accounted for by two part-time jobs, two entrepreneurial/informal jobs, one full-time employment and one grant.</li> <li>• On average families have eleven expenses.</li> <li>• Three households are able to save.</li> </ul>
2. ADDITIONS	<ul style="list-style-type: none"> <li>• All initial structures were toilets provided by government and placed at the back of the erven in either the left or right corners.</li> <li>• Roof structures were provided progressively after all erven had toilets. In this case, the roof structures were provided after all households had constructed one shack.</li> <li>• Eleven additions had been made in total. Of these 11, five were shacks, five were completed houses, and one was a garage.</li> <li>• All households made two additions except for household C (three additions).</li> <li>• Where information was available, the following was noted: <ul style="list-style-type: none"> <li>○ All shacks were constructed of temporary materials and houses of permanent materials.</li> <li>○ Temporary materials were purchased from within Mamelodi and permanent materials from outside Mamelodi.</li> <li>○ Costs for temporary structures range from R500 to R900. Permanent structures cost between R1 000 to R3 000.</li> <li>○ Majority of savings money was used. One loan had been acquired.</li> <li>○ Builders of shacks were either owners or material suppliers.</li> <li>○ Builders of houses were private contractors.</li> <li>○ The time lapse between additions was between one and four years.</li> </ul> </li> </ul>
3. HOW HAS THE UNIT CHANGED OVER TIME?	<p><b>NUMBER OF EXTENSIONS AND THE TREND IN USE OF MATERIALS</b></p> <ul style="list-style-type: none"> <li>• An average of two additions per household was noted.</li> <li>• All shacks were constructed of temporary materials and houses of permanent materials.</li> </ul> <p><b>SIZE</b></p> <ul style="list-style-type: none"> <li>• Temporary structures total area: 58m<sup>2</sup></li> <li>• Temporary structures average area: 19m<sup>2</sup></li> <li>• Temporary structures average size: 19m<sup>2</sup></li> <li>• Temporary structures average coverage: 10%</li> <li>• Permanent structures total area: 290m<sup>2</sup></li> <li>• Permanent structures average area: 58m<sup>2</sup></li> <li>• Permanent structures average size: 48m<sup>2</sup></li> <li>• Permanent structures average coverage: 30%</li> <li>• Combined average extension size: 39m<sup>2</sup></li> <li>• Combined average area: 70m<sup>2</sup></li> <li>• Combined average coverage: 35%</li> <li>• Combined average occupational density: 19m<sup>2</sup>/person</li> </ul> <p><b>SHAPE AND CONFIGURATION</b></p> <ul style="list-style-type: none"> <li>• Shape: Shacks built take a rectangular shape. In household A the shacks have been arranged to form an 'L' shape. Houses are rectangular in shape with an 'L' shaped garage.</li> <li>• Average dimensions of temporary structures: 3.3m x 5.6m. Average dimensions of permanent structures: 5.7m x 8m.</li> </ul>
<p><b>*NOTE</b></p> <ol style="list-style-type: none"> <li>1. The toilet, roof structure and room under the roof structure have fixed values in terms of area, dimensions and shape. Instead of repeating these values throughout the document, it will be noted here. <i>Toilet - area (1.2m<sup>2</sup>), dimensions (1m x 1.2m) and shape (rectangle). Roof structure - area (54m<sup>2</sup>), dimensions (6m x 9m) and shape (rectangle). Room under roof structure - area (12m<sup>2</sup>), dimensions (4m x 3m) and shape (rectangle).</i></li> <li>2. Also important to note, when reference is made to extensions, it refers to those made by the dwellers and not by government. This excludes the water closets and roof structures.</li> <li>3. The measurements given are <b>approximated</b> from the diagrams representing the situation of the erven and aerial photographs as a cross check. A measuring exercise was not carried out during the interviewing sessions. The measurements are therefore not true representations.</li> <li>4. Information about the structures is limited, e.g. costs, date of construction, etc. Respondents were reluctant to provide all the information either because of a lack of trust or poor memories. As a result, issues of cost and date of construction of extensions have been omitted from this analysis. However, assumptions based on available information have been made.</li> <li>5. All calculations within this section include enclosed structures only, e.g. incomplete roof structures that have been added to the calculation are those that are enclosed but lack internal divisions.</li> <li>6. When discussing privacy, there are two categories, i.e. from the public on the street and from neighbours. In this section, it refers to privacy from the public.</li> <li>7. Reasons for the placing of structures by respondents are mentioned only where reasons were given.</li> <li>8. No reasons for the use of space within the structures could be obtained.</li> </ol>	

3. HOW HAS THE UNIT CHANGED OVER TIME?	<p>PLACING OF BUILDINGS</p> <ul style="list-style-type: none"> <li>All shacks have been placed at the back of the erven and the houses in a central position with the longer side lying parallel to the road frontage.</li> <li>Where houses have been placed with the shorter side parallel to the road frontage, they have been placed along the side boundaries and closer to the road frontage.</li> <li>In terms of the efficiency in the use of space for living, three households have partially satisfied this (gardening space was still too large). In two cases, roof structures have been placed to far back and close to the temporary structures.</li> </ul>
4. HOW IS SPACE WITHIN THE HOME BEING USED?	<ul style="list-style-type: none"> <li>In total, there are 14 bedrooms across all households. An average of three per household.</li> <li>Each household has a kitchen and a lounge.</li> <li>One household has a dining room.</li> <li>All households have indoor toilets in combination with the toilet provided by government except for household A.</li> <li>At least one bathroom is present in each household.</li> <li>The use of space in each case was suited to the needs of the families.</li> </ul>
5. HOW IS THE PROPERTY BEING USED?	<ul style="list-style-type: none"> <li>Three households have gardens placed at the front of the yard.</li> <li>Each household makes provision for the parking of cars. This is mostly accommodated at the side.</li> <li>Services and commercial activity is conducted within two separate households (an average of 20%).</li> <li>Tents have been erected for socialising space.</li> <li>Many storage facilities are present (three households)</li> <li>Clotheslines have been erected in three erven.</li> </ul>
6. PUBLIC/PRIVATE INTERFACE	<p><b>RELATION TO THE STREET:</b></p> <p><i>Street Boundary Definition</i></p> <ul style="list-style-type: none"> <li>Three households have attempted to fence of their properties and have used transparent wire fencing. It does not contribute to privacy.</li> <li>The other two households have decorated the entrances with bricks and stones.</li> </ul> <p><b>PRIVACY:</b></p> <p><i>Side and Back Boundaries</i></p> <ul style="list-style-type: none"> <li>Transparent wire fencing has been used again in all cases except household C. It does not successfully help to create privacy.</li> <li>The households here present an interesting dynamic, i.e. although privacy is created at the back of the erf, from the public on the street and some neighbours, it is semi-private from other neighbours.</li> </ul> <p><i>Placing of units</i></p> <ul style="list-style-type: none"> <li>The houses have been placed close to the shacks. The arrangement of the roof structure and shack in household A helps to facilitate privacy between the units.</li> <li>In most cases some form of privacy is created between the temporary structures and the houses.</li> <li>In most cases, the placing of the structures, trees and fencing have assisted in keeping the public out of the back of the erven while keeping the front part of the erven open. Privacy was sought at the back.</li> </ul> <p><i>Placing of the front door</i></p> <ul style="list-style-type: none"> <li>Three out of five households have their doors facing the street, whilst the others have their doors at the sides. However, each household has back door. Therefore, interaction with the public is sought as well as privacy.</li> <li>However, two out of the three households could find this beneficial because of the service and commercial activity that transpires within the households. Interaction with the public would lure more business to their establishments.</li> </ul>
*NOTE	<ol style="list-style-type: none"> <li>The toilet, roof structure and room under the roof structure have fixed values in terms of area, dimensions and shape. Instead of repeating these values throughout the document, it will be noted here. <i>Toilet - area (1.2m<sup>2</sup>), dimensions (1m x 1.2m) and shape (rectangle). Roof structure - area (54m<sup>2</sup>), dimensions (6m x 9m) and shape (rectangle). Room under roof structure - area (12m<sup>2</sup>), dimensions (4m x 3m) and shape (rectangle).</i></li> <li>Also important to note, when reference is made to extensions, it refers to those made by the dwellers and not by government. This excludes the water closets and roof structures.</li> <li>The measurements given are <b>approximated</b> from the diagrams representing the situation of the erven and aerial photographs as a cross check. A measuring exercise was not carried out during the interviewing sessions. The measurements are therefore not true representations.</li> <li>Information about the structures is limited, e.g. costs, date of construction, etc. Respondents were reluctant to provide all the information either because of a lack of trust or poor memories. As a result, issues of cost and date of construction of extensions have been omitted from this analysis. However, assumptions based on available information have been made.</li> <li>All calculations within this section include enclosed structures only, e.g. incomplete roof structures that have been added to the calculation are those that are enclosed but lack internal divisions.</li> <li>When discussing privacy, there are two categories, i.e. from the public on the street and from neighbours. In this section, it refers to privacy from the public.</li> <li>Reasons for the placing of structures by respondents are mentioned only where reasons were given.</li> <li>No reasons for the use of space within the structures could be obtained.</li> </ol>

**AFFORDABILITY**

- **Family structure:** All families are single and nuclear except for one woman-headed family.
- **Family sizes:** tend to be small (average size of 4), ranging from 3 to 6.
- **Sources of income:** Each family has one source of income excluding household D (2 sources).
- **Expenses:** On average each household has eleven expenses. There are many expenses made.
- **Savings:** Three households are able to save.

**Conclusion**

The affordability of households to expand is reasonable considering that family sizes are average and are supported by one source of income.

Households A to D have the same number of expenses and similar family sizes (between 3 and 4). Household E has 6 family members. Households A, B, C, and E have a single source of income (either entrepreneurial/informal, full-time employment or part-time employment), whilst household D has two sources of income (one formal and one grant). Therefore, households A to C would have the same advantages and disadvantages and would therefore produce similar products. Household D would appear to be at the greatest advantage, with a small family size and two sources of income. Household E seems to be the one to produce the least amount of addition or of poorer quality because of the larger family size.

**PRODUCT**

- **Number of additions:** In total eleven additions have been made. Households A, B, D and E have produced two additions (one temporary structure and one permanent structure). Household C, however, managed to produce one temporary structure and two permanent structures.
- **Time:** All households had arrived around the same time (between 1996 and 1997). It is unknown when household A had arrived, but it is also estimated to have arrived around the same time. The level of consolidation in each household is more or less the same except for household C that managed to construct an addition permanent structure. However, household C had arrived the same year as household B. Therefore, time of arrival does not prove to be a factor affecting the level of consolidation on its own. Time with additional factors has played a role.
- **Type of structures:** Both temporary and permanent structures have been built.
- **Level of formalisation:** Each household had initially built a temporary structure followed by a permanent structure. Household C continued to build another permanent structure. There are therefore, five temporary structures and six permanent structures built. 55% of the structures produced were permanent structures. Households have managed to mobilise money to enable consolidation. The level of consolidation is therefore high.
- **Size of additions:** The average size of additions (temporary and permanent combined) is  $39\text{m}^2$ , whereas the average size of temporary and permanent structures is  $19\text{m}^2$  (ranging from  $13\text{m}^2$  to  $30\text{m}^2$ ) and  $48\text{m}^2$  (ranging from  $20\text{m}^2$  -  $54\text{m}^2$ ) respectively. In relation to family size, the size of additions appears sufficient.
- **Configuration:** The average dimensions of temporary structures are  $3.3\text{m} \times 5.6\text{m}$ . The average dimensions of permanent structures are  $5.7\text{m} \times 8\text{m}$ . The vast difference in dimensions between the two can be noted.
- **Area of additions:** The area of temporary structures range from  $13\text{m}^2$  -  $30\text{m}^2$  (average of  $19\text{m}^2$ ), whereas the average area of permanent structures is  $58\text{m}^2$  (ranging from  $54\text{m}^2$  -  $74\text{m}^2$ ).
- **Occupational density:** Each person has an average area of  $19\text{m}^2$  (ranging from  $11\text{m}^2$  to  $28\text{m}^2$ ) to himself or herself.
- **Coverage:** temporary structures amount for 10% (ranging from 7% to 14%) and permanent structures for 30% (ranging from 25% to 39%). In total, they still don't cover more than 50% of the erven. The placing of the roof structures have taken advantage of this fact in three households.
- **Shape:** All structures appear rectangular. Some have been arranged to form 'L' shapes.  
**Arrangement of structures:** All temporary structures have been placed at the back of the erven. Roof structures have been placed in front of them either with the shorter or longer side parallel to the street. Where the roof structures have been placed with the shorter side parallel to the street, they have been placed along the side boundary and closer to the street. Space has been used efficiently to a certain degree on three erven.
- **Type of employment:** The type of employment seems not to have an effect on the abilities of families to consolidate.

**Conclusion**

Household C and A Produced the most additions and seem to have consolidated to a greater degree than the others. The small family size was beneficial. However, the circumstances of household C are identical to household A, i.e. expenses, type and number of income sources and family sizes are the same. The only distinguishing factor would possibly be time. It is unknown when household A had arrived. The amount of income brought in by the entrepreneurial activity could be more in household C.

**\*NOTE**

1. The toilet, roof structure and room under the roof structure have fixed values in terms of area, dimensions and shape. Instead of repeating these values throughout the document, it will be noted here. Toilet - area ( $1.2\text{m}^2$ ), dimensions ( $1\text{m} \times 1.2\text{m}$ ) and shape (rectangle). Roof structure - area ( $54\text{m}^2$ ), dimensions ( $6\text{m} \times 9\text{m}$ ) and shape (rectangle). Room under roof structure - area ( $12\text{m}^2$ ), dimensions ( $4\text{m} \times 3\text{m}$ ) and shape (rectangle).
2. Also important to note, when reference is made to extensions, it refers to those made by the dwellers and not by government. This excludes the water closets and roof structures.
3. The measurements given are **approximated** from the diagrams representing the situation of the erven and aerial photographs as a cross check. A measuring exercise was not carried out during the interviewing sessions. The measurements are therefore not true representations.
4. Information about the structures is limited, e.g. costs, date of construction, etc. Respondents were reluctant to provide all the information either because of a lack of trust or poor memories. As a result, issues of cost and date of construction of extensions have been omitted from this analysis. However, assumptions based on available information have been made.
5. All calculations within this section include enclosed structures only, e.g. incomplete roof structures that have been added to the calculation are those that are enclosed but lack internal divisions.
6. When discussing privacy, there are two categories, i.e. from the public on the street and from neighbours. In this section, it refers to privacy from the public.
7. Reasons for the placing of structures by respondents are mentioned only where reasons were given.
8. No reasons for the use of space within the structures could be obtained.

Household B and D These two households are the same except for the type and number of income sources. Household D seems to have two sources of income (part-time and a grant). Household B is supported by a full-time job. Household D would therefore have the advantage of twice the income source compared to household B. The level of consolidation is however, the same.

Household D Has the advantage of fewer expenses than the rest of the households but has the disadvantage of a larger family size.

The factors that influence consolidation positively are the small family sizes and many income sources. In other cases, the large family sizes played a negative role in the consolidation process.

### PROCESS

- **Sourcing of materials:** The purchasing of temporary materials was done from within Mamelodi and permanent structures from outside Mamelodi.
- **Cost:** The cost of permanent structures ranged from R1 000 to R3 000 whilst temporary structures cost between R500 and R900.
- **Funding:** Majority of the time, savings had been used. Only one case involved the use of a loan.
- **Builders:** The builders of the permanent structures involved private contractors. Temporary structures were built by either the material suppliers or the owners.
- **Time:** The time lapse between additions had been between one and four years. One or two households had taken three to four years to build the permanent structures. Others had taken two years. Time was spent saving for the construction of the permanent structures.

### USE OF SPACE

#### *Within structures*

- The uses within these households go beyond the basic kitchen, bedroom and outside toilet situation. These households have the luxuries of lounges, indoor bathrooms and toilets, and dining rooms. The increase in space for the household has also resulted in the increased diversity in the use of space.

#### *Within erven*

- **Gardens:** Three households have flower gardens at the front of the erven.
- **Parking:** Vehicular parking is generally accommodated at the side of the erven by all households.
- **Tenants:** None of the households has tenants.
- **Commercial:** Two households accommodate commercial activity and provide a service from within their houses.
- **Other:** Tents have been erected for social space. The storage of materials takes place on the erven wherever space would allow for it. Clotheslines have been erected on many erven.

### PUBLIC/PRIVATE INTERFACE

- **Street boundary:** The households that have attempted fencing off their properties have used transparent wire fencing, which does not assist in creating privacy. Other households have decorated the front of their erven with stones and boulders.
- **Side and back boundaries:** Transparent wire fencing has been used. This has not assisted in creating private space, but the strategic placing of trees and plants has helped to a certain degree.
- **Placing of units:** The placing of the structures has helped in cutting off the public from space created at the back of the erven. This space, however, is not very private from the neighbours. The roof structures have been placed close to the temporary structures, which have assisted in the creation of semi-private space.
- **Placing of the front door:** Each household has a back and front door, so whilst interaction is encouraged to a small degree at the front, privacy is also required at the back.

#### \*NOTE

1. The toilet, roof structure and room under the roof structure have fixed values in terms of area, dimensions and shape. Instead of repeating these values throughout the document, it will be noted here. Toilet - area (1.2m<sup>2</sup>), dimensions (1m x 1.2m) and shape (rectangle). Roof structure - area (54m<sup>2</sup>), dimensions (6m x 9m) and shape (rectangle). Room under roof structure - area (12m<sup>2</sup>), dimensions (4m x 3m) and shape (rectangle).
2. Also important to note, when reference is made to extensions, it refers to those made by the dwellers and not by government. This excludes the water closets and roof structures.
3. The measurements given are **approximated** from the diagrams representing the situation of the erven and aerial photographs as a cross check. A measuring exercise was not carried out during the interviewing sessions. The measurements are therefore not true representations.
4. Information about the structures is limited, e.g. costs, date of construction, etc. Respondents were reluctant to provide all the information either because of a lack of trust or poor memories. As a result, issues of cost and date of construction of extensions have been omitted from this analysis. However, assumptions based on available information have been made.
5. All calculations within this section include enclosed structures only, e.g. incomplete roof structures that have been added to the calculation are those that are enclosed but lack internal divisions.
6. When discussing privacy, there are two categories, i.e. from the public on the street and from neighbours. In this section, it refers to privacy from the public.
7. Reasons for the placing of structures by respondents are mentioned only where reasons were given.
8. No reasons for the use of space within the structures could be obtained.

**Pattern:**

1. Temporary structures have been placed at the back and sides of the erven. Three sides of the erven are fenced off with the frontage either fenced or decorated with boulders and bricks. Roof structures with the shorter end parallel to the road frontage have been placed along the side boundary. Vehicular parking has been accommodated on all erven, usually at the back. Storage also takes place at the back of property.

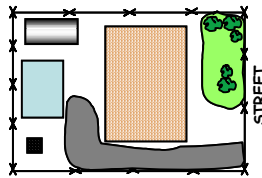


FIGURE 43: Pattern 1

2. Temporary structures have been placed at the back and sides of the erven. Three sides of the erven are fenced off with the frontage either fenced or decorated with boulders and bricks. Roof structures with longer side parallel to the road frontage have been placed centrally on the erven. Vehicular parking has been accommodated on all erven, usually at the back. Storage also takes place at the back of every property.

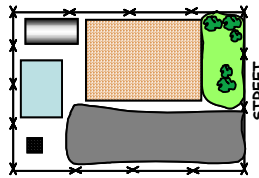


FIGURE 44: Pattern 2

**\*NOTE**

- The toilet, roof structure and room under the roof structure have fixed values in terms of area, dimensions and shape. Instead of repeating these values throughout the document, it will be noted here. Toilet - area (1.2m<sup>2</sup>), dimensions (1m x 1.2m) and shape (rectangle). Roof structure - area (54m<sup>2</sup>), dimensions (6m x 9m) and shape (rectangle). Room under roof structure - area (12m<sup>2</sup>), dimensions (4m x 3m) and shape (rectangle).
- Also important to note, when reference is made to extensions, it refers to those made by the dwellers and not by government. This excludes the water closets and roof structures.
- The measurements given are **approximated** from the diagrams representing the situation of the erven and aerial photographs as a cross check. A measuring exercise was not carried out during the interviewing sessions. The measurements are therefore not true representations.
- Information about the structures is limited, e.g. costs, date of construction, etc. Respondents were reluctant to provide all the information either because of a lack of trust or poor memories. As a result, issues of cost and date of construction of extensions have been omitted from this analysis. However, assumptions based on available information have been made.
- All calculations within this section include enclosed structures only, e.g. incomplete roof structures that have been added to the calculation are those that are enclosed but lack internal divisions.
- When discussing privacy, there are two categories, i.e. from the public on the street and from neighbours. In this section, it refers to privacy from the public.
- Reasons for the placing of structures by respondents are mentioned only where reasons were given.
- No reasons for the use of space within the structures could be obtained.