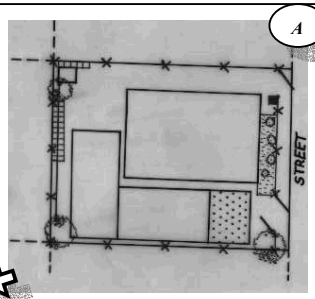
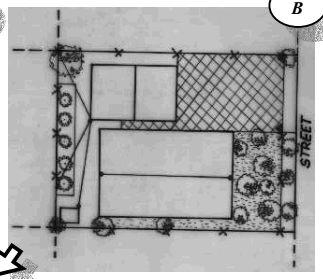
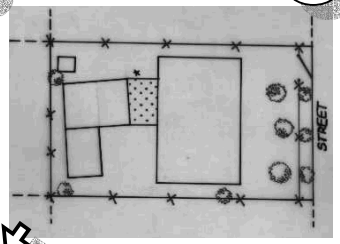
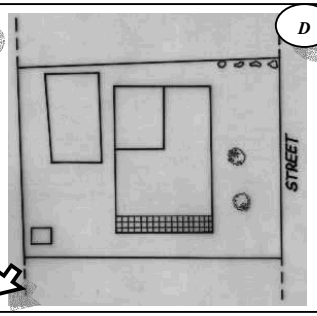
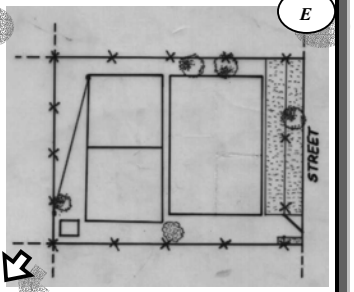
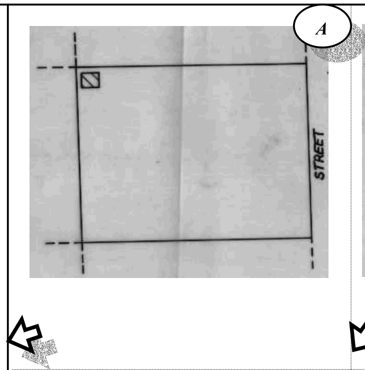
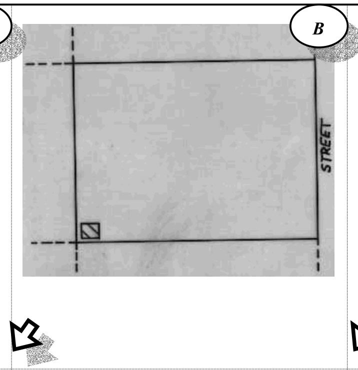
	A	B	C	D	E
THE HOUSEHOLD					
HOUSEHOLD PROFILE	**Family type:** *Single nuclear family* **Family size:** *7* **Tenants:** *No* **No. of tenants:** *NA* **Household size:** *7*	**Family type:** *Single woman-headed family + extended* **Family size:** *4* **Tenants:** *No* **No. of tenants:** *NA* **Household size:** *4*	**Family type:** *Single nuclear family* **Family size:** *9* **Tenants:** *No* **No. of tenants:** *NA* **Household size:** *9*	**Family type:** *Single nuclear family* **Family size:** *6* **Tenants:** *No* **No. of tenants:** *NA* **Household size:** *6* .	**Family type:** *Single nuclear family + extended* **Family size:** *7* **Tenants:** *No* **No. of tenants:** *NA* **Household size:** *7*
EMPLOYMENT AND INCOME	**No. of sources of income:** *1* **Sources of income:** *Father* **Employment:** *Part time* **Location:** *Pretoria North.*	**No. of sources of income:** *1* **Sources of income:** *Grandmother* **Employment:** *Pension* **Location:** *NA.*	**No. of sources of income:** *1* **Sources of income:** *Mother* **Employment:** *Part time* **Location:** *Factory in Deneboom.*	**No. of sources of income:** *1* **Sources of income:** *Father* **Employment:** *Occasional part time* **Location:** *Unknown*	**No. of sources of income:** *4* **Sources of income:** *Father, mother, and two daughters.* **Employment:** *Full-time (parents) and both daughters work part time.* **Location:** *Airax in town, Multi-cleaners, Multi-cleaners, and pamphlet distribution.*
EXPENDITURE	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.				
WATER	x	x	x	x	x
ELECTRICITY	x	x	x	x	x
TRANSPORT		x	x		x
TELEPHONE				x	
EDUCATION	x		x	x	x
	x	x	x	x	x
CLOTHING				x	x
ACCOUNTS					x
SAVINGS					
TAXES	x	x	x	x	x
SANITATION	x	x	x	x	x
WASTE	x	x	x	x	x
OTHER					x

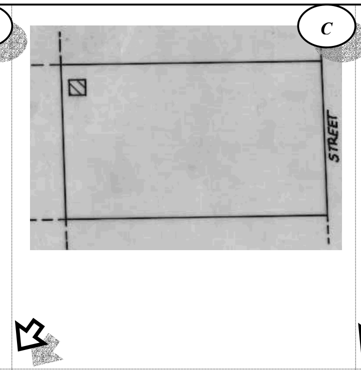
INITIAL STRUCTURE



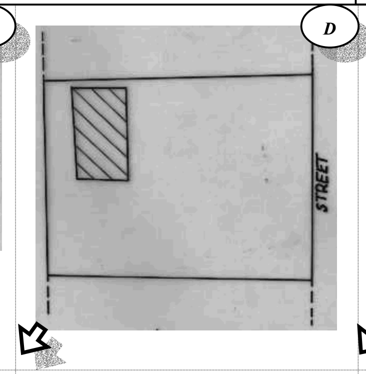
Description: Water Closet
Materials used: Precast concrete
Material supplier: Government
Cost: Subsidy
Funding: Government
Builder: Government
Date of Constr.: Unknown
Problems: None



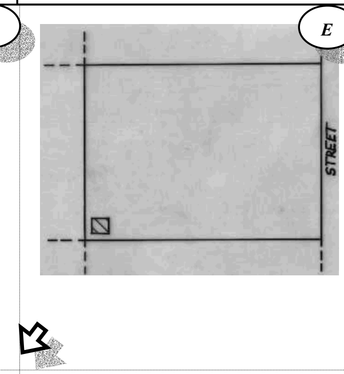
Description: Water Closet
Materials used: Precast concrete
Material supplier: Government
Cost: Subsidy
Funding: Government
Builder: Government
Date of Constr.: Unknown
Problems: None



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

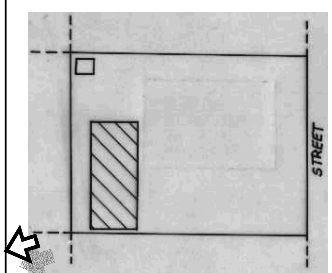


Description: Temporary structure
Materials used: Wooden boards (temporary materials).
Material supplier: Down the street
Cost: Unknown
Funding: Savings
Builder: Private contractor
Date of Constr.: 1996
Problems: None.

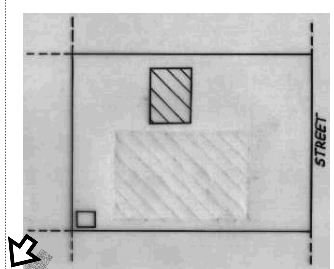


Description: Water Closet
Materials used: Precast concrete
Material supplier: Government
Cost: Subsidy
Funding: Government
Builder: Government
Date of Constr.: Unknown
Problems: None

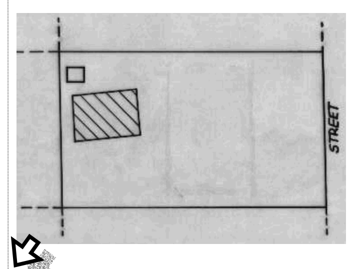
ADDITION 1



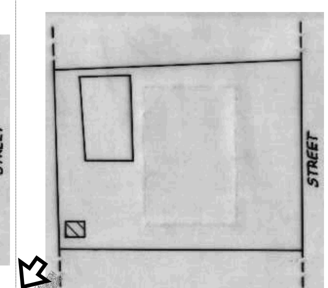
Description: Temporary structure
Materials used: Corrugated iron and wood (temporary materials)
Material supplier: Samca Chamberlaines
Cost: R1 000
Funding: Retirement money
Builder: Owner
Date of Constr.: December 1996
Problems: Funding and unemployment



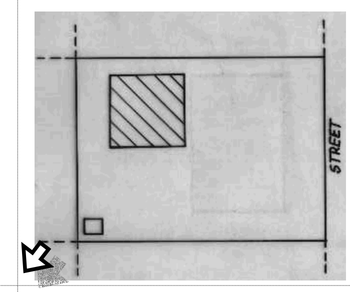
Description: Temporary structure
Materials used: Corrugated iron and metal sheets (temporary materials)
Material supplier: Bought in the neighbourhood.
Cost: R600
Funding: Savings
Builder: Son
Date of Constr.: 1992
Problems: None



Description: Temporary structure
Materials used: Wooden planks and asbestos (temporary materials)
Material supplier: Block 1
Cost: R330
Funding: Savings
Builder: Owner
Date of Constr.: 1995
Problems: Funding

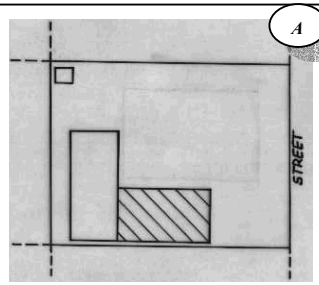
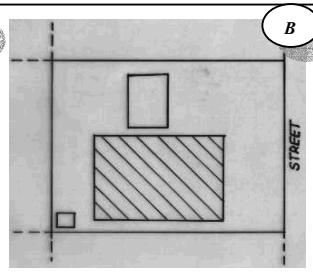
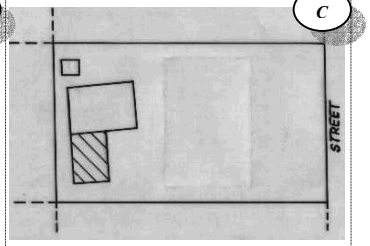
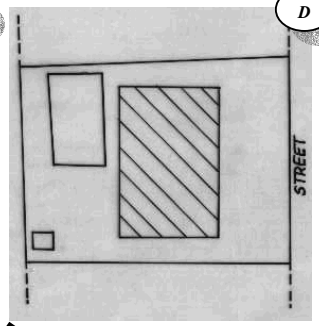
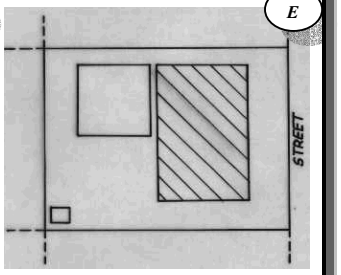
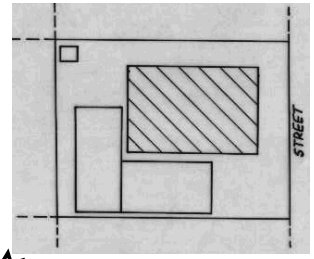
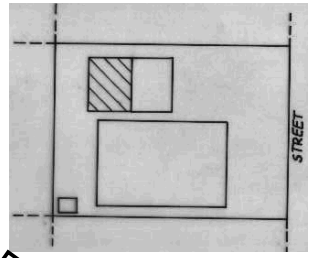
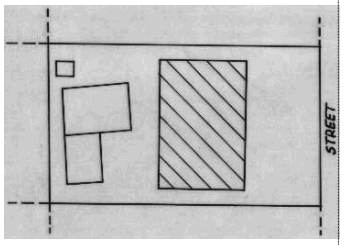
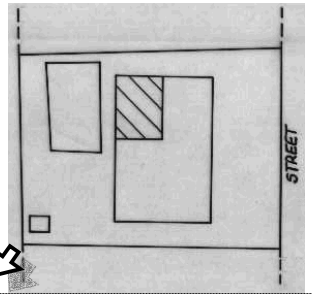
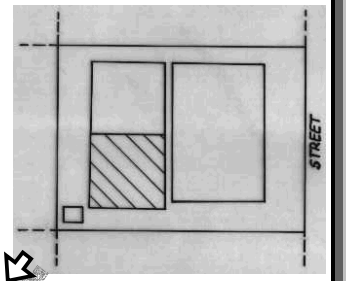


Description: Water Closet
Materials used: Precast concrete
Material supplier: Government
Cost: Subsidy
Funding: Government
Builder: Government
Date of Constr.: Unknown
Problems: None



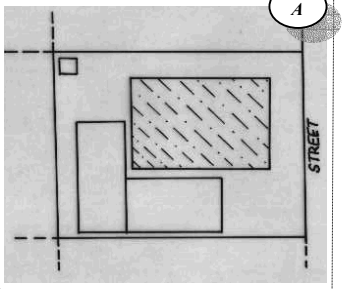
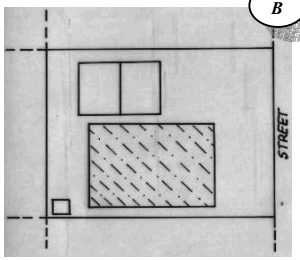
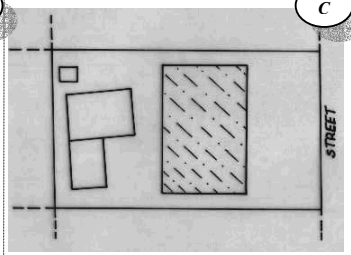
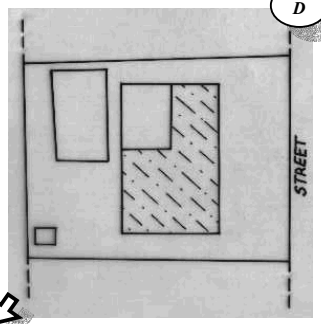
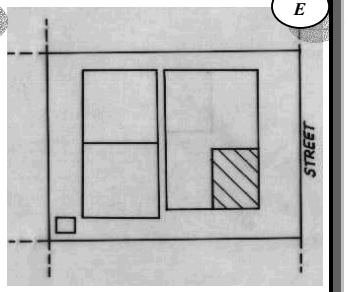
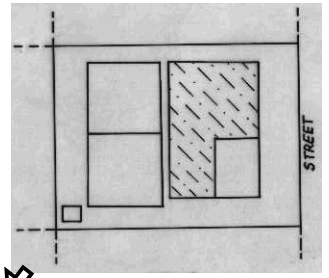
Description: Temporary structure
Materials used: Corrugated iron and metal sheets (temporary materials).
Material supplier: Bought in the neighbourhood.
Cost: R400
Funding: Savings
Builder: Assisted private contractors
Date of Constr.: Unknown
Problems: Funding and transport of materials

*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.

	A	B	C	D	E
ADDITION 2					
	Description: Temporary structure ***Materials used:*** Corrugated iron and metal sheets (temporary materials) ***Material supplier:*** Unknown ***Cost:*** R2 000 ***Funding:*** Retirement money ***Builder:*** Owner ***Date of Constr. :*** 1997 ***Problems:*** Funding and unemployment	***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:*** Temporary structure ***Materials used:*** Corrugated iron and metal sheets (temporary materials) ***Material supplier:*** Block 1 ***Cost:*** R600 ***Funding:*** Savings ***Builder:*** Owner ***Date of Constr. :*** 1995 ***Problems:*** Funding	***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: 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:*** Temporary structure ***Materials used:*** Corrugated iron and metal sheets (temporary materials) ***Material supplier:*** Bought in the neighbourhood. ***Cost:*** R600 ***Funding:*** Savings ***Builder:*** Son ***Date of Constr. :*** 1996 ***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:*** One room under roof structure. ***Materials used:*** Bricks (permanent materials) ***Material supplier:*** Government ***Cost:*** Subsidy ***Funding:*** Government ***Builder:*** Government ***Date of Constr. :*** Unknown ***Problems:*** None	***Description:*** Temporary structure ***Materials used:*** Corrugated iron and metal sheets (temporary materials) ***Material supplier:*** Unknown ***Cost:*** R400 ***Funding:*** Savings ***Builder:*** Private contractor ***Date of Constr. :*** Unnown ***Problems:*** Funding and transport of materials.

***NOTE**

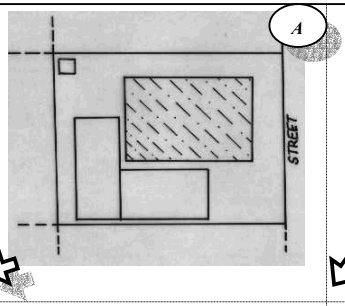
1. Information about the structures is limited, e.g. costs, date of construction, etc. Respondents were reluctant to provide all the information either because of a lack of trust or poor memories.

	A	B	C	D	E
ADDITION 4					
	Description: House construction ***Materials used:*** Bricks (permanent materials) ***Material supplier:*** Unknown ***Cost:*** Unknown ***Funding:*** Retirement money ***Builder:*** Owner ***Date of Constr.:*** Started in 2000 ***Problems:*** Funding and unemployment	***Description:*** House construction ***Materials used:*** Bricks (permanent materials) ***Material supplier:*** Waltloo ***Cost:*** R3 040 (bricks), R3 000 (construction) ***Funding:*** Savings ***Builder:*** Private contractor ***Date of Constr.:*** 1999 ***Problems:*** Storage of building materials	***Description:*** House construction ***Materials used:*** Bricks (home made – permanent materials) ***Material supplier:*** Mamelodi East ***Cost:*** R1 000 ***Funding:*** Savings ***Builder:*** Eldest son ***Date of Constr.:*** Started Oct 2002 ***Problems:*** Funding	***Description:*** Additional room ***Materials used:*** Bricks (permanent materials) ***Material supplier:*** Waltloo ***Cost:*** R1 500 ***Funding:*** Savings ***Builder:*** Assisted by government (bricks were bought by owners) ***Date of Constr.:*** 1998 ***Problems:*** Finance	***Description:*** One room under roof structure. ***Materials used:*** Bricks (permanent materials) ***Material supplier:*** Government ***Cost:*** Subsidy ***Funding:*** Government ***Builder:*** Government ***Date of Constr.:*** Unknown ***Problems:*** None
ADDITION 5					
					Description: House construction ***Materials used:*** Bricks (permanent materials) ***Material supplier:*** Phase 3 ***Cost:*** R1 500 ***Funding:*** Savings ***Builder:*** Private ***Date of Constr.:*** 2002 ***Problems:*** Funding and transport of materials.

*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.

HOW HAS THE UNIT CHANGED OVER TIME IN TERMS OF:



NUMBER OF EXTENSIONS AND THE TREND IN USE OF MATERIALS

Three extensions have been made. Two extensions were shacks constructed out of temporary materials and the third was the construction of an incomplete house (permanent materials).

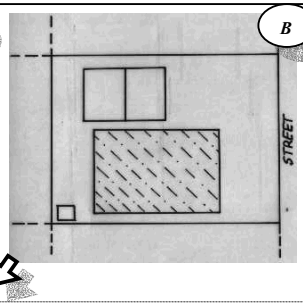
SIZE

The size of the first extension is approximately 23m² and the second is approximately 22m². The incomplete house remains within the frame of the roof structure (54m²).

Erf size: 192m²
Total area-temporary structures: 45 m²
Total area-permanent structures: 54m²
Total area: 99m²
Coverage - temporary structures: 23%
Coverage - permanent structures: 28%
Coverage: 51%
Occupational density: 14m²/person

SHAPE AND CONFIGURATION

Both shacks are rectangular with the first being 7.4m x 3.2m. The second extension has dimensions of 3.6m x 6.2m.



NUMBER OF EXTENSIONS AND THE TREND IN USE OF MATERIALS

There are three extensions built by the dwellers, the first two being shacks (temporary materials). The third was the construction of the house (incomplete) with the use of permanent materials.

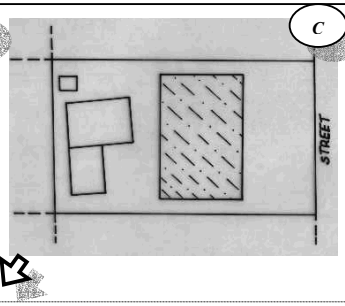
SIZE

Roughly, both of the temporary material extensions were 10m². The house is being built within the roof structure provided.

Erf size: 192m²
Total area-temporary structures: 20m²
Total area-permanent structures: 54m²
Total area: 74m²
Coverage - temporary structures: 11%
Coverage - permanent structures: 28%
Coverage: 39%
Occupational density: 19m²/person

SHAPE AND CONFIGURATION

All structures are rectangles. Both have the same dimensions of 3m x 3.8m.



NUMBER OF EXTENSIONS AND THE TREND IN USE OF MATERIALS

Three extensions were made, i.e. two shacks and the construction of the incomplete house (permanent materials). The two shacks were constructed of temporary.

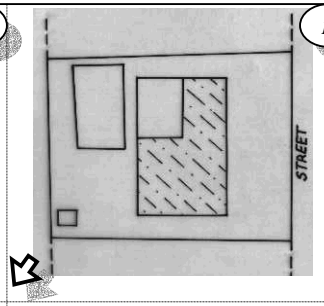
SIZE

The first shack is estimated at 16m² and the second at 9m². The incomplete house is approximately 54m².

Erf size: 209m²
Total area-temporary structures: 25m²
Total area-permanent structures: 54m²
Total area: 79m²
Coverage - temporary structures: 12%
Coverage - permanent structures: 26%
Coverage: 38%
Occupational density: 9m²/person

SHAPE AND CONFIGURATION

The two shacks are joined together to form an 'L' shape (3.4m x 4.7m + 3.5m x 2.5m). All structures are rectangular is shape.



NUMBER OF EXTENSIONS AND THE TREND IN USE OF MATERIALS

Two extensions were made: one shack has been constructed from temporary materials and other extension was a room under the roof structure made from permanent materials.

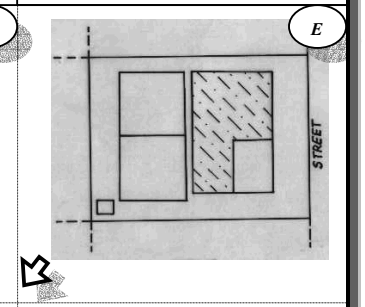
SIZE

The shack covers a small area of approximately 17m². The single room being constructed covers almost the same area as that of the room provided by government (12m²).

Erf size: 192m²
Total area-temporary structures: 17m²
Total area-permanent structures: 12m²
Total area: 29m²
Coverage - temporary structures: 9%
Coverage - permanent structures: 6%
Coverage: 15%
Occupational density: 3m²/person

SHAPE AND CONFIGURATION

The shack takes the form of a rectangle (5.5m x 3.2m) and so too does the additional room (3m x 4m).



NUMBER OF EXTENSIONS AND THE TREND IN USE OF MATERIALS

Three extensions have been made, two of which were shacks (temporary materials). The other extension was made from permanent materials (the house, which is incomplete).

SIZE

The two shacks covered an area of 24m² whilst the house construction occupies the same area as that of the roof structure (54m²).

Erf size: 192m²
Total area-temporary structures: 48m²
Total area-permanent structures: 54m²
Total area: 102m²
Coverage - temporary structures: 25%
Coverage - permanent structures: 28%
Coverage: 53%
Occupational density: 15m²/person

SHAPE AND CONFIGURATION

The shacks and incomplete house are rectangular in shape. The dimensions of the shacks are identical (4.8m x 5m).

*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 (1.2m²), dimensions (1m x1.2m) and shape (rectangle). **Roof structure** – area (54m²), dimensions (6m x 9m) and shape (rectangle). **Room under roof structure** – area (12m²), 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.
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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.
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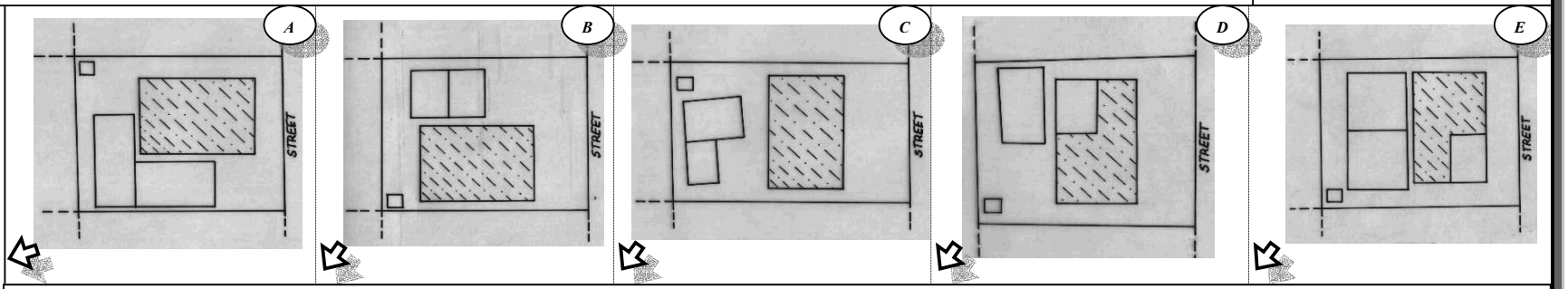
HOW HAS THE UNIT CHANGED OVER TIME IN TERMS OF:



PLACING OF BUILDINGS: With the size of the erven being approximately 208m² 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.

PLACING OF BUILDINGS

The shacks have been placed along the back and west boundary lines and form an 'L' shape. The roof structure appears toward the centre with the shorter side parallel to the road frontage. The toilet is placed at the opposite corner (east) of the shacks at the back.

The placing of the roof structure closely to the temporary structures has created a very narrow passage between them. Odd pockets of space are also created around the structures. The creation of such space makes it difficult to use the erven efficiently.

The shacks were placed in such a manner to enable the easy transition into their future house without disturbing their present accommodation.

PLACING OF BUILDINGS

The shacks are placed along the side (south) boundary with the toilet placed at the back of the erf. The roof structure was placed along the opposite side boundary to the temporary structures.

A small space between the temporary structures and the roof structure is created. A large open space is created at the front of the erven with little space at the back. The use of space in this case is mediocre.

PLACING OF BUILDINGS

The shacks are placed at the back of the erf. The house is placed in a central position. The longer side of the roof structure faces the road. The toilet appears at the back of the erf.

Privacy is created at the back of the erven behind the roof structure, but a large pocket of potential living space is wasted at the front of the erven, i.e. had the roof structure been placed closer to the front, greater space could have been used for living space and less for the garden area in the front. The use of space in this case is mediocre.

PLACING OF BUILDINGS

The temporary structure is placed at the back of the erf along the side (south) boundary. The roof structure is placed in a central position on the erf. The longer side faces the road. The toilet is placed at the back opposite to the temporary structure.

Although privacy is created at the back of the erf with the placing of the roof structure, only a narrow space exists between the roof structure and the temporary structure. There are large pockets of space created at the back and in front but they are separated by the roof structure. The space at the front is too large. It could have been used better, i.e. more space could have used at the back. The erf has not been used efficiently.

PLACING OF BUILDINGS

The shacks are built close to back of the erf, parallel to the back boundary line. The roof structure was placed in front being equidistant from the side boundaries. The longer sides lie parallel to the road frontage and the toilet in the northern corner.

Almost equal space is created at the back and front of the erf with a small space between the structures, i.e. the roof structure has been placed too close to the temporary structures built. The erf has not 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 (1.2m²), dimensions (1m x1.2m) and shape (rectangle). *Roof structure* – area (54m²), dimensions (6m x 9m) and shape (rectangle). *Room under roof structure* – area (12m²), dimensions (4m x 3m) and shape (rectangle).**
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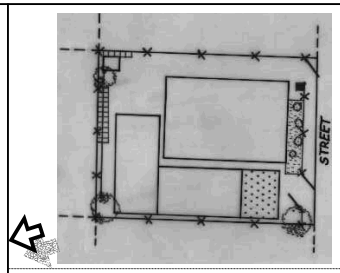
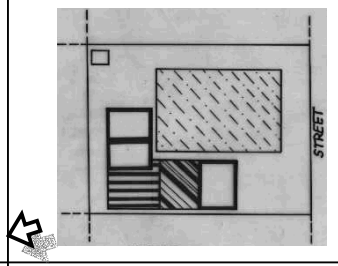
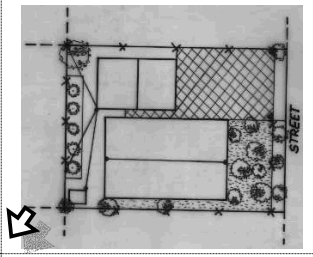
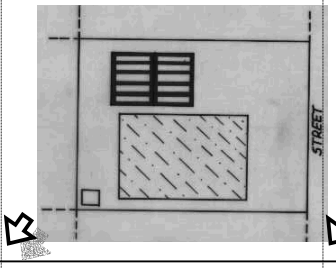
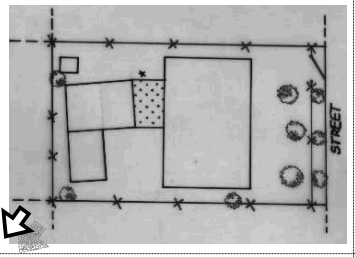
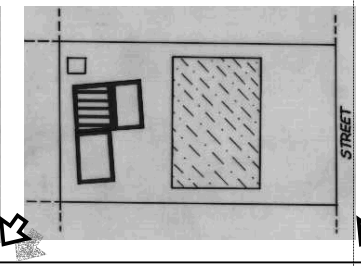
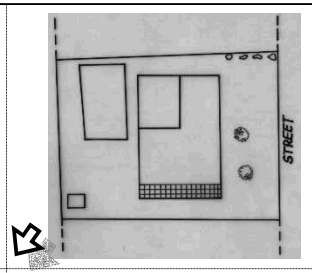
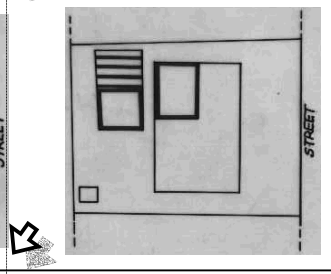
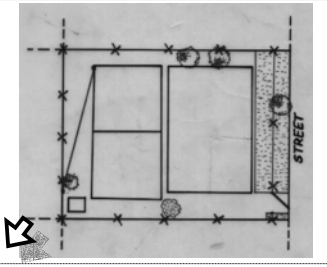
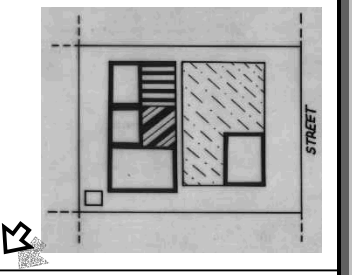
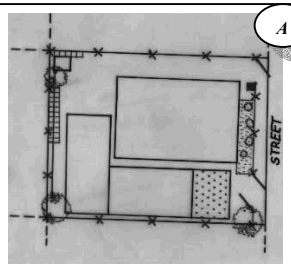
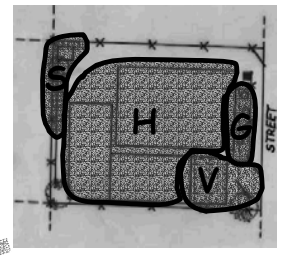
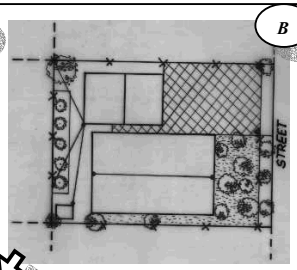
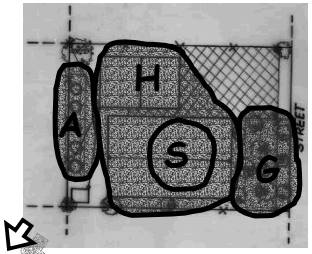
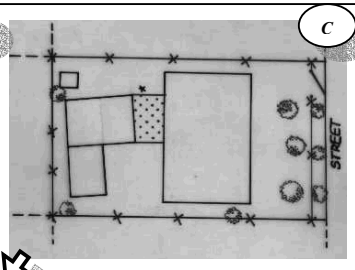
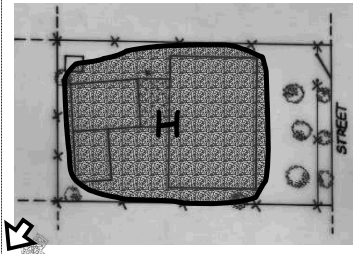
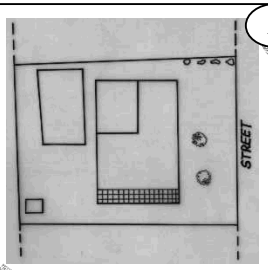
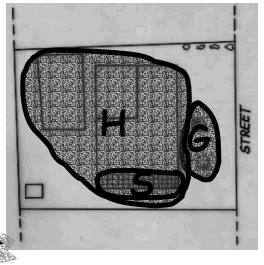
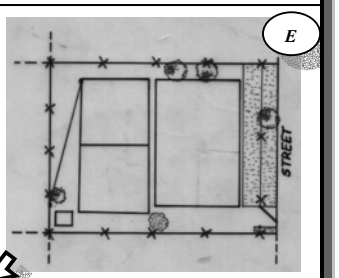
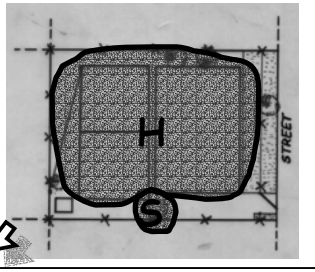
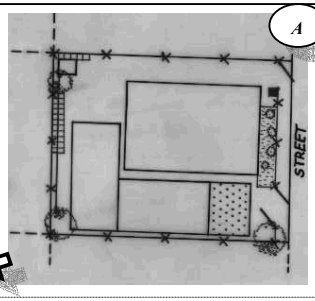
HOW IS THE SPACE WITHIN THE HOME BEING USED?	 	 	 	 	 
BEDROOMS	• Three bedrooms.	• Two bedrooms.	• Three bedrooms.	• Two bedrooms.	• Three bedrooms.
KITCHEN	• One kitchen.	• Two kitchens.	• One kitchen.	• One kitchen.	• One kitchen.
DINING ROOM	• One dining room.				• Shared dining room and lounge.
LOUNGE					• Shared dining room and lounge.
TOILET	• One toilet – government provision.	• One toilet – government provision.	• One toilet – government provision.	• One toilet – government provision.	• One toilet – government provision.
BATHROOM					
WHY IS IT USED IN THIS WAY?	*NOTE 1. No reasons for the use of space within the structures could be obtained.				

	A	B	C	D	E
HOW IS THE PROPERTY BEING USED IN TERMS OF:	 	 	 	 	 
GARDENING	There is a bit of a garden in front of the house and a few trees at the back of the house.	A flower garden exists in the front.		There is a small garden in front of the house that is not taken care of.	
RENTAL HSG					
COMMERCIAL					
SERVICE					
AGRICULTURE		A little vegetable garden is grown at the back of the property.			
PARKING	Vehicles are parked in front of the shack under a shaded cloth.				
OTHER	Bricks for the completion of the house are stored at the back of the erf. There is also a clothesline at the back.	Clotheslines run from the roof structure to the back ends of the property and the toilet. The roof structure also houses a clothesline and building materials.		Building materials are housed on the property.	Building sand is stored on the erf and a clothesline exists at the back of the erf.

PUBLIC/ PRIVATE INTERFACE

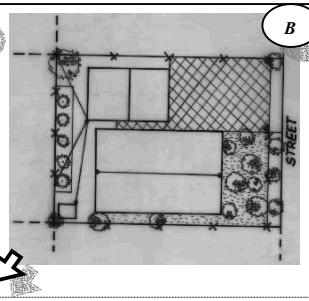


RELATION TO THE STREET:
Street Boundary Definition
The wire fence in front of the house is tall (2m) and strong, but it is transparent. It does not succeed in creating privacy.

PRIVACY:
Side and Back Boundaries
The other boundaries are fenced off with the same fencing, but trees assist to create some level of privacy. The fencing at the back of the property are lined with the storage of bricks and trees, which do create some privacy.

Placing of units
The positioning of the shacks also contributes to the privacy created. They have been arranged in the form of an 'L'. Private space is created between the shacks and the roof structure as well as behind the shacks at the back of the erf.

Placing of the front door
The entrance to the house faces the shack and vice versa. Semi-private to private space is created in this manner.

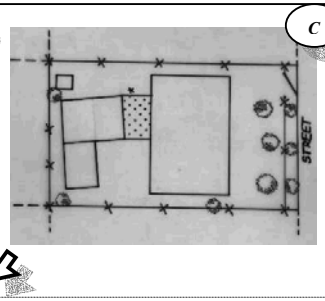


RELATION TO THE STREET:
Street Boundary Definition
A type of fencing exists at the front (two threads of wire tied onto two poles – 0.75m). It appears much more open and transparent in nature than the normal wire fencing commonly used by the numerous other households. The erf is therefore open to public space.

PRIVACY:
Side and Back Boundaries
Fences and trees appear on all other sides. The fences are transparent and weak. It, therefore, does not assist in creating privacy.

Placing of units
The shacks have been placed next to one another in very close proximity to the roof structure. This creates some semi-private space between the structures.

Placing of the front door
The entrances are at the side of the house between the shacks and the house. Each structure therefore opens out into each other. Security and a bit of semi-private space are achieved in this way.

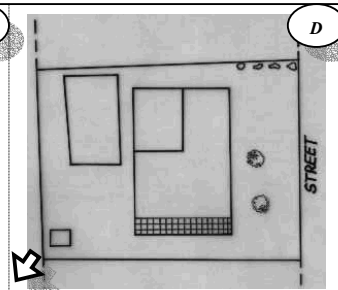


RELATION TO THE STREET:
Street Boundary Definition
There is a weak, dilapidated fence (1.5m) at the front that defines the boundary. No privacy is created.

PRIVACY:
Side and Back Boundaries
Transparent wire fencing is also used around the entire erf. No private space is created.

Placing of units
The shacks were placed in an 'L' shape and have been linked up to the roof structure via a tent. The shacks are buffered from the street via the structure. No privacy exists from the neighbours but there is privacy from the public.

Placing of the front door
The entrance to this incomplete house is in front, but lacks any stoep or veranda. The shacks have entrances that face the roof structure and the neighbour to the side.

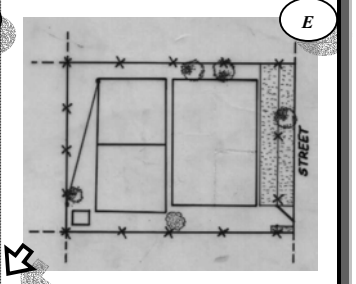


RELATION TO THE STREET:
Street Boundary Definition
This erf is very open to the public. There is no fencing at all. A few trees are planted at the front accompanied by the placing of rocks.

PRIVACY:
Side and Back Boundaries
The lack of any fencing or tree planting prevents any form of privacy from being created here.

Placing of units
The shack is placed very close behind the roof structure. This creates a little bit of semi-private space. The roof structure creates a buffer between the street and the temporary structure and blocks out public disturbances. Neighbours can however, intrude.

Placing of the front door
The doors of the shack face the roof structure. The room under the roof structure faces the side.



RELATION TO THE STREET:
Street Boundary Definition
A tall wire fence (2m) is present at the front of the erf. Its transparent nature prevents any privacy from being created.

PRIVACY:
Side and Back Boundaries
The remaining sides of the erf are fenced off with the same type of wire fencing. No privacy is created in this way.

Placing of units
The temporary structure is sheltered by the roof structure by being placed behind it. The only private space is between the structures. This is a small space.

Placing of the front door
The closed off roof structure is entered at the front but also lacks a stoep or a veranda. It lends itself to the public. The entrance to the temporary structures at the back faces the roof structure, thereby creating some privacy and security.

1. SOCIO-ECONOMIC STATUS

- Three single nuclear families exist here with one single nuclear family with extended family members and one woman-headed family with extended family members.
- Family sizes range between 4 and 9 with an average of 7.
- Household size also ranges between 4 and 9 with and average of 7.
- None of the households has tenants.
- Income sources range from 1 to 4. The average household income is 2.
- Part time employment seem to dominate the typology (5 cases). The other sources are through full-time employment and pension.
- On average this typology displays an average of 8 expense items.
- None of the households are able to save.

2. ADDITIONS

- Four of five initial structures were toilets. One household constructed a shack.
- Roof structures and one room under the roof structure were provided after the toilets were provided.
- 14 additions have been made in total: four were houses in construction, nine were shacks, and one was an additional room.
- All shacks were made of temporary materials, the rest were made of permanent materials.
- Where information was available, the following was noted:
    - In most cases permanent materials were sought outside Mamelodi and temporary materials within Mamelodi. A few cases go against this trend, i.e. permanent materials were sought within and temporary materials were sought outside.
    - Costs range between R330 – R3 040. The cost of temporary structures ranges between R330 to R2 000. Permanent structures cost between R1 000 and R3 040.
    - Savings was mostly the source of income. Retirement money was also used in one particular household.
    - Owners used their own skills in the construction 95% of the time whilst private contractors were appointed 5% of the time.
    - The time lapse between additions range between a few months to seven years.

3. HOW HAS THE UNIT CHANGED OVER TIME?

NUMBER OF EXTENSIONS AND THE TREND IN USE OF MATERIALS

- An average of approximately three shacks per household.
- All shacks were constructed of temporary materials and houses (incomplete) were constructed from permanent materials.

SIZE

- Temporary structures total area: 155m²
- Temporary structures average area: 31m²
- Temporary structures average size: 17m²
- Temporary structures average coverage: 16%
- Permanent structures total area: 228m²
- Permanent structures average area: 46m²
- Permanent structures average size: 46m²
- Permanent structures average coverage: 23%
- Combined average extension size: 27m²
- Combined average area: 77m²
- Combined average coverage: 38%
- Combined average occupational density: 12m²/person

SHAPE AND CONFIGURATION

- Shape: Rectangular shapes dominate the additions made. Some have been arranged along side one another whilst others have been arranged in and 'L' shape.
- Average dimensions: 4m x 6m. Average dimensions of temporary structures: 3.5m x 5m. Average dimensions of permanent structures: 5.4m x 8m.

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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.

3. HOW HAS THE UNIT CHANGED OVER TIME?	**PLACING OF BUILDINGS** • Shacks have been placed at the back of the erven. In two cases, the shacks border the side boundary as well. The incomplete houses (roof structures) have mostly been placed in a central position on the erven where the longer side lies parallel to the road frontage. The other two roof structures have been placed with the shorter side parallel to the road frontage. These structures have been placed toward the sides of the erven. • The placing of the roof structure has allowed one erven to use space in a somewhat efficient manner (C) whilst the other households experience roof structures placed too close to the temporary structures. Some have small pockets of space created on the erven which prevents the optimal use of space. • Household (A) had reasoned that the placing of the shacks along the boundary of the erf was to ensure an easy transition into the future house without disrupting or destroying the present accommodation.
4. HOW IS SPACE WITHIN THE HOME BEING USED?	• There is an average of 2.5 bedrooms per household and a total of 13. • Each household has a kitchen and make use of the toilet provided by government. • Two households have dining rooms and one has a lounge. • Most reason that space is needed for their children or family and this stimulates extensions. The affordability of others limited the additions made.
5. HOW IS THE PROPERTY BEING USED?	• Three households have gardens in front of their homes. • One household has a vegetable garden at the back of the erf and household A makes provision for the parking of a vehicle at the front. • Three households have clotheslines that connected temporary structures together. These clotheslines are found at the back of the erven. • Tents are also erected either for shelter or as a carport.
6. PUBLIC/PRIVATE INTERFACE	**RELATION TO THE STREET:** ***Street Boundary Definition*** • An attempt is made by four households to fence off their yards from the public with the use of wire fencing. This does not assist in creating private space. **PRIVACY:** ***Side and Back Boundaries*** • Transparent wire fencing has been used around all erven except household D (no fencing). • This doesn't help in the creation of privacy. In some cases, trees have been used to strengthen the element of a border and the need for privacy. It hasn't been very successful in the creation of privacy. ***Placing of units*** • The placing of the roof structures close to the temporary structures have enabled some degree of privacy to transpire. ***Placing of the front door*** • All temporary structures have placed their doors to face the roof structures. In the absence of the roof structures, the need for privacy is still evident, i.e. doors are placed to the side in most cases. • An element of security is evident.

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8. No reasons for the use of space within the structures could be obtained.

AFFORDABILITY

- **Family structure:** All families are single and nuclear. Just one has extended family members living with as well.
- **Family sizes:** Tend to range between 4 and 9 with an average of 7.
- **Sources of income:** Each household has an average income source of two, ranging from 1 to 4. One household survives on the pension received and another on occasional part-time employment.
- **Expenses:** On average each household has 8 expenses. They range between 7 and 11 expenses.
- **Savings:** None of the households are able to save.

Conclusion

The affordability of these households is therefore low. The income sources are few, family sizes are large in comparison to the number of income sources available and expenses are high.

The commonalities between the households that can allow other factors to be isolated for comparison are the expenses made, i.e. they are more or less similar. Income sources are also similar throughout except for household E (4 sources). This places household E in a better position to make additions irrespective of the large family of seven. This allows for the evaluation of the type of employment and the family size in order to determine the affordability and ability of households to make additions.

Household E seems the most likely to make additions (many income sources) followed by household A (has part-time employment). Household C also has one part-time income source but the family size is larger than household A. This would require the income to be spread over a larger number of people. The affordability to make extensions would therefore be lower.

Households B and D have income sources from pension and occasional part-time employment. They are therefore similar on that basis, but family sizes differ. Household B would therefore be able to extend to a greater extent than household D.

PRODUCT

- **Number of additions:** In total 14 additions have been made (average of 3 each). Households A, B, C, and E had made three additions each and household D had made two.
- **Time:** Households had arrived between 1992 and 1996. One household couldn't provide the information necessary to determine the time of arrival, but the others arrived around the same time except for household B (1992). The time of arrival has had an effect on the quality of house produced, i.e. arriving in 1992 has allowed this household to build up the roof structure with face bricks. In comparison to the other households structures, this structure is of a higher quality. All the other households have built up the roof structure as well. The quality of structures appears to be similar.
- **Type of structures:** Temporary and permanent structures have been built. On average, each household has managed to build two initial temporary structures and one final permanent structure.
- **Level of formalisation:** Each household has built a permanent structure. The level of formalisation is therefore high. The households have the ability to extend.
- **Size of additions:** The average size of additions (temporary and permanent combined) is 27m². Temporary structures range from 9m² to 24m² with an average of 17m², whilst permanent structures average 46m² (range between 12m² and 54m²). The size of the additions appear to be insufficient for the large family sizes.
- **Configuration:** Permanent structures generally have dimensions of 5.4m x 8m. Temporary structures have dimensions of 3.5m x5m.
- **Area of additions:** Temporary structures have an average area of 31m² (ranging from 17m² to 48m²), whilst permanent structures have an average of 46m² (ranging from 12m² to 54m²). One household is using space efficiently to a degree. The other households have not managed the efficient use of space.
- **Occupational density:** In general each person has 12m² to himself or herself, ranging from 3m² to 19m².
- **Coverage:** On average, the temporary structures cover approximately 16% (ranging from 9% to 25%). and permanent structures cover 23% (ranging from 6% to 28%) leading to a total average coverage of 38%. This leaves space open for other activities. The placing of the roof structures, however, have reduced the efficient use of this space.
- **Shape:** All structures appear rectangular.
- **Arrangement of structures:** Temporary structures have been placed at the back of the erven with the roof structures either centrally positioned or placed along the side boundary. The temporary structures have been placed next to one another to form long rectangles and others have been placed in 'L' shapes. The roof structures have been oriented in two ways, i.e. one with the longer side parallel to the street and the other with the shorter side parallel to the street.
- **Type of employment:** The type of employment in combination with other factors have an influence on the ability of these households to consolidate, e.g. household B receives a pension but has four family members to feed and has produced the highest quality house. Household A has a part-time employment as the income source but has seven family members. The quality of the house is below that of household A.

*NOTE

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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.
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8. No reasons for the use of space within the structures could be obtained.

Conclusion

Household B has produced the best quality house with assistance from time (arrived in 1992), the smallest family size (4), and a few expenses. The only inhibiting factor is the number and type of income sources.
Household A has managed to produce the same number of additions but experienced restrictions of the large family size and the *limited* income source. Expenses were minimal.
Household E has four income sources of part-time and full-time employment, a large family size of seven, and the most number of expenses. This family has been able to close the roof structure and make the same amount of additions.
Household C is supported by one part-time job and has the largest family (9). Expenses are kept low. The roof structure was also enclosed.
Household D has a family of six and one income source (occasional part-time employment). Expenses are a bit higher than the rest (9). This household has made the least amount of additions. The household is now in the process of building another room under the roof structure.

Thus the factors that have inhibited consolidation in this case have been the limited income sources, time (arriving earlier), large family sizes and in one case, many expenses and the type of employment (example, pension as opposed to a full-time job). Factors that have assisted in consolidation were small family sizes, few expenses, many income sources and the type of income sources. However, these factors cannot be looked at in isolation. The interplay between the factors creates suitable and unsuitable environments for consolidation.

PROCESS

- **Sourcing of materials:** In most cases, permanent materials were sought from outside Mamelodi and temporary structures were acquired from within. There are, however, a few people (approximately two or three households) that have sourced temporary materials outside of Mamelodi and permanent materials were sought from within.
- **Cost:** The cost of temporary structures range between R1 000 to R3 040. The cost of temporary structures range between R330 and R2 000. There is not a big difference between the money spent on additions of temporary and permanent nature. The lack of accurate information has distorted the results.
- **Funding:** Savings was the most common used source of funding. In one particular case, retirement money was used.
- **Builders:** 95% of the time owners used their skills to build their additions. The rest of the time, private contractors were hired.
- **Time:** The time between additions ranged from a few months to seven years. On average, each household took between a few months to three years to make additions. One household took seven years. This implies that time was spent saving sufficient money to build the quality permanent structure required.

USE OF SPACE

Within structures

- The uses extend beyond the basics of a toilet, bedrooms and kitchens. Some households have the luxury of dining rooms and lounges.

Within erven

- **Gardens:** Three households have gardens at the front of their erven. One household has a vegetable garden at the back of the erven. This is one of the survival strategies employed in this typology.
- **Parking:** Only one household makes provision for the parking of a vehicle owned by the household (luxury).
- **Tenants:** None of the households has tenants.
- **Other:** Households have clotheslines erected on the erven, sometimes attached from one structure to the next. Tents have also been erected to create a social space and a shelter/carport. Storage of building materials takes place on these erven wherever space would allow it.

PUBLIC/PRIVATE INTERFACE

- **Street boundary:** The transparent wire fencing used prevents any private space from being created. The street boundaries are often accompanied by gardens and trees.
- **Side and back boundaries:** The transparent wire fencing does not help in creating privacy.
- **Placing of units:** The roof structures have been placed very close to the temporary structures. This creates privacy from the public but neighbours can still intrude on this space created.
- **Placing of the front door:** All temporary structures have the doors facing the roof structures. In the absence of the roof structures, some doors face the side whilst others face the street.

*NOTE

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8. No reasons for the use of space within the structures could be obtained.

Patterns:*1. Temporary structures have been placed at the back with roof structures in the centre of the erf. Gardens are placed at the entrance.*

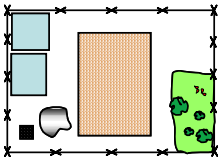

FIGURE 41: Pattern 1

2. Temporary structures are placed along the side and back with roof structures along the other side boundary. Gardens are present at the front and materials are stored on the erf.

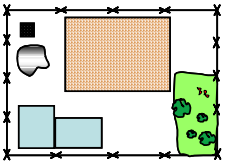

FIGURE 42: Pattern 2

***NOTE**

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