COMPARATIVE ANALYSIS OF TYPOLOGIES WITHIN EXTENSION TEN

	TYPOLOGY 1	TYPOLOGY 2	TYPOLOGY 3
1. SOCIO-ECONOMIC STATUS	• All families are single and nuclear except for one. There is one woman-headed family. • Family sizes range from 5 to 6 and average of 6. • Two households have tenants (A and B). • The average household size is 7, ranging from 5 to 9. • On average each household has two sources of income. It ranges from 1 to 3. • The dominant employment source is through entrepreneurial/informal activity, follows by full time employment and then part-time employment. • The average number of expenses within each household is 9. • Only one household is able to save (E).	• 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.	• Four families are single nuclear and one woman-headed. • Family size ranges from 3 to 6 with an average of 4. • None of the families have tenants. • Household size also ranges from 3 to 6 with an average of 4. • Each family has one source of income except for household D that has two sources. On average each household has one source. • The income sources tend to be accounted for by two part-time jobs, two entrepreneurial/informal jobs, one full-time employment and one grant. • On average families have eleven expenses. • Three households are able to save.

2. ADDITIONS	• Four out of five initial structures were toilets. One household had built a shack.
	• Roof structures were provided by government after toilets were provided. This was followed by one room under the roof structure.
	• Ten additions by residents had been made in total.
	• Nine additions were shacks and one was a house.
	• Three households had made two additions (households A, C and D), one household had made three additions, and household E had made one addition.
	• All shacks were made of temporary materials and houses of permanent materials.
	• Where information (however, minuscule) was available, the following was noted:
	  ○ Materials for shacks were sought in Mamelodi and materials for houses were sought outside Mamelodi.
	  ○ Costs range from R650 to R2400.
	  ○ In most cases savings was the source of funding.
	  ○ Builders: a large number of private contractors were used. A few owners built their own additions and others employed the material suppliers.
	  ○ The time lapse between additions range from one to four years.
		• 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 (however, minuscule) 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.
			• All initial structures were toilets provided by government and placed at the back of the erven in either the left or right corners.
			• 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.
			• Eleven additions had been made in total. Of these 11, five were shacks, five were completed houses, and one was a garage.
			• All households made two additions except for household C (three additions).
			• Where information (however, minuscule) was available, the following was noted:
			  ○ All shacks were constructed of temporary materials and houses of permanent materials.
			  ○ Temporary materials were purchased from within Mamelodi and permanent materials from outside Mamelodi.
			  ○ Costs for temporary structures range from R500 to R900. Permanent structures cost between R1 000 to R3 000.
			  ○ Majority of savings money was used. One loan had been acquired.
			  ○ Builders of shacks were either owners or material suppliers.
			  ○ Builders of houses were private contractors.
			  ○ The time lapse between additions was between one and four years.

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3. HOW HAS THE UNIT CHANGED OVER TIME	**NUMBER OF EXTENSIONS AND THE TREND IN USE OF MATERIALS** • An average of two extensions per household has been made. • All shacks were constructed of temporary materials and formal structures from permanent materials. **SIZE** • Average erf size: 215m² • Average extension size: 21m² • Average area: 39m² • Average coverage: 17% • Average occupational density: 6m²/person **SHAPE AND CONFIGURATION** • Shape: All shacks appear rectangular in shape. The houses constructed take irregular shapes: trellised and 'L' shaped. • Average dimensions: 3.6m x 5.2m **PLACING OF BUILDINGS** • In most cases shacks were placed at the back of the erven and roof structures either centrally or squeezed in next to existing shacks. • Most had no reasons for the placing of their shacks, but the owner that had constructed the house reflected that the location of his house was the ideal position.	**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. **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. • Most have no reason for the placing of their shacks except for one household (A). The reason behind placing 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.	**NUMBER OF EXTENSIONS AND THE TREND IN USE OF MATERIALS** • An average of two additions per household was noted. • All shacks were constructed of temporary materials and houses of permanent materials. **SIZE** • Temporary structures total area: 58m² • Temporary structures average area: 19m² • Temporary structures average size: 19m² • Temporary structures average coverage: 10% • Permanent structures total area: 290m² • Permanent structures average area: 58m² • Permanent structures average size: 48m² • Permanent structures average coverage: 30% • Combined average extension size: 39m² • Combined average area: 70m² • Combined average coverage: 35% • Combined average occupational density: 19m²/person **SHAPE AND CONFIGURATION** • 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. • Average dimensions of temporary structures: 3.3m x 5.6m. Average dimensions of permanent structures: 5.7m x 8m. **PLACING OF BUILDINGS** • 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. • 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. • None of the household members had explanations for the positioning of their structures.
4. HOW IS SPACE WITHIN THE HOME BEING USED?	• An average of three bedrooms per household and a total of 15. • Each household has at least one kitchen. • Two households have a dining room and one a lounge. • One household has a spaza shop and the other a bathroom. • Each household makes use of the toilet provided by government. One household also has an indoor toilet. • In most cases the reason for expanding has been the need for more space for their children	• 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.	• In total, there are 14 bedrooms across all households. An average of three per household. • Each household has akitchen and a lounge. • One household has a dining room. • Nine toilets exist. All households have indoor toilets in combination with the toilet provided by government except for household A. • At least one bathroom is present in each household. • The use of space in each case was suited to the needs of the families.

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	TYPOLOGY 1	TYPOLOGY 2	TYPOLOGY 3
5. HOW IS THE PROPERTY	• Three households have gardens. • Two households make provision for the parking of cars. • Commercial activity is conducted from within two households. • Renters reside within two erven.	• 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.	• Three households have gardens placed at the front of the yard. • Each household makes provision for the parking of cars. This is mostly accommodated at the side. • Services and commercial activity is conducted within two separate households. • Tents have been erected for socialising space. • Many storage facilities are present (three households) • Clotheslines have been erected in three erven.
6. PUBLIC/PRIVATE INTERFACE	**RELATION TO THE STREET:** **Street Boundary Definition** • Only two households have erected fences in front of their homes. Others have either placed stones defining the front boundary or not erected anything up front. This allows for public space to invade the space of the erven. **PRIVACY:** ***Side and Back Boundaries*** • Transparent wire fencing has been used in all cases. This is a very poor attempt at creating private space. • In some cases trees have been used to re-inforce these boundaries. • There is only one case where privacy is created. ***Placing of units*** • All roof structures have been placed very close to the shacks, thereby creating some semi-private space between the structures. • Some shacks have been placed along boundary lines to strengthen the boundaries. **Placing of the front door** • All shacks have placed their doors to face the roof structure. • In some cases the roof structure acts as a buffer from the street. • Household C has a door facing the street and one facing the back yard.	**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. ***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. **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.	**RELATION TO THE STREET:** ***Street Boundary Definition*** • Three households have attempted to fence of their properties and have used transparent wire fencing. It does not help to create private space. • The other two households have decorated the entrances with bricks and stones. ***Placing of the front door*** • 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. • 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 with lure more business to their establishments. **PRIVACY:** ***Side and Back Boundaries*** • Transparent wire fencing has been used again in all cases except household C. It does not successfully help to create privacy. • 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. ***Placing of units*** • 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. • In most cases some form of privacy is created between the temporary structures and the houses. • 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.

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	TYPOLOGY 1	TYPOLOGY 2	TYPOLOGY 3
CONCLUSION	***AFFORDABILITY*** • **Family structure:** A single, nuclear family is typical within this area with just one woman-headed household. • **Family sizes:** Family sizes range between 5 and 6, which is quite consistent. Household sizes tend to be much larger because of the presence of tenants in some households (range between 5 and 9). Households A and B have tenants. • **Sources of income:** On average each household has two sources of income. These sources can be accounted for by entrepreneurial/informal activity (mostly), rent, part-time employment and full-time employment. The family within household A is completely supported by rental money. Affordability of this family will be restricted as a result. The ability of these families to make additions is limited to a certain degree considering the amount of people that have to be supported. • **Expenses:** These families have numerous expenses (9). Combined with the large family sizes and the limited income sources, the abilities of these families are further restricted. • **Savings:** The ability of households to save is evidence enough of their inability to make good quality additions. Only one household is able to save. **Conclusion** Household B would appear to be in the most favourable situation with five family members, fewer expenses and three sources of income. The next household with greater potential for building additions would be a tie between households A and C. Household E seems to be in the worst position. This household's ability is restricted by many factors irrespective of its ability to save.	***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. The range of family sizes is quite large. • **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.	***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 ten additions have been made. Household B had made three additions followed by households A, C and D with two additions each and household E with one addition. Household B had been the most successful in building many additions, which reinforces the statement made above. • **Time:** All households had arrived around the same time (1996) except for two households (C and E). Household C had arrived in 1997 and household E in 1995. This shows that time was not a factor in terms of consolidation in this typology, i.e. arriving in 1995 would imply that this household would have either made more additions or consolidated to a greater extent than the others considering being there for a longer period. The total opposite holds true. Household E is the least consolidated and has produced the least amount of additions. Household C had arrived in 1997 (more or less a year later than the majority), which would imply the least consolidated and the least amount of additions. Instead, this household is the most consolidated (permanent structure) with the average number of additions made. • **Type of structures:** All structures produced were temporary structures except for one produced by household C (a house made of bricks). 90% was therefore temporary structures. • **Level of formalisation:** The level of formalisation within this typology is low considering that only one household had managed to produce a permanent structure (10%).	***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 difference between permanent and temporary structures is quite large. • **Configuration:** Permanent structures generally have dimensions of 5.4m x 8m. Temporary structures have dimensions of 3.5m x5m, whilst the combined (permanent and temporary) average is 4m x 6m. Permanent	***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.

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CONCLUSION

TYPOLOGY 1

- **Size of additions:** Additions have an average size of 21m², ranging from 11m² to 65m². In the absence of including the permanent structure in the calculation, the average size of additions would be 16m². The size of the additions has been influenced by the large family sizes, limited income sources, numerous expenses and the inability to save. The levels of affordability have had an impact on the size of structures produced.
- **Configuration:** Average dimensions appear to be 3.6m x 5.2m.
- **Area of additions:** On average the total area of additions within each erven is 39m² and ranges between 25m² and 65m². Considering the number of people that live within this space, this is a small area.
- **Occupational density:** On average each person has 6m² to himself or herself.
- **Coverage:** The coverage of these structures on their erven range from 12% to 26% with an average of 17%. This leaves a large amount of space available for other activities.
- **Shape:** All structures are rectangular except for the house built (appears 'trellised').
- **Arrangement of structures:** In general temporary structures have been placed either at the back of the erven or along the side boundaries. In response to this, the roof structures have been either placed centrally on the erven with the longer side parallel to the street or along the side boundary with the shorter side parallel to the street. The placing of the roof structures was dependent on the placing of the temporary structures.
- **Type of employment:** The household that has managed to build a house has been supported by three sources of income, which include a part-time job, full-time job and entrepreneurial/informal activity. All other households are supported by income from tenants, entrepreneurial/informal activity mostly with one part-time employment. The type of employment in this case appears to have influenced the ability of these households to consolidate.

Conclusion

Household C is the most successful household, managing to build a permanent structure. The factors that have assisted this household appear to be the type of employment and the number of income sources. This household arrived later than the others, has the second largest amount of expenses, and one of the largest family sizes (6), but has still managed to produce a permanent structure.

Household B managed to produce three temporary structures, which were assisted by the type of employment (part-time and rental income), the smaller family size, being one of the few to arrive earlier (1996), and the number of income sources. Expenses were also minimal. In comparison to household C, this household only differs by the type of employment, where household C is at the advantage, but household B has fewer expenses, the same number of income sources, a smaller family size and the advantage of arriving a year earlier. The type of income sources therefore plays an important role in this typology.

Household A managed two additions. The factors that played a role here are the smaller family size, fewer income sources, the type of income sources (rental income), the year of arrival (1996) and fewer expenses. In comparison to household C it has the advantage of fewer expenses, a smaller family size, and a year. It however lacks in terms of income sources and the type of income sources.

TYPOLOGY 2

structures are larger than temporary structures.

- **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).
- **Occupational density:** In general each person has 12m² to himself or herself.
- **Coverage:** On average, the temporary structures cover approximately 16% and permanent structures cover 23% leading to a total average coverage of 38%. This leaves space open for other activities.
- **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.

Conclusion

Household B has produced the best quality house and has been assisted by 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 has been restricted by 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) and a family of six. Expenses are a bit higher than the rest (9). This household has made the least amount of additions and is in the process of building another room under the roof structure.

TYPOLOGY 3

- **Size of additions:** The average size of additions (temporary and permanent combined) is 39m², whereas the average size of temporary and permanent structures is 19m² (ranging from 13m² to 30m²) and 48m² (ranging from 20m² – 54m²) respectively. Permanent structures are much larger.
- **Configuration:** The average dimensions of temporary structures are 3.3m x 5.6m. The average dimensions of permanent structures are 5.7m x 8m. The vast difference is dimensions between the two can be noted.
- **Area of additions:** The area of temporary structures range from 13m² – 30m² (average of 19m²), whereas the average area of permanent structures is 58m² (ranging from 54m² – 74m²).
- **Occupational density:** Each person has an average area of 19m² to himself or herself.
- **Coverage:** temporary structures amount for 10% and permanent structures for 30%. In total, they still don't cover more than 50% of the erven.
- **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.
- **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.

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.

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CONCLUSION

TYPOLOGY 1	TYPOLOGY 2	TYPOLOGY 3
Household D has constructed two additions. The factors that have been taken into consideration in comparison to household C, include a smaller family size, a single income source, the type of income source (entrepreneurial/informal), the time of arrival (1996) and fewer expenses. This household also lacks in the number and type of income sources. *Household E* produced one temporary structure. It has the largest amount of expenses, the same type and number of income sources as in household D, the same family size as in household C and arrived in 1995).		
PROCESS • **Sourcing of materials:** The sourcing of materials were directly related to the type of structures that were built, i.e. temporary structures required the acquisition of materials from within Mamelodi, whilst materials were sought external to Mamelodi for the construction of permanent materials. • **Cost:** On average costs ranged between R650 and R2 400. Resources were minimal and affordability within this typology is low, therefore not much could be afforded. • **Funding:** Savings was the main source of funding. • **Builders:** Three types of builders were involved. The most used was private contractors, and in some cases, material suppliers were employed. In some cases, owners had built their own additions. • **Time:** The time lapse between additions ranged from one to four years. One household took four years to build another addition. The others had taken between one and two years to make additions. This indicates in general that people had saved for a little while and had built small additions.	***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 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. • **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.	***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*** • Households A, D and E display characteristics of households that could only afford the necessary uses (Bedrooms, kitchens, and outdoor toilets). • Household B and C have added on a few more uses (luxuries). Household B displays only one additional use (dining room). Household C has a dining room, a lounge, a spaza shop, and an indoor bathroom and toilet. Household C is the household with the permanent structure. • As was indicated earlier households B and C appear to be the two most successful households. As such, the uses within their structures also differ from the others. With a movement toward consolidation, the uses become more complex. ***Within erven*** • **Gardens:** Only three households have gardens, which were placed at the front. These were flower gardens. • **Parking:** Two households make provision for the parking of cars. The car parked in household C belongs to the owner of the house and is therefore a luxury. • **Tenants:** One of the survival strategies employed in this typology is rental activity. Two households rent out structures as a source of income. Such activities are found at the back and along the side boundary. • **Other:** Another survival strategy is commercial activity. Household C runs a spaza shop from the one room provided under the roof structure and household E sell vegetables from a vegetable stall built along the street. Such activity generally occurs at the front of the property.	***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.	***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.

COMPARATIVE ANALYSIS OF TYPOLOGIES WITHIN EXTENSION TEN

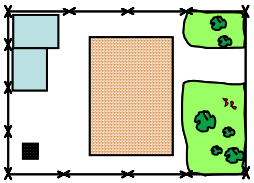
CONCLUSION

TYPOLOGY 1

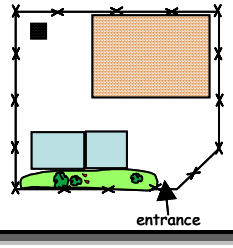
PUBLIC/PRIVATE INTERFACE

- **Street boundary:** The lack of street boundary definition in most households indicates the openness for interaction with the street. Only two households had attempted to fence the front boundary. Transparent wire fencing was used with the planting of trees and plants and the placing of rubble.
- **Side and back boundaries:** The transparent wire fencing used does not assist in creating private space. Privacy has only been created in household C with the assistance of the planting of trees.
- **Placing of units:** The roof structures have been placed close to the temporary structures, thereby creating semi-private space between these structures. These households have privacy from the public but not from the neighbours.
- **Placing of doors:** Most temporary structures have placed their doors to face the roof structures, which in their absence would mean that the doors of the temporary structures faced the street. This could either be the result of wanting interaction with the public or an attempt to keep space for the construction of the future house. None of the households had indicated any reason for the placing of the structures.
- The roof structure acts as a buffer from the public now. Some structures have been placed along the side and back boundaries for extra strength.

Patterns: *1. Shacks are placed at the back with roof structures centrally placed (longer side parallel to the street). No fence exists at the front.*



2. Structures are used to block off one road frontage (in the case with two road frontages) and the roof structures have been placed at the back (where one road frontage is chosen as the entrance point) with gardens at the front. One roof structures has been placed along the side boundary (dependent on the placing of temporary structures).

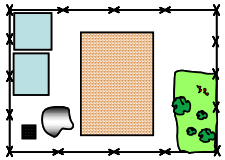


TYPOLOGY 2

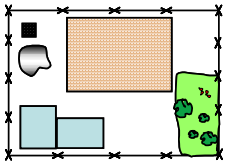
PUBLIC/PRIVATE INTERFACE

- **Street boundary:** The transparent wire fencing used prevents any private space from being created. The street boundaries are often accompanied by gardens and trees.
- **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 doors:** 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. Privacy was required.
- **Side and back boundaries:** The transparent wire fencing does not help in creating privacy.

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.*



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.

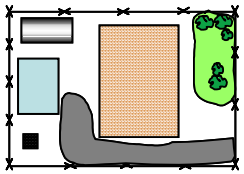


TYPOLOGY 3

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.
- **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 doors:** 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.
- **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.

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.*



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.