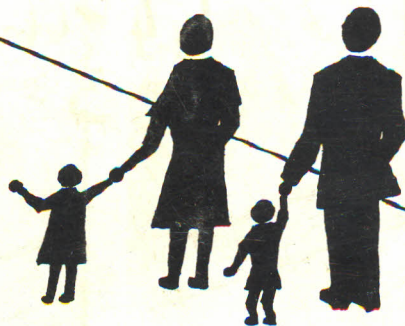


# LOW-INCOME HOUSE TYPES FOR KENYA



**HOUSING RESEARCH AND DEVELOPMENT UNIT  
UNIVERSITY OF NAIROBI**



UNIVERSITY OF NAIROBI  
HOUSING RESEARCH AND DEVELOPMENT UNIT

LOW-INCOME HOUSE TYPES FOR KENYA.

a selection of house types with  
estimated construction cost prices,  
suitable for the low-income group.

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Date: June, 1979

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1. INTRODUCTION

It is the aim of this publication to provide reference plans of urban house types suitable for the low-income group. Each example shown indicates a design solution which conforms with certain design criteria and is not meant as a prototype to be applied indiscriminately.

- The target population: It is usually assumed that a household can afford to spend 20% of its income on housing. The latest figures indicate that for 1977 the average household income in the formal sector was approximately KShs.1000/- per month. This would mean that large numbers of Kenyans can afford less than KShs.200/- per month on housing<sup>(1)</sup>.
- Minimum standards: In the government housing policy, as laid down in the Development plan 1974-78 it says: (2)  
 ".....each housing unit constructed in urban areas shall have at least two rooms plus its own kitchen and toilet"
- Cost of a minimum house: Such a minimum, with two rooms, kitchen, toilet and a shower, built in permanent materials by a registered contractor will cost approximately KShs.25,000/- (including cost of infrastructure) and the occupant's monthly charge would be over KShs.200/-.
- Subletting: Therefore it is very often found that a household occupies only one room. Normally the owner of the house (if living there) does not share the kitchen but shares the toilet and the shower with the subletters.

- 
- (1) ECONOMIC SURVEY 1978 (Kenya) Page 57, states that for 1977 the average wage earning per employee is Shs.760/- per month. It is assumed that household income is 25% higher than that of the individual employee.
- (2) DEVELOPMENT PLAN, 1974 - 78, article 21.17 (iii) Page 473.

NOTE: Public Authorities have permitted the initial construction of one room of a two room design allowing the owner to complete the second room when his resources permit.

- Legal framework: The house types shown are geared to meet the requirements of the existing Grade II By-Laws of the Kenya Building Code. It should be noted that according to the Public Health Act, health aspects related to house design shall be satisfactory to the local Medical Officer of Health or the Local Health Inspector.
- Present standard of facilities: Number of toilets, showers and kitchens should vary according to numbers of rooms. At present NHC (1) allows up to six rooms to share one toilet, one shower and a kitchen.
- Plot sizes: The examples of house types presented are placed on what is considered to be a minimum plot size based on recommended distances between neighbouring houses and a minimum setbacks from building lines. The plots shown are not meant to be the solution to plot sizes in general.
- Scope: It is the author's hope that this publication will be useful as an "idea/source book" for house designers, students, technical staff of local councils and others involved in the design of houses in general.

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(1) NHC, National Housing Corporation  
Site and Service guidelines 1977.

## 2. DESIGN CRITERIA

**Standards:** Design criteria for the house type presented are based on the need to provide adequate houses at a minimum cost. All house types are composed of rooms which are considered to be of an acceptable minimum size. The facilities provided, such as toilets, showers and kitchen space are kept to a minimum according to present standards.

**Design:** It is recommended that, the following points be taken into considerations when designing low-cost houses:-

1. Private entry to each room, which allows for partial subletting.
2. Each house to have a private outdoor space which can be securely enclosed.
3. All buildings to be simple structures to facilitate self-help construction techniques.
4. All house types to allow for phased development.
5. Toilets, showers and kitchens to be placed as close as possible to the public main sewer and water mains.
6. Access to toilets, showers and kitchens to be through a well ventilated corridor or court yard and to be inside the secure area.
7. All houses to be provided with a splash/wash area.
8. All plots to have access from a public road.
9. All plots to have a parking space for at least one car near or within the plot.
10. Distance from windows in habitable rooms to plot boundary should not be less than 2.5 m (Grade II By-Laws says 1.52m). (1)
11. Distance to plot boundary from all other rooms, openings, windows etc. not less than 1.5m.

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(1) BY-LAW, GRADE II Page 155, article 7 (2).

EXPLANATORY NOTES

- Number of people per house: In the various house types presented, mainly two room sizes are used: a room of 3m. by 3 m. which legally allows for occupation by two persons and a room of 3 m by 4 m, which allows occupation by three persons. (1) The assumed number of people to occupy each house type is based on the above number of people per room.
- Public Service: It is assumed that the public main sewer and water main are found in front of the plot.
- Plots: The price of land is not taken into consideration, because of variations from place to place depending on many factors.
- Cost Estimates: The estimated construction and material prices are only for work executed inside the plot boundary. Cost of off-plot infrastructure is not taken into consideration.
- Paid Labour: The cost of labour is based on daily rates for skilled and unskilled workers from the agreements between labour and employers organisations. The estimated cost of a house built by paid labour is based on the material price plus the calculated consumption of work days for a semi-skilled labour at a daily rate of KShs.28/80 for nine hours work.
- Contractor Built Houses: On top of all the estimated prices for contractor built houses must be added, approximately, 10% for preliminary and contingencies.
- Electrical Installations: If the houses are to be provided with electrical installations a price of approximately KShs.37/- per square meter is to be added.
- Fencing: Cost of fencing is not taken into consideration.
- Climatic zones of Kenya: With reference to the H.R.D.U. publication Design for Climate by Charles Hooper, January 1975, Kenya is divided into six climatic zones and "some of the major climatic aspects of building in the different zones in Kenya" are quoted from this publication.

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(1) GRADE II BY-LAW, article 10 (2) Page 155.

COST ESTIMATES

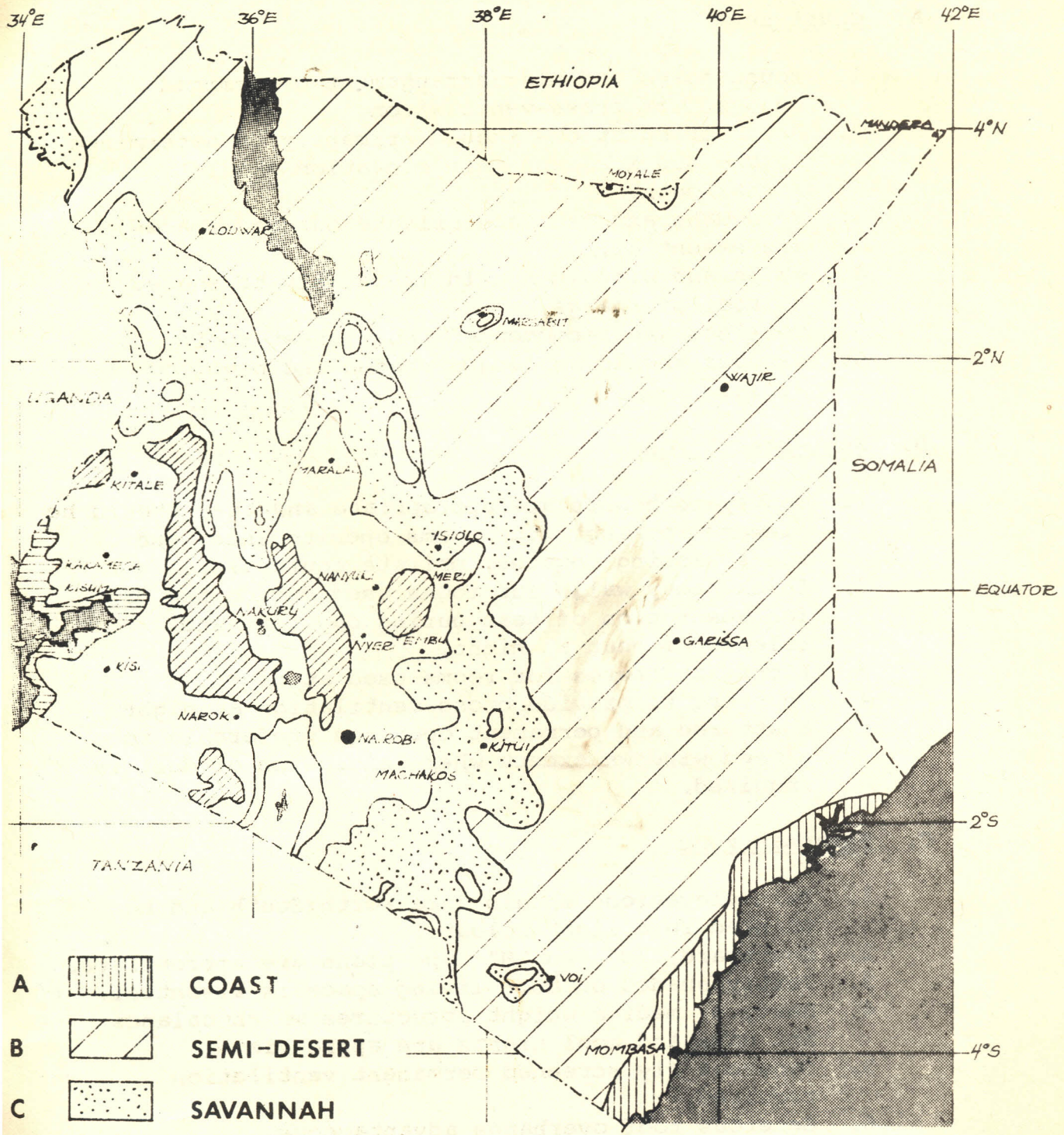
The cost estimates are based on the following standards of materials and construction methods:-

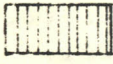
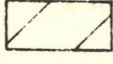
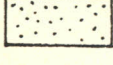
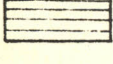
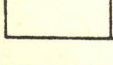
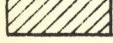
- Building Site: Preparation of building site (KShs. 4/80 per m<sup>2</sup>) assuming flat entry area.
- Foundation: Concrete strip (150 by 450 mm; 1:3:6 mix).  
 Concrete block sub-walling (3 courses)  
 Bagwashing to external surface (150 mm above ground level).  
 Stone filling, (200 mm under floor).  
 Floor slab, (75 mm concrete, 1:3:6 mix).  
 Soil conditions are assumed to be of medium quality.
- Walls: 140 mm concrete blocks for external and load bearing walls 90 mm concrete blocks for internal walls.  
 Cement mortar, (1:5 mix).  
 Bagwash on walls.
- Roofing: Timber purlins, Podo or Cypress (50 by 100 mm).  
 Corrugated galvanised iron-sheets (26 gauge).  
 Galvanised nails.  
 Galvanised ridge cover.  
 Verg board (gable only).
- Windows: Timber frames (38 by 78 mm).  
 Glass louvres with metal frames.  
 Mosquito gauze wire to cover ventilation part only.
- Doors: Door shutter ledged and braced with rim lock.
- Painting: Oil painting to woodwork with wood primer.



- Kitchen: One water tap provided.  
Enameled iron sink.  
Concrete cooking slab and work top.  
Metal cooking hood.  
Metal ventilation pipe.
- W.C.: Cistern, high level and w.c. pan  
pedestal type.
- Shower: Shower head and closing valve.
- Wash area: Concrete slab with built in sink (concrete)  
with one tap.
- External: Necessary drains, gully traps and inspection  
chambers.  
Water is provided from the public main at the  
plot boundary.  
Construction of drains is supervised by the  
Local Authority.
- Local  
Materials: Local building materials and construction  
techniques used in the different climatic  
zones would have to be considered to suit  
the socio-cultural and economic aspects in  
the different zones.

# CLIMATIC ZONES: KENYA



- A  COAST
- B  SEMI-DESERT
- C  SAVANNAH
- D  LAKE
- E  HIGHLANDS
- F  UPPER HIGHLANDS

## CLIMATIC ASPECTS OF BUILDING DESIGN

Some of the major climatic aspects of building design in the different climatic zones in Kenya are as follows:-

### A. Coast zone

1. House forms and plan arrangement determined by need for cross-ventilation.
2. House orientations should primarily be determined by the sun i.e. the main elevation should face North/South.
3. Verandahs and enclosed private outdoor spaces are essential.
4. Walls and windows should preferably be shaded by roof overhangs.
5. Ceilings are recommended under sheet roofs.
6. Windows should be large, shaded and have low sills.

### B. Semi-Desert zone

1. Courtyard houses are appropriate and they should be 'inward looking' with rooms opening into, and roofs sloping towards, private courtyards.
2. Thick heavy walls for rooms used during the day for absorption of heat during day time and release of heat at night.
3. Light structures for rooms used at night.
4. Shutters to provide cross-ventilation at night.
5. Shuttered and permanent openings preferable to glazed windows except where exclusion of dust is required.

### C. Savannah zone

1. Main elevations should face North/South and be painted in a light colour.
2. Courtyard, "U" and "H" type plans are appropriate.
3. Partly shaded outdoor living space is essential.
4. Heavy or medium weight structures which balance hot days and cool nights are appropriate.
5. Generous fly screened permanent ventilation required.
6. Generous roof overhangs advantageous.

D. Lake zone

1. House forms are largely determined by need for cross-ventilation.
2. Main elevations should face North/South.
3. Verandahs are traditional and popular.
4. Medium to heavy weight walls advantageous.
5. Ceilings are recommended under sheet roofs.
6. Mosquito and burglar proofing essential if windows are to be kept open after dark.

E. Highland zone

1. Courtyard houses are popular and climatically acceptable.
2. Some shaded outdoor spaces are desirable.
3. Permanent vents (required on health not comfort grounds) are best located at high level.
4. Heavy walls most desirable, insulated lightweight walls are acceptable.
5. Glazed windows, louvre blades, with burglar-proofing recommended.
6. Ceilings are recommended under sheet roofs.

F. Upper Highland zone

1. Compact house forms desirable.
2. Sun through east and west windows most desirable.
3. Small windows are appropriate.
4. Heavy walls and roofs, which delay the impact of solar heating until the night, are highly desirable.
5. Ceilings are recommended under sheet roofs.
6. Permanent ventilation, required on health rather than comfort grounds.
7. Fire places recommended in living rooms.

HOUSE TYPE AND PLOT SIZE

Planning aspects:

When a low-cost housing scheme is being planned, the architect planner have to take many aspects into account to create a well balanced socio-economic, cultural, climatical and environmental acceptable habitable situation for the target population. Preferable plotsizes and densities will vary from zone to zone according to priority put on the various aspects.

Plot layout:

Providing for the infrastructure in a low-cost housing scheme is the most expensive component of the scheme.

The number of serviced plots which have to be related to the cost of infrastructure have to balance with the affordability of the plot owner for repayment of loan for house construction and the infrastructure.

Type of scheme:

In low-cost housing schemes, which consist of multi-roomed houses, the owners have an income from subletting and thereby can afford a relatively high rate of repayment of loan. This aspect should be reflected in the design and planning of the scheme.

Sewer and water:

This publication does not deal with infrastructure as such, but it is assumed in all the house type examples shown, that installations as sewer and water are placed in front of the plot.

When planning a low-cost housing scheme it might be advantageous to place sewer and water supply at the back of the plot. Most of the house types shown in this publication can easily be altered to back to back served houses without destroying the idea of the house layout.

Plot size:

Each house type presented in this publication require a certain minimum plot size, which should be examined and seen in relation to the various planning aspects before taken into consideration.

## HOUSE TYPE DEFINITIONS

### THE DETACHED HOUSE

A house standing alone with open space around it, is called a detached house.

Some of the detached house types shown have adjacent or common fences, but these examples will still be called detached houses because the fences are not a part of the superstructure and the houses can be constructed without the fences.

### THE SEMI-DETACHED HOUSE

A semi-detached house has at least one wall in common with a neighbouring building.

The party wall between the houses may be a double wall which allows for progressive development at different time of construction.

### THE TERRACED HOUSE

Terraced houses are houses built in rows with no passage between the individual units.

The plot frontage is determined by the width of each individual unit, which reduces the cost of infrastructure per plot considerably.

When building terraced houses, the plot owners have the opportunity to share the construction price of the party walls and thereby reduce the total cost of construction.

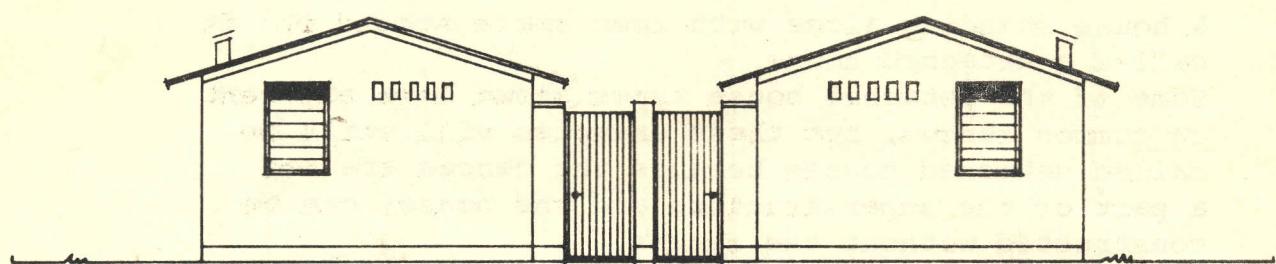
### THE GROUPED HOUSE

Houses built very close together with adjacent party walls between two or more neighbouring houses have been termed as grouped houses.

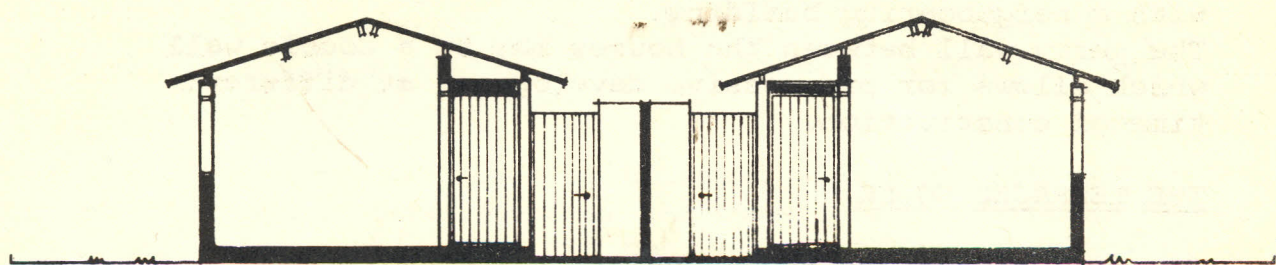
One of the characteristics of grouped houses is the creation of many small and bigger enclosed areas, which make grouped houses very appropriate in zones with strong winds and dust storms.

Grouped houses also provide the opportunity to create neighbourhoods, which can share facilities such as piped water and waterborne sewer systems at the lowest possible cost.

The code no. on the following pages (example D 5) refers to a detached (D) house followed by the number of rooms (5 rooms).

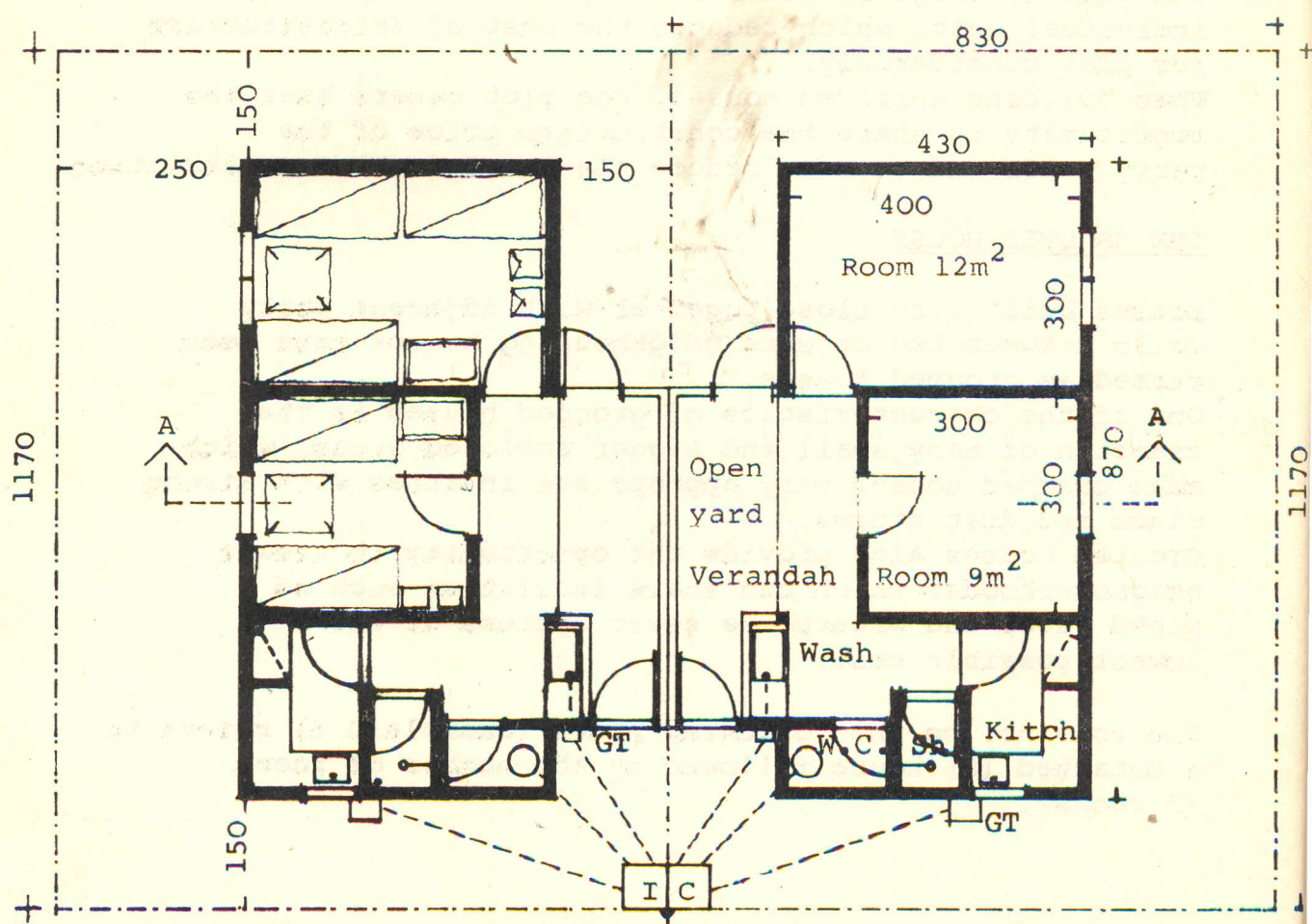


Elevation E1



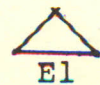
Section A-A

Wall or fence



Plot boundary

To main sewer



E1

HOUSE TYPE: DETACHED		DESIGNED BY: H.R.D.U.	YEAR: 1978
NO. OF ROOMS: 2	NO. OF OCCUPANTS: 5	HABITABLE AREA PER PERSON: 4.2m <sup>2</sup>	
PLINTH AREA: 37m <sup>2</sup>	PLOT SIZE: 8.30 by 11.70=97.11m <sup>2</sup>	PLOT COVERAGE: 38.5%	

RECOMMENDED TYPE OF SCHEME: Staff houses

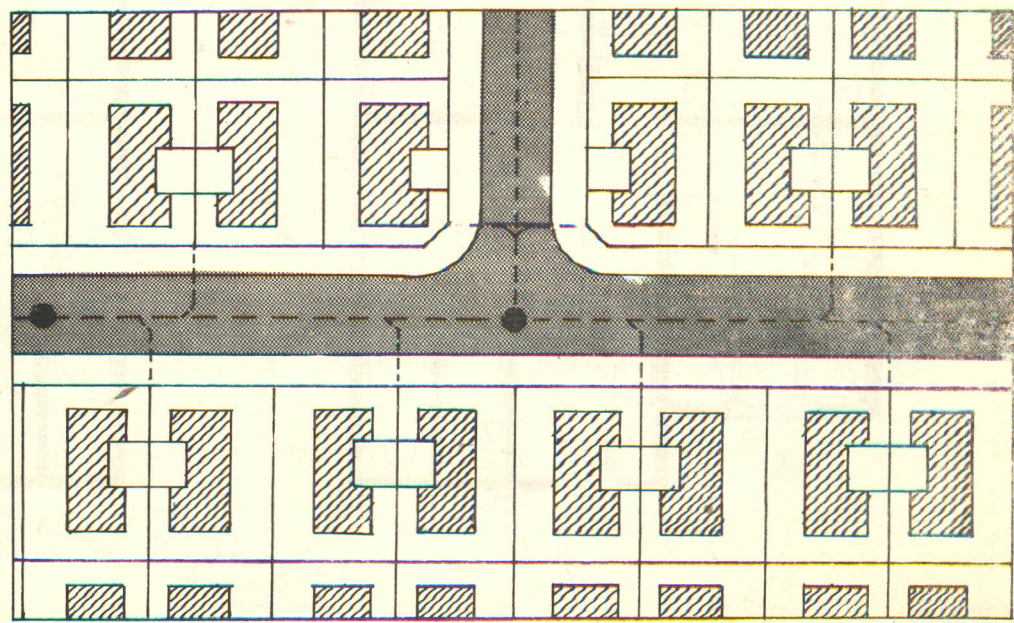
RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D and E

COMMENTS: If built in zone B and C, the court yard should be shaded.

COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs. 13,200/-
	BUILT BY PAID LABOUR: KShs. 15,000/-
	CONTRACTOR BUILT: KShs. 19,000/-

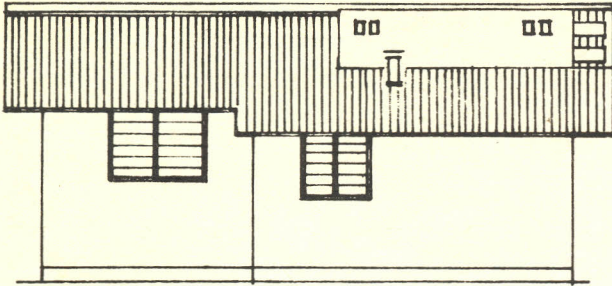
LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	13,200/-	104	116	129
	15,000/-	118	132	147
	19,000/-	150	167	186

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500

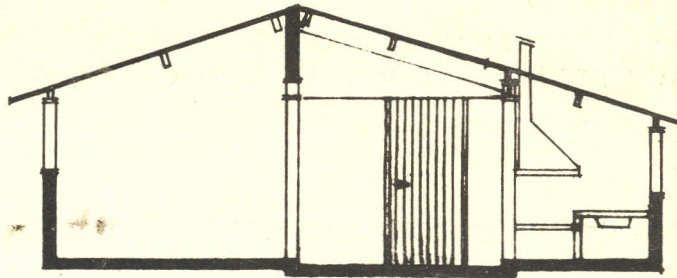


LEGEND:	BUILDING		ROAD		TREES		SEWER		MANHOLE	
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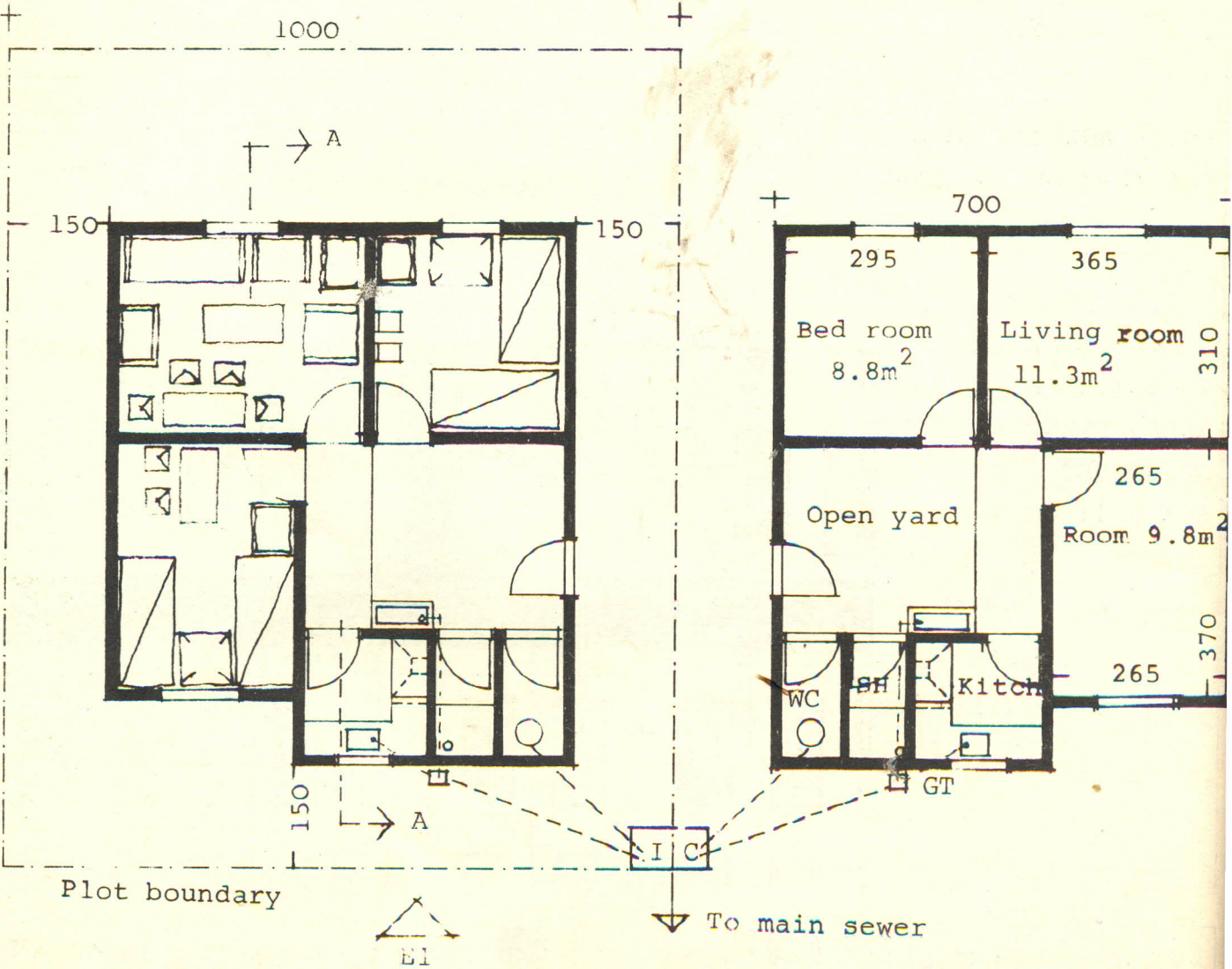




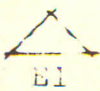
Elevation E1



Section A-A



Plot boundary



To main sewer

HOUSE TYPE: DETACHED

DESIGNED BY: H.R.D.U.

YEAR: 1978

NO. OF ROOMS: 3

NO. OF OCCUPANTS: 7

HABITABLE AREA PER PERSON: 4.3m<sup>2</sup>

PLINTH AREA: 46m<sup>2</sup>

PLOT SIZE: 10.00 by 12.25 = 125m<sup>2</sup>

PLOT COVERAGE: 37%

RECOMMENDED TYPE OF SCHEME: Staff houses and Rental schemes

RECOMMENDED FOR CLIMATIC ZONES: A, B, C, D, and E

COMMENTS: Extended court yard is desirable.

The whole court yard should be shaded if built in zone B and C.

COST ESTIMATES PER UNIT

(NAIROBI PRICES 1978)

BUILDING MATERIALS ONLY: KShs. 15,500/-

BUILT BY PAID LABOUR: KShs. 17,500/-

CONTRACTOR BUILT: KShs. 21,800/-

LEVEL ANNUITY LOAN  
FOR TERM OF 20 YEARS.

PRINCIPAL SUM

MONTHLY PAYMENTS (KShs.)

15,500/-

17,500/-

21,800/-

7%

122

138

171

8½%

136

154

192

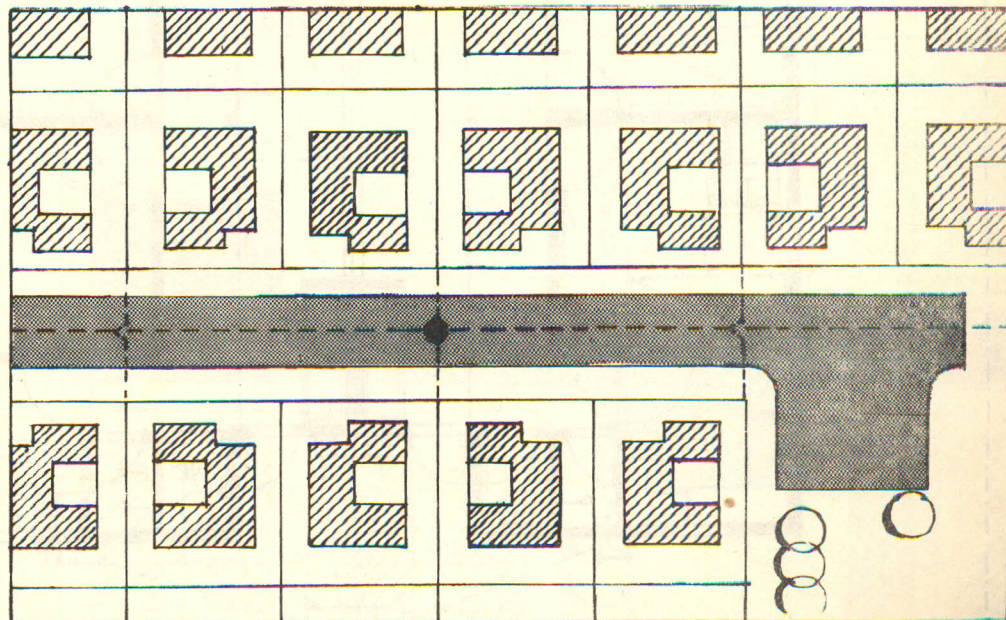
10%

152

171

213

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



LEGEND:

BUILDINGS



ROADS

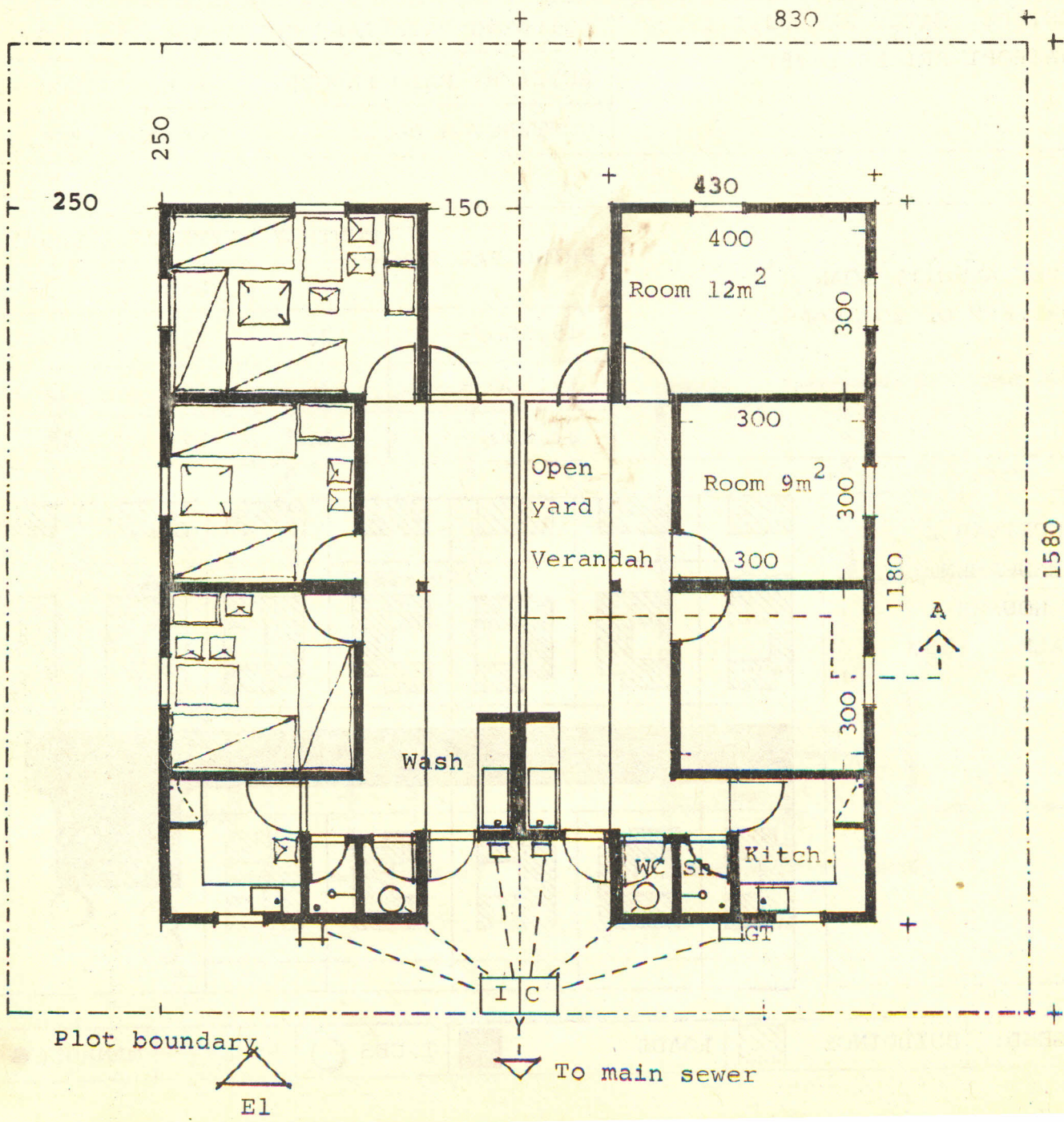
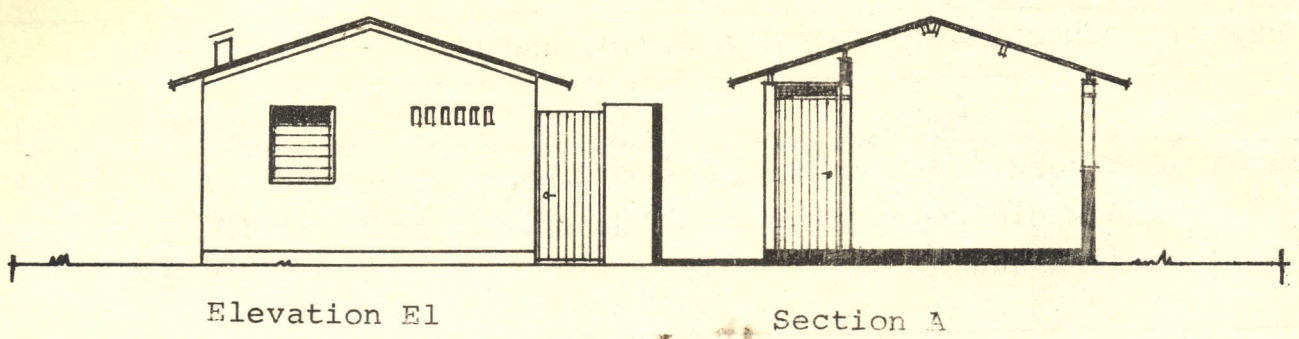


TREES



SEWER

MANHOLE



HOUSE TYPE: DETACHED

DESIGN BY: H.R.D.U.

YEAR: 1978

NO. OF ROOMS: 3

NO. OF OCCUPANTS: 7

HABITABLE AREA PER PERSON: 4.3m<sup>2</sup>

PLINTH AREA: 51m<sup>2</sup>

PLOT SIZE: 8.30 by 15.80 = 131.2m<sup>2</sup>

PLOT COVERAGE: 38.7%

RECOMMENDED TYPE OF SCHEME: Staff houses and Rental schemes

RECOMMENDED FOR CLIMATIC ZONE: B, C, E, and F

COMMENTS: Court yard should be shaded if built in zone B and C  
Covered walk way to toilet and shower is desirable

COST ESTIMATES PER UNIT  
(NAIROBI PRICES 1978)

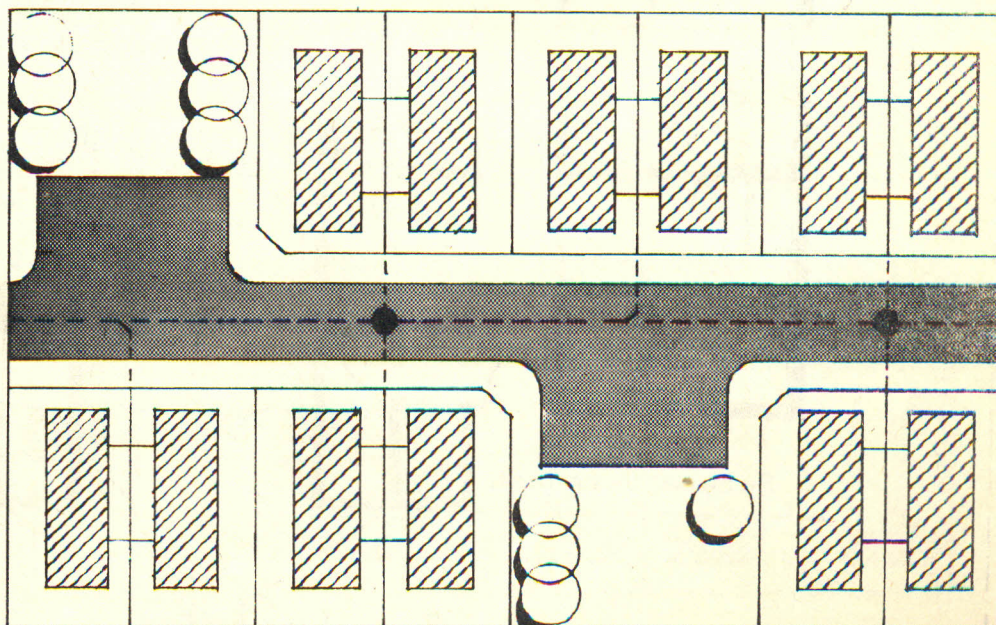
BUILDING MATERIALS ONLY: KShs.17,600/-

BUILT BY PAID LABOUR: KShs.20,000/-

CONTRACTOR BUILT: KShs.25,100/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	17,600/-	138	155	172
	20,000/-	157	176	196
	25,100/-	197	221	246

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



LEGEND:

BUILDINGS



ROAD



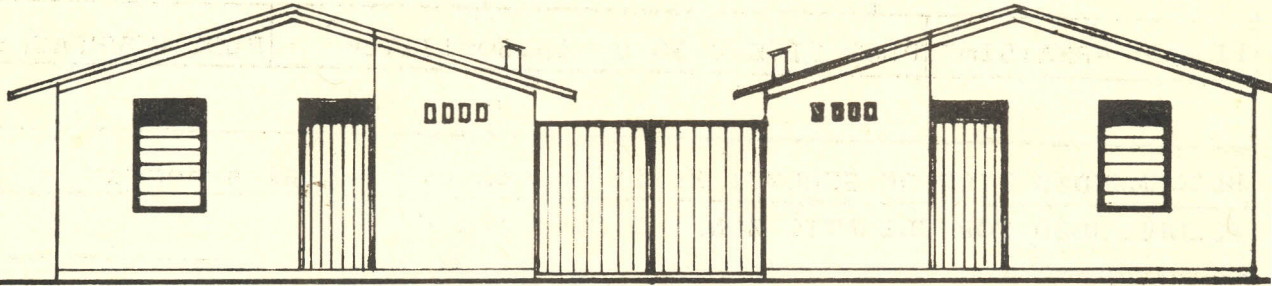
TREES



SEWER---

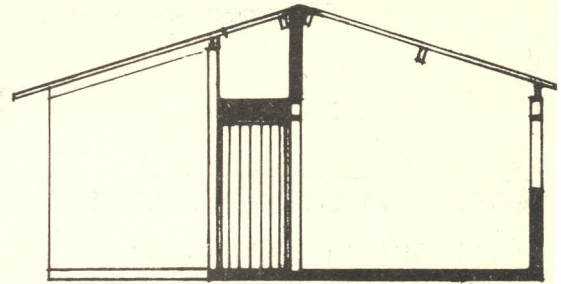
MANHOLE





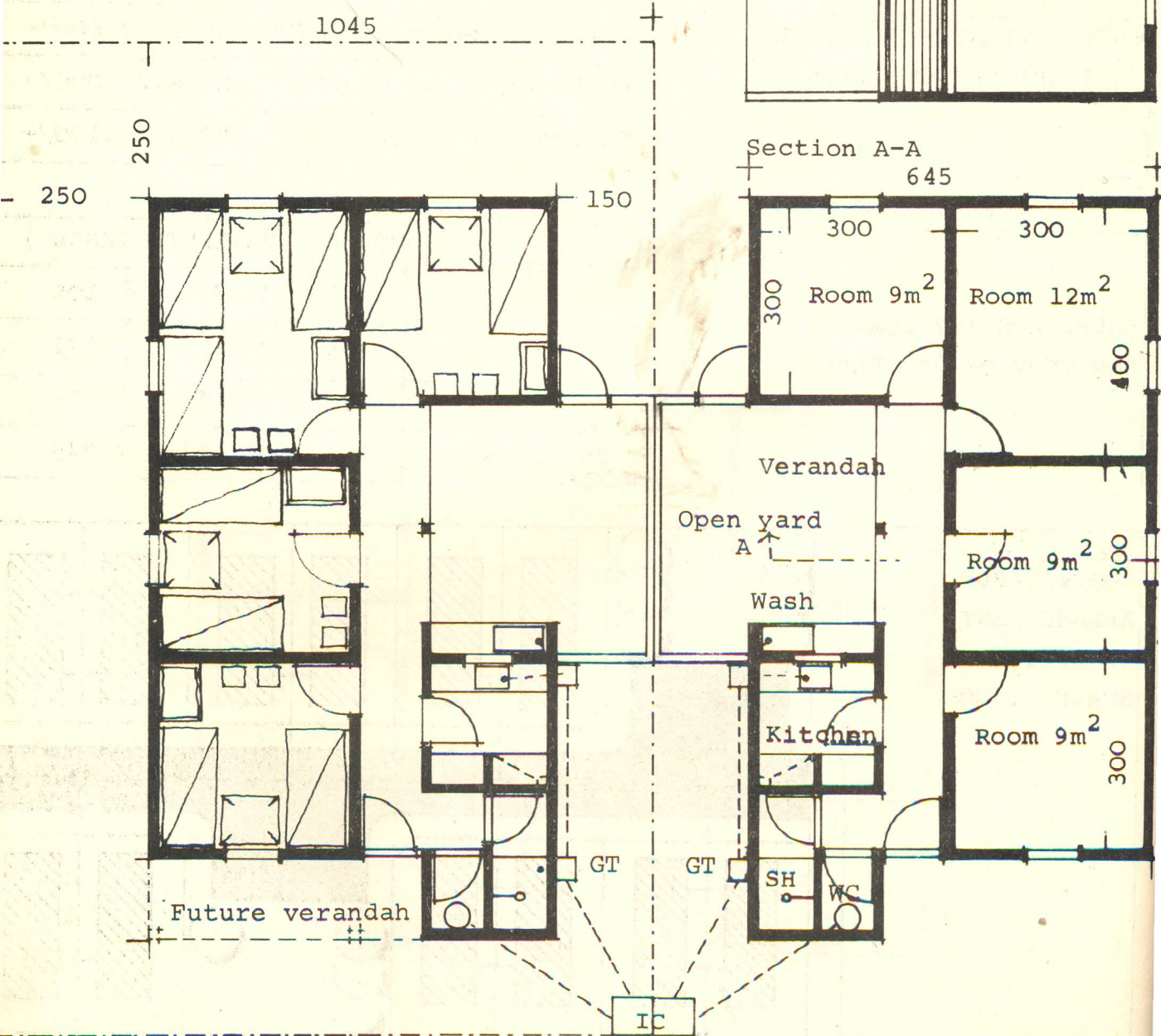
Elevation E1

Wall or fence



Section A-A

645



Plot boundary

To main sewer



E1

HOUSE TYPE: DETACHED

DESIGN BY: H.R.D.U.

YEAR: 1978

NO. OF ROOMS: 4

NO. OF OCCUPANTS: 9

HABITABLE AREA PER PERSON: 4.3m<sup>2</sup>PLINTH AREA: 70m<sup>2</sup>PLOT SIZE 10.45 by 15.75=164.59m<sup>2</sup>

PLOT COVERAGE: 42%

RECOMMENDED TYPE OF SCHEME: Rental and Tenant Purchase schemes

RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D, and E

COMMENTS: If built in zone B and C the roof should be extended to cover more of the court yard.

COST ESTIMATES PER UNIT:

(NAIROBI PRICES 1978)

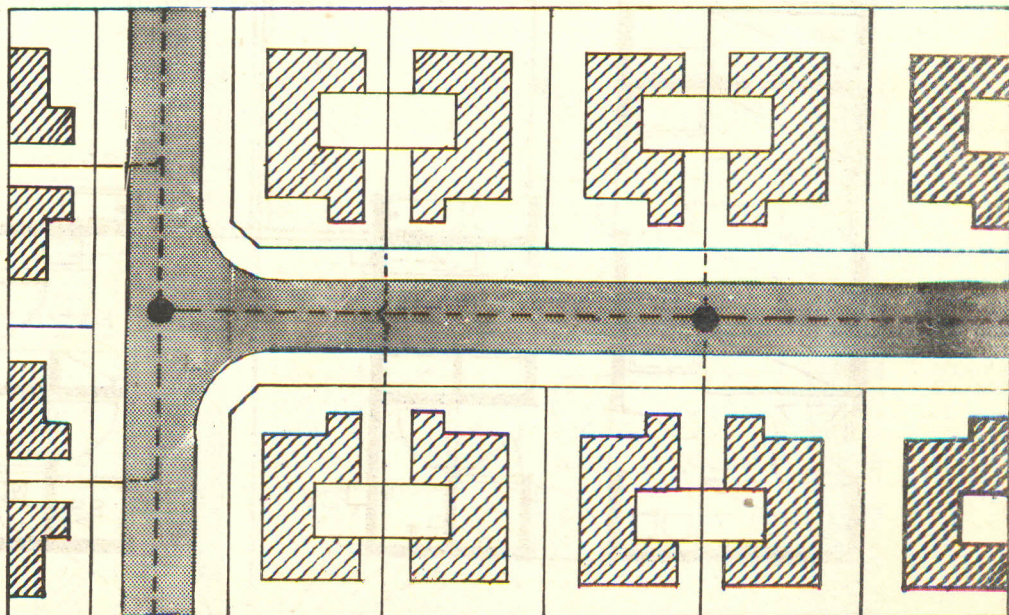
BUILDING MATERIALS ONLY: KShs. 22,600/-

BUILT BY PAID LABOUR: KShs. 25,500/-

CONTRACTOR BUILT: KShs. 31,400/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	22,600/-	178	199	221
	25,500/-	201	225	250
	31,400/-	247	277	307

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



LEGEND:

BUILDING



ROAD



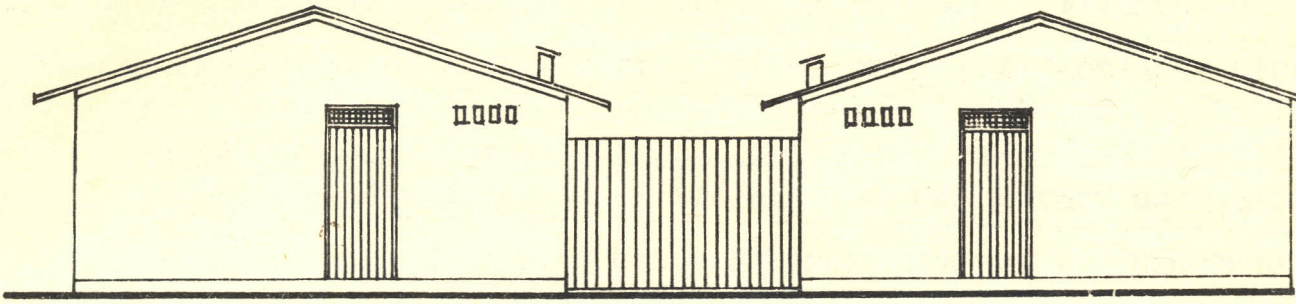
TREES



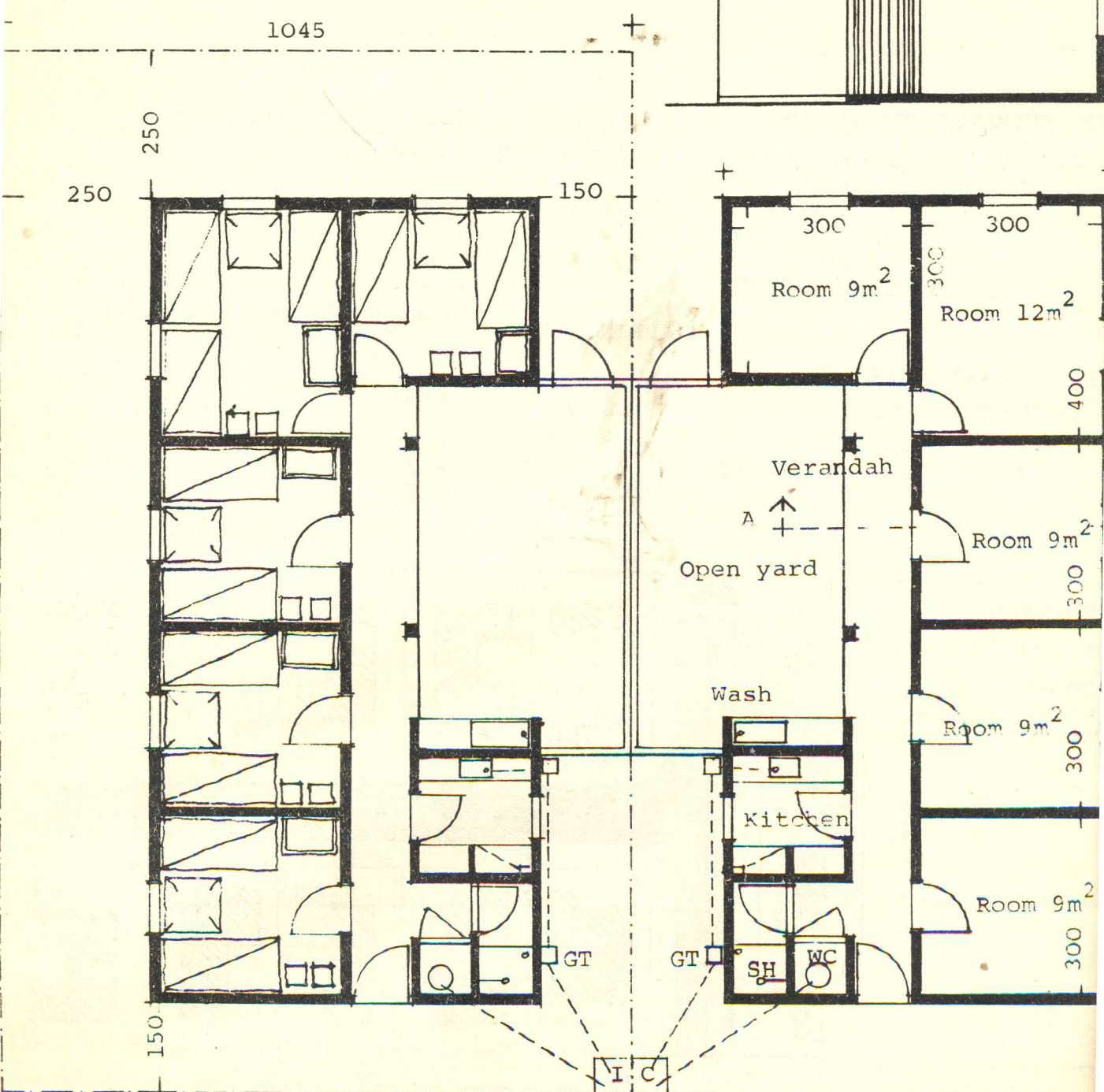
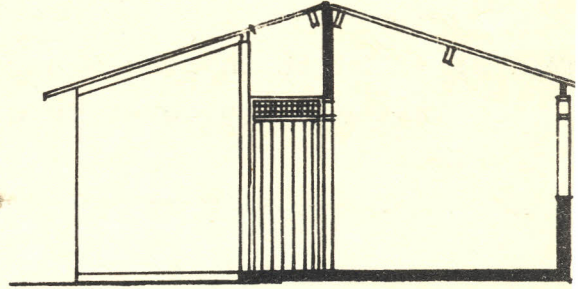
SEWER---

MANHOLE

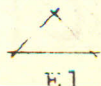




Elevation E1



Plot boundary



To main sewer

HOUSE TYPE: DETACHED		DESIGN BY: H.R.D.U.	YEAR: 1978
NO. OF ROOMS: 5	NO. OF OCCUPANTS: 11	HABITABLE AREA PER PERSON: 4.36m <sup>2</sup>	
PLINTH AREA: 75m <sup>2</sup>	PLOT SIZE: 10.45 by 17.60 = 183.72m <sup>2</sup>	PLOT COVERAGE: 40.7%	

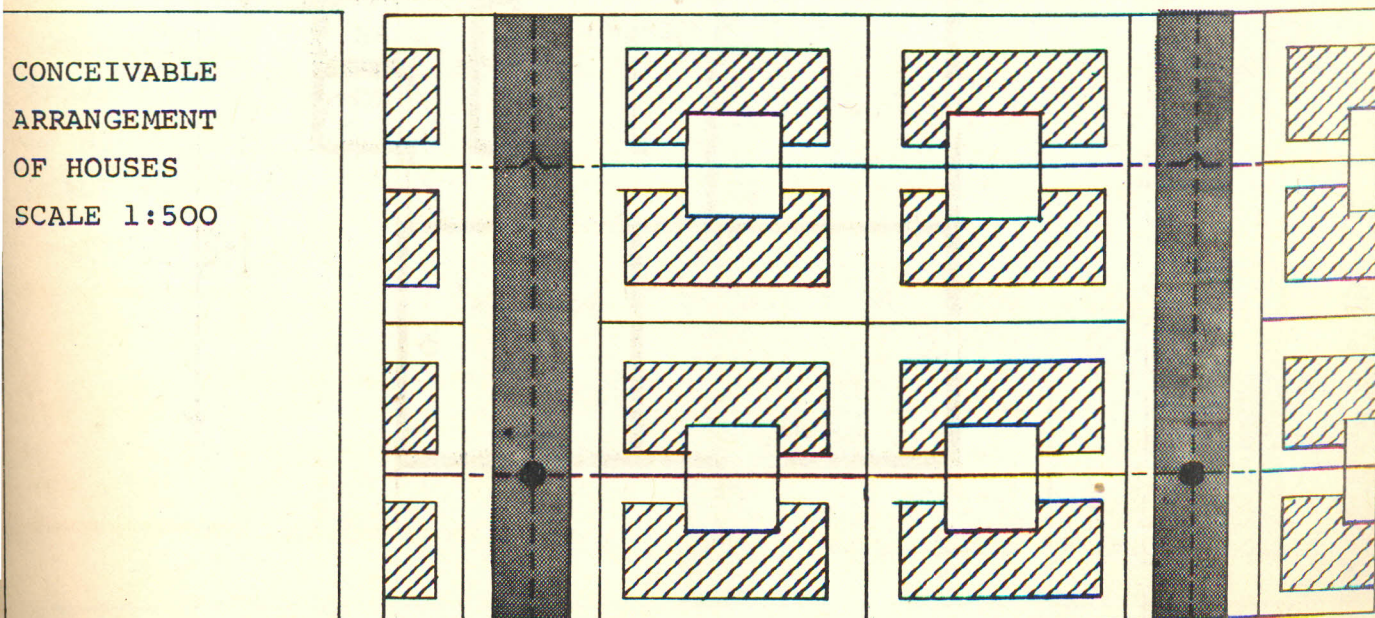
RECOMMENDED TYPE OF SCHEME: Site & Service Rental and Tenant Purchase.

RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D, and E

COMMENTS: The roof should be extended to cover more of the court yard if built in zone B and C.

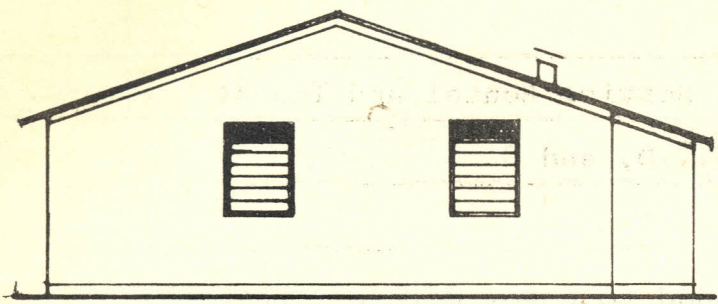
COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs. 24,000/-
	BUILT BY PAID LABOUR: KShs. 27,100/-
	CONTRACTOR BUILT: KShs. 33,300/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	24,000/-	189	211	233
	27,100/-	213	239	265
	33,300/-	262	293	326

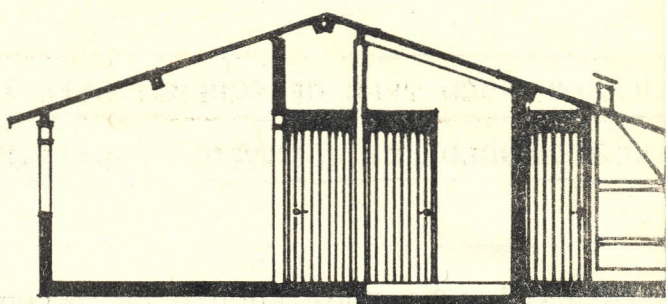


LEGEND:	BUILDING		ROAD		TREES	SEWER---	MANHOLE
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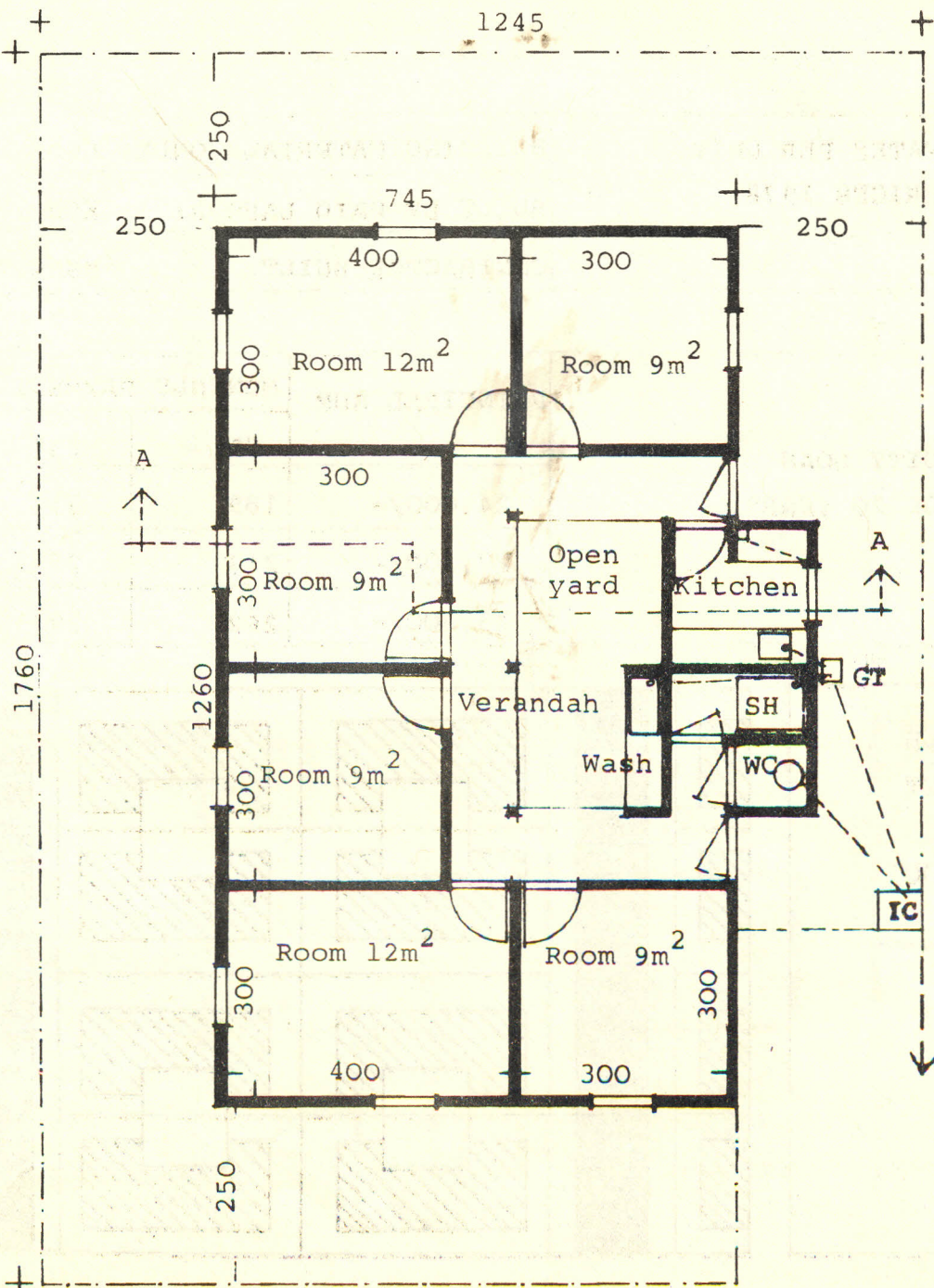




Elevation E1



Section A-A



Plot boundary

E1

HOUSE TYPE: DETACHED		DESIGN BY: H.R.D.U.	YEAR: 1978
NO. OF ROOMS: 6	NO. OF OCCUPANTS: 14	HABITABLE AREA PER PERSON: 4.3m <sup>2</sup>	
PLINTH AREA: 82m <sup>2</sup>	PLOT SIZE: 12.45 by 1760=219m <sup>2</sup>		PLOT COVERAGE: 37.4%

RECOMMENDED TYPE OF SCHEME: Rental and Tenant Purchase schemes.

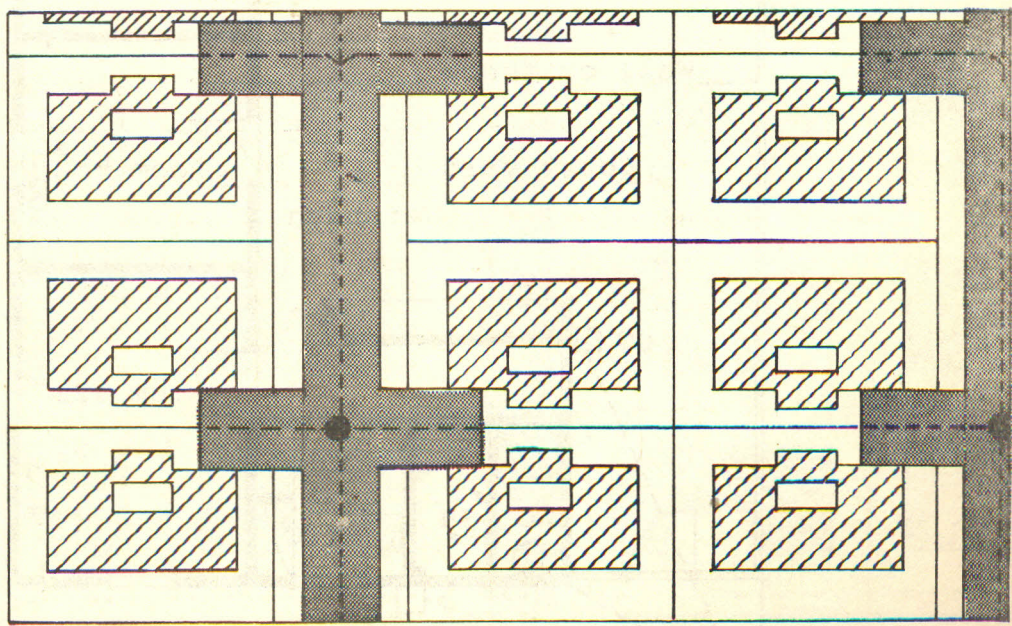
RECOMMENDED FOR CLIMATIC ZONE: B,C,E, and F

COMMENTS: Court yard is small; wet core can be moved to plot boundary creating a SD type with a bigger court yard.  
 Correct plot area is 219m<sup>2</sup> - (5.0x2.5)m<sup>2</sup> = 206.50m<sup>2</sup>

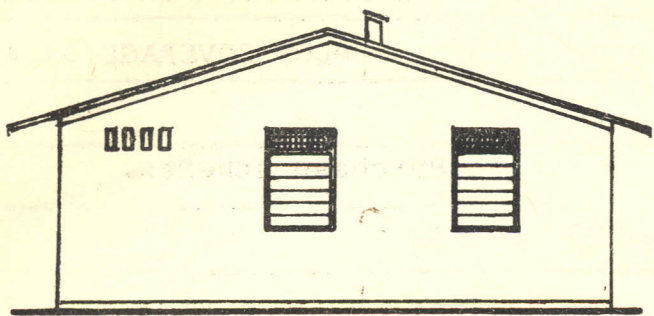
COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs.26,100/-
	BUILT BY PAID LABOUR: KShs.29,400/-
	CONTRACTOR BUILT: KShs.36,000/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	26,100/-	205	230	255
	29,400/-	231	259	288
	36,000/-	283	317	352

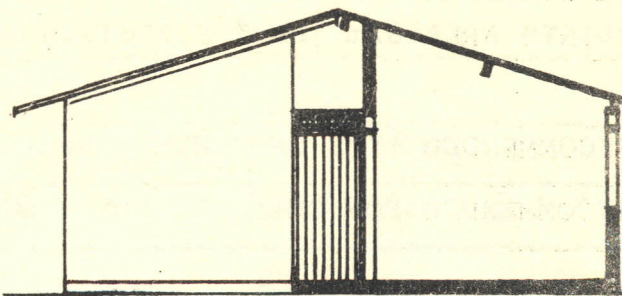
CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



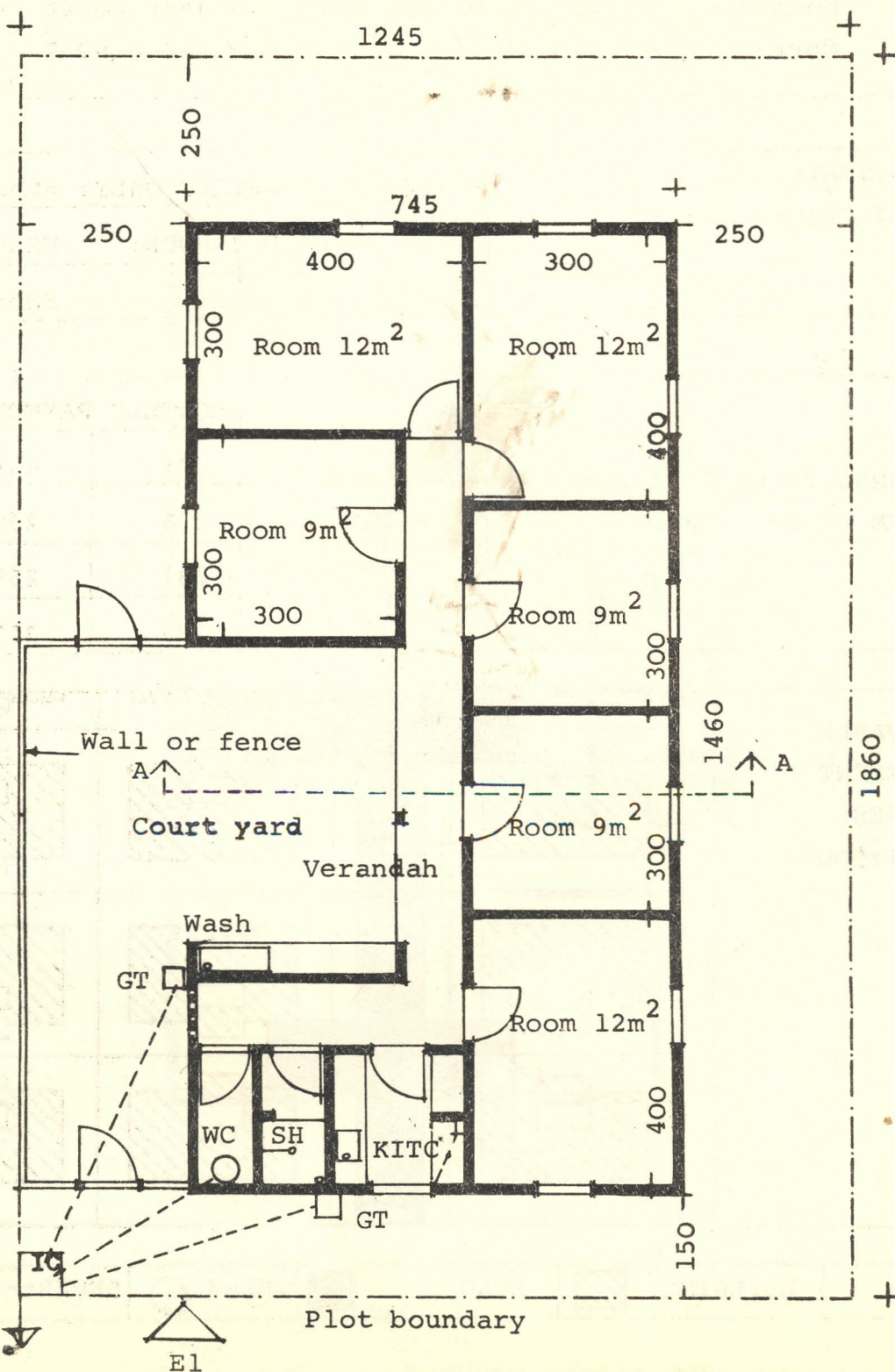
LEGEND:	BUILDING	ROAD	TREES	SEWER---	MANHOLE
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Elevation E1



Section A-A



HOUSE TYPE: DETACHED

DESIGN BY: H.R.D.U.

YEAR: 1978

NO. OF ROOMS: 6

NO. OF OCCUPANTS: 15

HABITABLE AREA PER PERSON: 4.2m<sup>2</sup>

PLINTH AREA: 93m<sup>2</sup>

PLOT SIZE: 12.45 by 18.6 = 231.57m<sup>2</sup>

PLOT COVERAGE: 40.2%

RECOMMENDED TYPE OF SCHEME: Site & Service, Rental and Tenant Purchase

RECOMMENDED FOR CLIMATIC ZONE: C, D, and E

COMMENTS: The roof should be extended to cover more of the court yard if built in zone C and D

COST ESTIMATES PER UNIT:  
(NAIROBI PRICES 1978)

BUILDING MATERIALS ONLY: KShs. 30,600/-

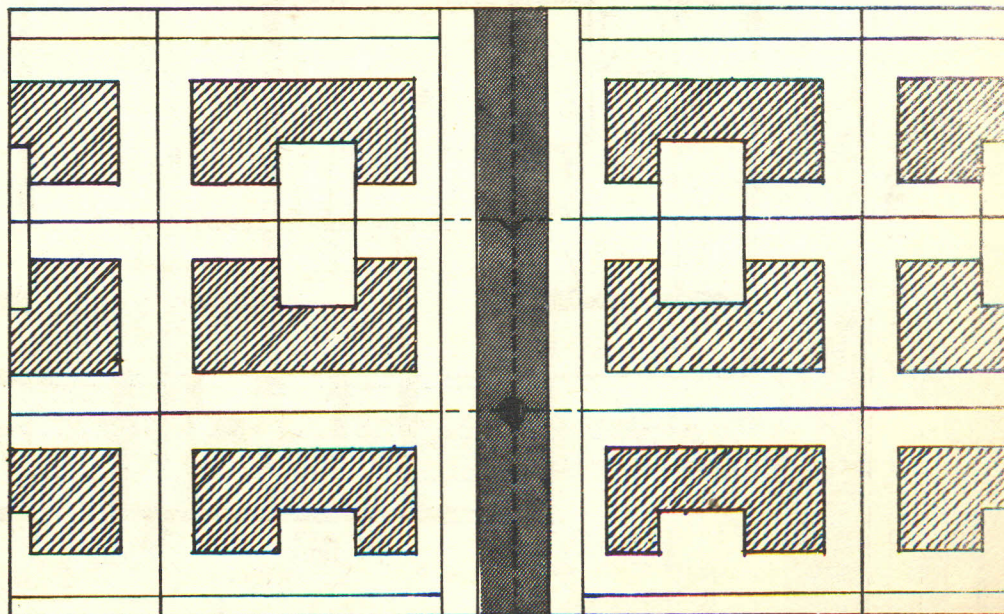
BUILT BY PAID LABOUR: KShs. 34,500/-

CONTRACTOR BUILT: KShs. 42,700/-

LEVEL ANNUITY LOAN  
FOR TERM 20 YEARS.

PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
	7%	8½%	10%
30,600/-	241	269	300
34,500/-	271	304	338
42,700/-	336	376	418

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



LEGEND:

BUILDING



ROAD

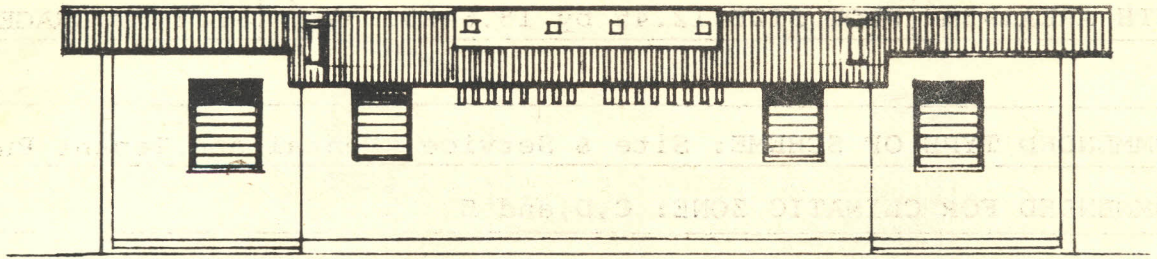


TREES

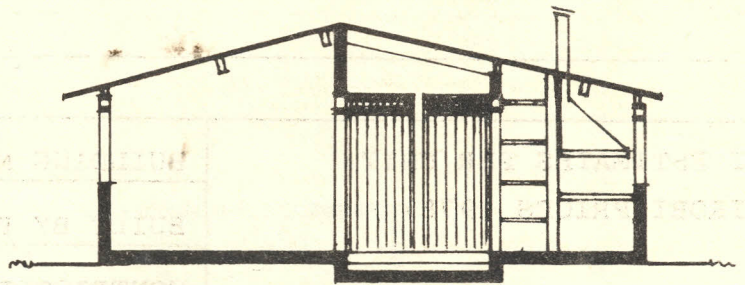


SEWER---

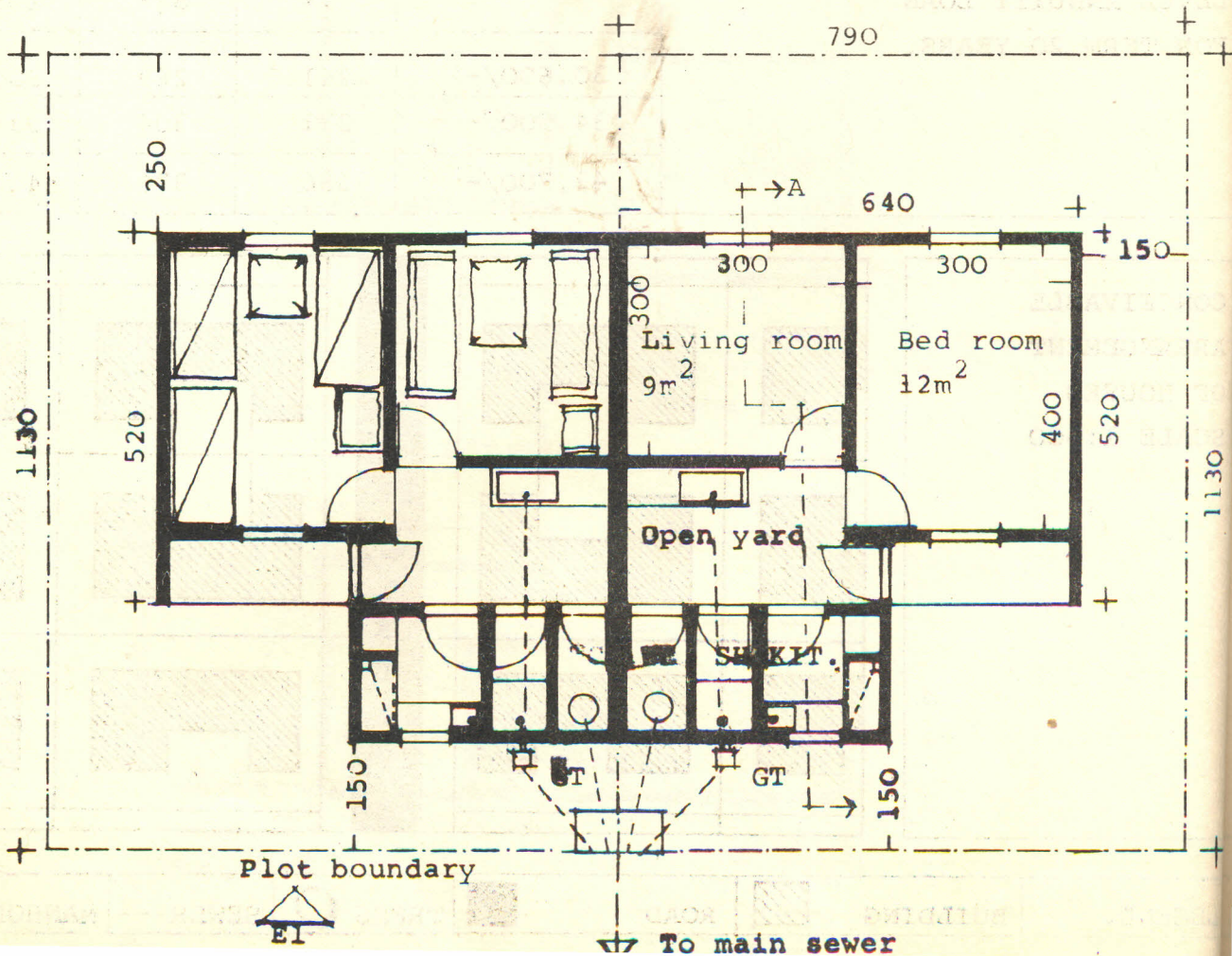
MANHOLE



Elevation E1



Section A-A



HOUSE TYPE: SEMI-DETACHED

DESIGNED BY: H.R.D.U.

YEAR 1979

NO. OF ROOMS: 2

NO. OF OCCUPANTS: 5

HABITABLE AREA PER PERSON: 4.2m<sup>2</sup>PLINTH AREA: 37m<sup>2</sup>PLOT SIZE: 7.90 by 11.30 = 89m<sup>2</sup>

PLOT COVERAGE: 42%

RECOMMENDED TYPE OF SCHEME: Staff houses

RECOMMENDED FOR CLIMATIC ZONE: B,C,E, and F

COMMENTS: Court yard very small.

Covered walk way to w.c. and shower to be considered.

COST ESTIMATES PER UNIT:

(NAIROBI PRICES 1978)

BUILDING MATERIALS ONLY: KShs.13,100/-

BUILT BY PAID LABOUR: KShs.14,900/-

CONTRACTOR BUILT: KShs.18,700/-

LEVEL ANNUITY LOAN  
FOR TERM OF 20 YEARS.

PRINCIPAL SUM

MONTHLY PAYMENTS (KShs.)

7%

8½%

10%

13,100/-

103

115

128

14,900/-

117

131

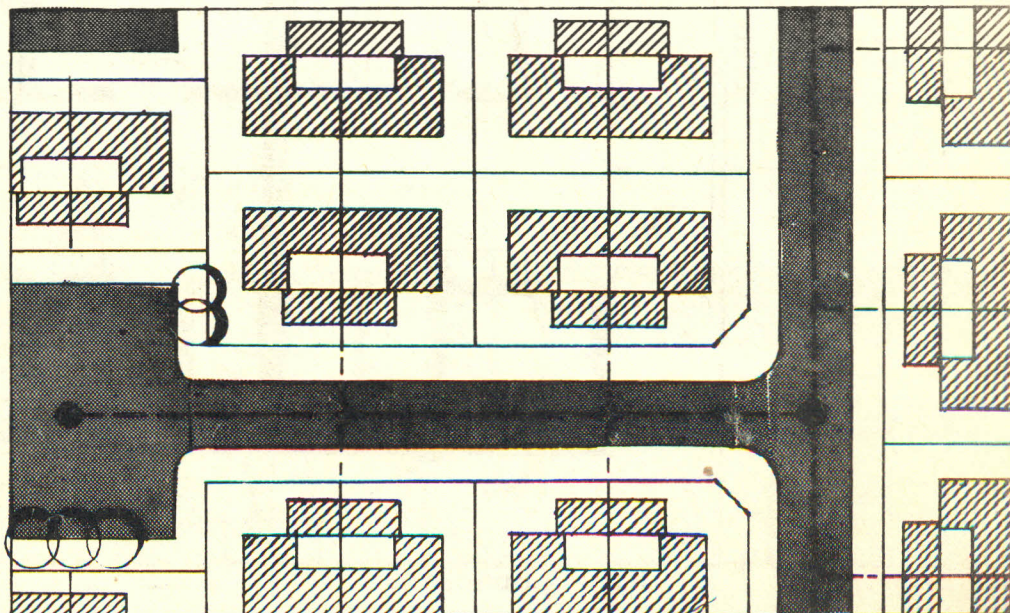
146

18,700/-

147

167

183

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500

LEGEND:

BUILDING



ROAD



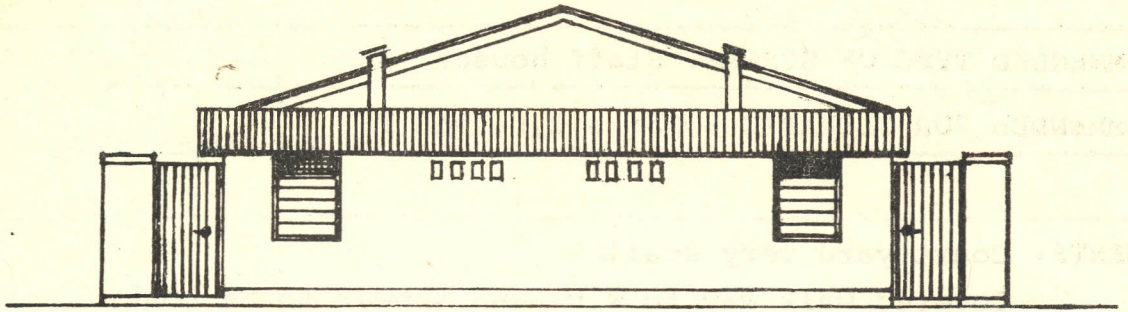
TREES



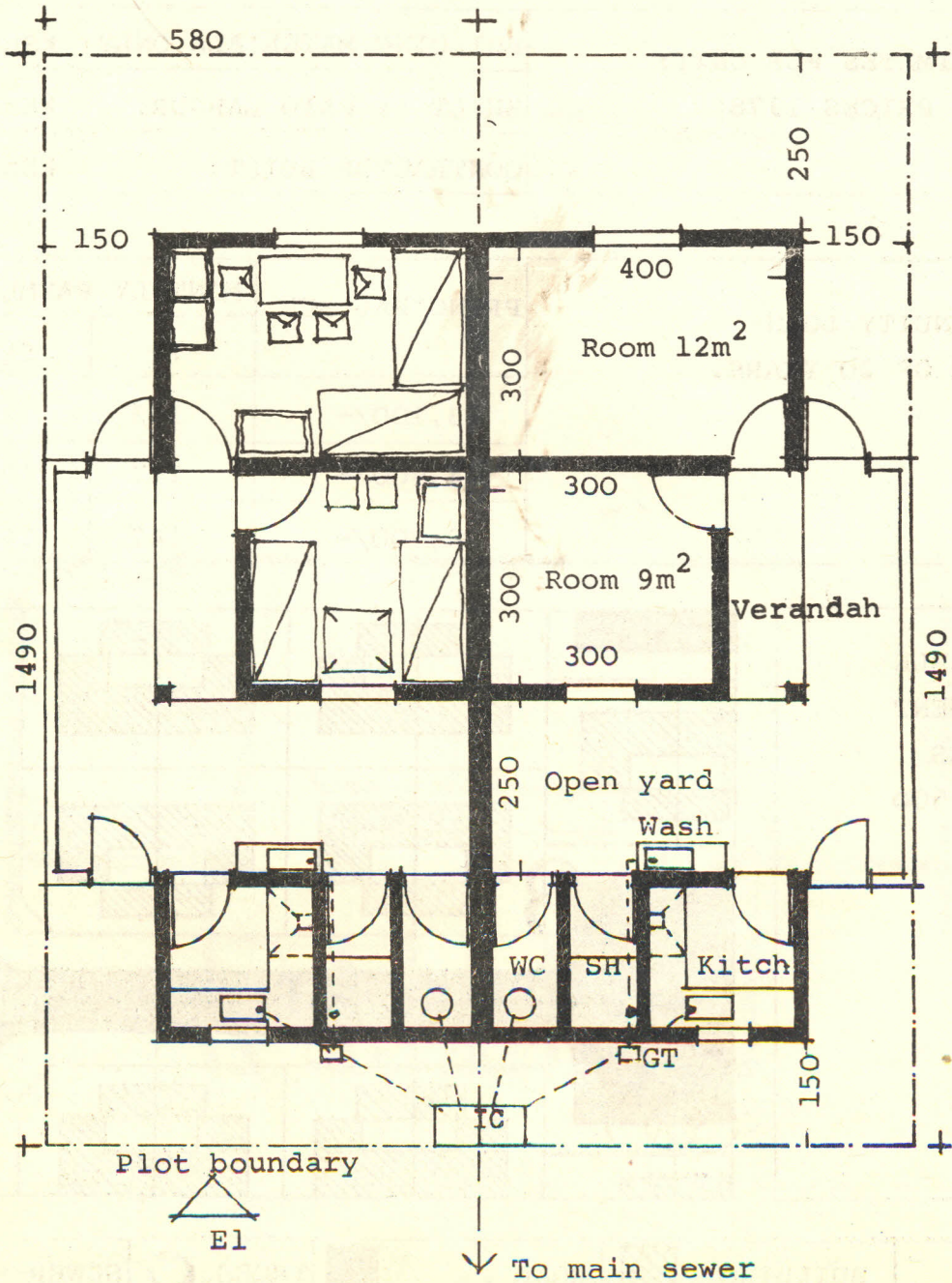
SEWER

MANHOLE





Elevation E1



HOUSE TYPE: SEMI-DETACHED		DESIGNED BY: H.R.D.U.	YEAR: 1979
NO. OF ROOMS: 2	NO. OF OCCUPANTS: 5	HABITABLE AREA PER PERSON: 4.2m <sup>2</sup>	
PLINTH AREA: 36m <sup>2</sup>	PLOT SIZE: 14.9 by 5,80=86m <sup>2</sup>		PLOT COVERAGE: 41%

RECOMMENDED TYPE OF SCHEME: Staff houses

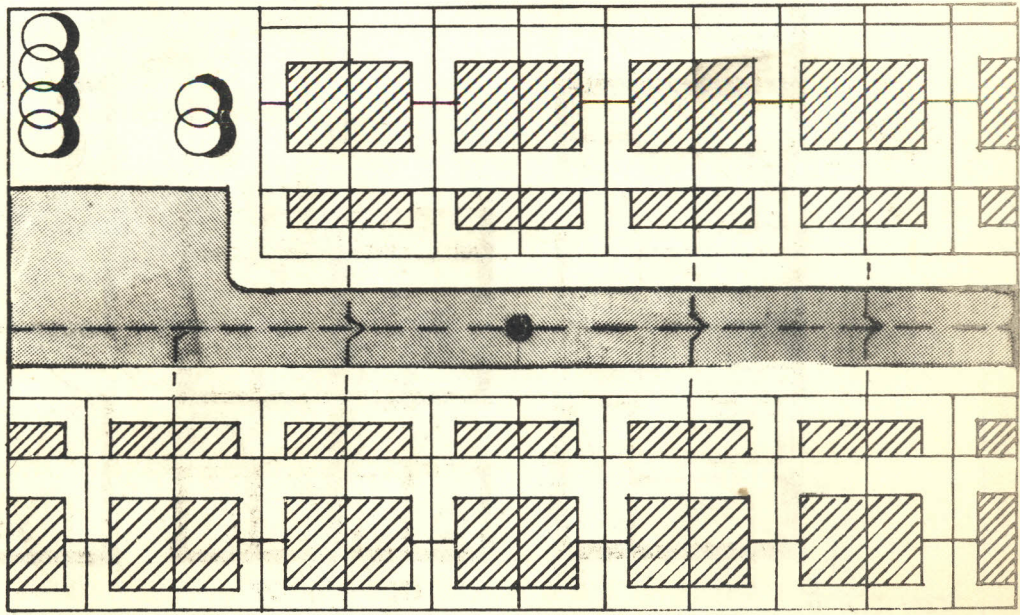
RECOMMENDED FOR CLIMATIC ZONE: A,B,C,D and E

COMMENTS: Covered walk way to wet core might be considered.  
Court yard can be shaded if built in zone B and C

COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs.12,900/-
	BUILT BY PAID LABOUR: KShs.14,600/-
	CONTRACTOR BUILT: KShs.20,300/-

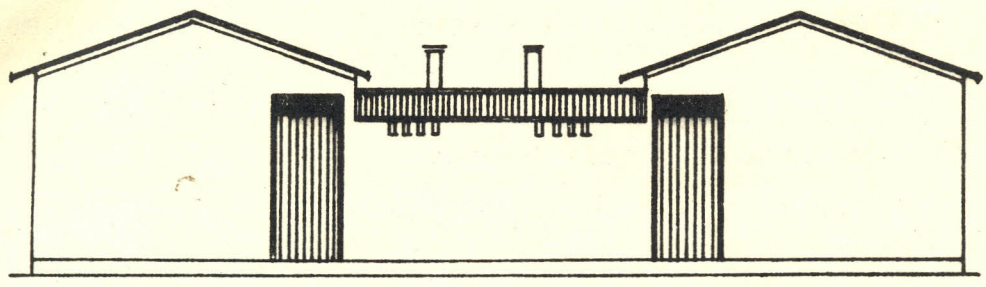
LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	12,900/-	101	114	126
	14,600/-	115	129	143
	20,300/-	160	179	199

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500

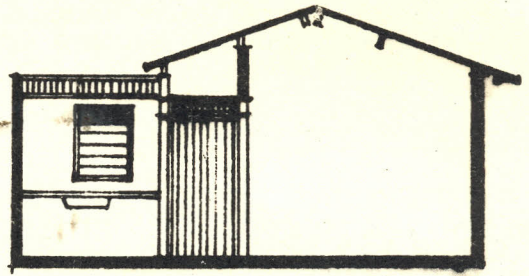


LEGEND:	BUILDING	ROAD	TREES	SEWER---	MANHOLE
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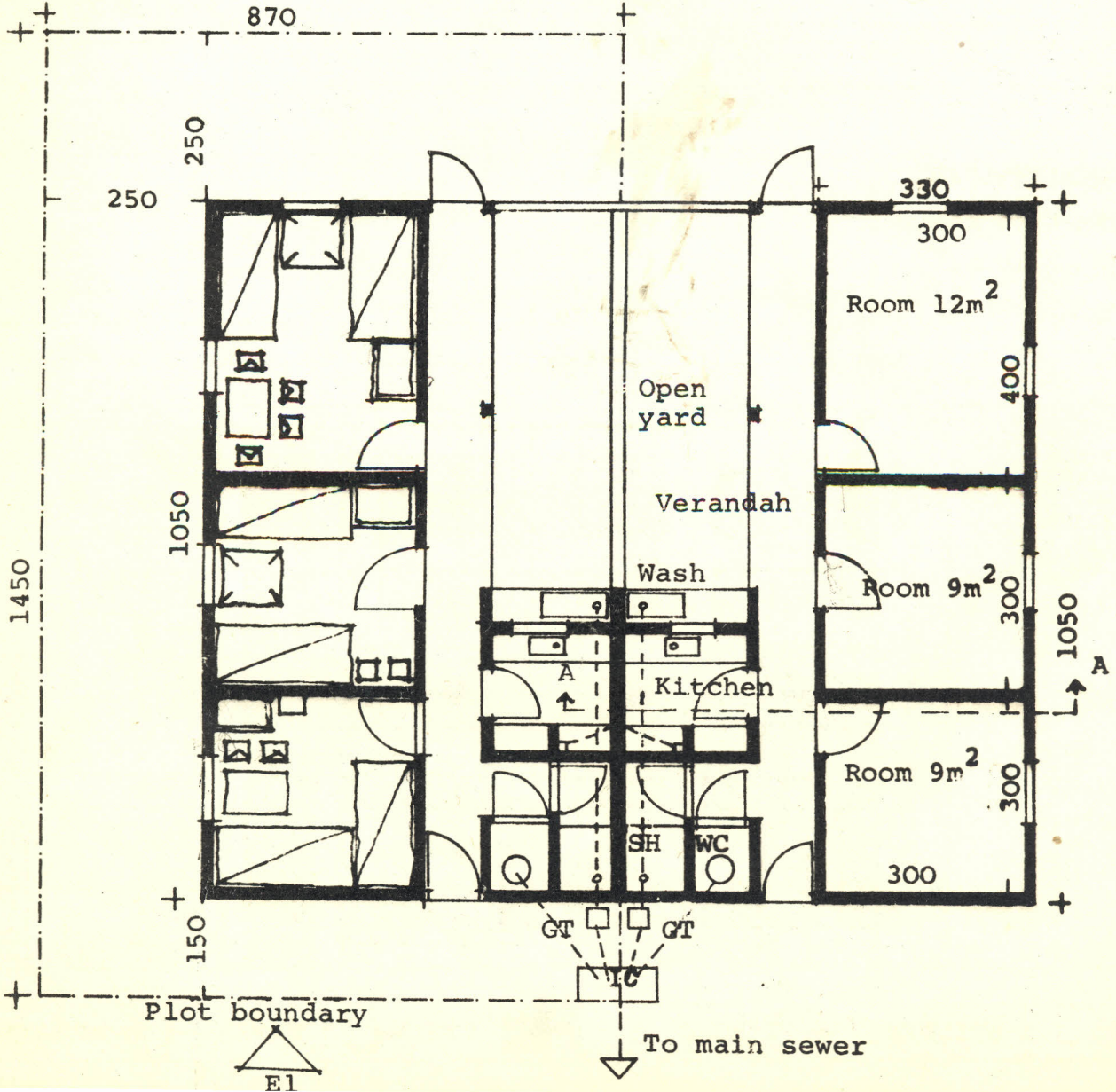




Elevation E1



Section A-A



HOUSE TYPE: SEMI-DETACHED		DESIGNED BY: H.R.D.U.	YEAR: 1979
NO. OF ROOMS: 3	NO. OF OCCUPANTS: 7	HABITABLE AREA PER PERSON: 4.2m <sup>2</sup>	
PLINTH AREA: 52m <sup>2</sup>	PLOT SIZE: 8.70 by 14.50 = 126m <sup>2</sup>		PLOT COVERAGE: 41%

RECOMMENDED TYPE OF SCHEME: Staff houses and Rental schemes

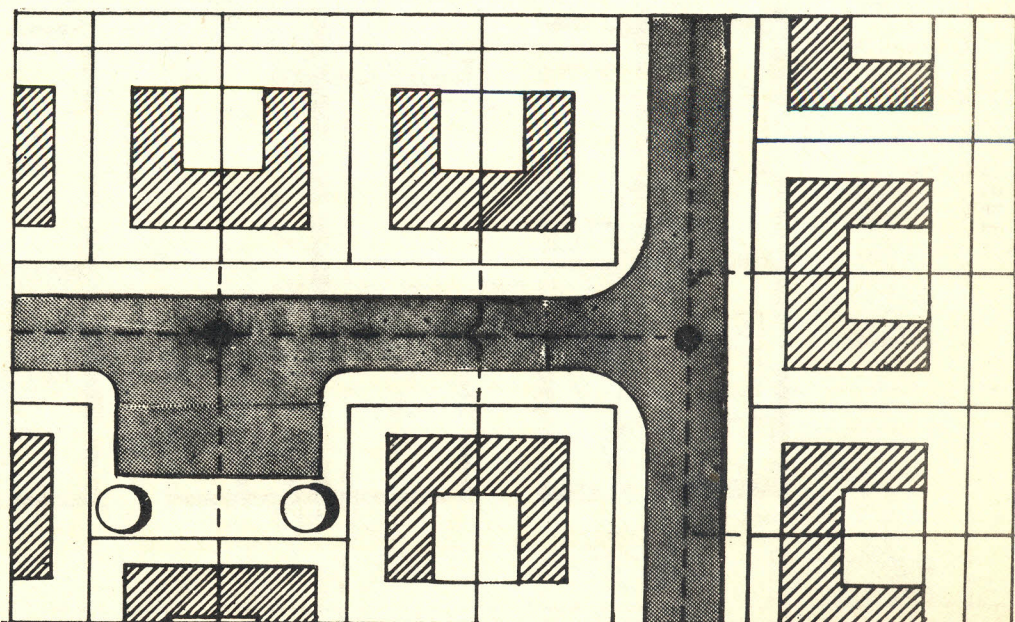
RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D, and E

COMMENTS: Part of court yard should be shaded if built in zone B and C.

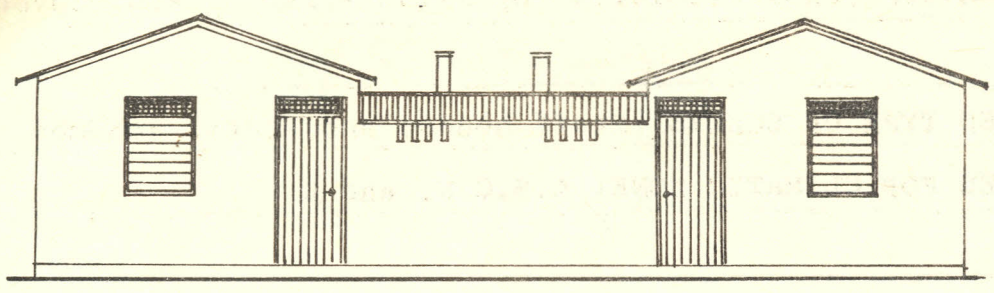
COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs.17,400/-
	BUILT BY PAID LABOUR: KShs.19,600/-
	CONTRACTOR BUILT: KShs.24,400/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	17,400/-	137	153	170
	19,600/-	154	173	192
	24,400/-	192	215	239

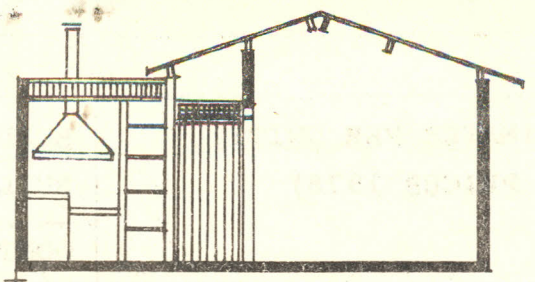
CONCEIVABLE ARRANGEMENT OF HOUSES  
SCALE 1:500



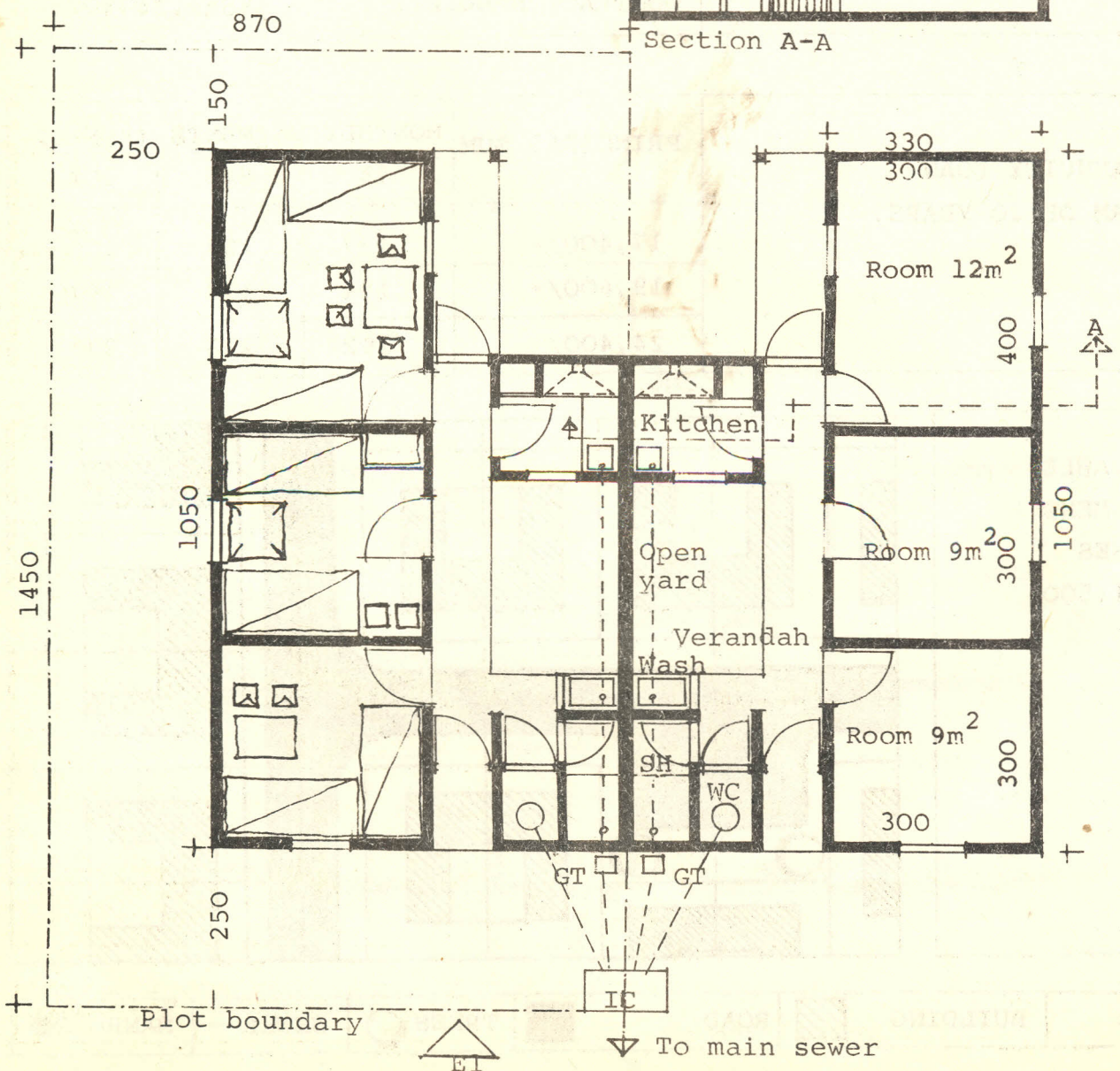
LEGEND:	BUILDING		ROAD		TREES		SEWER		MANHOLE	
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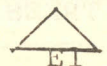
Elevation



Section A-A



Plot boundary



To main sewer

HOUSE TYPE: SEMI-DETACHED		DESIGNED BY: H.R.D.U.	YEAR: 1978
NO. OF ROOMS: 3	NO. OF OCCUPANTS: 7	HABITABLE AREA PER PERSON: 4.2m <sup>2</sup>	
PLINTH AREA: 53m <sup>2</sup>	PLOT SIZE: 8.700 by 14.500=126m <sup>2</sup>		PLOT COVERAGE: 42%

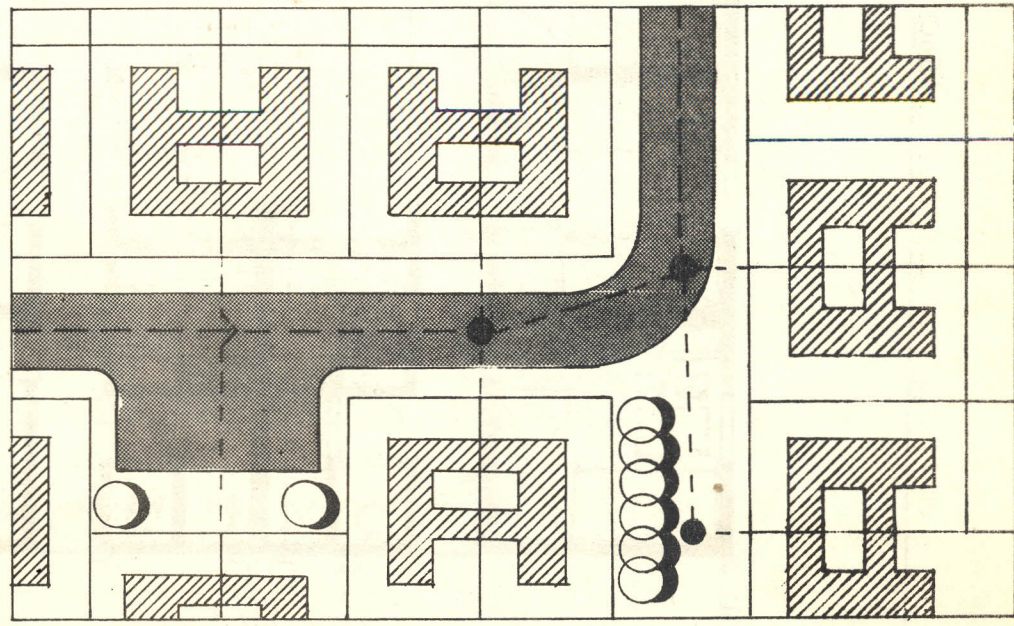
RECOMMENDED TYPE OF SCHEME: Staff houses and Rental schemes  
 RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D, E and F






COMMENTS:

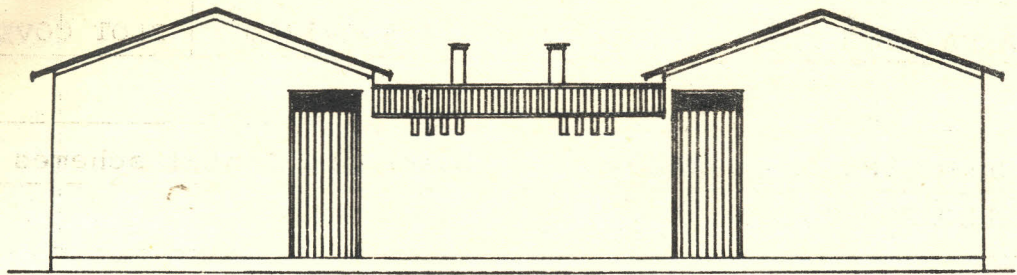
COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs. 18,000/-
	BUILT BY PAID LABOUR: KShs. 20,400/-
	CONTRACTOR BUILT: KShs. 25,400/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	18,000/-	142	159	176
	20,400/-	160	180	200
	25,400/-	200	224	249

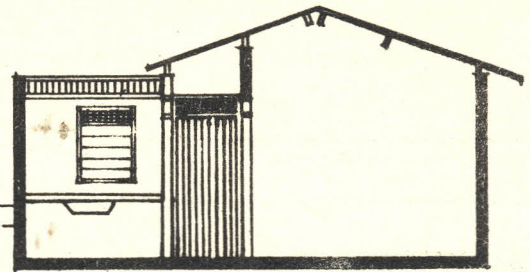
CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



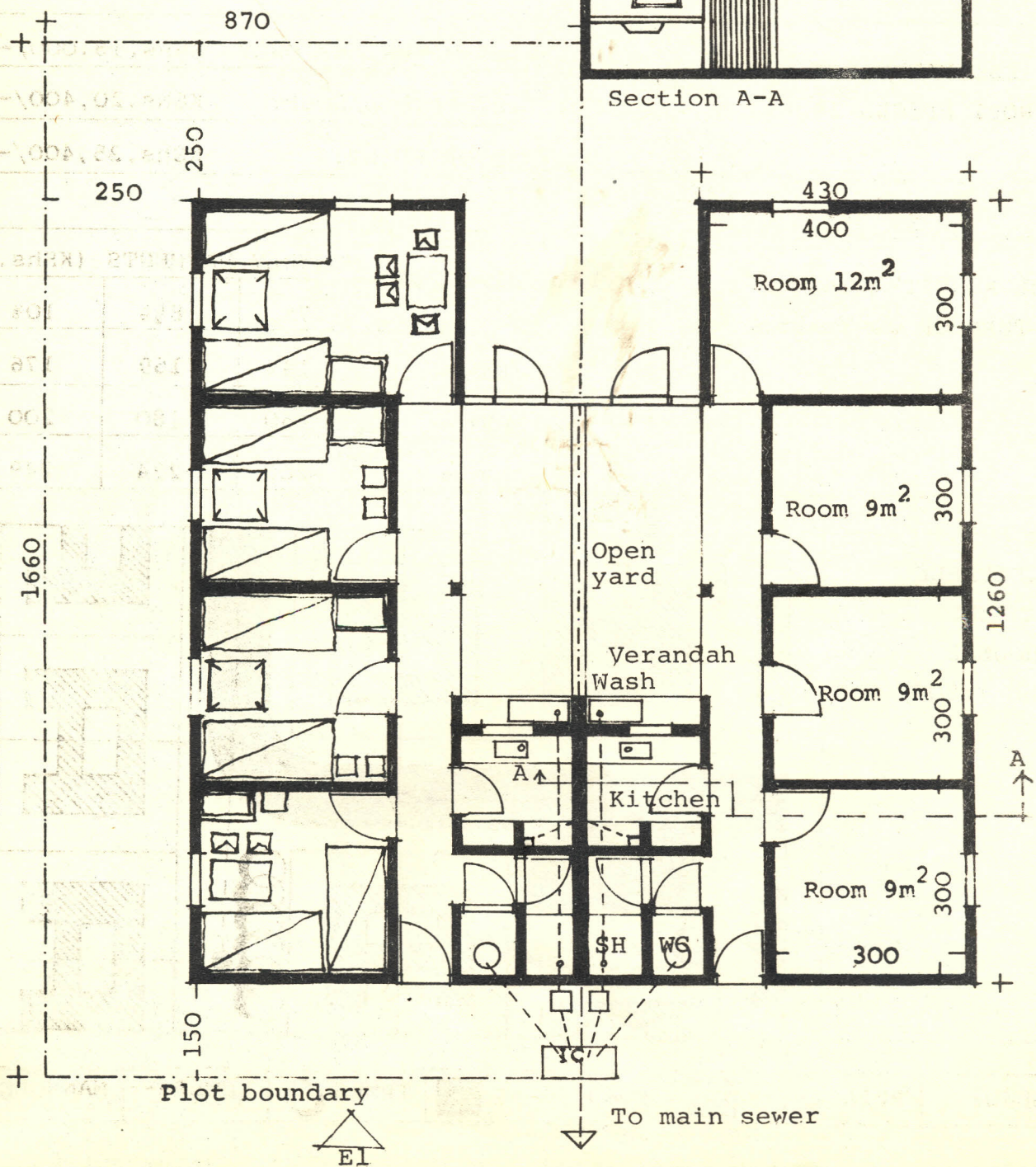
LEGEND:	BUILDING 	ROAD 	TREES 	SEWER--- 	MANHOLE 
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Elevation E1



Section A-A



HOUSE TYPE: SEMI-DETACHED

DESIGNED BY: H.R.D.U.

YEAR: 1979

NO. OF ROOMS: 4

NO. OF OCCUPANTS: 9

HABITABLE AREA PER PERSON: 4.3m<sup>2</sup>PLINTH AREA: 62m<sup>2</sup>PLOT SIZE: 8.700 by 16.600=144m<sup>2</sup>

PLOT COVERAGE: 43%

RECOMMENDED TYPE OF SCHEME: Rental, Tenant Purchase and Site &amp; Services

RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D, and F

COMMENTS: Court yard should be shaded if built in zone B and C.  
If built in zone F a wall between verandah (walk way)  
and court yard should be considered.

COST ESTIMATES PER UNIT:  
(NAIROBI PRICES 1978)

BUILDING MATERIALS ONLY: KShs. 20,200/-

BUILT BY PAID LABOUR: KShs. 22,800/-

CONTRACTOR BUILT: KShs. 28,100/-

LEVEL ANNUITY LOAN  
FOR TERM OF 20 YEARS.

PRINCIPAL SUM

MONTHLY PAYMENTS (KShs.)

7%

8½%

10%

20,200/-

159

178

198

22,800/-

179

201

223

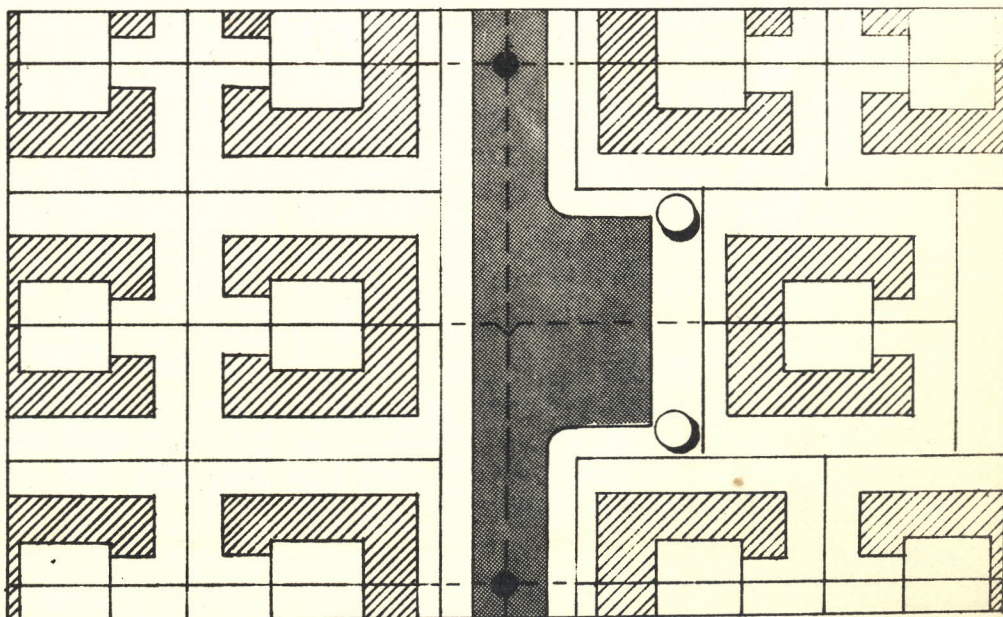
28,100/-

221

247

270

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



LEGEND:

BUILDING



ROAD



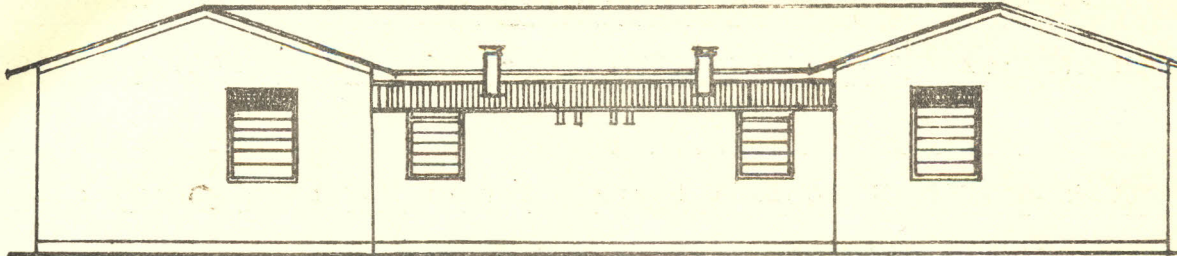
TREES



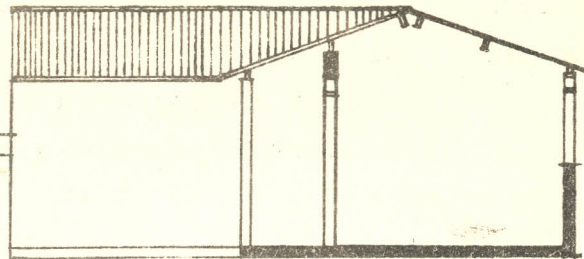
SEWER---

MANHOLE

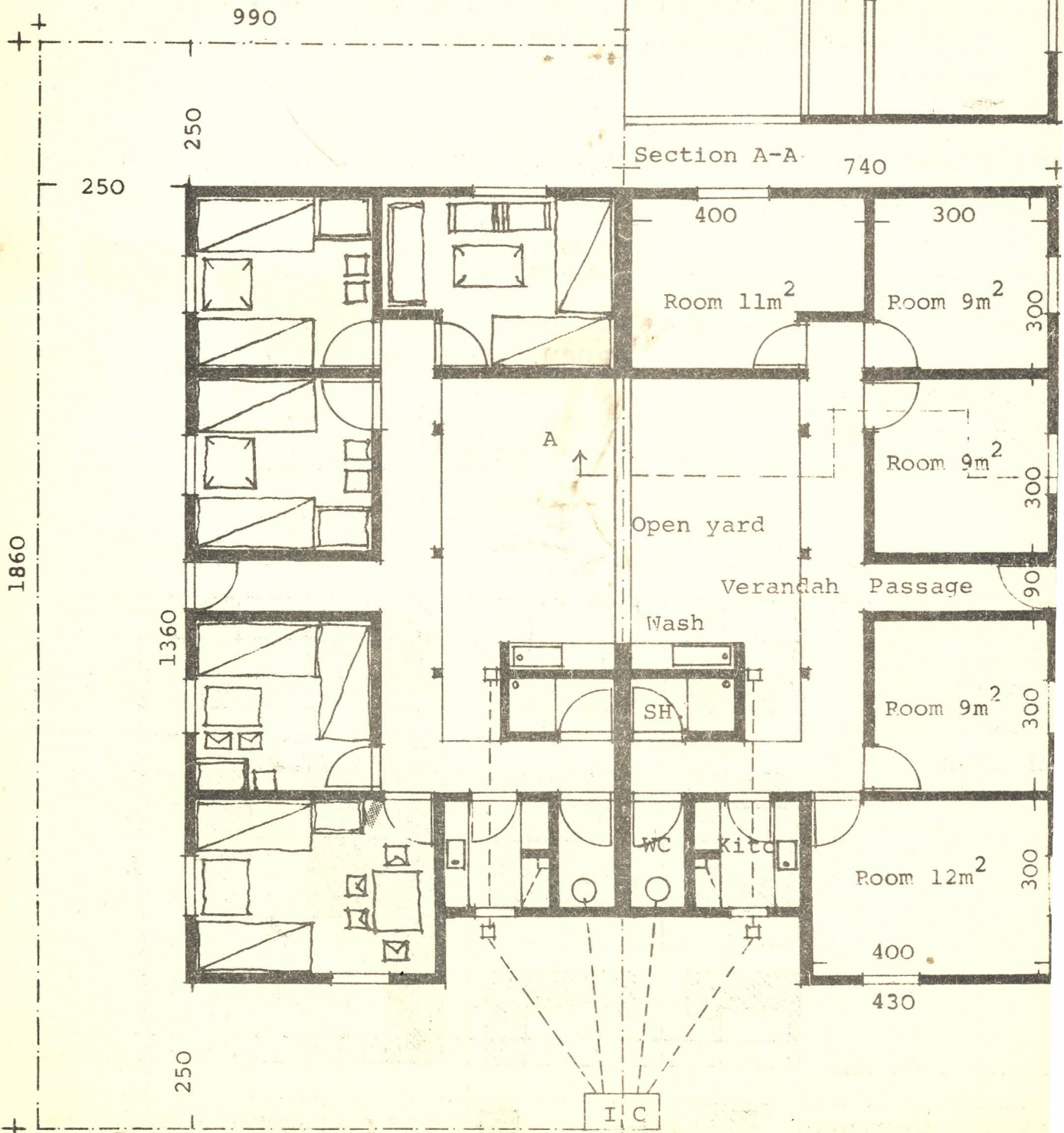




Elevation E1



Section A-A 740



Plot boundary

E1

To main sewer

HOUSE TYPE: SEMI-DETACHED

DESIGNED BY: H.R.D.U.

YEAR: 1979

NO. OF ROOMS: 5

NO. OF OCCUPANTS: 12

HABITABLE AREA PER PERSON: 4.2m<sup>2</sup>PLINTH AREA: 83m<sup>2</sup>PLOT SIZE: 9.90 by 18.60 = 184m<sup>2</sup>

PLOT COVERAGE: 45%

RECOMMENDED TYPE OF SCHEME: Rental and Site &amp; Services schemes.

RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D and E

COMMENTS: Court yard should be shaded if built in zone B and C.

COST ESTIMATES PER UNIT:

(NAIROBI PRICES 1978)

BUILDING MATERIALS ONLY: KShs. 26,800/-

BUILT BY PAID LABOUR: KShs. 30,300/-

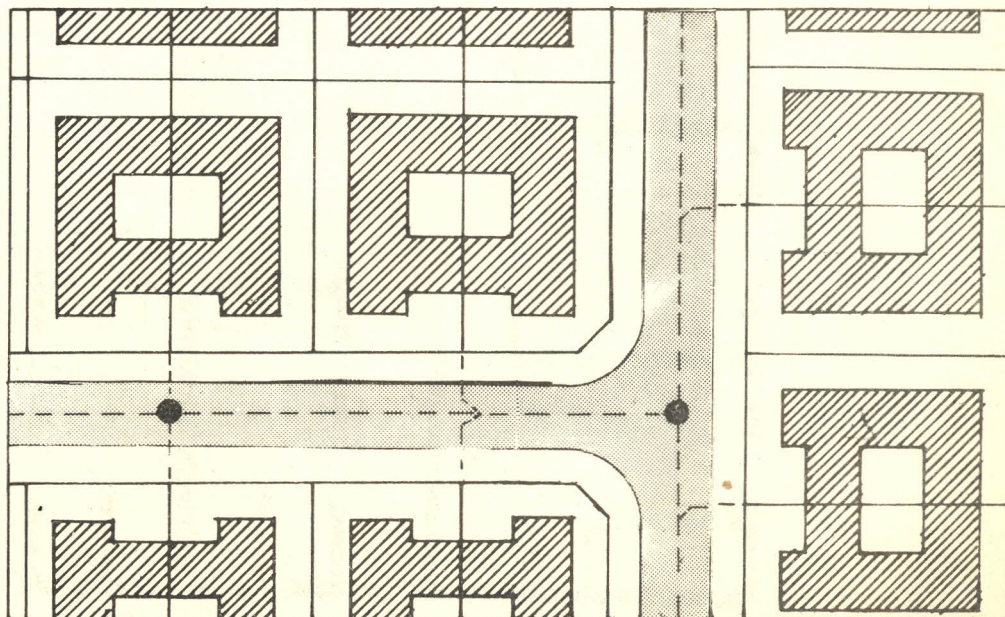
CONTRACTOR BUILT: KShs. 37,300/-

LEVEL ANNUITY LOAN

FOR TERM OF 20 YEARS.

PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
	7%	8½%	10%
26,800/-	211	236	262
30,300/-	238	267	297
37,300/-	293	328	365

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



LEGEND:

BUILDING



ROAD



TREES

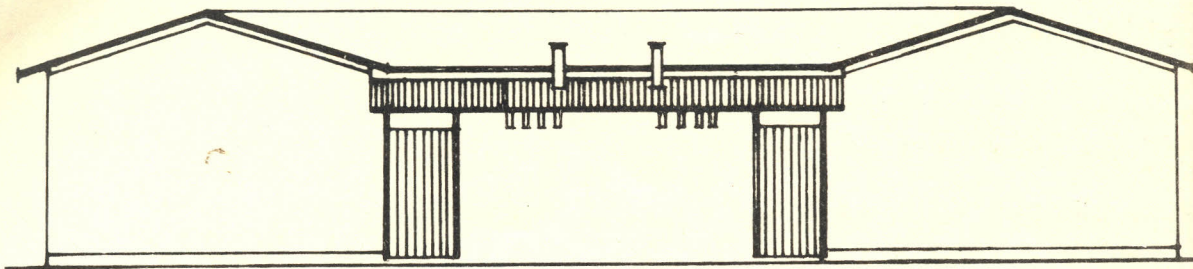


SEWER---

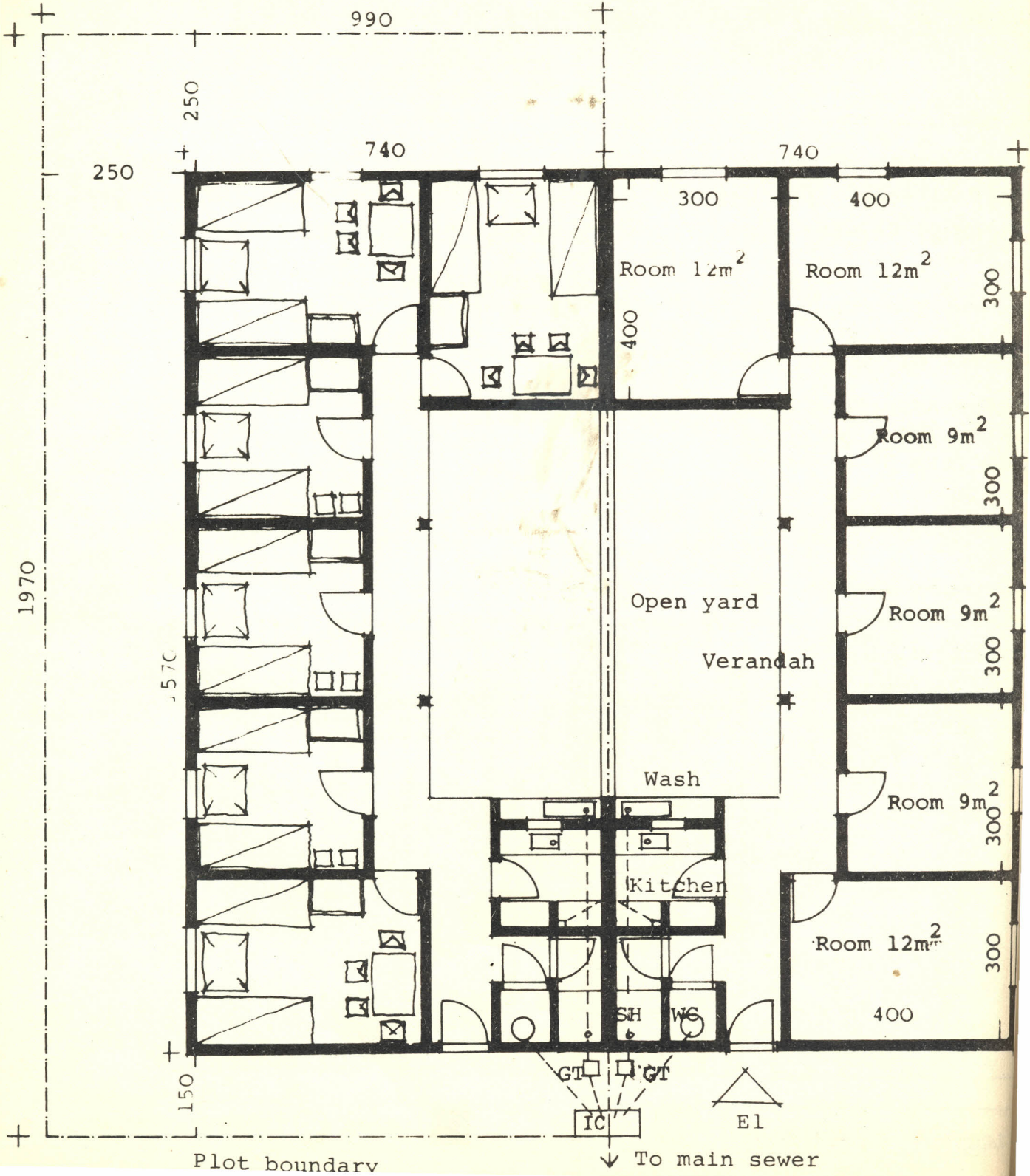
MANHOLE







Elevation E1



HOUSE TYPE: SEMI-DETACHED

DESIGNED BY: H.R.D.U.

YEAR: 1979

NO. OF ROOMS: 6

NO. OF OCCUPANTS: 15

HABITABLE AREA PER PERSON: 4.2m<sup>2</sup>PLINTH AREA: 95m<sup>2</sup>PLOT SIZE: 9.900 by 19.700 = 195m<sup>2</sup>

PLOT COVERAGE: 49%

RECOMMENDED TYPE OF SCHEME: Site &amp; Services

RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D, and E

COMMENTS: Part of court yard should be shaded if built  
in zone B and C.

COST ESTIMATES PER UNIT:  
(NAIROBI PRICES 1978)

BUILDING MATERIALS ONLY: KShs. 29,600/-

BUILT BY PAID LABOUR: KShs. 33,300/-

CONTRACTOR BUILT: KShs. 40,500/-

LEVEL ANNUITY LOAN  
FOR TERM OF 20 YEARS.

PRINCIPAL SUM

MONTHLY PAYMENTS (KShs.)

7%

8½%

10%

29,600/-

233

261

290

33,300/-

262

293

326

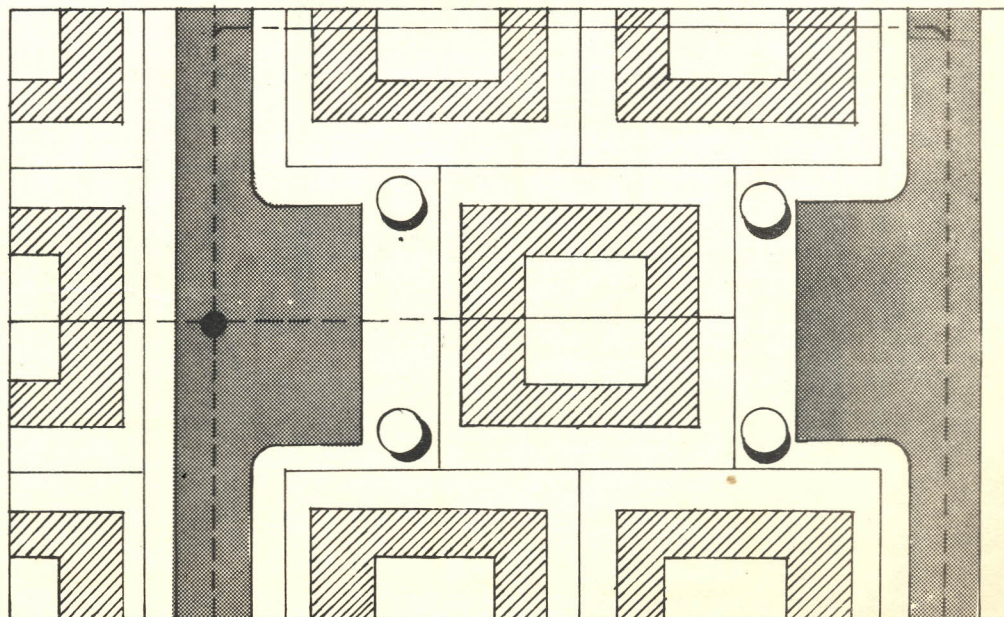
40,500/-

319

357

396

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



LEGEND:

BUILDING



ROAD

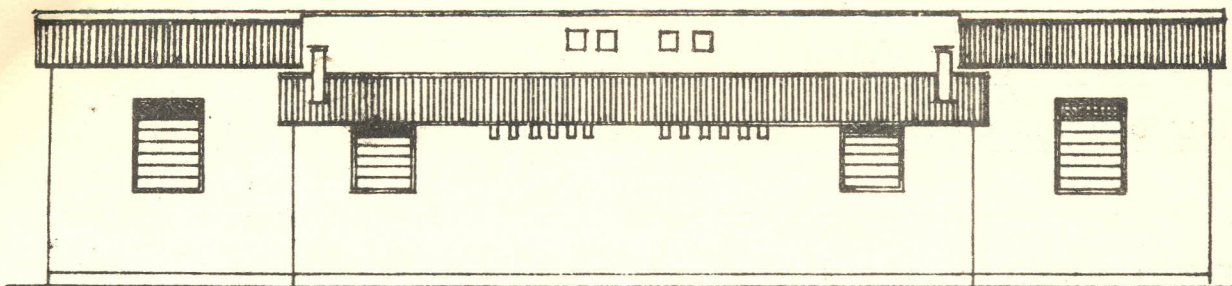


TREES

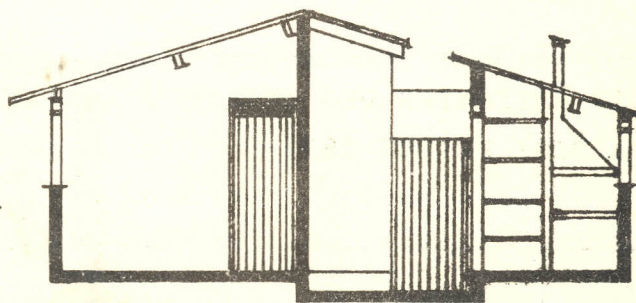


SEWER---

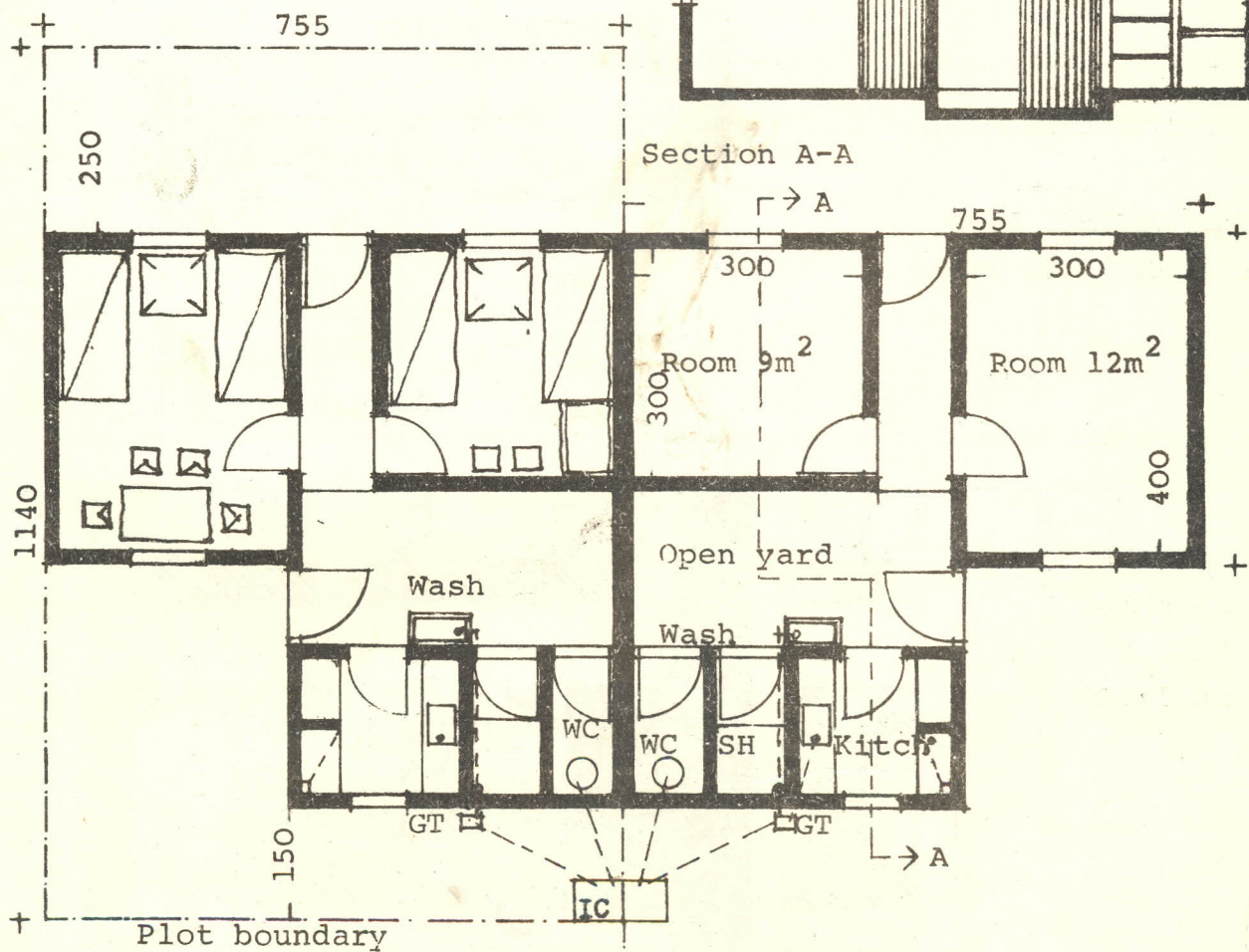
MANHOLE ●



Elevation E1



Section A-A



To main sewer



HOUSE TYPE: TERRACED		DESIGNED BY: H.R.D.U.	YEAR: 1979
NO. OF ROOMS: 2	NO. OF OCCUPANTS: 5	HABITABLE AREA PER PERSON: 4.2m <sup>2</sup>	
PLINTH AREA: 37m <sup>2</sup>	PLOT SIZE: 7.55 by 11.40 = 86m <sup>2</sup>		PLOT COVERAGE: 43%

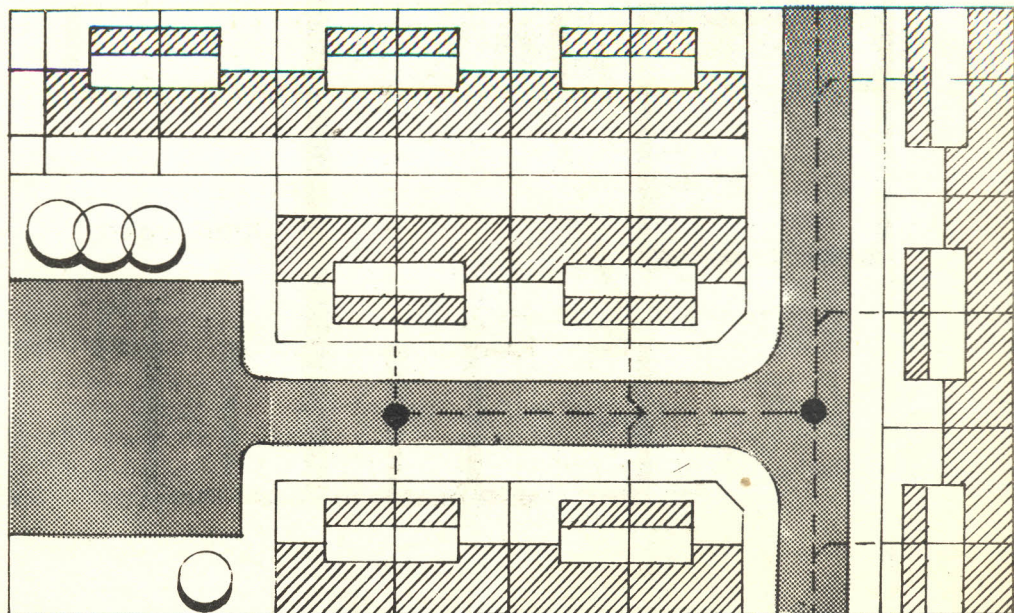
RECOMMENDED TYPE OF SCHEME: Staff houses
RECOMMENDED FOR CLIMATIC ZONE: B, C, E and F

COMMENTS: If built in zone B and C the court yard should be shaded.  
If built in zone F, the court yard should be shaded by roof.

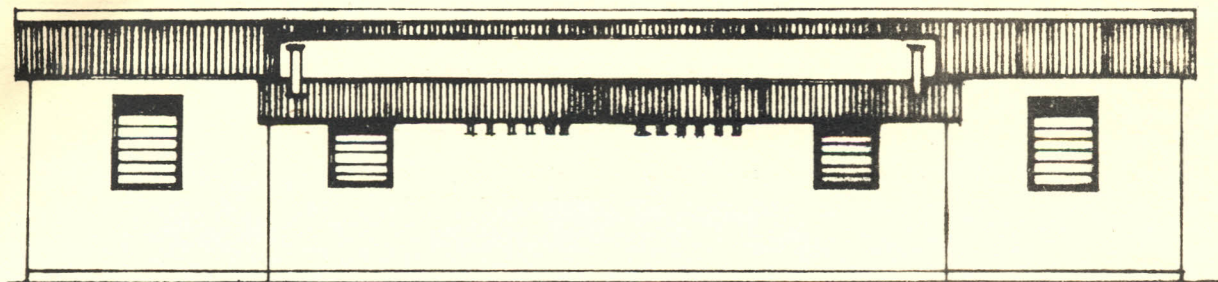
COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs.12,800/-
	BUILT BY PAID LABOUR: KShs.14,500/-
	CONTRACTOR BUILT: KShs.18,200/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	12,800/-	101	113	125
	14,500/-	114	128	142
	18,200/-	143	160	178

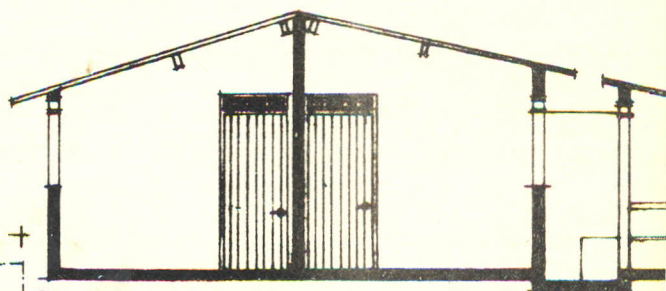
CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



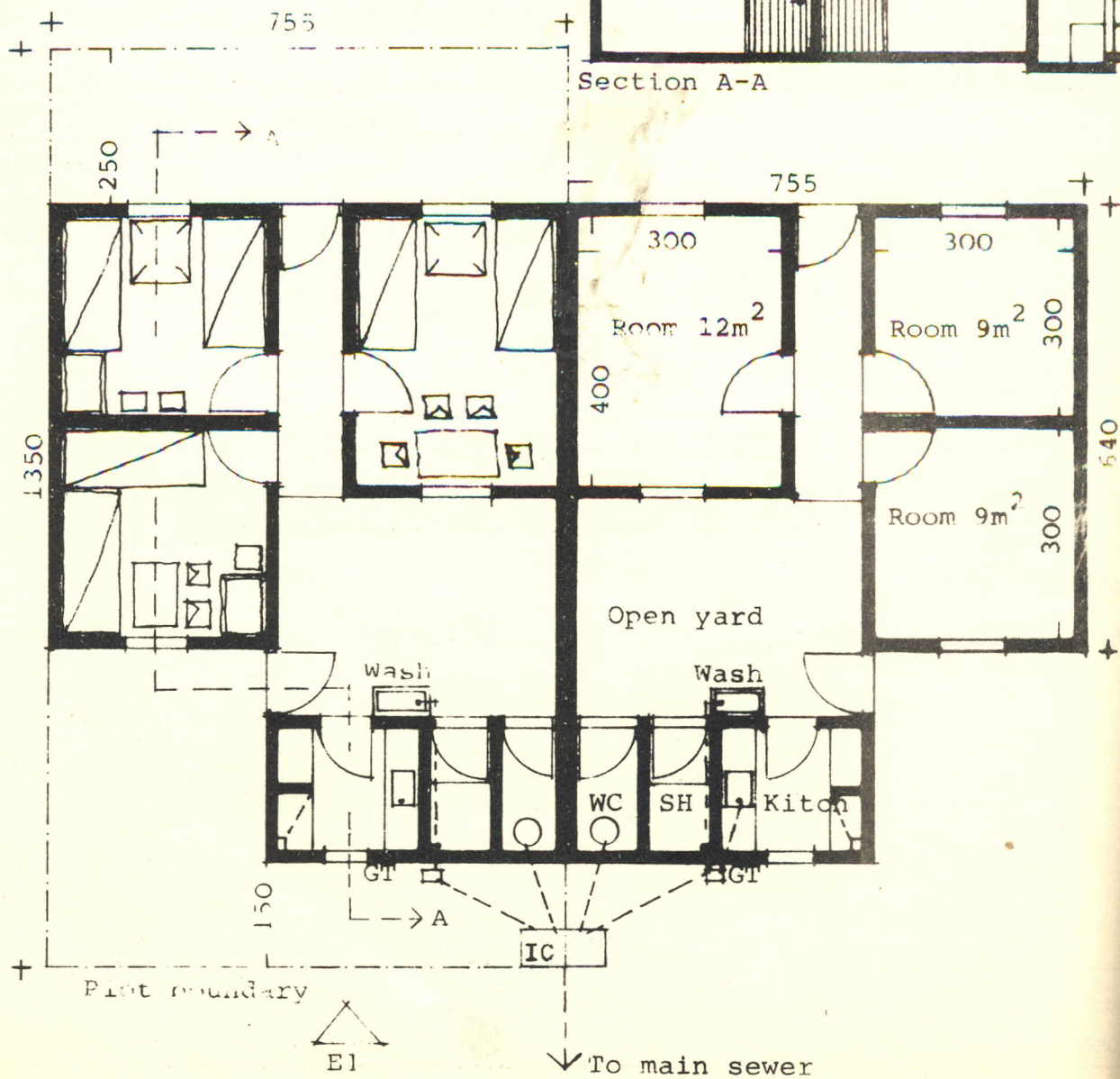
LEGEND:	BUILDING	ROAD	TREES	SEWER---	MANHOLE●
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Elevation E1



Section A-A



Plot boundary



To main sewer

HOUSE TYPE: TERRACED		DESIGNED BY: H.R.D.U.		YEAR: 1979
NO. OF ROOMS: 3	NO. OF OCCUPANTS: 7	HABITABLE AREA PER PERSON: 4.3m <sup>2</sup>		
PLINTH AREA: 49m <sup>2</sup>	PLOT SIZE: 7.55 by 13.50 = 102m <sup>2</sup>		PLOT COVERAGE: 43%	

RECOMMENDED TYPE OF SCHEME: Staff houses and Rental schemes.

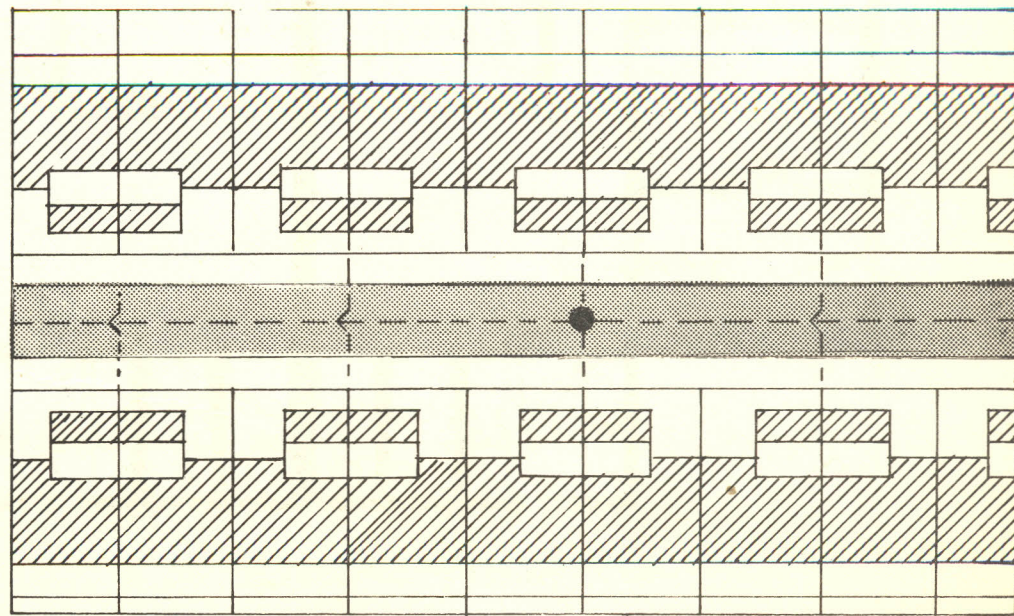
RECOMMENDED FOR CLIMATIC ZONE: B,C,E and F

COMMENTS: Covered Walk way to kitchen, w.c. and shower can be considered.  
If built in zone B and C court yard should shaded.

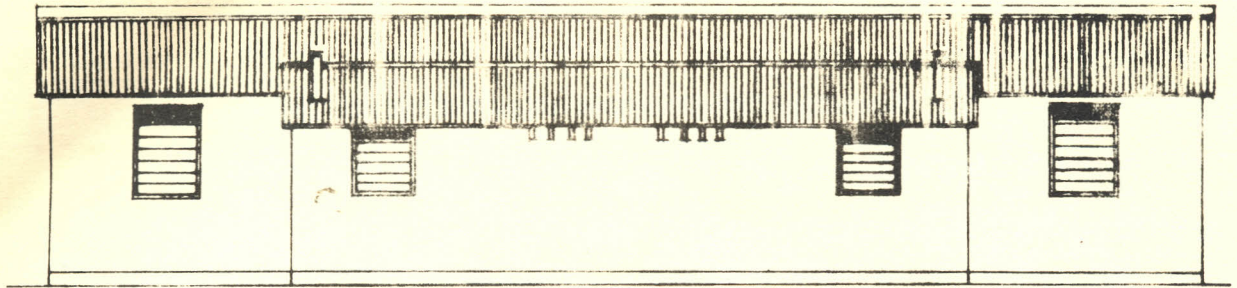
COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs.16,200/-
	BUILT BY PAID LABOUR: KShs.18,300/-
	CONTRACTOR BUILT: KShs.22,700/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	16,200/-	127	143	159
	18,300/-	144	161	179
	22,700/-	179	200	222

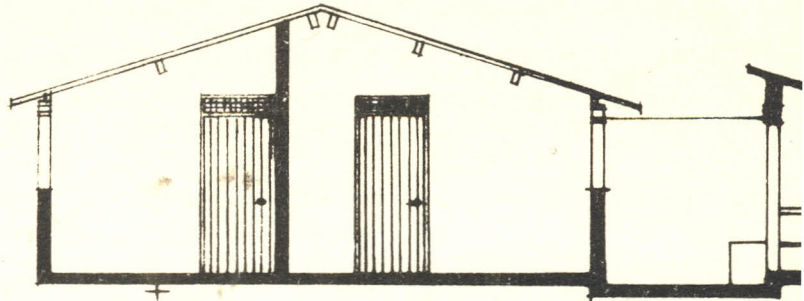
CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



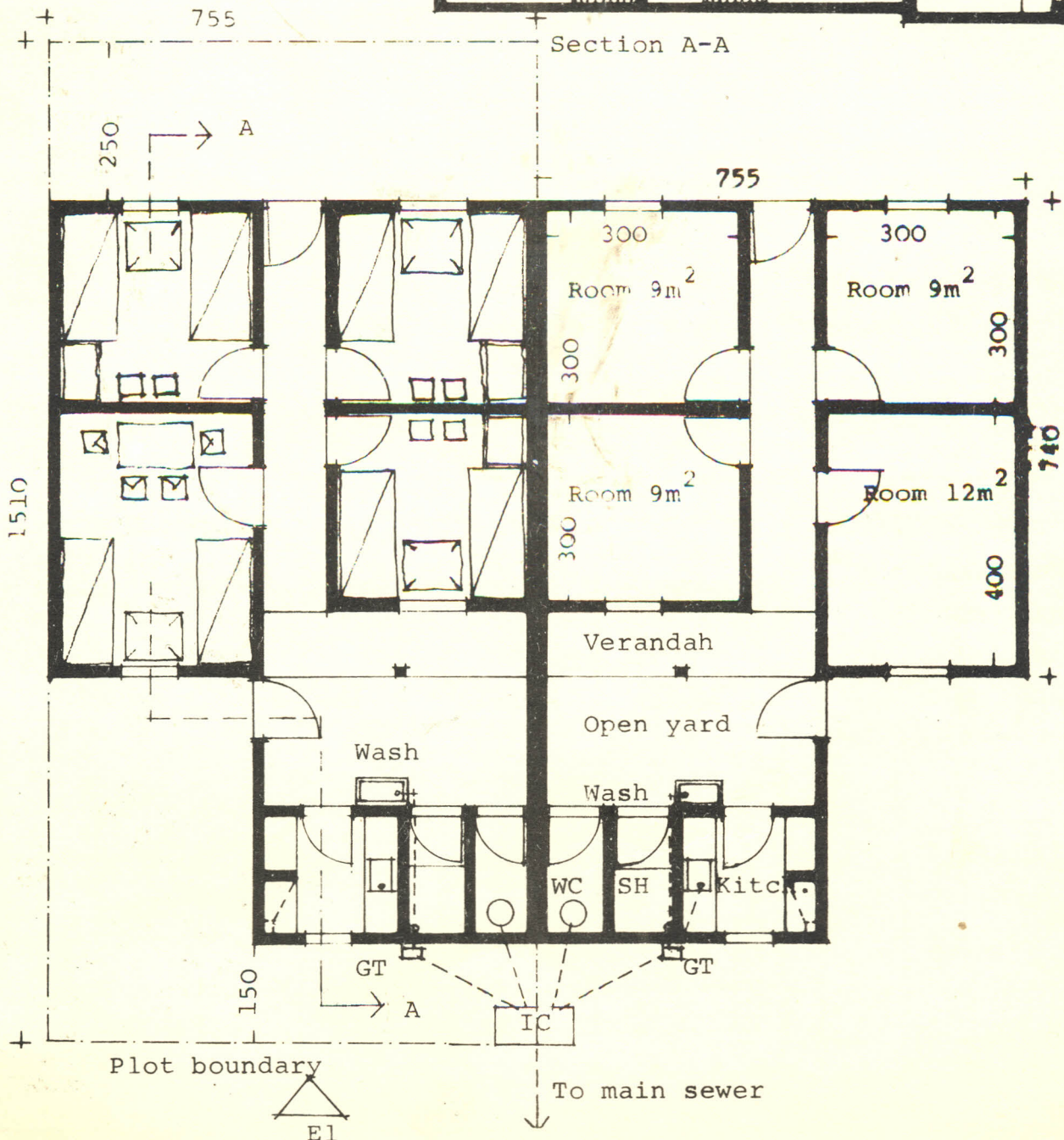
LEGEND	BUILDING		ROAD		TREES		SEWER---	MANHOLE	
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Elevation



Section A-A



HOUSE TYPE: TERRACED

DESIGNED BY: H.R.D.U.

YEAR: 1979

NO. OF ROOMS: 4

NO. OF OCCUPANTS: 9

HABITABLE AREA PER PERSON: 4.3m<sup>2</sup>PLINTH AREA: 64m<sup>2</sup>PLOT SIZE: 7.55 by 15.10 = 114m<sup>2</sup>

PLOT COVERAGE: 56%

RECOMMENDED TYPE OF SCHEME: Rental and Tenant Purchase schemes.

RECOMMENDED FOR CLIMATIC ZONE: B, C, E and F

COMMENTS: Covered walk way might be considered.

COST ESTIMATES PER UNIT:

(NAIROBI PRICES 1978)

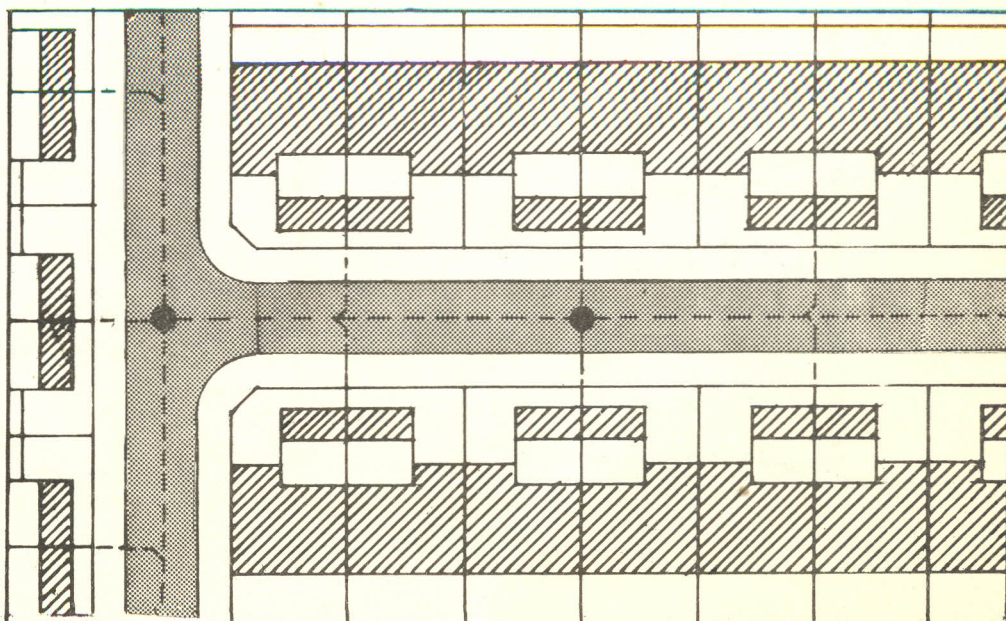
BUILDING MATERIALS ONLY: KShs.20,500/-

BUILT BY PAID LABOUR: KShs.23,100/-

CONTRACTOR BUILT: KShs.28,400/-

LEVEL ANNUITY LOAN  
FOR TERM OF 20 YEARS.

PRINCIPAL SUM	MONTHLY PAYMENT (KShs.)		
	7%	8½%	10%
20,500/-	161	181	201
23,100/-	182	203	226
28,400/-	223	250	278

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500

LEGEND:

BUILDING



ROAD



TREES

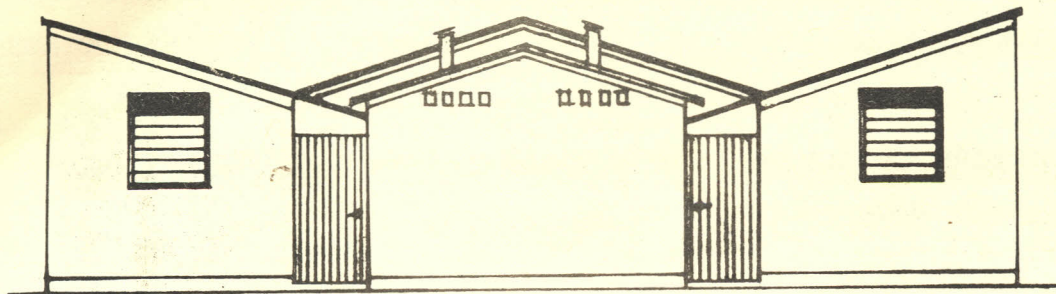


SEWER---

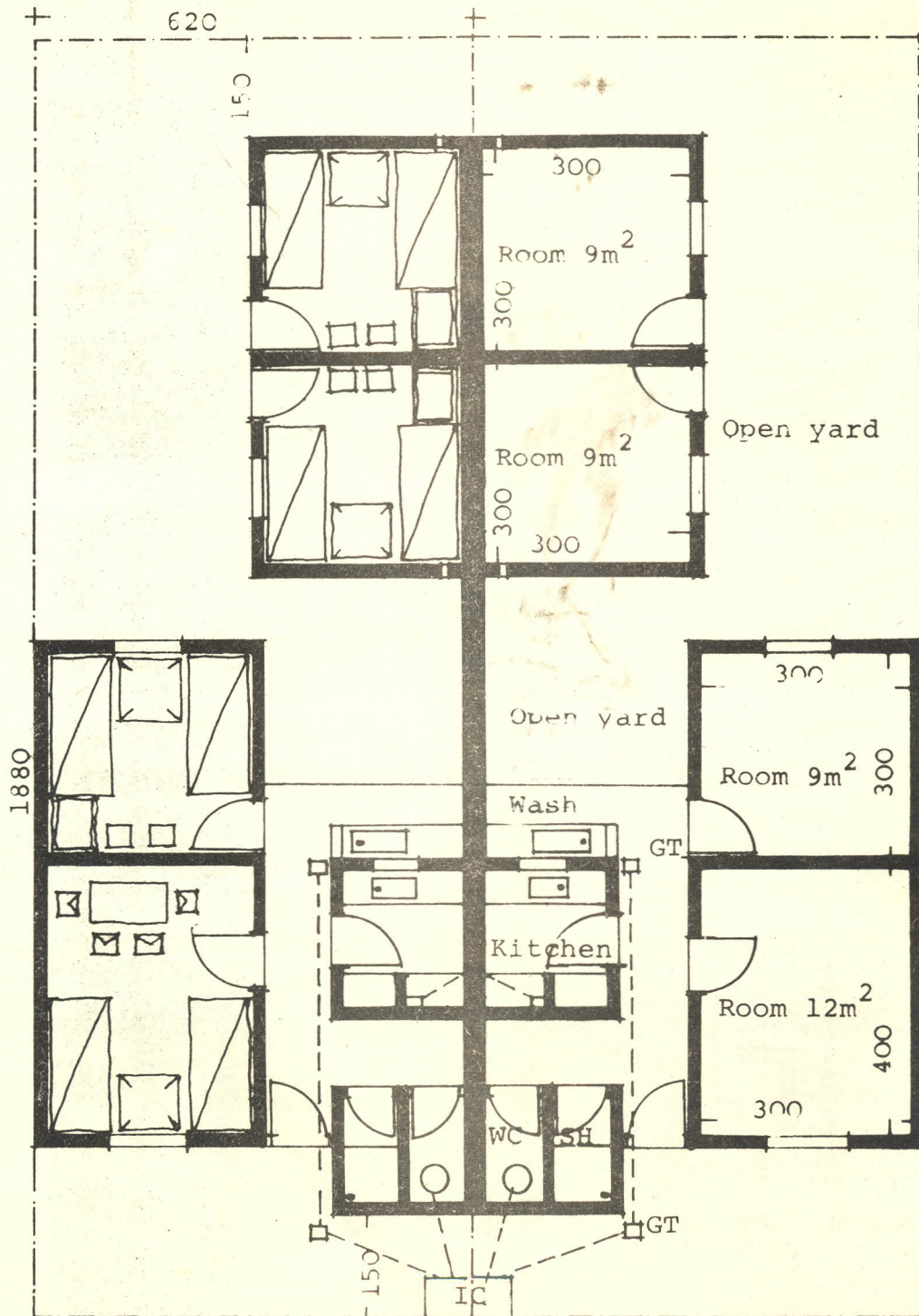
MANHOLE







Elevation E1



Plot boundary

E1

To main sewer

HOUSE TYPE: TERRACED		DESIGNED BY: H.R.D.U.	YEAR: 1979
NO. OF ROOMS: 4	NO. OF OCCUPANTS: 9	HABITABLE AREA PER PERSON: 4.3m <sup>2</sup>	
PLINTH AREA: 55m <sup>2</sup>	PLOT SIZE: 6.20 by 18.80=116.5m <sup>2</sup>		PLOT COVERAGE: 47%

RECOMMENDED TYPE OF SCHEME: Rental and site & service schemes

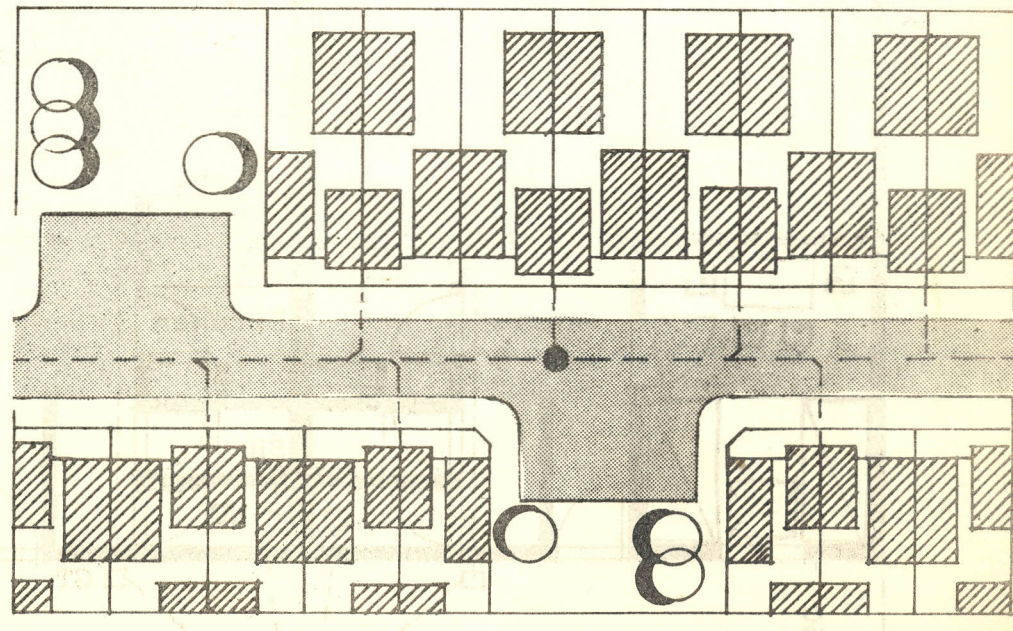
RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D and E

COMMENTS: Big roof overhang to cover walk way to wet core.  
 If built in zone B and C part of court yard should be shaded.

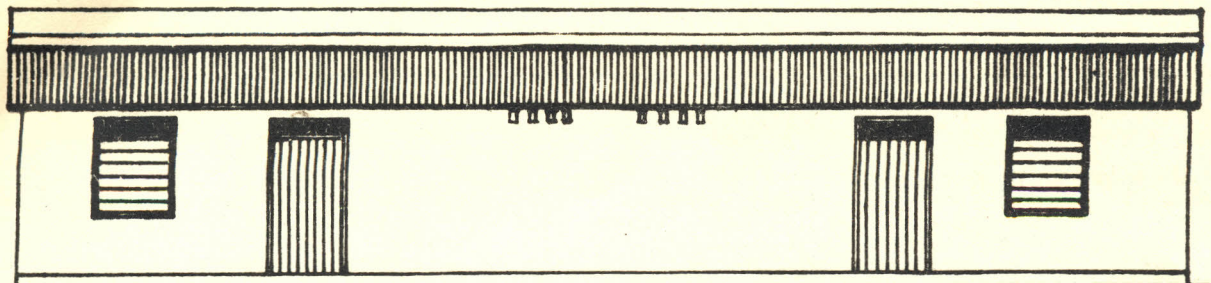
COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs.18,800/-
	BUILD BY PAID LABOUR: KShs.21,300/-
	CONTRACTOR BUILT: KShs.26,700/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENT (KShs.)		
		7%	8½%	10%
	18,800/-	148	166	184
	21,300/-	168	188	208
	26,700/-	210	235	261

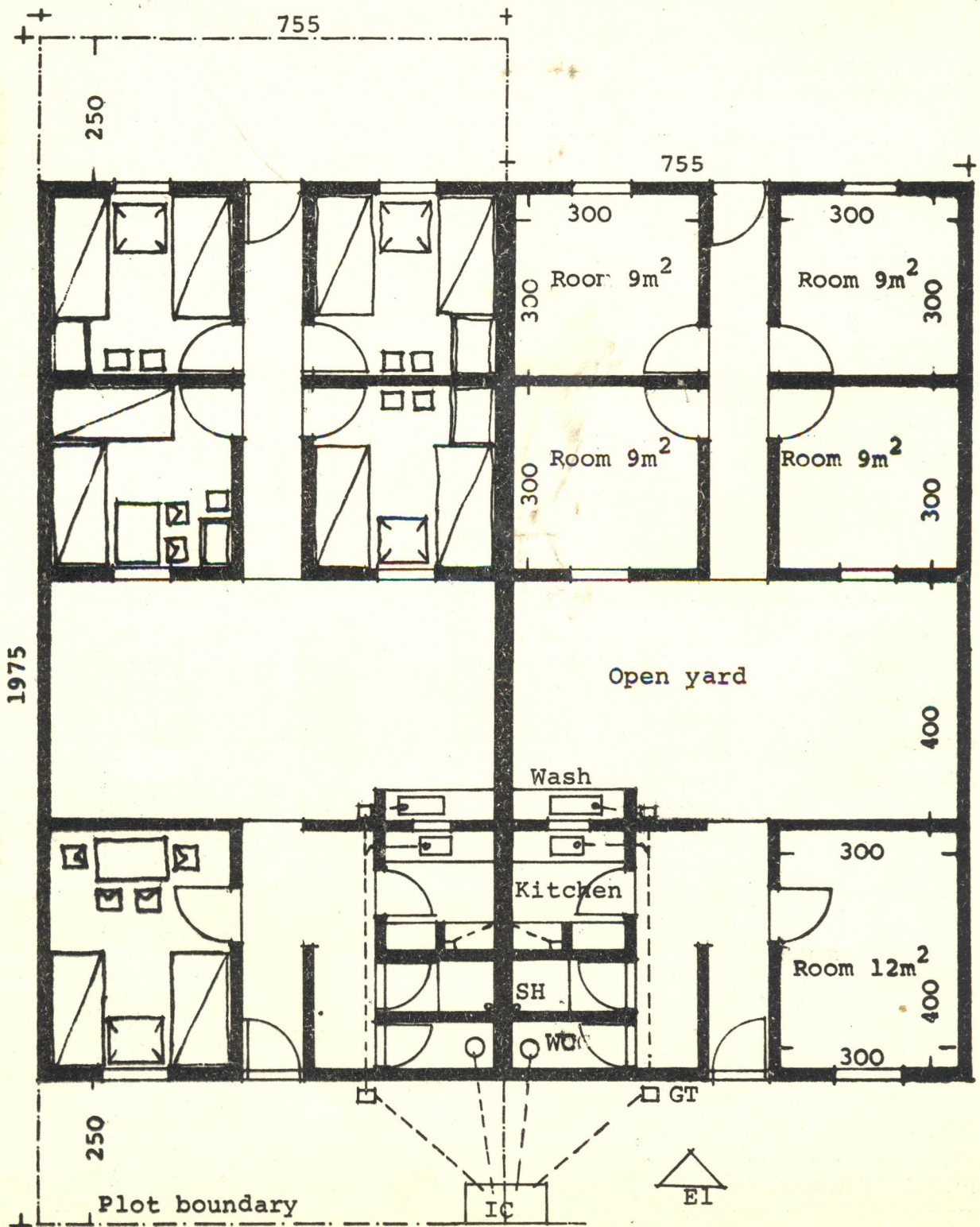
CONCEIVABLE ARRANGEMENT OF HOUSES  
 SCALE 1:500



LEGEND:	BUILDING	ROAD	TREES	SEWER---	MANHOLE
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Elevation E1



HOUSE TYPE: TERRACED		DESIGNED BY: H.R.D.U.	YEAR: 1979
NO. OF ROOMS: 5	NO. OF OCCUPANTS: 11	HABITABLE AREA PER PERSON: 4.4m <sup>2</sup>	
PLINTH AREA: 80m <sup>2</sup>	PLOT SIZE: 7.55 by 19.75 = 149m <sup>2</sup>		PLOT COVERAGE: 53%

RECOMMENDED TYPE OF SCHEME: Site & Service scheme.

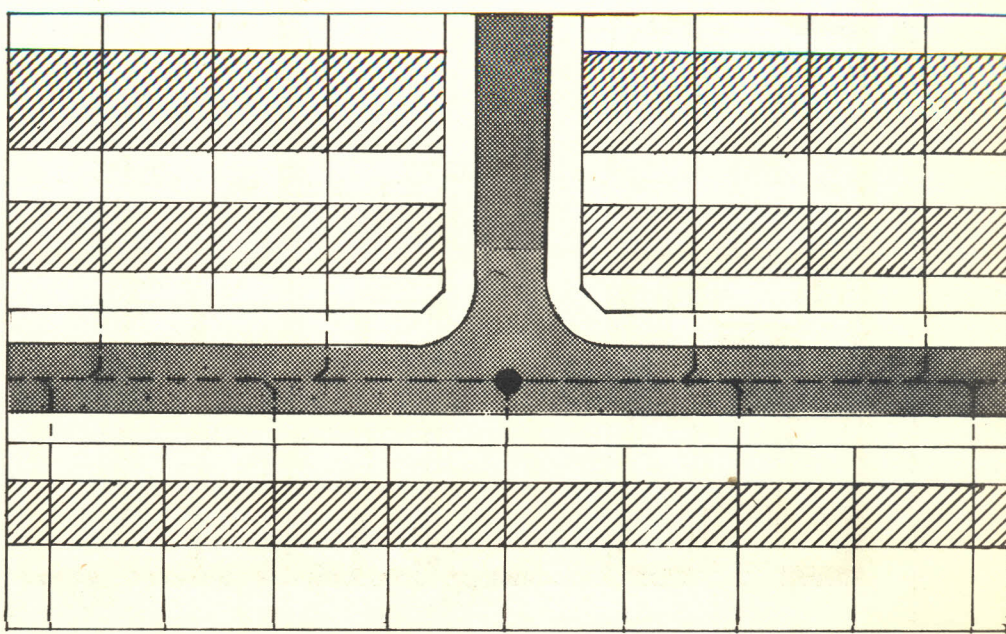
RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D and E

COMMENTS: Covered walk way to wet core might be considered.  
 If built in zone B and C part of court yard should  
 b be shaded.

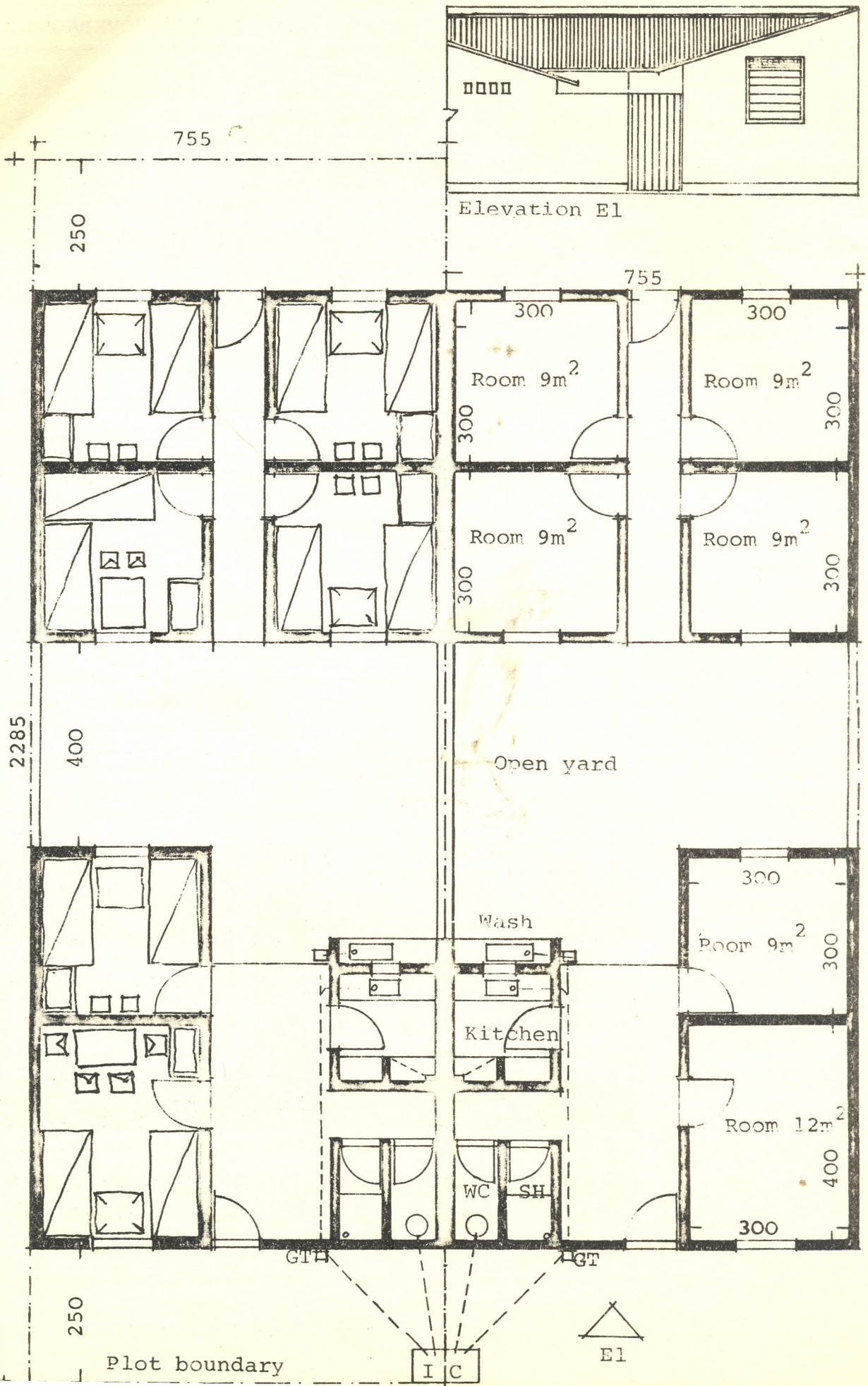
COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs. 26,100/-
	BUILT BY PAID LABOUR: KShs. 29,400/-
	CONTRACTOR BUILT: KShs. 36,300/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	26,100/-	205	230	255
	29,400/-	231	259	288
	36,300/-	286	320	355

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



LEGEND:	BUILDING	ROAD	TREES	SEWER ---	MANHOLE
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HOUSE TYPE: TERRACED		DESIGNED BY: H.R.D.U.	YEAR: 1979
NO. OF ROOMS: 6	NO. OF OCCUPANTS: 13	HABITABLE AREA PER PERSON: 4.4m <sup>2</sup>	
PLINTH AREA: 82m <sup>2</sup>	PLOT SIZE: 7.55 by 22.85=173m <sup>2</sup>	PLOT COVERAGE: 47%	

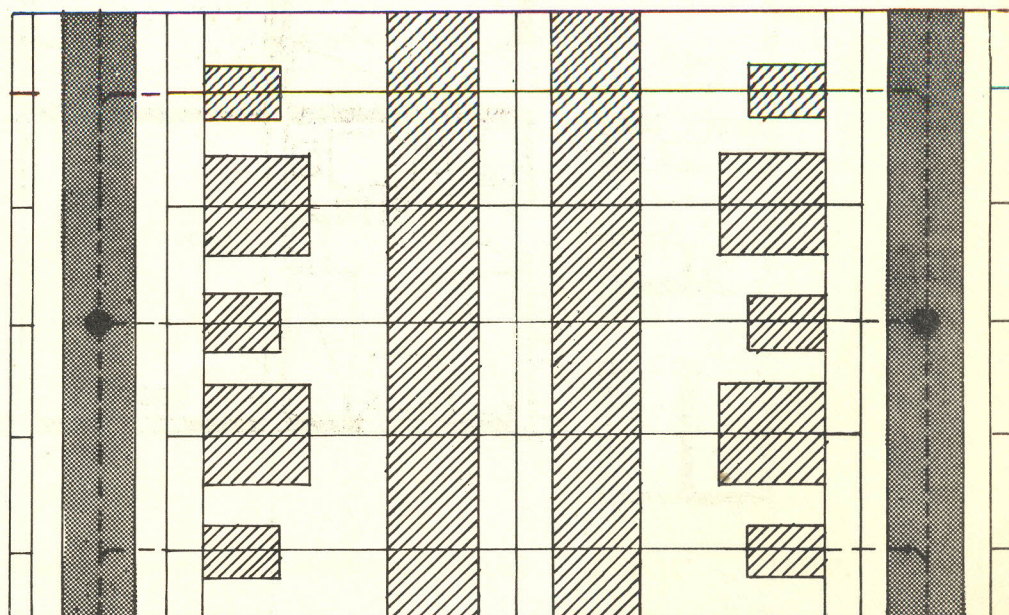
RECOMMENDED TYPE OF SCHEME: Site & Service schemes
RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D and E

COMMENTS: Covered walk way to wet core might be considered.  
If built in zone B and C part of court yard should be shaded.

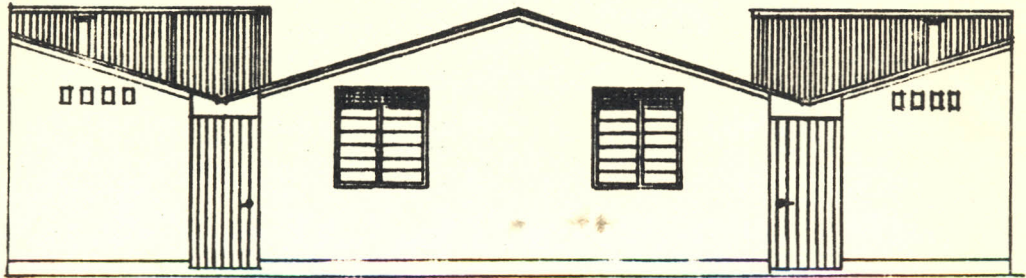
COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs. 27,200/-
	BUILT BY PAID LABOUR: KShs. 29,900/-
	CONTRACTOR BUILT: KShs. 37,300/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	27,200/-	214	240	266
	29,900/-	235	263	293
	37,300/-	293	328	365

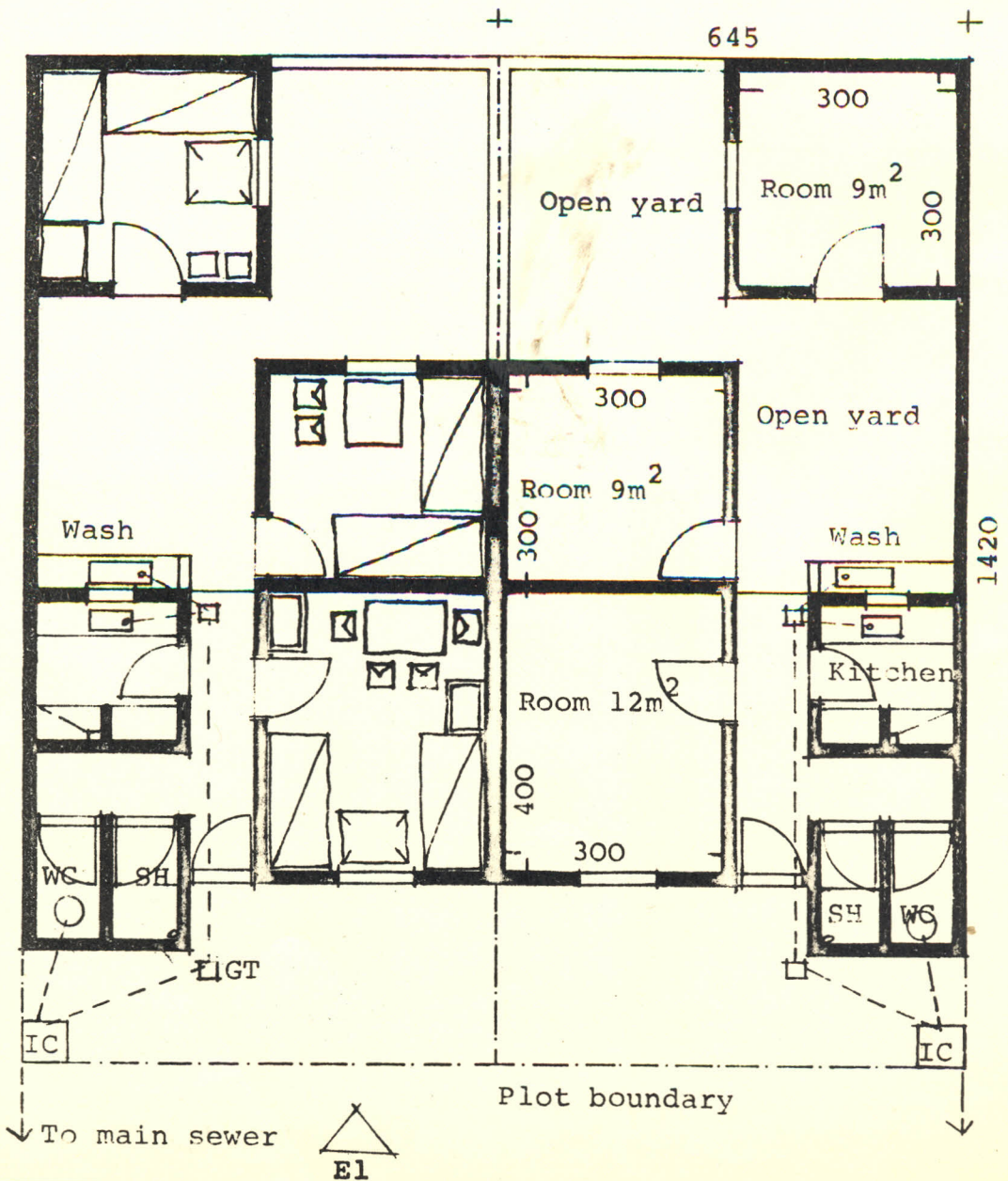
CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



LEGEND:	BUILDING	ROAD	TREES	SEWER---	MANHOLE●
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Elevation E1



HOUSE TYPE: GROUPED

DESIGNED BY: H.R.D.U.

YEAR: 1979

NO. OF ROOMS: 3

NO. OF OCCUPANTS: 7

HABITABLE AREA PER PERSON: 4.3m<sup>2</sup>

PLINTH AREA: 46m<sup>2</sup>

PLOT SIZE: 6.45 by 14.20 = 91m<sup>2</sup>

PLOT COVERAGE: 50%

RECOMMENDED TYPE OF SCHEME: Staff houses and Rental schemes.

RECOMMENDED FOR CLIMATIC ZONE: B, C, and E

COMMENTS: Roof overhand to cover walk way to wet core.

If built in zone B and C, one of the yards should be shaded.

COST ESTIMATES PER UNIT:  
(NAIROBI PRICES 1978)

BUILDING MATERIALS ONLY: KShs.16,100/-

BUILT BY PAID LABOUR: KShs.18,300/-

CONTRACTOR BUILT: KShs.23,100/-

LEVEL ANNUITY LOAN  
FOR TERM OF 20 YEARS.

PRINCIPAL SUM

MONTHLY PAYMENTS (KShs.)

7%      8½%      10%

16,100/-

127

142

158

18,300/-

144

161

179

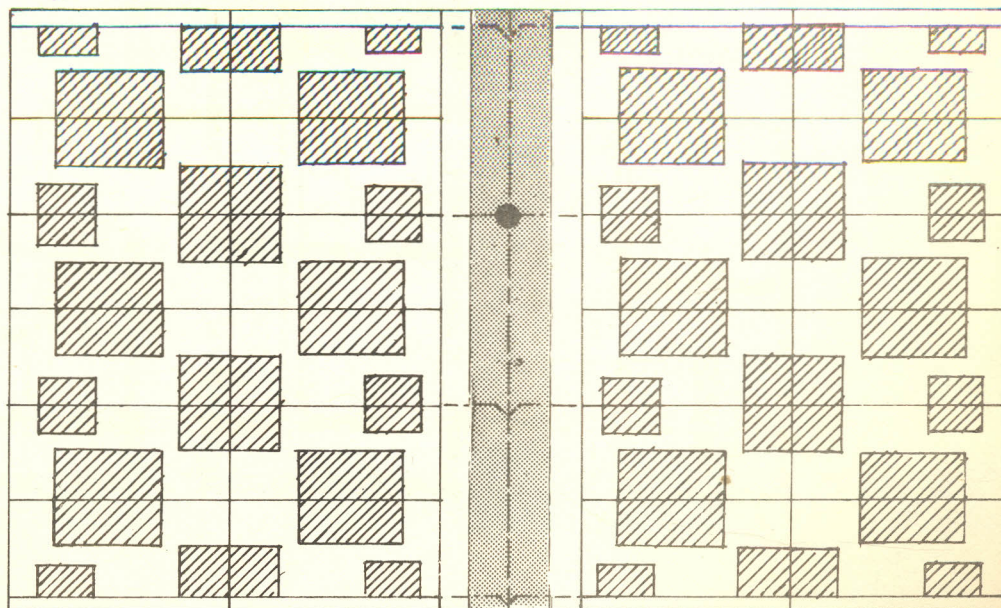
23,100/-

182

203

226

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE 1:500



LEGEND:

BUILDING



ROAD



TREES

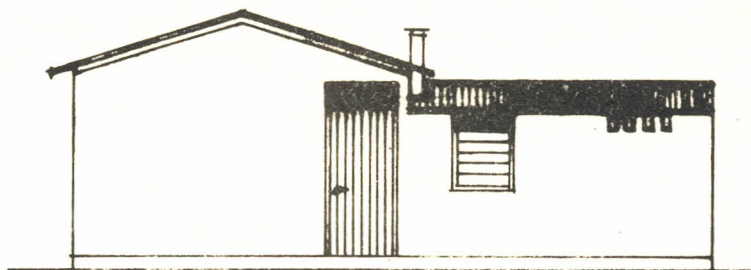


SEWER

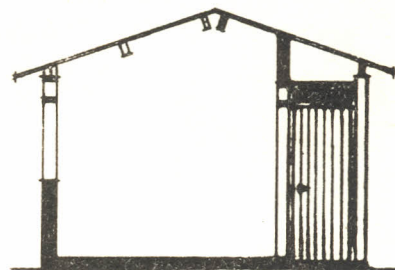
MANHOLE



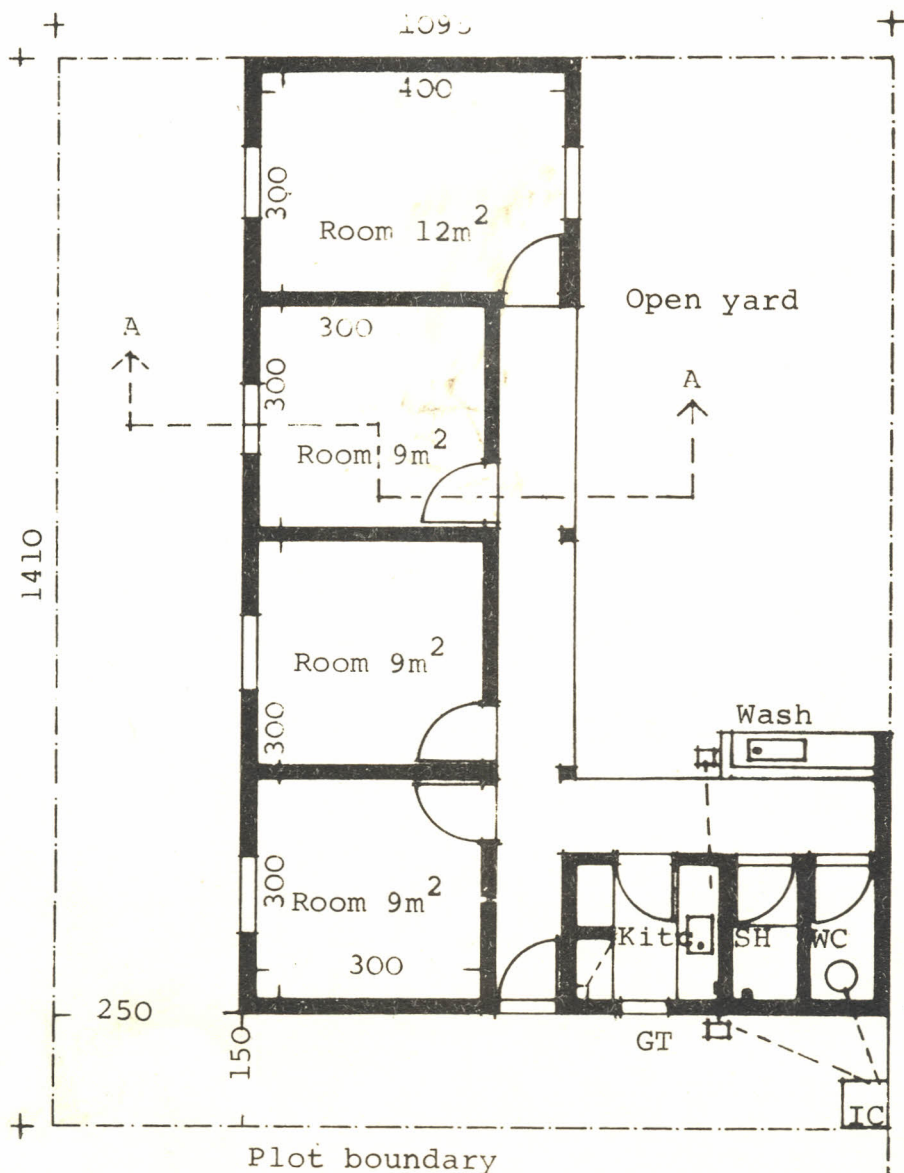




Elevation E1



Section A



Plot boundary



E1

↓ To main sewer

HOUSE TYPE: GROUPED

DESIGNED BY: H.R.D.U.

YEAR: 1979

NO. OF ROOMS: 4

NO. OF OCCUPANTS: 12

HABITABLE AREA PER PERSON: 4.3m<sup>2</sup>PLINTH AREA: 73m<sup>2</sup>PLOT SIZE: 10.95 by 14.10 = 154m<sup>2</sup>

PLOT COVERAGE: 47%

RECOMMENDED TYPE OF SCHEME: Tenant Purchase schemes.

RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D, and E

COMMENTS: Court yard very big, can be used for extra rooms or stores, cooking spaces and shaded areas.

(Court yard can be reduced if design of wet core is changed)

COST ESTIMATES PER UNIT:  
(NAIROBI PRICES 1978)

BUILDING MATERIALS ONLY: KShs. 23,400/-

BUILT BY PAID LABOUR: KShs. 26,300/-

CONTRACTOR BUILT: KShs. 32,300/-

LEVEL ANNUITY LOAN  
FOR TERM OF 20 YEARS.

PRINCIPAL SUM

MONTHLY PAYMENT (KShs.)

7%

8½%

10%

23,400/-

184

206

229

26,300/-

207

232

257

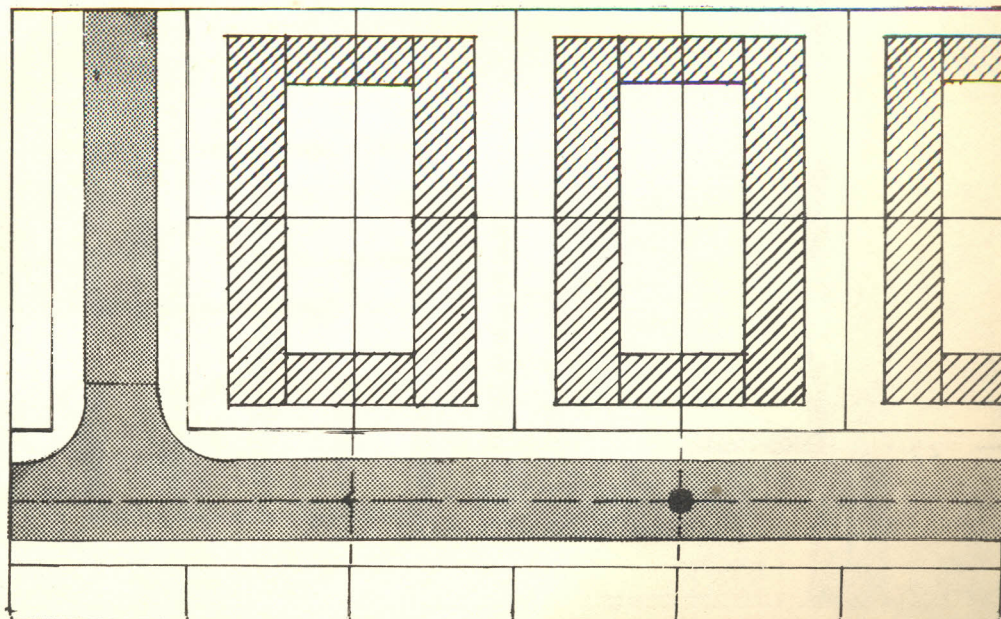
32,300/-

254

284

316

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE: 1:500



LEGEND:

BUILDING



ROAD

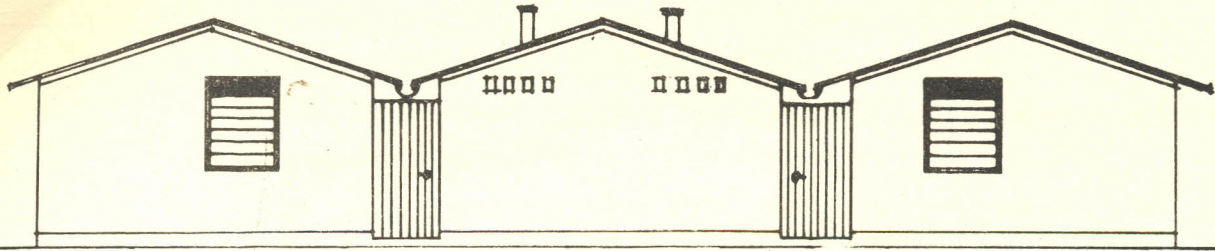


TREES



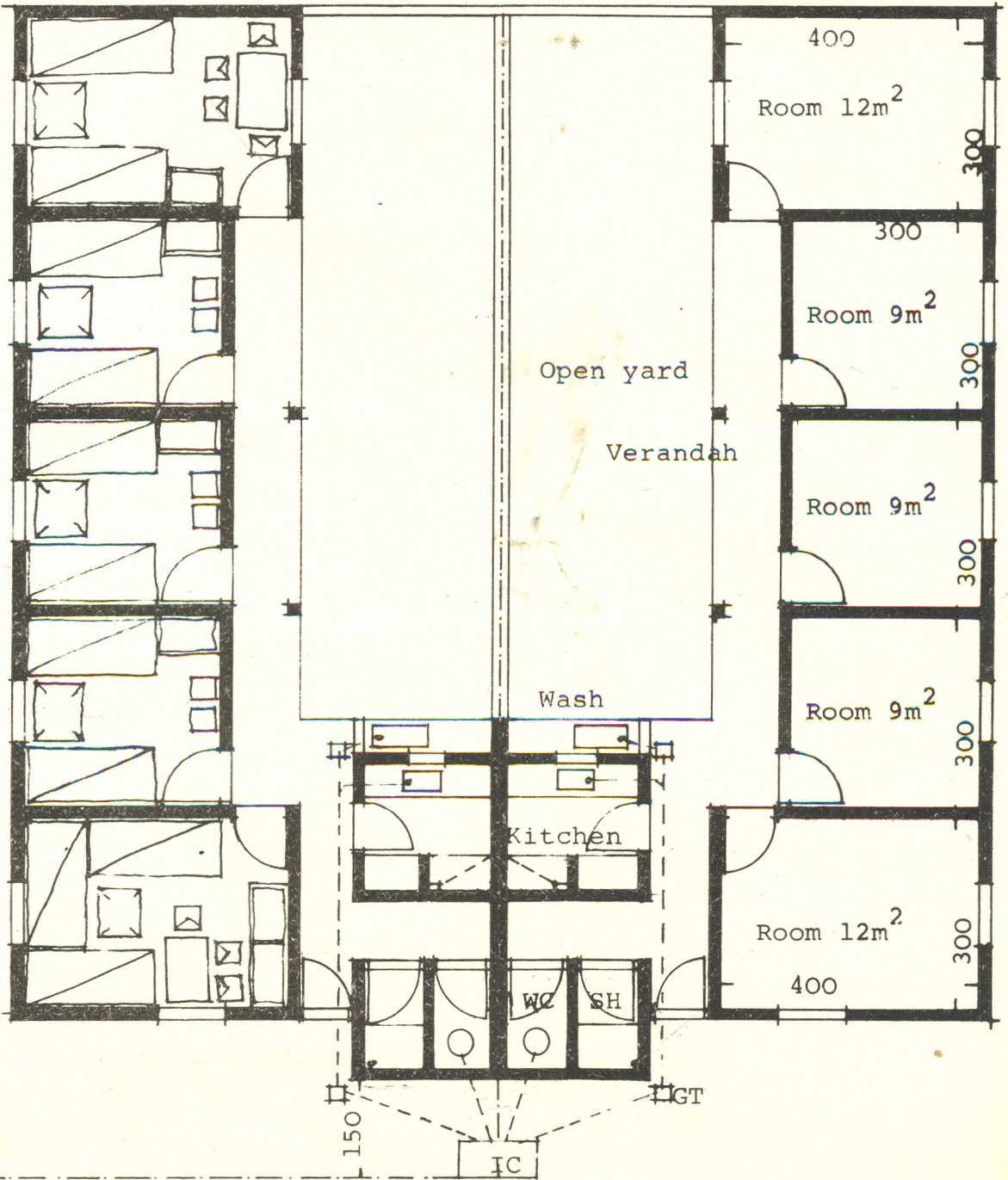
SEWER---

MANHOLE ●



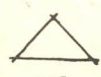
Elevation E1

985



250

Plot boundary



E1

To main sewer

HOUSE TYPE: GROUPED		DESIGNED BY: H.R.D.U.	YEAR: 1979
NO. OF ROOMS: 5	NO. OF OCCUPANTS: 12	HABITABLE AREA PER PERSON: 4.3m <sup>2</sup>	
PLINTH AREA: 79m <sup>2</sup>	PLOT SIZE: 9.850 by 18.200=179m <sup>2</sup>		PLOT COVERAGE: 44%

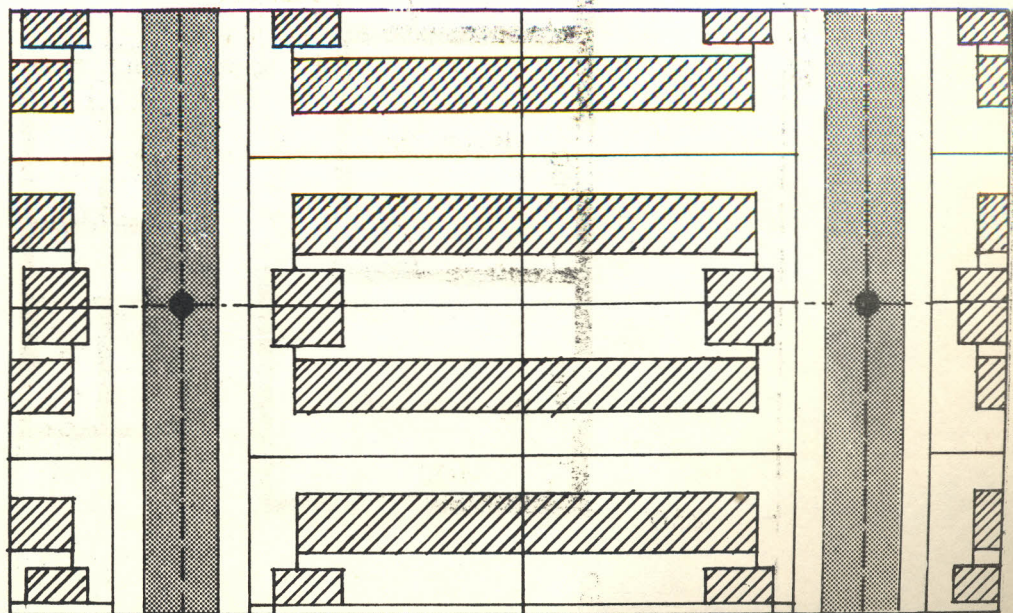
RECOMMENDED TYPE OF SCHEME: Site & Services
RECOMMENDED CLIMATIC ZONE: A, B, C, D, and E




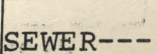

COMMENTS: If built in zone B and C part of court yard should be shaded.

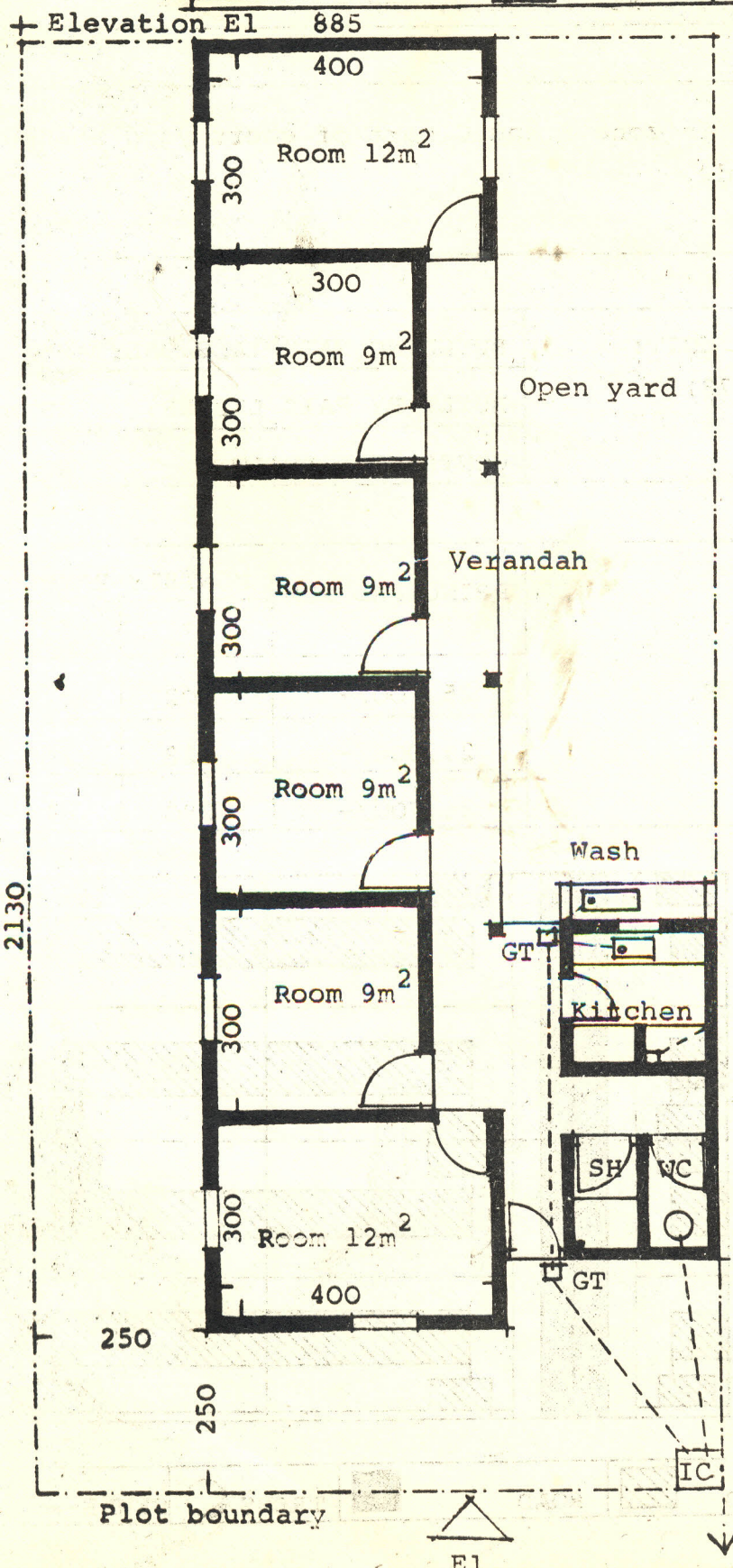
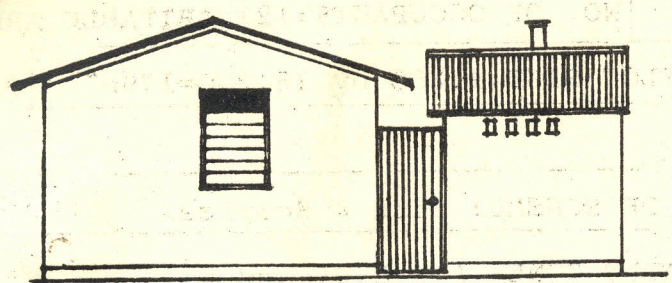
COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs.25,700/-
	BUILT BY PAID LABOUR: KShs.29,000/-
	CONTRACTOR BUILT: KShs.35,700/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	25,700/-	202	226	252
	29,000/-	228	255	284
	35,700/-	280	314	349

CONCEIVABLE  
ARRANGEMENT  
OF HOUSES  
SCALE: 1:500



LEGEND:	BUILDING 	ROAD 	TREES 	SEWER--- 	MANHOLE 
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HOUSE TYPE: GROUPED		DESIGNED BY: H.R.D.U.	YEAR: 1979
NO. OF ROOMS: 6	NO. OF OCCUPANTS: 14	HABITABLE AREA PER PERSON: 4.2m <sup>2</sup>	
PLINTH AREA: 91m <sup>2</sup>	PLOT SIZE: 8.85 by 21.30 = 188.5m <sup>2</sup>		PLOT COVERAGE: 48%

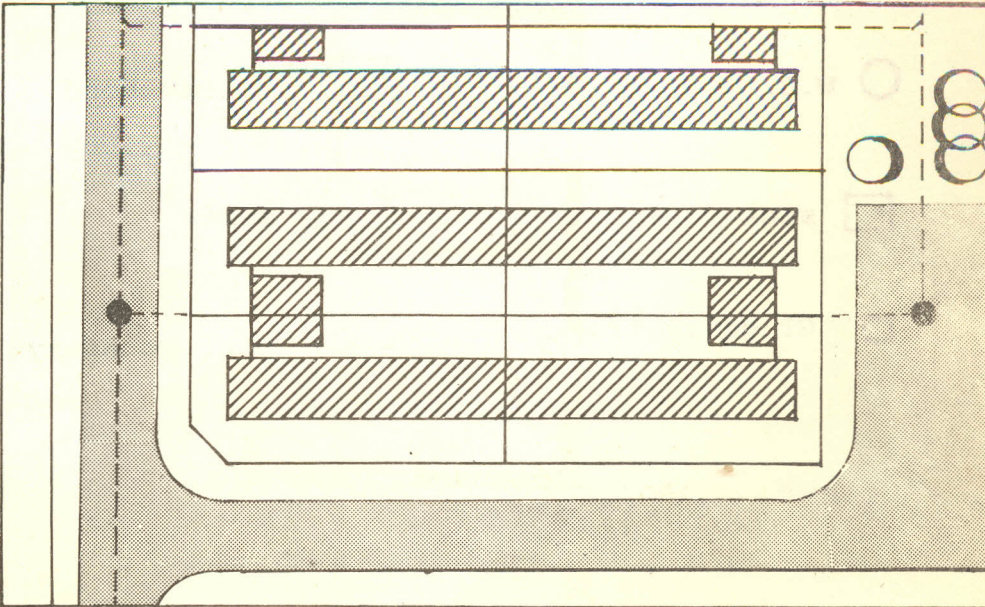
RECOMMENDED TYPE OF SCHEME: Site & Service schemes.  
 RECOMMENDED FOR CLIMATIC ZONE: A, B, C, D, and E

COMMENTS: If built in zone B and C, part of court yard should be shaded.

COST ESTIMATES PER UNIT: (NAIROBI PRICES 1978)	BUILDING MATERIALS ONLY: KShs. 28,800/-
	BUILT BY PAID LABOUR: KShs. 32,400/-
	CONTRACTOR BUILT: KShs. 39,700/-

LEVEL ANNUITY LOAN FOR TERM OF 20 YEARS.	PRINCIPAL SUM	MONTHLY PAYMENTS (KShs.)		
		7%	8½%	10%
	28,800/-	227	254	282
	32,400/-	255	285	317
	39,700/-	312	350	389

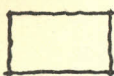
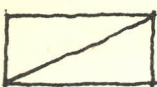


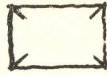
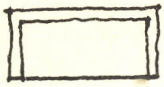


CONCEIVABLE ARRANGEMENT OF HOUSES  
 SCALE 1:500











LEGEND:	BUILDING	ROAD	TREES	SEWER ---	MANHOLE
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EXPLANATORY NOTES TO THE HOUSE TYPE PLANS

Symbols for furniture:

-  dining table
-  bed
-  easy chair
-  chair
-  coffee table
-  sofa
-  cupboard
-  stool

Symbols for services:

-  shower
-  W.C.
-  sink
-  GT gully trap
-  IC inspection chamber
-  cooking hood
-  sewer
-  plot boundary

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