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IRAQ, National Context

Background Paper Update, by Nadia Al Hasani

BAGHDAD, Urban Context

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SAYDIYYA NEIGHBORHOOD, BAGHDAD, IRAQ

Project Summary Paper, by Nadia Al Hasani

Prepared for

The Aga Khan Program for Islamic Architecture

IRAQ

Primary Information

Country:	Republic of Iraq
Capital:	Baghdad
Population:	12.6 million
Growth Rate:	3.3%
Density:	29 persons per square kilometer
Urban:	72%
Urban Growth Rate:	5.4%
Area:	435,000 square kilometers
Geography:	Four main areas: the mountainous highlands in the north and northeast; the dry, rolling uplands between the fertile, alluvial flood plains of the Tigris and Euphrates Rivers, extending from just north of Baghdad southeastward to the Persian Gulf; and the vast desert south and west of the Euphrates.
Climate:	Combination of shortage of rain and extreme heat makes much of the country a desert. 90% of rainfall occurs in winter; summer months are intensely hot and dry.
Languages:	Arabic (official) Kurdish, Turkish, English
Religion:	Muslim 95%
Currency:	Iraqi Dinar (ID) = 20 dirhams = 1,000 fils US\$ 1.00 = 295.3 fils (May 1981)
Per Capita Income:	US\$ 2,410
Major Cities:	Baghdad, Basra, Mosul
Production:	Industry 73% Services 19% Agriculture 8%

IRAQ

National Context

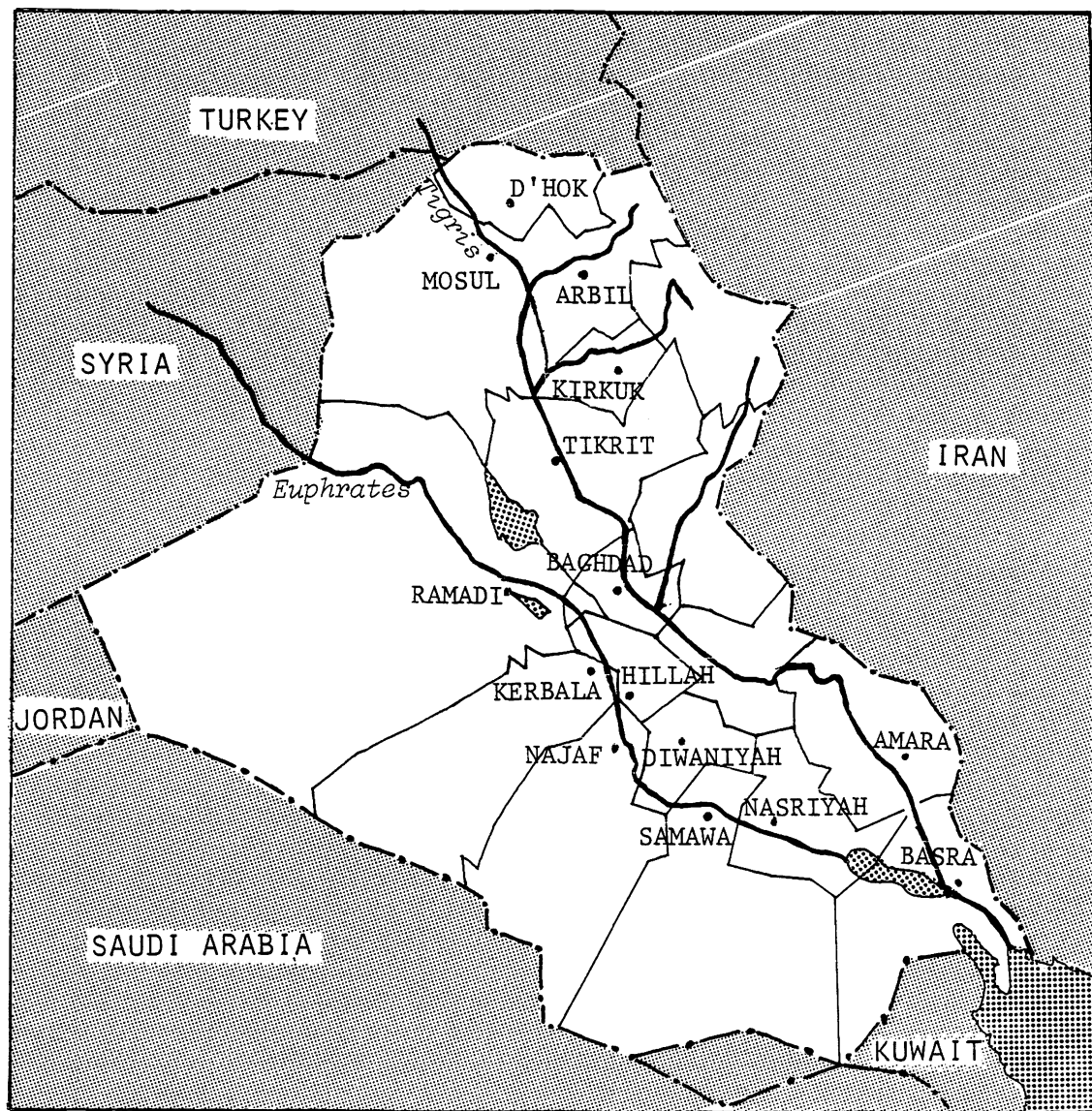
Bounded by Turkey in the north, Iran in the east, Kuwait, the Gulf, and Saudi Arabia to the south, and Syria and Jordan to the west, the Republic of Iraq provides a major land link between Europe and Asia. Its land area is 435,000 square kilometers, and its topography is divided into four major zones.

An alluvial plain, occupying one-fifth of Iraq's area, is interlaced by the Tigris and Euphrates Rivers, their tributaries and irrigation canals. A fairly large part of this area is permanent marshland and lakes, fed by the rivers in flood. A vast desert plateau in the western part of Iraq, whose altitude ranges from 100 to 1,000 meters above sea level, covers three-fifths of the country's area. Mainly a stormy plain, it is interspersed by sandy stretches and marked by seasonal riverbeds (wadis) which are dry for most of the year. The western plateau and the sedimentary plains have a hot desert climate, with an annual rainfall of 50 to 200 mm., and summer temperatures reaching as high as 45°C to 50°C in summer.

The mountain region, an extension of the mountain chains of Turkey and Iran, covers one-fifth of the country's land area. Elevations are between 900 and 3,650 meters above sea level. Rainfall in the foothills and steppes and spring water in a few valleys make cultivation possible. The northeastern mountains enjoy a Mediterranean climate characterized by cool winters, with snowfall in the mountain peaks, and rainfalls of about 400 to 1,000 mm. annually. Moderate summer temperatures (not exceeding 35°C) make the area well-known for its summer resorts.

The piedmont is a transitional region running from the lowlands in the south to the high mountainous region in the north, and it enjoys a steppes climate with sufficient annual rainfall (200 to 400 mm.) for seasonal pastures. It forms 75% of the mountain region, with an altitude of 200 to 1,000 meters above sea level.

Overall, Iraq's climate varies from continental to subtropical, with wide variations between regions. Except in the northeast, rainfall is



IRAQ
STATE BOUNDARIES

Miles 0 80 160 320
Kilometers 0 50 100 200

scant from December to April, which, combined with extreme heat, makes most of the country a desert. The summers are overwhelmingly hot. Winters are generally pleasant, but can be quite cold in the mountains. Sudden hot spells during winter are typical in the center and south.

HISTORY

The history of Mesopotamia ("the land between the rivers," in Greek) dates back almost 5,000 years, to the time when the Sumerian civilization flourished in the fertile area between the Tigris and the Euphrates. Subsequently, it was the seat of Babylonia, Assyrian, and Parthian civilizations. In 637 AD, the Arab conquest brought Islam to the land--the single most significant historical and cultural change in Iraq's history. In 762 AD, Baghdad was founded by the Abassid Caliph Al-Mansur, and became one of the world's most renowned cities, the capital of a great empire, famous for its buildings and its luxury, and as a seat of learning.

In the thirteenth century, Baghdad was devastated by the Mongol invasions, and for the next 600 years Iraq was a country of little importance. The ensuing condition of political chaos allowed Ismail Shah, founder of the Persian Safavid Dynasty, to invade Iraq. In 1534, Baghdad was captured by Suleiman the Magnificent, and Iraq remained under Ottoman rule until World War I. Following a period of British military rule, a constitutional monarchy was set up in 1921. The revolution of 1958 abolished the monarchy, and proclaimed Iraq an independent, sovereign, and Islamic republic.

DEMOGRAPHY

Iraq's population is composed of various ethnic, cultural, and religious groups. Arabs constitute about 80% of the total population and occupy most of the center, west, and south, while Kurds (the largest non-Arab group) constitute about 15% and are located mainly in the north and east. Other smaller groups include Turkomans, Armenians, Lurs, Shabaks, and Mandeans.

About 95% of the total population is Muslim, of which a majority are Shi'ah. Freedom of all other religions is guaranteed under the Constitution, and other religious groups in the country include Christians, Yazidis, Sabaeans, followers of St. John the Baptist, and Jews.

Arabic is the predominant language throughout the country. Kurdish and, to some extent Turkish, is spoken in the north. The most commonly used foreign language is English, which is taught as a second language in all schools.

ADMINISTRATION

Iraq is divided into 18 governorates with two levels of smaller administrative units: qadhas (96) and nahiyas (291).

The northern region comprises five governorates. Its most important city is Mosul. The southern region comprises six governorates, and the Port of Basra is its major center. The central region, comprising seven governorates, is dominated by the capital city of Baghdad. This region is experiencing a rate of urbanization higher than the national average, and it now accounts for over 60% of the total urban population.

Since 1977, the state administration has undergone major reorganization to strengthen centralized planning and expand the role of the public sector.

The Ministry of Planning is the central agency responsible for the formulation of national development policies. The Ministry of Housing and Construction implements the government's housing programs through numerous state organizations. With the exception of Baghdad, which is administered separately, governorate and municipal authorities are mostly responsible for implementation at the regional and local levels.

ECONOMY

The public sector constitutes approximately 85% of the nation's economy, with a small private sector which has been encouraged since the late 1970s. A large share of the gross domestic product is attributable to the tertiary sector, including services.

The Ministry of Planning was established in 1959. Its first Five-Year Plan (1961-65), focused on industrialization. The second Five-Year Plan (1965-69) continued this trend, seeking to reduce the country's dependence on oil revenue through industrial diversification. The period between 1970 and 1975 witnessed the nationalization of the oil industry and the jump in oil prices after 1973. Budgeted expenditures almost doubled and growth targets were exceeded.

Focusing on the oil and manufacturing sectors, the Fourth Plan (1976-80) launched a massive development program. Impressive annual GDP growth rates of over 15% were achieved. Per capita income, which had been rising slowly and steadily, increased quite sharply after 1973. It grew from ID 120 in 1970 to nearly ID 730 in 1980 (US\$ 2,410).

Agriculture: Agriculture was the traditional mainstay of the economy until oil production began on a large scale. The river systems of the Tigris and Euphrates, in addition to the heavy rainfalls in the north, made Iraq one of the most fertile and agriculturally developed countries in the region. Twenty percent of the total land area is cultivated, and the agricultural sector provides employment to 45% of the active labor force. The main agricultural products are livestock, wheat, barley, cotton, citrus fruits, and vegetables. Palm trees are the most common trees in the country (central and southern regions). Some 30 million date palms, representing about 176 varieties, produce one of Iraq's most important agricultural exports.

Development plans of the 1950s emphasized irrigation and other agricultural programs, but agriculture today receives a limited share of national investment.

Industry: Iraq is the third-largest oil producer in the Middle East and oil revenues account for most of its income. The government has undertaken a number of projects to expand petroleum production and distribution, with a major deep seas export terminal, pipelines linking the northern and southern oil fields, and an export pipeline across Turkey to the Mediterranean. Other petroleum-associated industries such as collection and utilization of natural gas from the oil fields are also under way.

The current five-year plan emphasizes a policy of industrialization based on diversity and the use of available raw materials to produce goods not only for domestic consumption but also to provide a surplus for export. Various industries are distributed widely over the country, including wool textiles, sugar, food canning, vegetable oils, soft drinks, cigarettes, drugs, paper, glass, and fertilizers. To meet the increasing demand for building materials, other industries such as cement, bricks, blocks, tiles, and pressed-wood manufacturing were established. Modern technology was

introduced in the 1970s in the form of electric and electronic manufacturing and assembly plants for TVs, radios, and other consumer goods.

URBANIZATION

Iraq's population grew from three million in 1930 to six million in the mid-1950s. It reached 12 million in 1977 (a census year). If the growth rate of 3.3% registered between 1970 and 1977 continues, the population will again double by the end of the century, to reach 24 million. The 1980 population was estimated to be 13 million and is characterized by a broad-base age pyramid, with 49% under 15 years of age.

Since the mid-1970's, Iraq's labor force has been insufficient to meet the demand generated by the pace of economic growth, encouraging immigration from labor-exporting countries, particularly Egypt. In 1980, total employment was estimated to be around 3.5 million. The huge construction program launched by the state has led to an influx of expatriate workers, particularly Asians.

An estimated 66% of the population lives in towns today, compared to 43% in 1960. The growing contrast between declining villages and booming cities has led to a considerable rural-urban migration--particularly to Baghdad, which is attracting an increasing share of economic activities despite government efforts to decentralize industry.

The urban population distribution is characterized by primacy: Baghdad's size is six to seven times greater than that of the second-largest cities, Basra and Mosul; 10 times larger than that of the fourth, Kirkuk; and 20 times larger than the remaining five cities of over 100,000 inhabitants.

Health: Iraq enjoys well established health care services, with 167 hospitals, 55 public clinics, 290 evening clinics, and 1,505 other health institutions (all of which are free except for private facilities). Medical drugs are funded by the government and are distributed through public and private pharmacies all over the country. No major epidemics have been reported in the past 15 years. All of the population has access to basic health care services; specialized hospitals are located in Baghdad.

The crude birth rate is 42.6 per 1,000 and the crude death rate is 10.6 per 1,000 for the country.

Education: Elementary education is compulsory. Primary, secondary, and higher education are free, with all expenses paid by the government including tuition, text books, and stationery. (At certain colleges, however, in exchange for government-paid tuition the student must devote a specified number of years to governmental service).

Iraq has eight universities in various parts of country. The government also provides vocational training on the secondary school level with courses in agriculture, business, and home economics.

Transportation: Roads and railways are the major elements in Iraq's transportation system. Major highway networks are being constructed to replace the old ones linking major cities throughout the country. River transport is less active. However, the ports in the south handle the major import and export of goods, especially oil. The country's international airport is in Baghdad; two other national airports are located in Mosul, in the north, and Basrah, the major city in the southern part of Iraq. Public transportation is available in its main cities. An underground system is being planned and designed to link the main areas of Baghdad city; its first stage is due for completion by 1990, with pedestrian underpasses connected to its stations.

BAGHDAD

Urban Context

Baghdad, the capital city of Iraq, is located on the Tigris River at an elevation of approximately 34 meters above sea level. Daily and annual temperature variations are quite large, with an average temperature of 44°C in summer and 10°C in winter. The annual rainfall, occurring primarily between November and April, averages about 150 mm.

Baghdad is a combination of old and new: the city still shows evidence of its early civilization, yet some parts are witnessing vast construction activity to cope with modern development.

HISTORY

Baghdad was founded by the Abbasid Caliph Al-Mansur in 762 AD, 50 miles to the north of ancient Babylon on the west bank of the Tigris River. The Caliph had the city laid out in the form of concentric rings of walls, pierced by four gates at the cardinal points. At the center was the palace-mosque complex.

The original city of Baghdad was completely destroyed by Hulagu in 1258. Subsequently, two new settlements developed--Rusafa, on the east bank, and Karkh, a subsidiary settlement, on the west bank. These walled settlements continued as the main components of Baghdad until the nineteenth century. Meanwhile, Kadhimiyeh developed as a separate community on the edge of the original city of Baghdad.

The walls around Baghdad were demolished in 1869 by the Turkish governor, but the walls of Rusafa were replaced by a flood-protection dyke, so that the town remained physically enclosed.

In the twentieth century, Baghdad has grown more or less in a linear fashion, northwest to southeast, until 1956 when the Thartar Dam was constructed and the flooding of the Tigris was finally brought under control. At this time the eastern embankment became obsolete, and the city broke that physical barrier. Development spread eastward rapidly, encouraged by the creation of the Army Canal in 1960. The city is now experiencing growth in all directions due to population increase and migration.

ADMINISTRATION

Baghdad, like most capital cities, enjoys considerably more administrative freedom than the other municipalities. The powerful Amanat Al Asima has wide regulatory authority and, in addition, a high degree of latitude vis-a-vis central agencies.

The municipal territory of 5,023 square kilometers is divided into seven "qadhas," of which 4 are centered around the historic districts: Kadhimiyeh, Adhamiyeh, Rusafa, and Karkh.

Baghdad is somewhat unusual among capital cities in developing countries, in having a strong planning function. The Master Plan is enacted as law and governs land development regulations.

ECONOMY

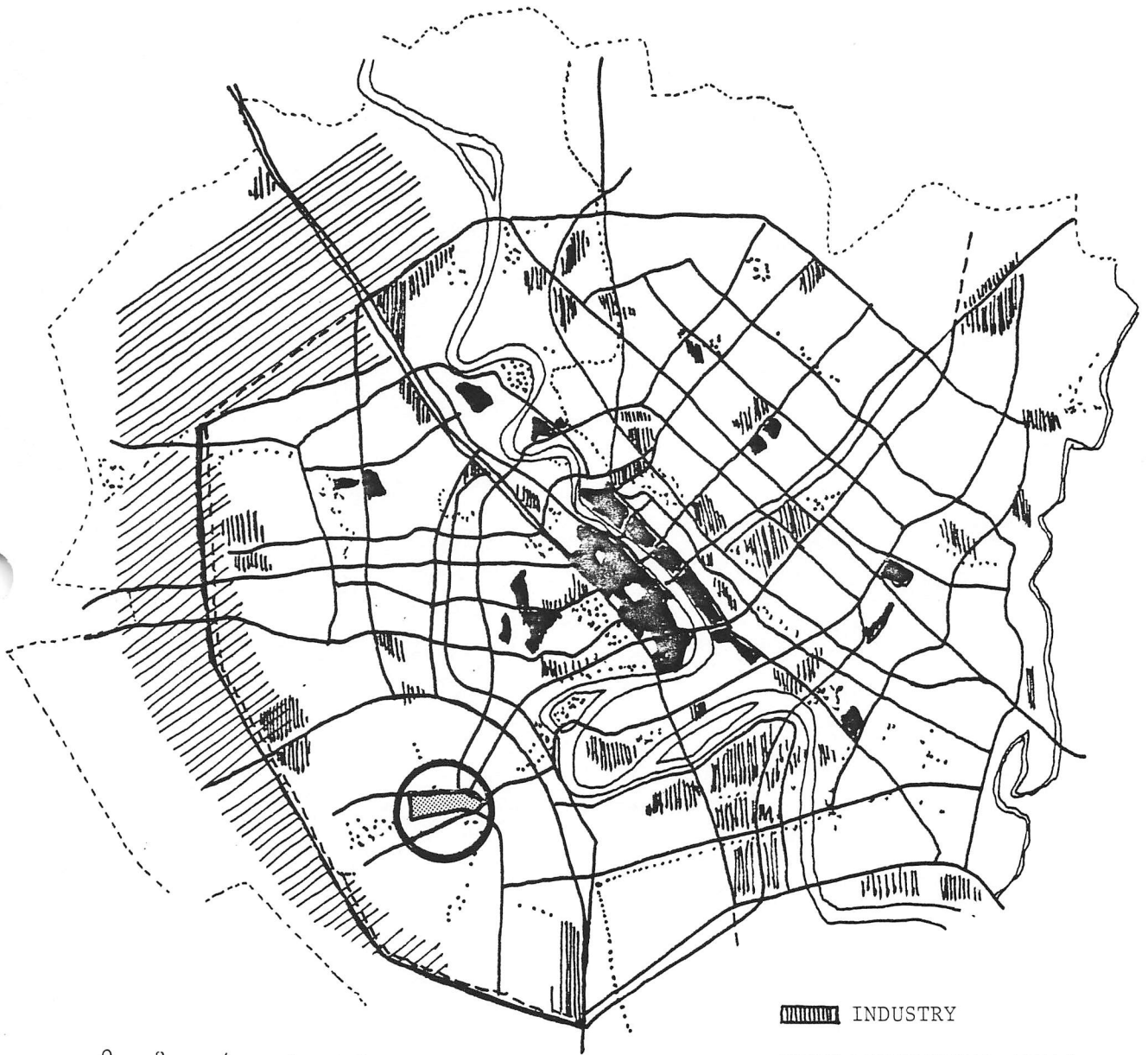
As the capital of Iraq, Baghdad houses most of the country's administrative functions. Although primarily a service city, it also contains important commercial and industrial activities and the site of Iraq's major oil refineries. Due to its centralized location, it functions as a distribution center for goods going all over the country and a major portion of its labor force is employed in office activities.

URBAN DEVELOPMENT

The city had grown to over one million population by 1965. Various social, cultural, and political factors influenced its development. The socio-cultural diversity of its inhabitants determined to a great extent its residential pattern: Christians were concentrated in Rusafa, along with a Muslim majority, mostly Sunnis; Sunnis predominated also in Karkh and in the small settlements of Adhamiyeh; while Shiites were concentrated in Kadhimiyeh. Among the newcomers in the late 1950s were more Christians and Kurds from northern Iraq, as well as many poverty-stricken peasants from southern Iraq.

At first the residential pattern in the city reflected the cohesion of these rural groups. However, the middle classes soon abandoned the older areas, moving out to new, more homogeneous peripheral communities creating a multi-nucleated development pattern.








BAGHDAD 2000 - COMPREHENSIVE DEVELOPMENT PLAN



0 2 4 6 8 10 km



NORTH

-  INDUSTRY
-  RESIDENTIAL AREAS
-  CITY CENTER
-  PUBLIC GREEN AREAS
-  GREEN CRESCENT
-  MAIN STREETS
-  SAYDIYYA NEIGHBORHOOD

With rising incomes and widespread investment in real estate, land values increased sharply. Worldwide inflation and high construction costs further added to the price of new housing. Large scale urban renewal was removing older housing stock while the influx of rural migrants and expatriate workers was placing heavy demand on lower-price accommodations, leading to crowded unsanitary conditions and accelerated deterioration in the older quarters.

Today, Baghdad's population is estimated at 3.4 million, about 43 percent of Iraq's total urban population. If present growth rates prevail, its population is expected to reach six million by the year 2000, and its urbanized area to cover 350 square kilometers.

In an attempt to address some of the city's problems, restructuring of central Baghdad has been undertaken. Four large scale urban redevelopment projects are being implemented as high-density development spines on both sides of the river: Khulafa Street, designed by The Architects Collaborative of the US; Bab Al-Sheikh, designed by Arub Associates and the Architectural and Planning Partnership (APP) of the UK, and Carlfried Mutschler and Partner of West Germany; Abu Nuwas Street, designed by Erickson of Canada and Denmark's Skaarup & Jespersen and Planer; and, on the Karkh side of the river, Haifa Street, designed by the Technical Studies Bureau and Reinicke Consultants of West Germany. Reinicke is also working on another large town planning study for the Karkh area. Work in the first three areas is focusing on construction of a metro targeted to be operational by 1990, with a string of stations along Khulafa and Saddoun Streets.

In the central business district in Rasafa, planning studies for Shaikh Omar district have also been let to France's OTH International and Planar; and Robert Matthew, Johnson-Marshall & Partners of the UK has undertaken studies for Kifah Street.

At the same time, a great emphasis has been placed on conserving houses and areas of historic or architectural value. Work is under way to develop housing around the mosques of Kadhimiyeh and Al-Gaylani in a sympathetic and traditional style (designs by APP).

A general framework for future development will be established under the Integrated Capital Development Plan, "Baghdad 2001," for which the Japanese Consortium of Consulting Firms recently signed a contract. This

is an updated version of Polservice's 1973 master planning covering Baghdad city, greater Baghdad, and the capital regions (which extend over a 120-kilometer radius).

Housing Conditions: Iraq shares the familiar problem of a shortage of housing due to population growth (64 percent of the total population is urban, according to 1977 census), and the prevalence of an older housing stock that does not meet modern minimum standards, while changing lifestyles affect the quality of housing expected by the urban population. Over the period 1977-1980, 263,000 new dwellings were estimated to be needed (221,000 in urban areas). The housing deficit at the beginning of 1981 was 633,000 dwellings (488,000 urban).

Directives issued by the Ministry of Housing and Construction state that an average of 40 percent of housing to be constructed during the period 1981 to 2000 should be government-funded, and that the private sector should contribute 60 percent. To help solve the problem of housing shortages in Baghdad, many governmental agencies are subsidizing large modern housing developments planned for government employees, in the outskirts and suburban areas such as Zayyuna and Saydiyya.

Minimum housing standards set by the government require: that units be occupied by not more than one household; that they consist of not less than two habitable rooms with separate cooking and washing spaces and a toilet; that they be supplied with electricity, potable water, and means of domestic waste disposal; that they be built of regionally available durable materials, and be located in situations not detrimental to health; and that they be served by basic social facilities including education, health care, shopping, and communication lines. The State Organization for Housing is currently establishing norms and specifications for housing in Iraq, but drafts of this comprehensive study have not yet been published or circulated among the authorities concerned.

Project Reference Sheet

Project Name: Saydiyya Neighborhood

Location: Baghdad, Iraq

Consultants: The Architects Collaborative

Contractor/Builder: Makers Development Services Private, Ltd., Bombay,
India

Client: Amanat Al-Assima (Baghdad Municipal Authority)

Implementing Agency: Amanat Al-Assima

Date of Commission: September 1980

Implementation Status: Nearing completion

Estimated Cost: US\$ 160 million

Summary Description: Saydiyya Neighborhood is a 2,000-unit housing development located on an 80-hectare site 10 kilometers outside Baghdad city center. In addition to housing, the US\$ 160-million development includes schools, a shopping center, health clinic, sports complex, and other community facilities, as well as a large civic center. The site design features a central garden, parking areas, and a network of parks and landscaped walkways connecting private and public areas. Neighborhood clusters on loop roads form the basic design element, with buildings grouped around central courtyards. The residential units are precast construction (except for the foundations); the precast panels were fabricated in a plant built for the project and located adjacent to the site. Scheduling requirements dictated that work on foundation and infrastructure begin while landscaping and building details were being finalized, to enable the contractor to proceed with a rapid and uninterrupted sequencing of construction work.

SAYDIYYA NEIGHBORHOOD**Baghdad, Iraq****Project Summary Paper**

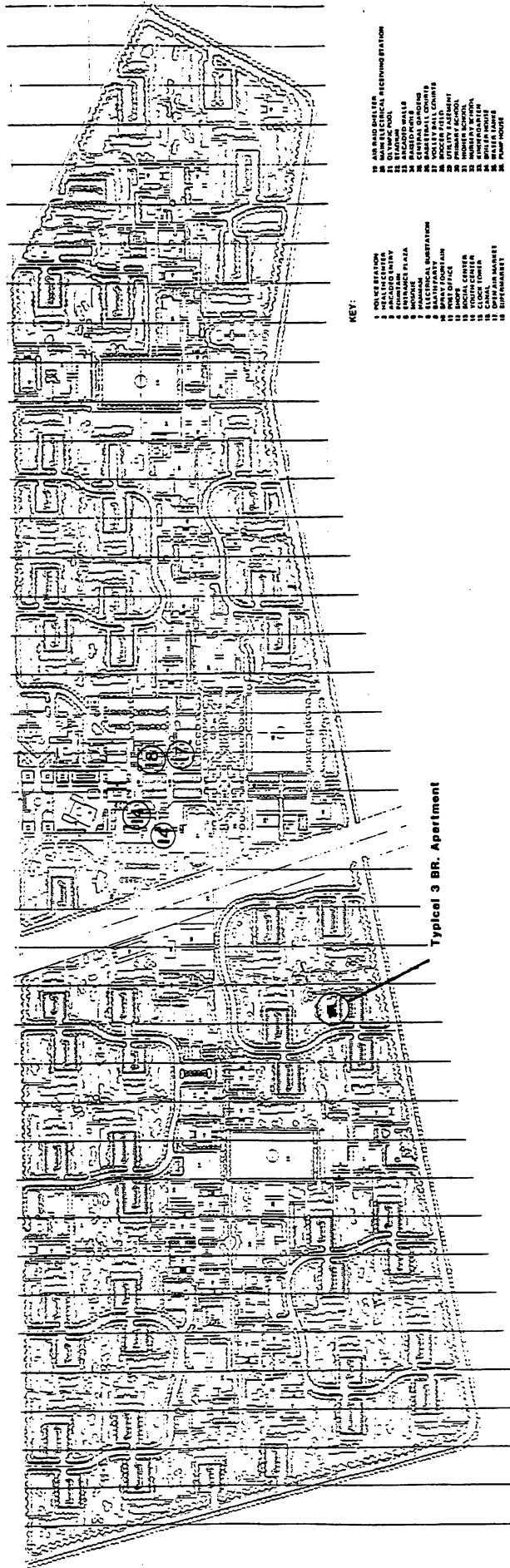
In 1980, Amanat Al-Assima (Baghdad Municipal Authority) retained The Architects Collaborative (TAC) to design the site plan and the community facilities for a 2,000-unit turnkey housing development near Baghdad. The housing was of precast concrete panels by Larsen-Nielsen. Standard foundations were built by the contractor; the precast elements were fabricated in a plant built specially for the project and located adjacent to the site. The neighborhood includes sixteen schools, a shopping center, a health clinic, a swimming pool, a sports complex, and other municipal facilities, as well as a large civic center grouping social, recreational, and religious facilities. The site design features a central open space, parking areas, and a network of parks and landscaped walkways connecting private and public areas. All public utilities will be provided; water, electric, and telephone will connect to the distribution networks of Baghdad.

Working with the contractor, Makers Development Services Private, Ltd., of Bombay, TAC mobilized its resources in site engineering and landscape and architectural design to meet the stringent scheduling requirements for this large project.

From the start, TAC directed attention first to site planning issues, which allowed the contractor to begin foundation and infrastructure work immediately. Subsequently, the focus shifted to building details, final landscaping, and utility systems, allowing the contractor to proceed expeditiously with the sequence of construction work.

THE SITE

The Saydiyya project is situated in a section of Baghdad called Al-Bayaa'. The 2,000 units will be located kilometers southwest of Baghdad city center, along a new road that will form the northern boundary of the site. The development will occupy a total land area of approximately 80 hectares.



KEY:

- | | |
|-------------------|----------------------------------|
| 1. MAIN ENTRANCE | 21. SWIMMING POOL |
| 2. ENTRANCE PLAZA | 22. ELECTRICAL RECEIVING STATION |
| 3. ENTRANCE DRIVE | 23. ELECTRICAL |
| 4. ENTRANCE | 24. ELECTRICAL |
| 5. ENTRANCE | 25. ELECTRICAL |
| 6. ENTRANCE | 26. ELECTRICAL |
| 7. ENTRANCE | 27. ELECTRICAL |
| 8. ENTRANCE | 28. ELECTRICAL |
| 9. ENTRANCE | 29. ELECTRICAL |
| 10. ENTRANCE | 30. ELECTRICAL |
| 11. ENTRANCE | 31. ELECTRICAL |
| 12. ENTRANCE | 32. ELECTRICAL |
| 13. ENTRANCE | 33. ELECTRICAL |
| 14. ENTRANCE | 34. ELECTRICAL |
| 15. ENTRANCE | 35. ELECTRICAL |
| 16. ENTRANCE | 36. ELECTRICAL |
| 17. ENTRANCE | 37. ELECTRICAL |
| 18. ENTRANCE | 38. ELECTRICAL |
| 19. ENTRANCE | 39. ELECTRICAL |
| 20. ENTRANCE | 40. ELECTRICAL |



PROJECT	AL ASSEMA CAMP, IRAQ	DATE	10 FEB 82	CS 1
DESIGNER	US ARMY ARCHITECTURAL CENTER, FORT MONROE, VA	APPROVED BY		
DESIGNED BY	US ARMY ARCHITECTURAL CENTER, FORT MONROE, VA	DATE		
DRAWN BY	US ARMY ARCHITECTURAL CENTER, FORT MONROE, VA	DATE		
CHECKED BY	US ARMY ARCHITECTURAL CENTER, FORT MONROE, VA	DATE		
APPROVED BY	US ARMY ARCHITECTURAL CENTER, FORT MONROE, VA	DATE		
TITLE	ILLUSTRATIVE MASTER PLAN			

The site has a narrow rectangular shape and is divided into two unequal parts by an existing utility easement. A system of loop roads prevents through traffic from cutting across the housing complex and creates intimate residential areas by delineating a series of neighborhoods. The neighborhoods, each containing a population of approximately 800 residents, are further divided into four roughly equal clusters. Within the community, a network of footpaths connects private spaces to public areas and neighborhoods to each other.

THE HOUSING

The housing units are three-story walk-up garden apartments. In a typical cluster, three apartment buildings face each other around a central courtyard which forms the entrance side of each grouping.

The project provides three prototypical designs: Type A, of which there are 600 units, has two bedrooms; Types B and C, of which there are 1,200 units altogether, have three bedrooms. A typical apartment contains, in addition to the bedrooms, a living room and a dining room, one and a half bathrooms, a large modern kitchen, a dining terrace, and a service terrace. In general, the family areas--the living room, dining room, and dining terrace--will face away from the entrance courtyard and toward the private side of the clusters.

Air-conditioning is provided by dual air coolers located in the service terrace; a false ceiling in the circulation spaces of the apartment conceals the air duct. In addition, the window panels can be removed to permit installation of window air-conditioning units.

The housing complex is intended for government employees, who will be allowed to buy individual apartments under lease-purchase agreements.

PUBLIC FACILITIES

All paths in the site eventually connect to the Civic Center at the heart of the development where the residents come for various communal activities, shopping, and recreation, and to make use of the service facilities provided in the development. The mosque can accommodate 300 people and has a separate space for women. Ten elementary and secondary schools are conveniently located around the site. Each school covers an area of 2,100 square meters, contains 12 classrooms, and is programmed for

30 students per classroom. Two nursery schools and four kindergartens are distributed about the site, conveniently located in close proximity to all the residential units. A health center will offer medical services to the residents free of charge. It covers an area of 2,500 square meters and includes examination and treatment rooms, a dental clinic, laboratory facilities, and a small operating room.

The land requirement program for the basic public facilities is as follows:

<u>Facility</u>	<u>Area (sq. meters)</u>
Mosque	588
Nurseries	750
Kindergartens (4)	1,000
Elementary schools (6)	2,100
Secondary schools (4)	2,100
Health center	2,500
Social and youth center	3,300
Swimming pool	1,400
HammaM (public bath)	300
Shopping center	1,216
Supermarket	908
Police station	771
Political headquarters	990

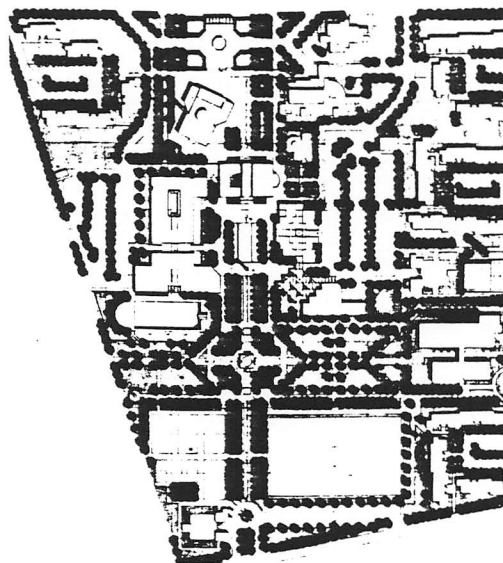
Recreational facilities include three soccer fields, four basketball courts, three volleyball courts, and a central landscaped garden with raised pools.

IMPLEMENTATION

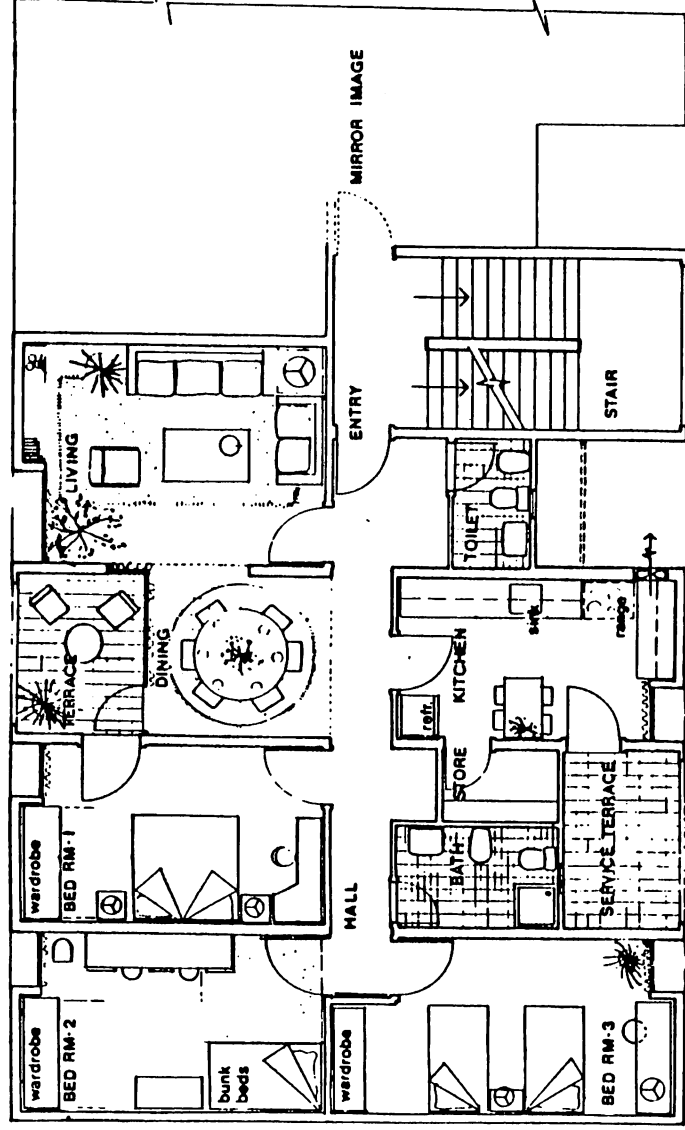
The western portion of the housing complex is scheduled for completion by December 1984, and the eastern portion by April 1985. The total cost of the project is estimated at US\$160 million.



Typical Housing Unit



Civic Center Cluster

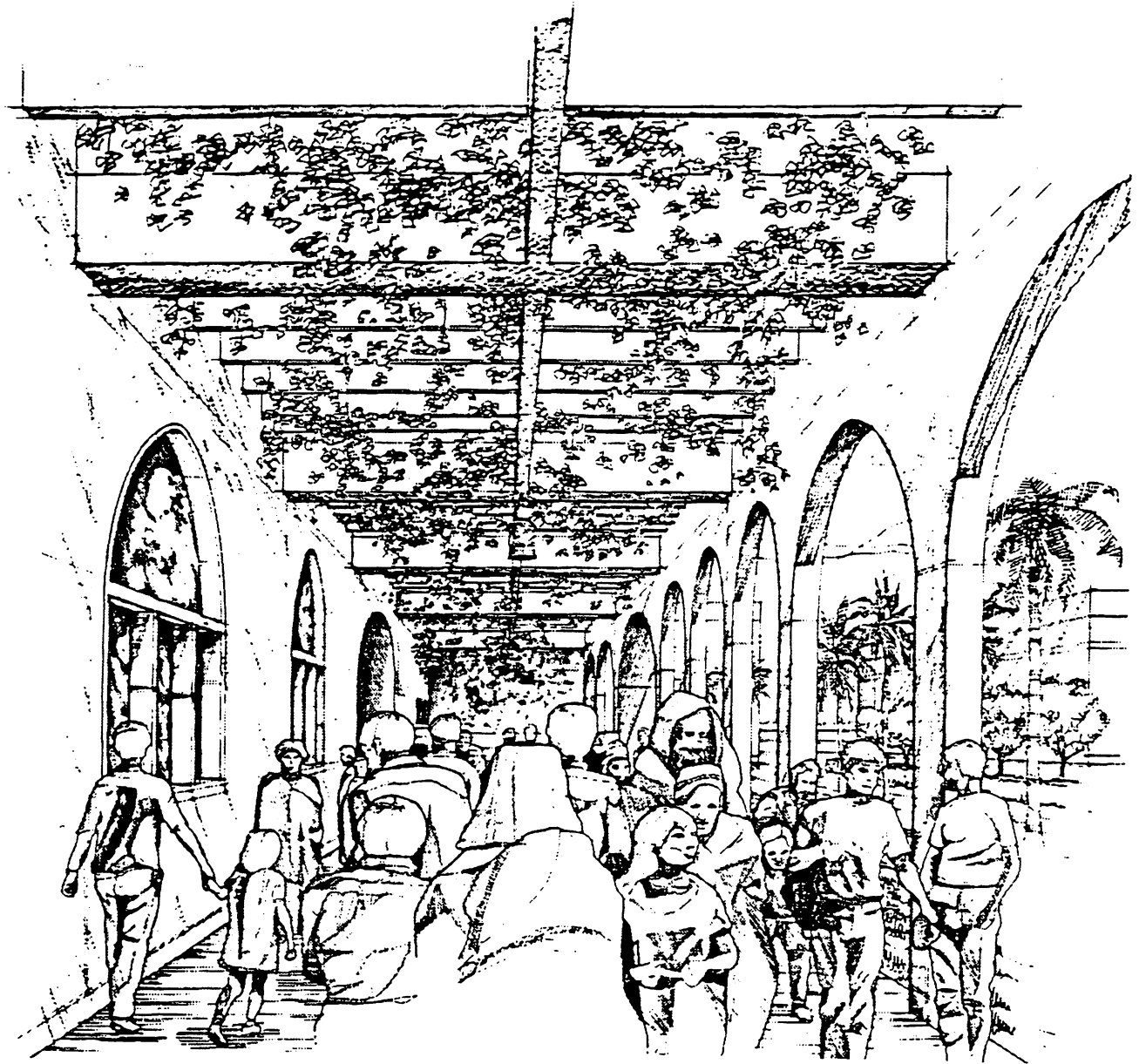


2000 HOUSING UNITS - BAGHDAD

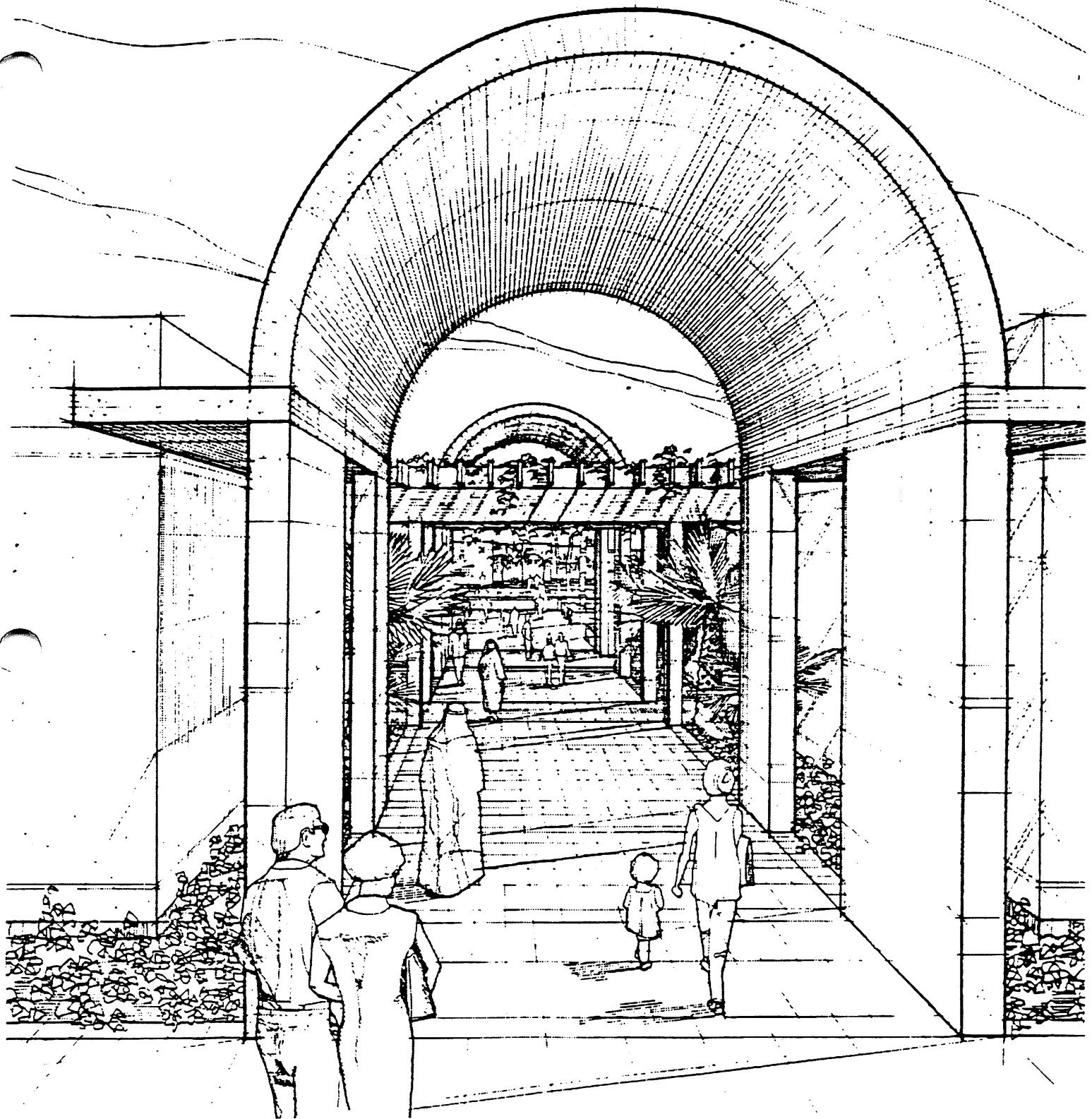
3 BEDROOM UNIT

TAC



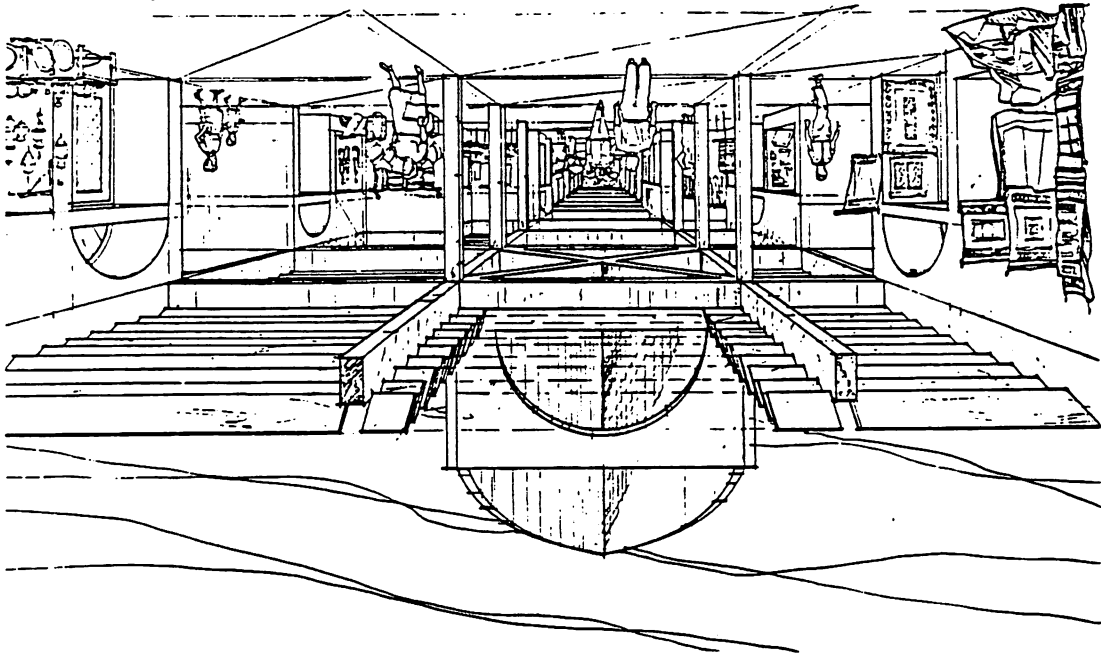


VIEW DOWN PEDESTRIAN ARCADE



18

VIEW INTO SHOPPING COMPLEX



17

VIEW INTO OPEN MARKET

