



**Figure 3.4 Current Road Network**

### **3.1.3 Related plans and regulations**

#### **(1) Guidance plan**

The guidance plan prepared by the Damascus governorate applies to the project area (Figure 3.5). The plan was examined during 1980's and 90's as a detailed plan for implementation of the 1968 Master Plan. It follows the basic schemes of the Master Plan such as artery roads. Some other elements, however, were cancelled such as a large parking area.

Construction permits are issued based on this guidance plan. Consequently, two types of buildings are coexisting in the project area: old buildings following old cadastral land shapes and new buildings following new block shapes. There exist some buildings constructed against new road boundaries and land use designation. Also, there remain some districts where redevelopment has not been progressed because land will be partly expropriated when re-construction takes place.

The land use distribution according to the guidance plan is summarized in Table 3.4. The plan allocates more than 37% of the total land area to roads.

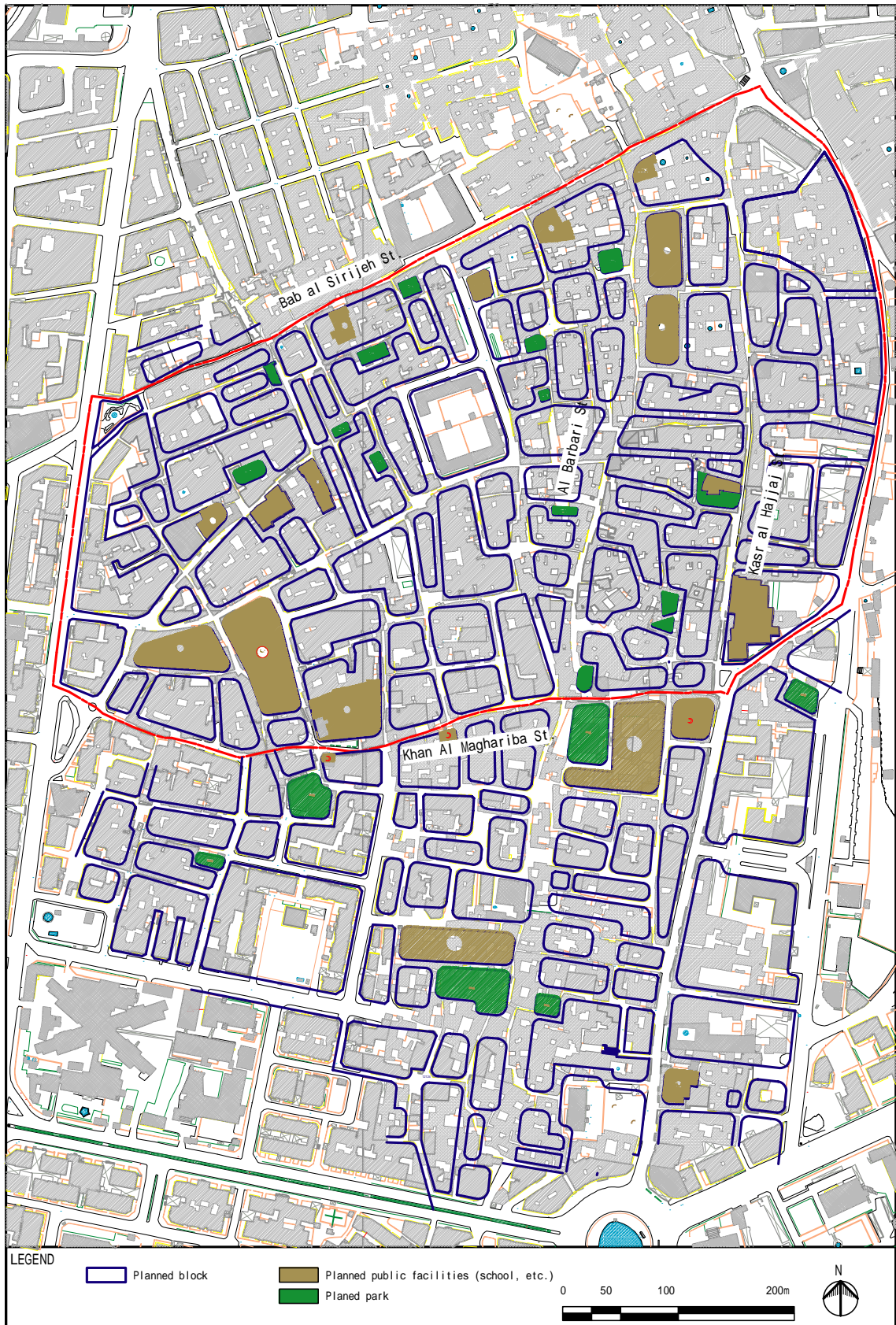


Figure 3.5 Guidance Plan for the Project Area and Its Surroundings

**Table 3.4 Land Use Distribution of Guidance Plan**

Land use	Surface (sqm)	Ratio (%)	Number of lots
Park	3,874	1.4	15
Elementary, secondary school (Future plan)	7,746	2.8	4
School (Existing facility)	5,350	1.9	1
Cemeteries	3,859	1.4	1
Other building site	152,976	55.2	-
Road	173,601	37.3	-
Total	276,890	100.0	-

**(2) Restriction on registered historical monuments**

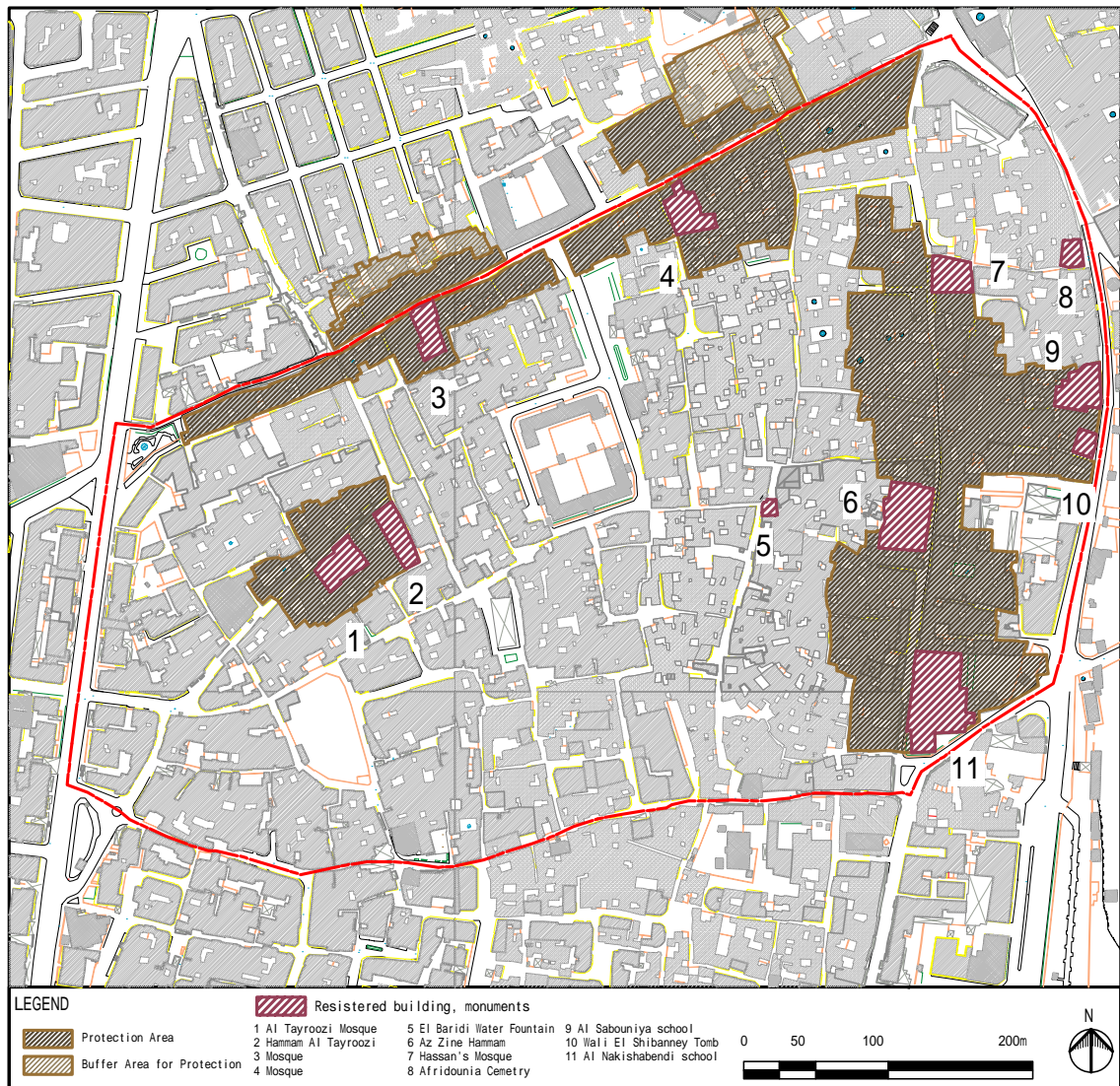
In the project area, 11 historical monuments were determined in 1964 under the authorization of the Department of Antiquity, the Ministry of Culture. This was based on the law enacted in 1963. According to the law, all the buildings 200 years old or older are subject to the registration. For the registered buildings, changes by reconstruction and rehabilitation of the interior and exterior are restricted. An old construction style and method should be used for restoration in principle. While the government support for the maintenance of registered buildings is stipulated by the law, no subsidy or guidance has been provided so far.

**(3) Conservation of historical protection areas**

The historical area in the project area was determined in 2006 under the authorization of the Department of Antiquity, the Ministry of Culture. The method of restoration is confined to the traditional one as is the case with the registered buildings. In some other registered areas, protection and buffer areas are mixed in the protection areas. In the case of Midan, the reconstruction of buildings is constrained with respect to the number of stories.

For the project area, only protection area has been determined with 6.4ha or 23.1% of the total land area. The protection area covers: (1) Qaser Al Hajjaj street (historical street to Midan), (2) Bab Srijeih street, and (3) district around the Tayroozi hammam and mosque (Figure 3.6).





**Figure 3.6 Historical Registered Monuments and Protection Area**

#### (4) Interview survey

An interview survey was conducted as part of the Study to residents in the project area. During September to October, 2007. The survey attempted to clarify the problems and the historical value of the area as perceived by the residents. The survey covered 150 residents. Most respondents were Syrian except a Palestinian and an Iranian. The majorities inherited their houses from their respective families and lived for many years. Only 14 families have lived there for less than four years.

#### Perceived problems

The following were mentioned during the survey as problems in the area:

- 1) poor road conditions,
- 2) poor housing conditions (risk of collapsing),

- 3) unsanitary conditions and dirt on streets,
- 4) unsuitable land use in some areas,
- 5) on-street parking,
- 6) inadequate drainage,
- 7) pollution of drinking water, and
- 8) drug dealing in abandoned collapsed houses.

#### Perceived historical value

Of all the respondents, 102 recognized the historical value of the project area. In particular, the following were mentioned as important:

- i) Tayroozi arch,
- ii) Tayroozi mosque,
- iii) Bab Al Srijeh street and market,
- iv) Al Breedi mosque, and
- v) A`atkeh grave.

#### **3.1.4 Urban conditions and problems**

The existing urban conditions and problems are summarized from the first workshop and the interview survey as follows.

##### **(1) Transportation and roads**

- 1) insufficient parking,
- 2) inadequate public transport,
- 3) narrow streets,
- 4) poor pavement conditions, and
- 5) no street light.

##### **(2) Public space and facilities**

- 1) no street light,
- 2) improper functioning of sewerage system,
- 3) poor waste management, and
- 4) lack of park.

##### **(3) Buildings and architecture**

- 1) high cost and lack of flexibility in reconstruction, restoration and removal,
- 2) lack of harmony between historical and newly constructed buildings, and
- 3) infringement on the privacy in historical houses by newly built buildings.

## **3.2 Planning Concepts and Improvement Strategy**

### **3.2.1 Objectives of the project**

In view of the existing urban conditions and problems examined above, the following objectives are set for the project.

#### **(1) Solving the current urban problems**

The existing urban problems facing the project area need to be solved irrespective of the heritage status of the area. The restoration of the heritage should be taken as the opportunity to solve the parking, traffic congestion and other problems. Also, public facilities and services should be planned following the same criteria established for other areas.

#### **(2) Enhancing comfort and amenities**

In line with the planning concepts of human security and cultural city, the project should contribute to creating more comfortable and pedestrian-friendly urban spaces with amenities.

#### **(3) Creating new value for demonstration**

In addition to solving the problems currently faced, the project should create new value that may serve as a model for urban development in the new era. This would also contribute commercial success of the project by enhancing the property value of the area.

### **3.2.2 Frameworks for the project**

#### **(1) Institutional framework**

The existing framework for protection of historical heritage is too restrictive to be realistically applied to existing buildings. Also, specific support measures to realize the protection are lacking. More flexible and realistic framework should be introduced.

There exist many residents who have abandoned the maintenance and preservation of their houses because of high costs involved in restoration and lack of means to undertake the works as stipulated by law and regulations. Some of them have left their houses to live elsewhere. This will result in disintegration of communities as well as heritage areas.

#### **(2) Development framework**

The plan for the project proposes to establish a buffer zone in the back of protection area. In this buffer zone, public facilities are planned to compensate for the inconvenience of residents living in buildings in the protection area. This will promote the positive use of historical buildings.



Moreover, the structure of urban environmental improvement and management is defined for the protection and its buffer areas. This includes a system and process for protection including construction regulation and introduction of support measures, and a system of physical planning, design and implementation for restoration works of buildings and street rehabilitation and construction of public service squares and new parks.

### (3) Land use framework

By mutually adjusting the need for historical preservation and the guidance plan, the land use framework for the project has been prepared as a revised guidance plan as shown in Figure 3.7. The land use distribution of this plan is summarized in Table 3.5. Each land use class is defined as follows.

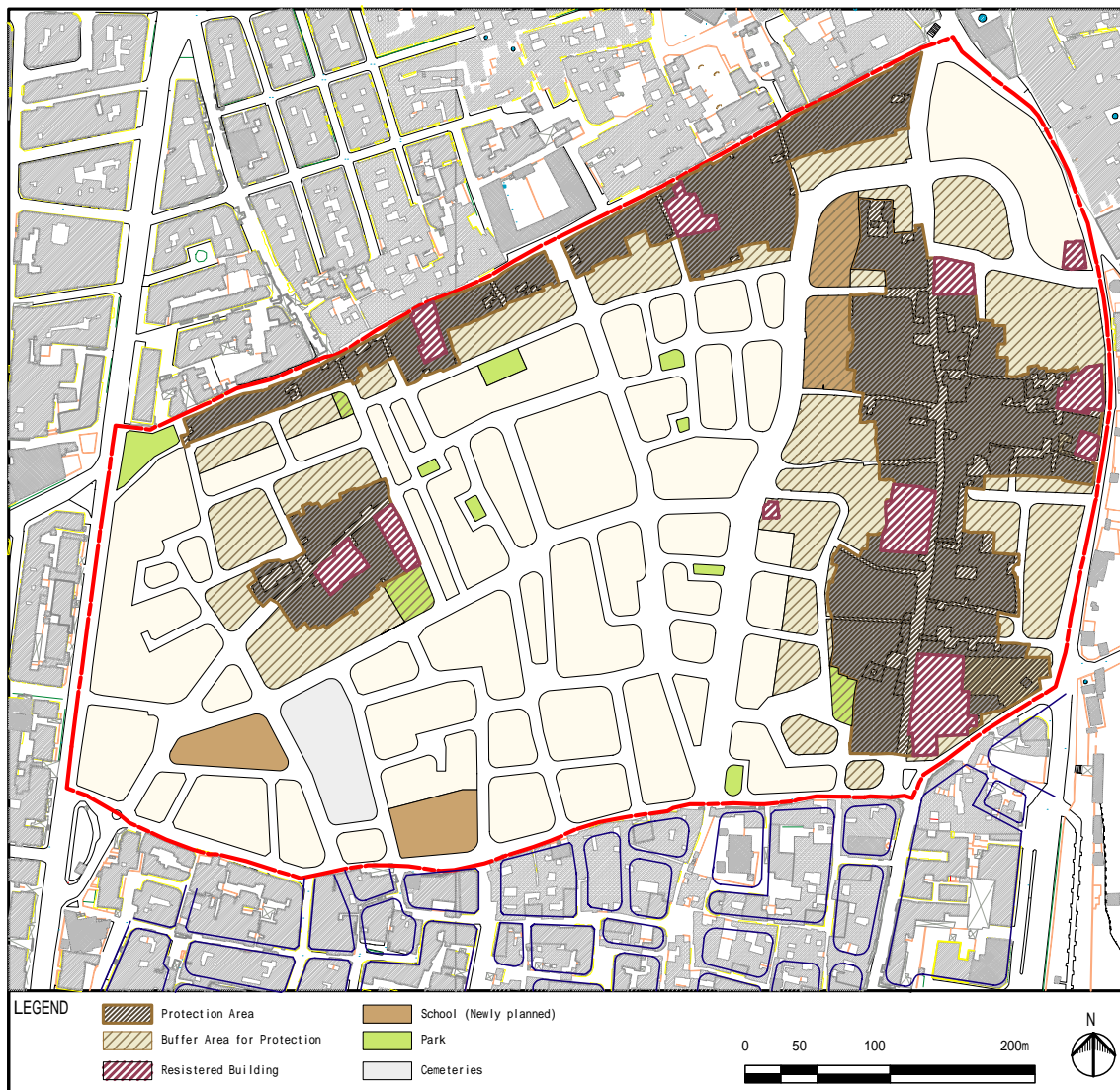


Figure 3.7 Modified Guidance Plan

**Table 3.5 Land Use Distribution of Revised Guidance Plan**

	Planned lot area (sqm)	Ratio (%)	Planned floor space index	Estimated building floor area (sqm)
Protection area	52,931	19.1	181.7%	96,176
Buffer area	40,476	14.6	200%	80,952
New block	85,702	31.0	300%	257,106
Park	3,677	1.3	-	-
Elementary, secondary school (future plan)	8,252	3.0	181.7%	14,994
School (Existing facility)	5,350	1.9	181.7%	9,721
Cemeteries	3,860	1.4	-	-
Road	76,642	27.7	-	-
Total	276,890	100.0		458,949

Protection area

The current average floor area ratio is taken as the planning index as no significant change should take place in the protection area. Most buildings in the area have one to three stories.

Buffer area

Considering part of the area is used for public facilities, assumed to cover 15-20% of the area, and some restrictions apply to new buildings in this area, the floor area index is set at two-thirds of that for new blocks.

New blocks

In the western part of the project area, redevelopment of some blocks has already been completed. In these blocks, the average building coverage is 0.65 to 0.70, and floor area ratios 2.50 to 2.70. Reflecting these and considering the possibility to modify and integrate small blocks, floor area ratio is set at 3.0 for the new blocks.

Parks

The modified guidance plan generally follow the designation of parks in the original guidance plan.

Education facilities

The modified guidance plan generally follows the criteria used in the original guidance plan. The required capacity is evaluated in Section 3.3.

Cemeteries

The modified guidance plan generally follows the designation in the original guidance plan.

Adjustment

As the result of the designation outlined above, the total floor area has increased to



458,949m<sup>2</sup>, an increase by 7.89% from the present. Therefore, the planned population is increased by 5% to 2,598.

### 3.3 Evaluation of Public Facilities and Services

#### (1) Education facilities

Out of eight schools existing in the project area, including one under construction, three are expected to be removed or stop being used as a school. A new school complex comprising two secondary schools (general and vocational) for girls, basic level school and kindergarten exist in the area. Furthermore, a new school is under construction, which is expected to be of secondary level for boys.

The number of new schools required to serve the expected population in the project area is estimated as shown in Table 3.6, incorporating some students from outside the area as well. A total of four schools are required on a total land area of 0.52ha. No secondary schools are required.

**Table 3.6 Planning for Educational Facilities**

Item	Unit	Education Level				Total
		KG	Basic 1	Basic 2	Secondary	
1) Share of population	%	5%	7%	9%	6%	27%
2) Enrollment level	%	50%	100%	100%	100%	---
3) Student number (project area)	Student	130	182	234	156	702
4) Total Classes required <sup>(1)</sup>	Class	2	21	9	0	32
5) New Schools required	School	1	2	1	0	4
6) Total Area requirements						
(1) Total Building <sup>(2)</sup>	m <sup>2</sup>	504	5,292	2,592	0	6,120
(2) Total Playground <sup>(3)</sup>	m <sup>2</sup>	216	2,268	1,296	0	2,808
(3) Number of floors/school	Floor	1	3	3	0	---
(4) Total Site requirement <sup>(4)</sup>	m <sup>2</sup>	720	4,032	2,160	0	5,184
7) Area requirement per school						
(1) Building area each school	m <sup>2</sup>	504	2,646	2,592	0	---
(2) One floor area	m <sup>2</sup>	504	882	864	0	---
(3) Playground area each school	m <sup>2</sup>	216	1,134	1,296	0	---
(4) Area required per school (playground + one floor)	m <sup>2</sup>	720	2,016	2,160	0	---
<b>Notes:</b> 1) Considering 36 students per class and removed classes, 2) 7m <sup>2</sup> per KG and B-1 student and 8m <sup>2</sup> per B-2 and Secondary student, 3) 3m <sup>2</sup> per KG and B-1 student and 4m <sup>2</sup> per B-2 and Secondary student, 4) [(1)/(3) + (2)]						

#### (2) Health facilities

The Al Qanawat service department as a whole has the highest number of hospital beds of all the departments, at 32.1 beds per 1.000 persons. In the project area, there is a new primary health care facility, which is not subject to removal. Therefore, no health facilities are proposed in the project.

### (3) Cultural centers

Four new cultural centers are proposed by the Master Plan in service departments where high population growth rates are expected. Al Qanawat is no one of them, and therefore, no facilities are proposed in the project.

### (4) Solid waste management

The sanitation section of the Damascus governorate is in charge of solid waste management in the whole city. Generally, residents put wastes into roadside waste containers, and the wastes are collected by collection vehicles. In Qanawat, however, many roads are narrow in some areas, and residents in those areas discharge wastes in front of respective houses and the city collectors pick them up using manual carts. The collected wastes are then put to the containers or collection vehicles.

The following problems are pointed out by residents:

- 1) The number and capacities of the waste containers, manual carts and waste collection vehicles are not sufficient; and
- 2) Some people throw wastes onto streets or into empty houses.

The equipment and staff provided in the Qanawat area are listed in Table 3.7, which the city staff in charge consider sufficient. The frequency of waste collection, three times a day, is considered also adequate. They consider the occasional absence of some staff causes complaints by residents.

**Table 3.7 Equipment and Staff Provided in Qanawat Area \***

Equipments and Staff		Quantity & Frequency
Waste container	Big containers (1100 liter)	27
	Middle containers (600 liter)	21
	Small containers (240 liter)	110
	Barrel (200 liter)	40
Collection cars	2 ton compactor car	1 vehicle x 3 times/day
	Truck	3 vehicle x 3 times/day
Manual carts		50 carts x 3 shifts
Staff		147 workers

Source: Interview with cleansing section of the Damascus city

\* Out of this area, the study area occupies around 60%.

## 3.4 Qanawat Heritage Area Improvement Project

### 3.4.1 Establishment of buffer area

The buffer area is proposed in the remaining land of protection zone and adjoining area (Figure 3.8). The purpose of establishing the buffer area is first to support the life of residents in old registered houses. In the buffer area, public facilities should be planned and

implemented as a precedence of the overall improvement of the project area. These facilities are intended also to serve adjoining protected area. The facilities include parking, loading/unloading spaces for commercial vehicles, traffic terminal, and waste collection service point. For these functions, public service squares are proposed as mentioned below.

Second, the buffer area is intended to harmonize its townscape and functions with those of adjoining protection zone. It would also moderate possible conflicts between old and new buildings. For these purposes, planning and improvement works should be undertaken jointly for both the buffer and the adjoining areas.



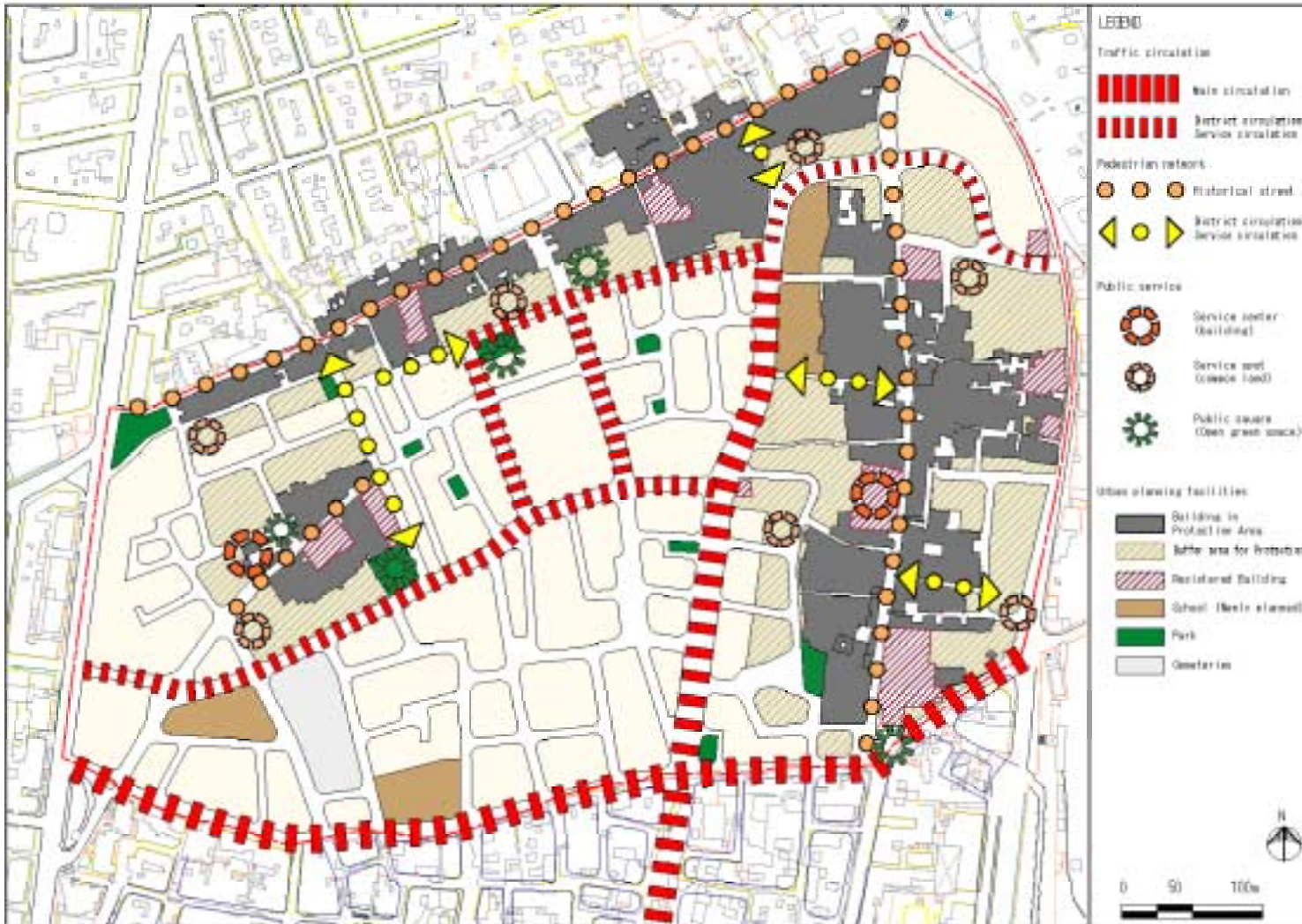


Figure 3.8 Master Plan for Qanawat urban Heritage Area Improvement

### 3.4.2 Improvement on traffic

The future road network for the project area is planned as shown in Figure 3.9. It incorporates the ideas to improve the Kasr Al Hajjaj street and to separate the intra traffic and through traffic. To realize these ideas, a prohibition zone is established for through traffic on the north-east entrance of the area, where through traffic are stopped from entering. The traffic demand with destinations in this area is met by entering at the east and south entrance, and from the north edge of the Qanawat area with some longer travel. Through traffic should move on a route around the Qanawat area, and will be prohibited to enter at the four lane section in the prohibited area.

Another idea incorporated in the plan is the provision of a 2-lane supplemental road in parallel with the Bab Al Srijeh street to the north. This road section will upgrade the service level of traffic along the east-west axis. This will also make the traffic movement on the main four lane-road sections located in parallel to the Qaser Al Hajjaj street.

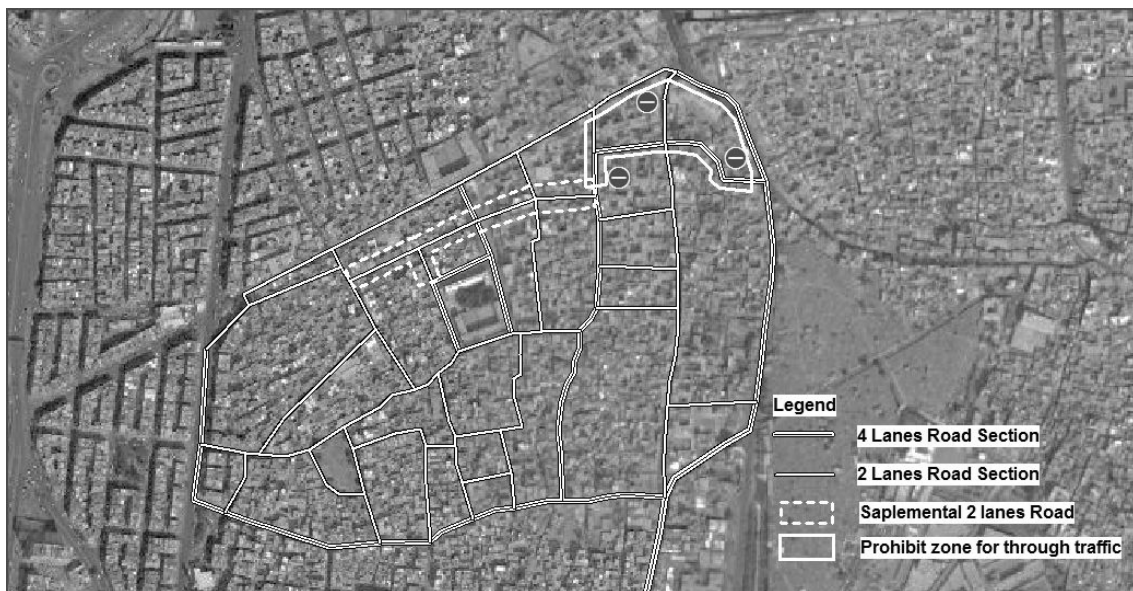


Figure 3.9 Future Road Network for the Project Area

### 3.4.3 Improvement on parking

The demand for car parking is estimated based on the planned population and the car ownership ratio in the future. The car ownership ratio was 87.7 cars per 1,000 persons in 2004 in the Damascus city. The ratio in Syria increased at the annual average rate of 5.28% during 2001-05. The car ownership ratio is assumed to increase to 258 vehicles per 1,000 persons by 2025. Applying this ratio, the parking demand for residents is estimated to be 639 in 2025. The demand for commercial vehicle parking is estimated at 2,300 based on the number of employees during daytime, estimated to be 5,221 in 2025, and commuting vehicles

attraction ratio of 2.27 employees per vehicle per day in the Damascus city center.

Corresponding to this demand, part of parking facilities are proposed to be provided in service spots.

#### **3.4.4 Improvement on street conditions and sewerage**

It is desirable that improvement of sewerage system and road surface improvement would be coordinated for effective execution of budget. In this case, the repair of façade of buildings along the road to be improved should also be implemented at the same time within the same budget.

#### **3.4.5 Establishment of public service centers**

Some buildings which are neglected and dilapidated may be considered for acquisition and conversion into other public uses. One or two buildings in the project area may be subject to this, depending on available budget. Possible uses include the following:

##### **(1) Office of city planning consultation**

This may be established as an information center for planned restoration of the project area for all the residents, where relevant information and maps are provided. The office may also be used for small consultative meetings between city planners, consultants and residents.

##### **(2) Exhibition facilities**

The old building may be converted into a small exhibition room for cultural heritage. It may be used also for exhibition of photos taken by residents on various heritage objects. This may help to raise the awareness of residents for the heritage value of their own.

#### **3.4.6 Establishment of public service spots**

The service spots are planned to be utilized for the following services and facilities. The plan recommends about 10 spots of 500 to 1,000m<sup>2</sup> to be provided in the project area.

##### **(1) Parking**

To reduce on-street parking, public parking lots should be provided. The parking on the public service spots should be used mainly for residents in the protection or buffer zone free of charge or at minimum charge.

##### **(2) Loading/unloading spaces**

Along with the improvement of pedestrian way, integrated loading/unloading space is provided for commercial establishments facing the market street. It should be used commonly



by neighboring shops.

**(3) Traffic terminal**

Public transportation in the area will continued to be offered by microbus called “service” and taxis. These vehicles make stops in the area to aggravate traffic congestion. To alleviate such conditions, waiting spaces for them should be provided.

**(4) Waste collection**

For efficient waste collection and clearance from main streets, space would be provided in public service spots.

**3.4.7 Improvement on waste management**

The waste management in the project area is expected to be improved by the uses of prepared facilities in the future public service spots. The facilities in such public places would provide opportunities to improve the waste handling operations as well. There already exists a committee for waste management, consisting of resident representatives and the sanitation section staff. It should be utilized to improve the situation mentioned above concerning the gap in the perception between them and associated problems.

**3.4.8 Parks**

Some parks are already planned in the current guidance plan. Location of the parks should be modified closer to historical monuments or entrances to historical area in order to enhance the space value through integration of related facilities.

**3.4.9 Architectural treatment**

**(1) Restoration of buildings**

Possible relaxation of the strict regulation currently applied to protection areas is a matter of continued discussion. The committee for heritage protection, organized by the department of antiquity of the Damascus governorate, the Ministry of Culture and other related organizations has been discussing the matter but no conclusion has been reached. The application of regulations of this sort should depend on actual conditions of buildings to be restored, which can be clarified only through surveys and assessment. At this time, only some general recommendation can be made.

Consultancy organization

The roles of the department in charge of heritage protection need to be established, and a consultancy organization established to support their functioning. The organization may

develop into a central coordination body, which would be responsible also for assessment of conditions of registered buildings, recommendation on restoration plans, and facilitation of funding for the restoration works.

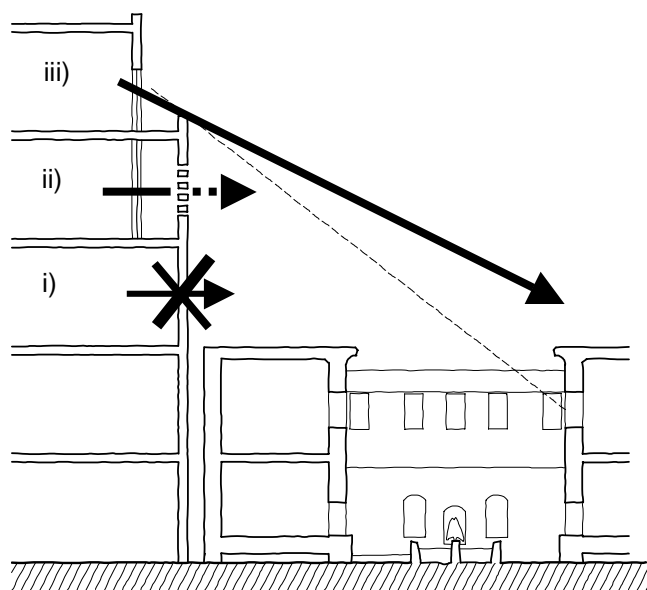
#### Financial support system

It is desirable to create a mechanism for funding the restoration works both through formal budgeting and informal fund raising by promotion activities.

### **(2) Regulation applicable to buildings in the buffer area**

Mild regulations should be applied to buildings in the buffer area such as the one on the window position to ensure privacy of buildings in the protection area. Examples of guidance include the following (Figure 3.10):

- i) ban on windows directly inflicting on registered buildings, and
- ii) requirement for balconies with shield device in case windows are planned overlooking registered buildings.



**Figure 3.10 Example of Mild Regulation in Buffer Area**

### **(3) Integration of streetscape**

For some important streets, a detailed design study should precede to formulate integrated streetscape. The study may start with community workshops and/or individual consultations to elicit ideas to be examined. For a street connecting protection zone and its buffer zone, additional regulation may apply to newly constructed buildings in the buffer zone such as utilization of traditional materials and styles on façade of ground floor.

#### **3.4.10 Other aspects**

Strategic extension of pedestrian linkages to neighboring areas is suggested in Figure 3.11. They include linkages with Old Damascus, the northern part of Qanawat, Bab As Sagheer, and Al Shagour. Also, they may link to the west axis along the Barada river through the Hijaz railway station and the national museum. To establish these links, installation of signposts explaining historical monuments and maps showing their location in the district is important to make them visible. Examples are shown in Figure 3.12.



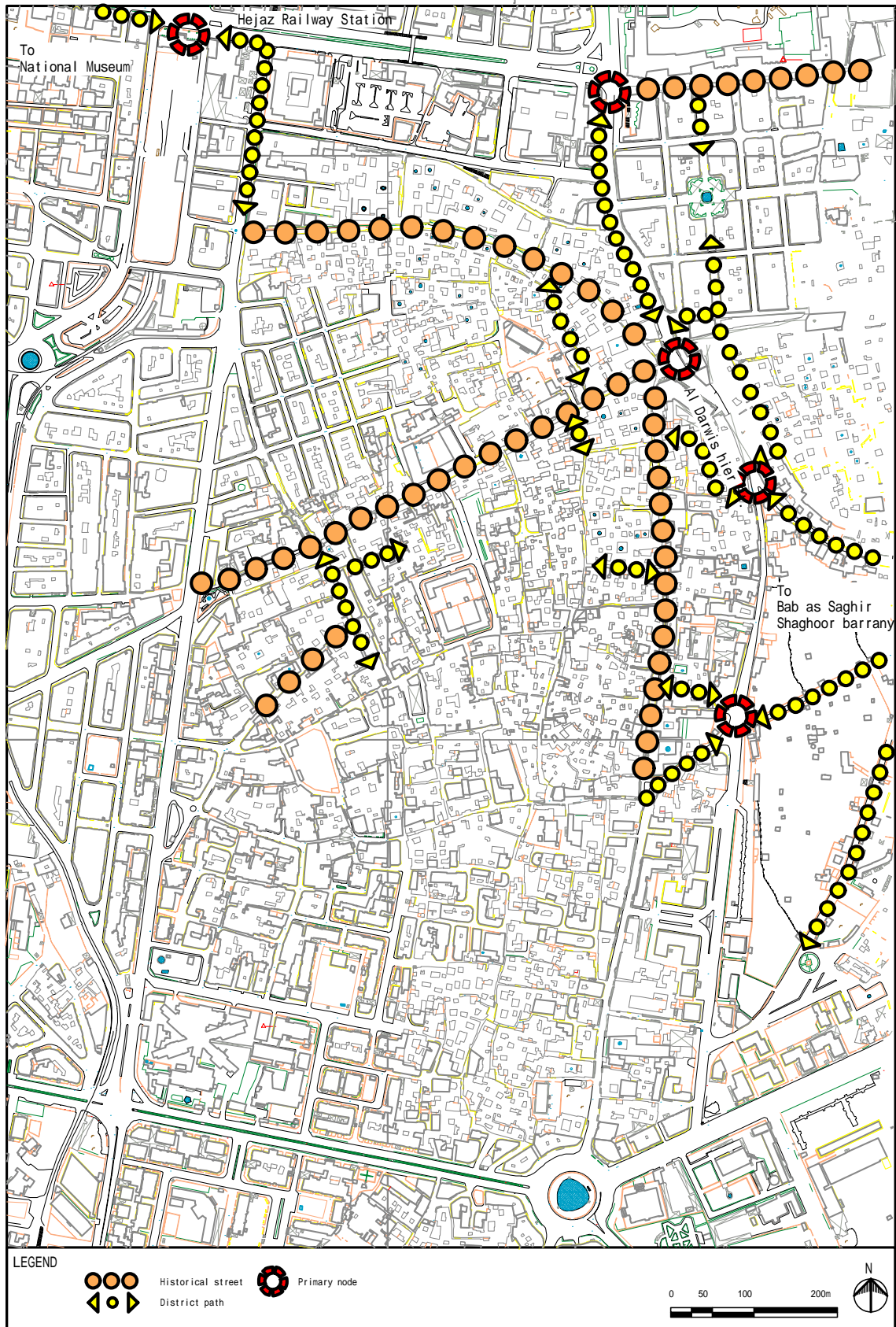


Figure 3.11 Future Extension of Pedestrian Network



Figure 3.12 Example of Signposts and Explanation Boards

**3.5 Evaluation of Objects to Be Improved**

Selected objects that may be improved in the near future are assessed at a preliminary level. They include old buildings, historical streets, and districts with narrow streets (Figure 3.13).

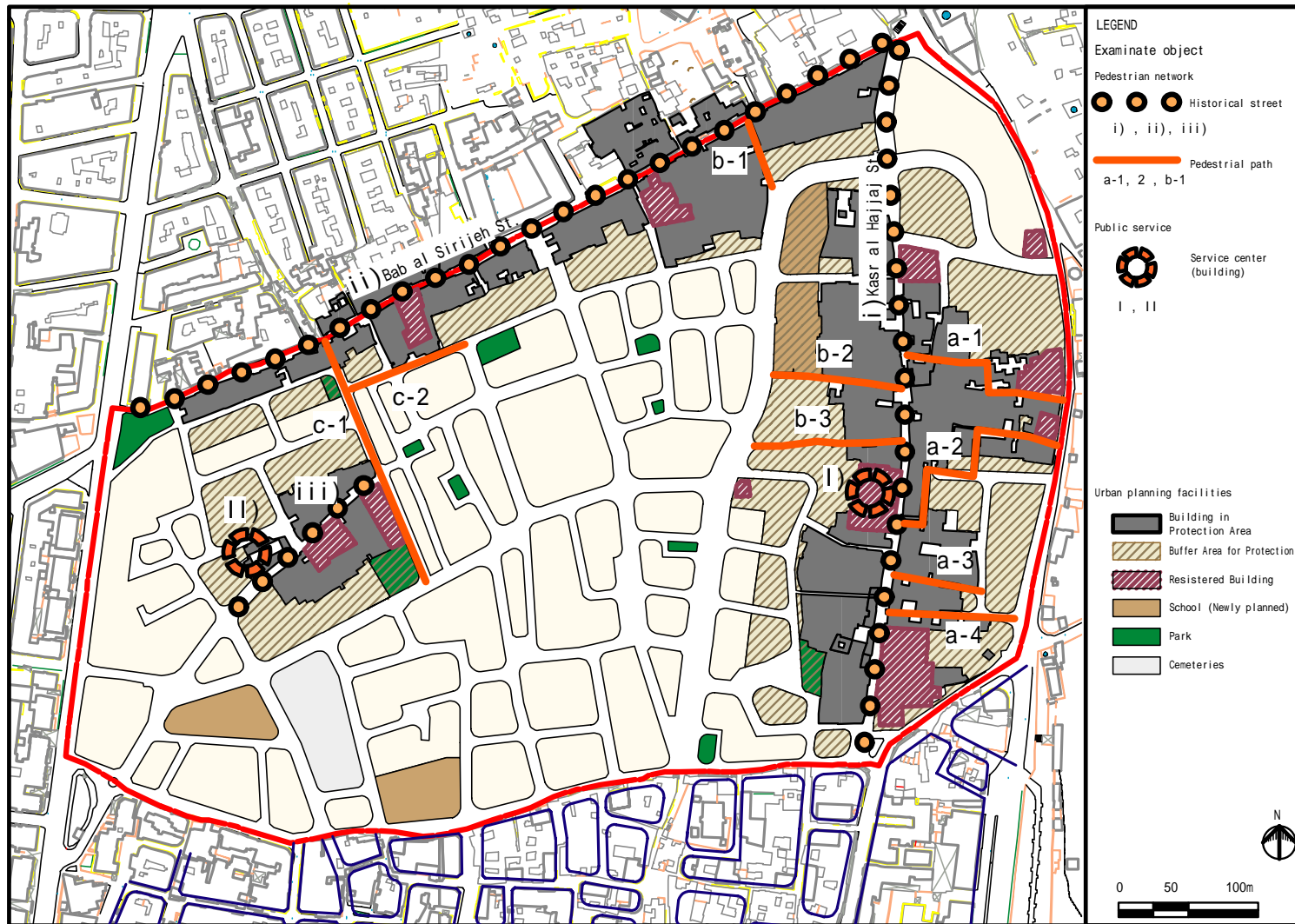


Figure 3.13 Locations of Objects to be improved in Near Future



### (1) Old buildings

Many historical buildings owners would like to sell the buildings rather than continuing to spend large costs for maintenance and repair. Also, risk is involved in keeping to own them in the form of troubles and expenses that may be involved in examining and assessing the buildings, if not their confiscation.

Two buildings in the project area have been selected for initial assessment. The selection is no more than preliminary, and more detailed studies will be necessary for these and other buildings in the next stage.

#### 1) Old house facing the Qaser Al Hajjaj street

The house is located facing the Qaser Al Hajjaj street, next to the registered hammam. The building area is estimated to be 605m<sup>2</sup>, and the floor area 1,210m<sup>2</sup>. It has two floors, ground and the first. The house is not used, and its owner lives abroad. According to the Syrian regulations, the unused buildings of absentee owners may be expropriated if a proper procedure is taken as required. Otherwise, the absentee building may be acquired with the owner's consent. Application of such procedures is subject to discussion by the administration and others.



#### 2) Old house near the Tayroozi mosque

The house is located in the Tayroozi area, near the Tayroozi hammam. The building area is estimated to be 480m<sup>2</sup>, and the floor area 960m<sup>2</sup>. It has ground and first floors. The building is divided into three and rented out to a school and a clinic. When the school is transferred to a new location in the future, the building may be acquired and converted to other uses. The exterior arch of the house was once used for equipment of a water pipe. Corresponding equipment remains on the indoor side. The arch gives a characteristic streetscape.



## (2) Historical streets

### 1) Qaser Al Hajjaj street

The street is 488m long and has the average width of 4.81m. It is asphalt paved. Historically, this used to be the main street connecting the central part of Damascus and the Midan area. The street is congested most of the time with the north-south traffic passing through the area. Many historical buildings exist along the street, it is expected to become a pedestrians' trunk road. To reduce the congestion, the road construction in a new block is a priority.



## 2) Bab Al Srijeh street

The street has the length of 615m and the average width of 5.6m. It is stone paved. The street serves as a shopping mall as well as a main route for the east-west traffic. The road surface repair work was undertaken, and the surface conditions are good. A key issue is to reduce the incoming traffic associated with the redevelopment of a neighboring area. Individual buildings facing the street can be more effectively repaired after the redevelopment.



## 3) Alley around the Tayroozi hamman

The alley is 153m long, 5.1m wide on the average, and asphalt paved. An arch over it gives a characteristic scene. Many historical buildings exist along the alley, and educational establishments are also located. Passage by cars is obstructed by parked cars, but the situation is not as serious as the other two streets mentioned above. Initial improvement measures include the road surface improvement, installation of electric cables underground, and repair of buildings along the alley.



## (3) Districts with narrow streets

Many narrow streets exist in some districts in the project area. They should be treated together for improvement. A preliminary assessment is in order.



**1) East of the Qaser Al Hajjaj street**

Four narrow streets east of the Qaser Al Hajjaj street are assessed in Table 3.8.

**Table 3.8 Assessment of Narrow Streets in East of Qaser Al Hajjaj Street**

Index	Length (m)	Width (m)	Road surface	Buildings	Comment, remarks
a-1	132	1.3 - 4.0	Seriously bad	Bad	Minimum required level as road not satisfied.
a-2	190	2.4 – 8.0	Rather bad	Some new	Expected to be improved with new block's development. Green space and comfortable square exist.
a-3	63	2.4 – 3.0	Normal	Normal	Room over the street makes characteristic street-scape
a-4	71	2.6 – 3.0	Normal	Normal	



**a1**



**a2**



**a3**



**a4**

**2) West of the Qaser Al Hajjaj street**

Three narrow roads west of the Qaser Al Hajjaj are assessed in Table 3.9. A new link is expected to be included in the development of a new block in this area.

**Table 3.9 Assessment of Narrow Streets in the West of Qaser Al Hajjaj Street**

Index	Length (m)	Width (m)	Road surface	Buildings	Comment, remarks
b-1	49	2.5 - 3.2	good	Good	Expected to be important path to north of the area
b-2	99	2.2 - 4.5	Rather bad	Normal	***(room over the street ) makes characteristic street-scape
b-3	98	1.8 – 3.0	Normal	Normal	



**b1**



**b2**



**b3**



**b3**

### 3) Tayroozi area

Two roads in the Tayroozi area, although wider than those mentioned above, should be treated together for their improvement. They are assessed in Table 3.10. Associated with the development of surrounding area, the environmental improvement of this area should be undertaken.

**Table 3.10 Assessment of Streets in Tayroozi Area**

Index	Length (m)	Width (m)	Road surface	Buildings	Comment, remarks
c-1	99	6.6 (guidance)	Seriously bad	Some new	Harmonization between old and new buildings must be considered.
c-2	189	7.2 (guidance)	Rather bad	Some new	Improvement will done by future new redevelopment.



c1

### 3.6 Implementation Program

#### 3.6.1 Cost estimate

The project costs consist of construction cost, engineering service cost, land acquisition and compensation costs, and contingencies. The construction cost is estimated in accordance with the guidelines of Syria covering material cost, labor cost, equipment cost and overhead. The overhead is taken as 20% of the total of material, labor and equipment costs as specified in the guidelines. The cost for some elements is adjusted to reflect the information obtained regarding the escalation of market prices.

The engineering service cost covers the detailed design, assistance for tendering, construction supervision and other related works, is estimated as 10% of the total construction cost. The land acquisition cost in the Qanawat area and the compensation cost are estimated based on the average rates of the following.

The compensation cost is estimated as rent for the same floor area of the current residence and commercial offices and shops applicable to temporary lodging for a period of five years during the construction. The private sector building construction costs are separately estimated, including detailed design and contingencies. The cost estimate is summarized in Table 3.11.



**Table 3.11 Estimated Cost Summary for the Project**

Project Cost Total		11,118.93	0.00	0.00	11,118.93	
Private Sector Building Construction (Qanawat)		11,066.73	0.00	0.00	11,066.73	
<b>Grand Total</b>		<b>22,174.86</b>	<b>0.00</b>	<b>0.00</b>	<b>22,174.86</b>	

Construction Cost Total		723.54	0.00	0.00	723.54	
Engineering Service Cost		72.35	0.00	0.00	72.35	10.0%
Land Acquisition		4,529.23	0.00	0.00	4,529.23	
Compensation Cost		4,783.00	0.00	0.00	4,783.00	
Contingency		1,010.81	0.00	0.00	1,010.81	10.0%
7 Culture Centers		0.00	0.00	0.00	0.00	
8 Religious		2.90	0.00	0.00	2.90	
9 Parking Facilities		9.50	0.00	0.00	9.50	
10 Infrastructures		86.63	0.00	0.00	86.63	
11 Miscellaneous		14.19	0.00	0.00	14.19	2.0%
2 Rehabilitation		17.07	0.00	0.00	17.07	
3 Roads		74.51	0.00	0.00	74.51	
4 Green Area		4.08	0.00	0.00	4.08	
5 Education		297.10	0.00	0.00	297.10	
6 Health Facilities		0.00	0.00	0.00	0.00	

Unit : Million SP

Item	Phase 1	Phase 2	Phase 3	Total	Remarks
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Source: Study Team

### 3.6.2 Implementing arrangements

The following are recommended to facilitate and expedite the project implementation.

#### (1) Establishment of a district council

Further project development is expected to be undertaken by extending the efforts through the Study. In particular, participatory process initiated should be institutionalized not only for further planning but more importantly for subsequent implementation. First, a resident organization such as a district council should be formally established through community workshops. This would establish ownership for the project, and act on the administrative side as the legitimate entity.

The resident organization should better have a fixed address in the project area, and an office of community development may be established. It may be meaningful if the office will locate in one of the registered buildings that should be renovated. The office will serve as an information center for all the residents, and a venue for small consultative meetings with the administration as well as among residents. The office should serve as the symbol of community integration.

#### (2) Cost sharing

The project should be implemented by the public-private partnership involving the residents and the administration. While the administration should be mainly responsible for securing fund necessary for the implementation through formal budgeting process, it is highly desirable that the residents would make financial contributions as well.

The residents through the district council should agree on the cost sharing for the project

implementation by determining the level of financial contributions and the method to collect and manage the contributions. Part of the contributions would be used for the operation of the district council, but the bulk should be devoted to covering working expenses for the project implementation.