Madaba

Detailed description of the city revitalisation program

Annex 1
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1. Executive summary

The main challenge that the historic core of Madaba is facing, is to recover its urban centrality and be revived with a new "social and economic mission" within its regional context.

Form a social point of view, the revived historic core must contribute to reconstruct social cohesion amongst the different social groups providing a common federating space for the entire population, where the cultural heritage is preserved and enhanced in both its symbolic and economic role, and urban space is improved for the benefit of residents and visitors.

From an economic point of view, the revived historic core will contribute to addressing the current economic stagnation by boosting the existing local economy and tourism activities, which in Madaba are concentrated mainly on the visit to the Church of the Map and to the archaeological area, expanding the visitors’ experience to include the main commercial spine and the new structures that will showcase local products.

Form an urban point of view, the focus is on the improvement of the socio-urban fabric, the recovery of commercial centrality and the improvement of the urban environment as a high quality civil space.

The project aims at achieving these objectives through a structured city revitalization program, that includes regulatory actions, physical actions and capacity building actions.

The most comprehensive actions are concentrated on enhancing the main urban axis composed by the Church of the Map node, the King Talal Street axis and the Saraya node. Tightly related to this axis is the proposed new complex for leisure and handicraft-related facilities. Moreover, an overall upgrading of the street network and of the public space will involve the entire perimeter of the historic core.

The transformation of the existing bus terminal into a quality space will complement to the general improvement of the streetscape and circulation patterns.

As a general framework, the regulatory action will ensure the preservation of the significant characters and assets and the completion, with time, of the improvement of the public spaces.

Finally, to sustain the municipality and ensure its participation in the program, a specific capacity building action is envisaged.
2. Scope of the program

2.1 MADABA

The urban form of the city, traditionally the regional centre for agricultural activity, is characterized by a centralized morphological scheme converging on the historical core and supported by a series of radial. The main features of the historical fabric are represented by the early Ottoman village (1880 - 1918), and by the subsequent phases of urban growth, which occurred until the 1940’s, which confirmed and extended the Ottoman village road network and opened new roads to accommodate urban expansion, which occurred in all directions around the central core. Around the historic core, the main urban components are the refugee camp to the south, and the new expansions on all the other directions. Urban form is also strongly characterized by a peripheral Ring Road which marks the limit between the outer expansion districts and the inner traditional urban core. Due to the fact that all the Master Plans from the late 1960’s to the present have confirmed the radial layout of the city, many major commercial activities, as well as administrative and institutional functions, have developed along the Ring Road transforming it into a multi-functional linear system pertaining to the wider urban context of the extended contemporary city.

The historical urban fabric extends around the central hilltop complex, which includes the Saraya Building and the Roman Catholic Chapel of St. John. This area still maintains for the population a symbolic value as the local Acropolis. Many archaeological sites are scattered within the urban core, witnessing different eras from the Iron Age up to the present. In 1991, the Archaeological Park was established in order to present and integrate within the urban fabric all those different layers of city history. The park is characterized by the presence of the remains of an ancient Roman road flanked by columns and paved with mosaics which, like the rest of the Imperial Roman remains present in the area, crops up in the un-built portions of the consolidated urban fabric. The Church of the Map (the site of the most ancient preserved mosaic map of the Holy Land) and the other buildings of the complex are positioned in the northwest quadrant of the historical core, acting both as a destination of pilgrimage and as a symbolic urban gateway for all visitors approaching the city from the direction of Amman. The suq spine of King Talal Street and Al Hashimi Street form the main commercial axis of the historic core, where most of the tourist facilities, small shops, handicraft and tourism related activities are concentrated.

The condition of the municipal infrastructure has revealed some shortcomings, mainly concerning the storm drainage network. There is only one storm water line in the perimeter study/historic core, connecting King Hussein Street downward to Petra Street till it reaches the Habeas Wadi. This line was built in 2000, but it already needs maintenance. Moreover, part of the road profiles are incorrect, therefore, water does not flow correctly by surface along the profile, which is to be avoided later during the renewing of the street network. There is a specific storm water issue in the area facing the Church of the Map, that should be addressed with a new storm water line. The overall traffic situation is chaotic, and a good traffic management plan is highly needed. An existing traffic study (made by the municipality) has been reported. The plan could not be enforced, and there is a need of a new, deeper study.

Needs include also parking and better signalization. The situation is also due to behavioral factors, such as the violation of one-way streets.
ANALYSIS OF THE PROJECT AREA

LEGEND

- CRY RE-HABILITATION PROGRAM PERIMETER
- MAIN STREETS
- OTHER IMPORTANT STREETS
- COMMERCIAL FRONT
- MAIN COMMERCIAL SPINE
- LANDMARK BUILDINGS
- ARCHAEOLOGICAL SITES

LANDMARK BUILDINGS

1. CHURCH OF THE APOSTLES (built in 1856 over the remains of a Byzantine church)
2. SARAYA BUILDING (first floor 1856 - second floor 1872)
3. AL-ALAAurat COMPLEX (late ottoman stone building)
4. AL-GHISHI HOUSE (late ottoman stone building)
5. FARAH HOUSE (late ottoman stone building)
6. SHINNAHAT HOUSE (late ottoman stone building)

SCALE 1:4000
third of the businesses are solely owned and half employs two or less employees. Manufacturing establishments have the biggest dimension and trade the smallest. Their products are almost entirely marketed among neighbors and proximate community. In general, King Talal Street, King Abdullah Street and Petra Street are the busiest commercial streets in Madaba. Residents and shopkeepers consider lack of parking areas, most especially in front of the larger stores, as a main problem. Besides competition, owners of formal businesses identified the main obstacles facing their businesses as customer related problems, weak demand, lack of financing sources, government procedures and labor problems.

The informal sector in Madaba is mostly led by women of 25-45 years old who run their operation by themselves (nearly a third employ 1-2 persons) and is constantly attracting new and young entrepreneurs who are joining the market, especially after attending training courses in handicrafts and food production. The skills and products of the informal sector players may be divided into five main categories: (a) making traditional food (specifically dairy products); (b) embroidery, and other traditional sewn products; (c) mosaic setting; (d) services such as providing IT related services (e.g. word processing, tailoring, layout teaching, beautician, folkloric singing and dancing (dabkeh); (e) other handicrafts skills (wood carving, pottery, flower arrangements, etc.). Finance is a strong need of the informal businesses. Currently there are around 1,300 informal businesses that are borrowers. The informal sector has a very important role within the economic system of the city and represents around 45% of SME total employment.

NGOs and community-based organizations play a very important role in supporting the informal businesses. Especially when their efforts are coordinated, they can be instrumental in offering organised and consoli- dated training program that will encompass the entrepreneurial efforts of Madaba.

The tourism sector in Madaba city employs around 206 persons, all Jordanians. Tourism has reached a peak during 2000 and now is at its minimum as in the rest of Jordan. In 2003, around 39,000 foreign tourists, mostly Europeans, visited the Church of the Map, and only 4,550 female tourists visited the Madaba Museum. In comparison, during the year 2000, 180,000 and 15,000 tourists visited the Church of the Map and the museum respectively. This is a clear demonstration of the sensiti- vity of the tourism sector to political conditions. The foreign tourists coming to Madaba in 2003, were 8% Americans, 9% Asians, 6% Arabs; 73% were Europeans; mostly French and Spanish. In terms of accom- modation, there are only four classified hotels (1 star) offering 190 rooms and 474 beds, 3 unclassified hotels with 32 rooms and 64 beds, and one apartment hotel with 12 bedrooms and 28 beds, totalling 556 beds. Recently, a new hotel project is under development as a 4-star 80-rooms (160 beds) hotel in the central core of Madaba, financed by the national Social Security funds. Madaba city has seven classified restaura- nts (two stars, two stars and three star). Other tourism related facilities are scarce: there are no car rental agencies, only one tour agent, and six souvenir shops in total.

Women are strongly involved in the informal sector, while education sector is chosen by 42% of the economically active women. The unem- ployed and mostly educated hold diplomas or university degrees, and the trend over the past five years shows an increasing number of appli- cants for work in the government.

By the end of 2003, the Ministry of Labor has permitted more than 3 thousand skilled and unskilled laborers for work in Madaba Governorate, most of them being Egyptians who work mainly in the agricultural sector, in the construction sector and in unskilled production.

In the private sector almost all establishments are small; around one the Madaba city centre were introduced. However, these amendments failed in taking into account the results of a study, concerning a new zoning in the city centre district, conducted by the Governor of Madaba, with the objective to provide a more adequate answer to the problems of development. The master plan concentrates on addressing the need of a growing population and dedicates a broad space to the development of the residential city.

It is important to point out that this model of development also reflects the consolidated experience of the traditional Islamic city where the house is the base unit, and only a few public buildings and their immedi- ate surroundings are the other relevant 'built objects' that participate in designing the townscape, mainly religious and institutional buildings.

The master plan confirms a clear tendency towards a radio-centric pat- tern in the proposed city development. A prevalence of residential areas as opposed to other land use destinations is also evident. The green ar- eas are scarce, often consisting in 'left over' spaces between buildings. The commercial areas are located mostly along the Longitudinal Com- mercial zone, including a number of commercial fronts placed on the main streets, fronts that gradually decrease in number moving out of the city centre. Industrial areas are found in the north–east sector of the city, along its borderline.

The public areas are uniformly distributed outside the old city centre. Ac- tually, the zoning reveals to be not very clearly defined as far as the his- toric and religious areas are concerned. Public areas such as those to be used for public car parking or those to be used for public services are not clearly specified. Moreover, the plan fails to identify and place under pro-

COTECNO ABT ALCHEMIA CDG MGA

With an area of 2,008 km², Madaba Governorate is located in the mid-

southern region of Jordan. The Capital Madaba District forms 42% of the whole Governorate and its population is currently around 130 thousand persons, constituting approximately 22,700 households. The demographic trend is a bit less dynamic than the national one: in the last ten years it experienced a growth of around 21%, compared to the na-

tional rate of 23%. Unemployment rate in Madaba Governorate is at 15%, and even if it has dropped substantially in the last 2 years, it is still higher than the national average of 13%. The percentage of economic inactivity has increased: people are pulling out from the economically active sect as the unemployed become unwilling to seek work. There is a certain feeling of discouragement among the potential workers, which is obvious when more than 2/3 of the economically inactive persons in Madaba Governorate report to believe that there are no jobs around.

The average household annual income in Madaba Governorate is JD 4,948, still lower than the national one. Considering the distribution of households according to their income level, around 40% of them earns an annual income below JD 3,600; a third has an average annual in-

come between JD 3,600 and JD 6,000; a quarter between JD 6,000 and JD 12,000, and only 4% of households earns more than JD 12,000. The poverty rate has declined in the last year at both the Governorate (from 13.15% in 1997 to 10.8% in 2003) and sub-district level.

Madaba city is characterized by a young population: 48% of its inhabi-

tants are below 19 years and as such are school, college or university students. Only 36% of the 15+ years old population of Madaba Gover-

norate is economically active, (only 10% of the females). This low level of activity is related to the high presence of young and the lack of work among women. In fact, students constitute 1/3 of the economically ac-

tive population, and the housewives more than 1/2. In addition, 31% of the population is employed, only 8% of the females; the three labor in-

tensive sectors are public and armed forces (which employs a third of the laborers), the commercial sector (more than 20% of the employed), and the education. Agriculture, on the other hand, depends mostly on foreign labor, and similarly the construction sector. Moreover, around 45% of the employed people hold low level, which have experienced growth over the past 3 years (mostly due to clothing and textile factories located in the Qualified Industrial Zones). The construction sector employs 5.6% (1,400) while hotels and estate re-

state each 1.5% of the total labor force. While at the national level in 2004 the economic system has been able to create jobs in tourism re-

lated sectors, in Madaba, the situation has been much less dynamic: the employment in public administration has slightly increased, while other sectors such as real estate, education, manufacturing, and agriculture decreased.

The current master plan of Madaba, designed by the MOMA, was re-

vised in 1998; several changes were introduced since then, the most im-

portant in 1999 when the New Zoning and Building Regulations for

THE CURRENT MASTER PLAN

MADABA – ANNEX 1 – EDA - DETAILED DESCRIPTION OF THE CRP PAGE 2-3
tection several ‘heritage buildings’ that were identified in the ‘Madaba Cul-
tural Heritage’ study released by AOCR (American Centre for Oriental
Research) (Amman, 1996). The archaeological areas are part of the ur-
ban fabric, being placed between the residential areas in the city centre.

The master plan was almost exclusively designed based on indications
for residential development. Directions and suggestions for setting
strategies for the management of social, economical, tourist, etc. devel-
opment are missing in the plan.

The decline of the historical centre, the degradation of its urban and
residential fabric and the crisis of its functions of centrality are strongly
related to the general weakness of the municipal institution. The in-
stitutional assessment has shown that the weakness of the municipal
institution is manifested on several interdependent levels, including (a)
urban planning and management, (b) management of public spaces and
urban services; (c) promotion and enforcement of sanitary and public
health rules; (d) absence of coordination between the municipality and
the public utility companies; (e) weakness of human resources and
qualification; (f) organizational weakness; (g) weakness of financial
management and of revenues generated by the municipality; and (h)
absence of mechanisms of accountability and of forms of participation
of the local population and stakeholders.

The condition of the municipal infrastructure has revealed some
shortcomings, mainly concerning the storm drainage network. There is
only one storm water line in the perimeter study/historic core, connecting
King Hussein Street downward to Petra Street till it reaches the Habeas
Wadi. This line was built four years ago, but it already needs mainte-
nance. Moreover, part of the road profiles are incorrect, therefore, water
does not flow correctly by surface along the profile, which could be
avoided later during the renewing of the street network. There is a spe-
cific storm water issue in the area facing the Church of the Map, that
could be addressed with a new storm water line. The overall traffic
situation is chaotic, and a good traffic management plan is highly
needed. An existing traffic study (made by the municipality) has
been reported. The plan could not be enforced, and there is a need of a new,
deeper study. Needs include also parking and better signalization. The
situation is also due to behavioral factors, such as the violation of one-
way streets. These behaviors should need better enforcement of regula-
tions and rising of awareness for the citizens.

2.2 KEY ISSUES

Nowadays, the city has to face a number of key issues affecting its so-
cial and economic development. These key issues include:

1) Decay of the socio-urban fabric. The asset and symbolic value
of the historic core and its vocation as public space is threatened by the
deterioration of the urban fabric and the residential pauperiza-
tion. Despite the affection of the population to this highly significant
place of collective memory, the middle classes leave the historic
core which becomes a residential space for the elderly and the
poorer and migrant population.

2) Urban disintegration. The anarchical and uncontrolled urban
growth and the development of unplanned and unstructured
residential areas brings to the disintegration of the city and to the
loss of its unity. This, in turn, prevents urban space from exercising
its unity. This, in turn, prevents urban space from exercising its
function as a deteriorating place and as a pole of economic, social and ur-
ban centrality. Madaba seems to be more and more a divided urban
structure

3) Loss of commercial centrality. The weakening and the impover-
ishment of the commercial centrality of the historic core is followed by a
linear and disorganized development of the commercial settle-
ments along the Ring Road, namely on the two streets that lead to
Amman: Petra Street to the east and King Abdullah Street to the
west.}

4) Physical decay of the urban environment. Urban space is af-
lected by physical decay, traffic and parking congestion (with the re-
sulting visual and acoustic pollution), lack of appropriate manage-
ment and visual clutter. Urban fabrics are threatened by uncon-
trolled urban growth dissecting the traditional urban structures. In
the study perimeter/historic core, the storm drainage network is not
complete and during heavy rains flooding occurs. Visual clutter, par-
ticularly in the main commercial axis of King Talal Street and on the
Ring Road, is the result of physical decay of buildings and public
spaces, presence of solid waste, uncontrolled signage and wires, traffic jams and uncontrolled parking.

5) Threats to cultural heritage. The built cultural heritage is threat-
ened by lack of maintenance, neglect and encroachment. An appro-
priate legal framework does not protect the remains that bear wit-
ness of the Ottoman period. The heritage is further threatened by the
lack of awareness of cultural values and of an effective legal
protection framework.

6) Decay and crisis of public spaces. The main factors that affect
the urban environment of Madaba contribute to decrease the quality
of the urban space and of the experience of the city for residents, visitors
and tourists. The central public spaces are disappearing or are used by a few social groups, often by the poorest or least
rooted in the community. The main bus station, an important interface
of the core within its region context.

7) Economic stagnation. The local economy is affected by a number
of factors leading to economic stagnation. The potential assets in
terms of human resources, skills and culture, remain largely under-
utilized, and the economic and social activities tend to be attracted
by the dominating urban pole of Amman. Existing tourist activities
and assets remain largely underdeveloped.

2.3 MAIN CONCEPT OF THE CITY REVITALIZATION
PROGRAM

The main challenge that the historic core of Madaba is facing, is to re-
cover its urban centrality and be revived with a new “social and eco-
nomic mission” within its regional context.

Form a social point of view, the revived historic core must contribute to
reconstruct social cohesion amongst the different social groups provid-
ing a common federating space for the entire population, where the cul-
tural heritage is preserved and enhanced in both its symbolic and eco-
nomic role, and urban space is improved for the benefit of residents and
visitors.

From an economic point of view, the revived historic core will contribute
to addressing the current economic stagnation by boosting the existing
local economy and tourism activities, which in Madaba are concentrated
mainly on the visit to the Church of the Map and to the archaeological
areas, expanding the visitors’ experience to include the main commercial
spine and the new structures that will showcase local products.

Form an urban point of view, the focus is on the improvement of the
socio-urban fabric, the recovery of commercial centrality and the im-
provement of the urban environment as a high quality civil space.

The project aims at achieving this vision through a structured city revi-
talization program, that includes: (a) regulatory actions; (b) physical ac-
tions; and (c) capacity building actions.

2.4 DESCRIPTION OF THE PROGRAM

The target area of the CRP is the historic core of Madaba. The perime-
ter of the target area includes:

1) the original historic core, circumscribed by the ring Road;

2) the Ring Road (King Hussein Street to the north, Al-Batra Street to
   the East, King Abdullah Street to the West and Al-Nuzha Street to
   the South), including the façades of the buildings on the external
   edge;

3) the portion of historic urban fabric that extends south of the Ring
   Road, that includes the Church of the Apostles;

4) the area of the bus station, east of Al-Batra street.

The area delimited has an extension of approximately 48 hectares.

Within the perimeter, the most comprehensive physical actions of the
program are concentrated on enhancing the main urban axis com-
pised by the Church of the Map node, the King Talal Street axis and the
Saraya node. This will create a renewed “central place” that will help to
reconstruct a “joint ownership” of the city by the different social compo-
ents, thus contributing to increase social cohesion. The new urban
quality space will also increase the appreciation by the residents and
the visitors. The project aims at improving the socio-urban fabric, the
core which becomes a residential space for the elderly and the
poorer and migrant population.

While the hypothesis of complete pedestrianization of King Talal Street
has been discarded as premature at this stage of urban rehabilitation, a
pilot parking management plan (44 parking stalls) involving the use of
parking meters has been developed. Tightly related to this axis is the proposed new complex for leisure and
handicraft-related facilities. The site is adjacent to the southern part of
King Talal Street, near to its lower end and to the Saraya Building. Through the renovation of a derelict area and the adaptive re-use of
some decayed buildings, this new urban component will house a mix of

MADABA – ANNEX 1 – EDA - DETAILED DESCRIPTION OF THE CRP PAGE 2/4
functions. The target of this new complex includes both the residents and tourists. The residents will benefit from the new outdoor green space, that will cover an important deficiency of the core, and from a number of services that will include a cyber café, a restaurant and other forms of entertainment addressed to the youth and local population. The handicraft centre will showcase the traditional production, mainly from the informal sector, thus creating an occasion for the visitors to better know the typical local products.

The overall upgrading of the street network and of the public space involves the entire perimeter. Using different weights of intervention, this action will mark the territory of the historic core as a quality urban space, but will be limited to the “horizontal” part of the space (public property). The approach of the city revitalization program to the upgrading of the public space is two-fold. The upgrading of the “horizontal” part, typically public property, is ensured by the direct intervention of the project that will fund and implement the overall up-grading of the street network and of the public space. The upgrading of the “vertical” part (i.e. the façades of the surrounding buildings) will be facilitated by the new regulatory framework that will ensure an appropriate level of quality and sustainability of all the building activities, within the perimeter. After adoption and enforcement of the new regulatory framework, all the building activities carried on within the perimeter will contribute to the achievement of a highest quality space.

The most significant actions will concentrate on King Tallal Street (main axis) and on other important streets such as Al-Batra Street and King Abdullah Street. As a complement to the general improvement of the streetscape and circulation patterns of the city the existing bus terminal redevelopment project into will improve the accessibility to the historic core, contribute to the overall improvement of the environmental quality of the public space and give economic benefits to the city while establishing in this highly frequented place improved commercial activities and services.

While the physical actions described herein will have the most immediate impact on the city, the new Madaba Historic Core regulation will operate in the background, gradually affecting all the aspects of the project area, ensuring: (a) the preservation of cultural heritage; (b) the continuous improvement of the urban environment; and (c) a baseline continuation over time of the city revitalization process.

The new regulations are designed to govern the land use and the building activities to ensure that these respect and are compatible with the character of the city and to provide for the protection of cultural heritage. Since the UNESCO Chart of Venice for Cultural Heritage Protection, the concept of cultural heritage has been increasingly widened. Today, the concept of heritage is no longer confined to “monuments” but also includes approaches, extensive sites and whole urban complexes for which the criteria are no longer just architectural merit but unity, universal and urban and spatial coherence deriving from the combination of a series of elements which may be of fairly little artistic value in themselves.

It has been recognized that the preservation of historical continuity in the environment is essential for the maintenance or creation of living conditions that enable humankind to discover its identity, to find its bearings both in the historical context and in its geographical setting in the broadest sense (physical, ethnic, etc.) and to acquire a sense of security amidst social upheaval through having fully understood the changes occurring and thus being better equipped to control their effects.

One of the most disturbing factors in Madaba urban environment is the visual clutter, particularly in the busiest commercial areas. Visual clutter could be the result of physical decay of buildings and public spaces, presence of solid waste, uncontrolled signage and wires, traffic jams and uncontrolled parking. The new regulation will contribute in keeping under control all these aspects, thus contributing to enhance the quality and livability of the urban environment within the perimeter.

Moreover, the continuous improvement of the urban environment will be further ensured by the specific norms concerning building rehabilitation works. The new regulation will keep under control the building rehabilitation and alteration activities of the private owners of buildings and will direct them in the direction of coherence with the overall city revitalization program.

Provided its institutional duties, Greater Madaba Municipality has a central role to play in the city revitalization program. For this reason, a capacity building action is envisaged. This action includes the resources needed for the successful implementation of the city revitalization program, including the new Madaba Historic Core Regulation.

As a result, it is expected that the improved municipal capacity will facilitate the launch and sustained continuation of the city revitalization process. Moreover, the new skills and management know-how gained by the Municipality within the context of the city revitalization program, targeted to the historic core, could be further expanded to cover the management of the whole city.

2.5 ECONOMIC SUMMARY

<table>
<thead>
<tr>
<th>PROJECT ACTIONS</th>
<th>JD</th>
<th>US$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.01 Upgrading of the city core street network</td>
<td>1,909,099</td>
<td>2,694,559</td>
<td>42.69</td>
</tr>
<tr>
<td>M.01 Rehabilitation of King Tallal Street and of the Church of the Map node</td>
<td>329,509</td>
<td>465,079</td>
<td>7.25</td>
</tr>
<tr>
<td>M.02 The creation of a new heritage centre at the Saraya Building</td>
<td>283,954</td>
<td>400,781</td>
<td>6.35</td>
</tr>
<tr>
<td>M.03 The re-design of the existing bus station</td>
<td>612,544</td>
<td>864,563</td>
<td>13.70</td>
</tr>
<tr>
<td>M.04 Realization of leisure and handicraft facilities</td>
<td>1,012,241</td>
<td>1,428,707</td>
<td>22.64</td>
</tr>
<tr>
<td>Capacity building</td>
<td>457,656</td>
<td>675,865</td>
<td>7.25</td>
</tr>
<tr>
<td><strong>Total cost of Madaba CRP</strong></td>
<td><strong>6,311,339</strong></td>
<td><strong>100.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

OVERALL INVESTMENT COSTS BY ACTION

The acquisition of some lands/buildings, as described in the following table, is an essential pre-condition for the execution of the CRP. The Municipality will be responsible for the acquisitions within the deadline established by the implementation plan.

<table>
<thead>
<tr>
<th>PROJECT ACTION</th>
<th>ACQUISITION OF</th>
<th>ESTIMATED COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realization of leisure and handicraft facilities</td>
<td>Land</td>
<td>255,000 JD</td>
</tr>
</tbody>
</table>

SUMMARY OF ACQUISITIONS

1 JD = US$1.41
3. The regulatory actions

3.1 MADABA HISTORIC CORE REGULATION

RATIONALE AND MAIN OBJECTIVE

Historic city centers in Jordan are a resource that can strongly participate to the improvement of the living conditions of the local communities. However, in most cases, very little perception of this valuable asset is registered. While the identification of the causes which created the conditions for lack of awareness from the socio-economic point of view will be approached and discussed in the related sections of this study, the proposed building regulations are designed to regulate the building activities and ensure that these respect and are compatible with the historic character of Madaba core city.

The regulations provide also for the protection of monuments, traditional buildings, green areas and open spaces (especially those that fit within a clearly identified archaeological/historical context), giving clear indications about the forms of intervention applicable to each context, the restrictions introduced and the level of protection to be achieved in the different cases.

Urban planning by means of zoning has been abandoned in these regulations to introduce an approach that more specifically focuses on the peculiar character of each and every component of the urban fabric. The regulations distinguish between categories of buildings and categories of interventions accordingly. The empty urban areas (lands) that are relevant to the valorization of the urban fabric are also treated and regulated in these regulations since they are to be considered an integral part of the historic city center.

The policies set by the regulations are especially designed to maintain and protect the traditional functions by consolidating the existing multifunctionality. In all cases where buildings have a clear commercial purpose, such as those lining the King Talal Street, the regulatory policies are designed to confirm and reinforce this use through the rehabilitation of vacant or underused commercial structures.

Equally, the rehabilitation of residential buildings, mostly family houses, to be used as housing is strongly recommended in all cases where the original use was clearly residential.

The introduction/creation of alternative activities or the introduction of new or different functions is allowed by these regulations in the core city center, provided that they are compatible with the characters of the traditional urban fabric. However, specific measures are indicated to disuade or definitely forbid the introduction of activities that clearly conflict with the historic core characters or that, by introducing evident heavy changes, undermine the peculiar townscape of the core.

The objective of the new Madaba historic core regulation is to ensure protection while fostering live-ability for the residents and visitors. In line with this principle, the new regulation gives relevance to rehabilitation activities aiming at improving the living conditions of the inhabitants inside their houses, while ensuring compatibility with the required level of respect for the general aesthetic of the historic city center.

The new historic core regulations introduce a prescriptive framework where allowed building alterations must be coherent with the constructive techniques and the urban context.

Incentives to building recovery, upgrading, conservation (that could be provided in terms of reduced or spread payments of building taxes) are highly effective and educational in determining a tendency towards emulation.

It is expected that upon an inception phase of around three months from the beginning of the CRP execution, the Cross-Departmental Municipal Unit (CDMU) established in each city will be able to provide the services and monitoring action that are designed for. A complete documentation with detailed information on categories of buildings and categories of interventions permitted under the Historic Core Regulations will be submitted by the CDMU by the end of the first six months of activity.

In the case of projects requiring an urgent implementation (i.e., emergency conservation, private initiatives, etc.) a detailed survey and study will be carried out by a private registered professional (on behalf of the landowner). However, this will be permitted only in the case of urgent needs for the use of a specific property, either land or building. The professional in charge must own a proved experience in city revitalization planning and in conservation. A specific study must be based on the guidelines provided in this study.

LEGAL FRAMEWORK

Since the principal law governing heritage protection in Jordan stipulates that only buildings erected before 1700 AD are protected, it is important to identify alternative measures to ensure a legal framework for the protection of Madaba’s built heritage.

The Cities, Villages and Buildings Planning Law no. 79/1966 provides for the adoption of a master plan, and indicates that specific regulations can be adopted for built heritage. Under this law, the municipality must declare the Madaba historic centre (historic core) a protected area in which special urban planning regulations are to be applied.

Another possibility consists in promoting legislative change that would allow buildings built after 1700 AD to be classified as heritage and thus be protected with the approval of Interim Law No. 49/2003 for the Protection of Urban and Architectural Heritage.

Anyway, a new comprehensive legislation focusing on heritage also addressing the issues concerning urban revitalization is expected it will be introduced as a result of the currently ongoing debate at the various levels of the Jordanian society. However, the time necessary for issuing and enforcing a new law would by far exceed any realistic timeframe for the implementation of the CRP.

This is why guidelines are provided in this study to allow the local authorities to bypass the lack of a specific legislation by avoiding overruling the instruments of regional and urban planning currently in use in Jordan but rather making the best use of them.

This will permit the local authorities to implement the CRP based on the current legislation without renouncing to the adoption of the currently highest international standards.

OBJECTIVES

- To identify the boundary of an action area (historic core) as a special conservation district with appropriate conservation and development control standards.
- To describe buildings or groups of buildings and urban areas to be protected, conserved or rehabilitated according to provisions that are specific for each building and work category.
- To set standards to be observed in the works of maintenance, restoration and improvements and conditions governing the new constructions.
- To introduce regulatory criteria for the improvement of public open spaces.
- To set rules and guidelines for the urban and building improvement especially for the large derelict and vacant lands located on the western and southern slopes of the hill of the “Acropolis”.
- To set restrictive measures for the protection of the archaeological areas and particularly those located in the western and southern hill slopes of the “Acropolis”, which have been only partially excavated and currently lay abandoned as derelict areas.
- To regulate all those “factors” that could cause visual clutter including: street signage; advertising and light signs of public and private activities; public lighting; urban furniture (public toilets, benches and others seats, telephone, booths, garbage containers, clocks, automatic dispensers, etc.).

DESCRIPTION

The new regulations will apply to a very specific portion of the territory referred to as the “historic core”. The area corresponds to the Historic City center of Madaba. The perimeter of the target area includes:

1) the original historic core, circumscribed by the ring Road;
2) the Ring Road (King Hussein Street to the north, Al-Batra Street to the East, King Abdullah Street to the West and Al-Nuzha Street to the South), including the façades of the buildings on the external edge;
3) the portion of historic urban fabric that extends south of the Ring Road, that includes the Church of the Apostles;
4) the area of the bus station, east of Al-Batra street.

This is the area of the former Ottoman village and subsequent developments within the “ring road”. The perimeter includes also most of the archaeological sites and heritage assets of Madaba known to date, doubtlessly the most important ones so far.
Madaba, like several other ancient cities in Jordan, was abandoned for several centuries after the socio and economic decline caused mostly by political and natural events that starting in the 8th century heavily affected the region and moved the centre of power far away (i.e., rise of the Abbasids dynasty and a series of earthquakes). The modern city that was established starting by the middle of the 1800 did lay over the ancient city at first, and it was not unusual that ruins be used as building materials or even base to lay over new construction. However, the portions of lands that still remain untouched by the urban development process are most likely areas of archaeological interest.

For this reason, § 4.7 of the Historic Core Regulation provides indications and restrictions for activities aimed at building, demolishing or restoring buildings. More in general, changes to the building and to the urban growth within the perimeter, must abide with the general criteria of conservation, integral recovery and comprehensive urban improvement.

Special attention will be paid to the peculiarities of the specific parts of the urban fabric, including: the Historic Archaeological evidences, the buildings, the open spaces and the infrastructural networks of historic, artistic and documentary interest.

The new regulation focuses on modes of use and alteration of the buildings and related plots, and provide for specific urban and architectural prescriptions as well as implementation modalities for the city revitalization program actions.

**SUMMARY OF REGULATORY PROVISIONS**

- **General provisions**: context of application; core boundary; definition and classification of buildings; action project areas; role of the CDMLU.
- **Operative tools** for regulatory implementation: rules for permits and release modalities; categories of intervention.
- **Building use**: public spaces; architectural requirements; prescription for street furniture.

### 3.2 PARKING AND TRAFFIC MANAGEMENT

**PILOT PARKING METERS ACTION**

The physical action M.01 - Upgrading of the city core street network - includes the realization of 44 parking stalls along King Tallal Street, in order to improve the streetscape of Madaba commercial core.

The new parking stalls will be managed by the Municipality as pilot payment parking through the provision of parking meter machines to be located within the parking stalls, with a ratio of one parking meter every two stalls. The Municipality will be the only authority in charge of the management of the parking stalls, and will therefore be responsible for enforcing the payment of the fee and for collecting the money from the machines.

In order to design a suitable management scenario for such an action, and to correctly estimate the revenues of such an activity for the Municipality, some preliminary assumptions have been made:

1. the payment timeframe will be from 6 a.m. to 10 p.m., thus the parking meters will be operational 16 hours each day. Parking after 10 in the evening will be free;
2. parking will be free on Friday and Saturday;
3. the parking fees will vary according to the time length of a car stop. According to available data, currently in Jordan parking fees rise from 0.25 to 0.75 JD; as for the King Tallal Street new parking stalls the fee schedule would be as follows:
   - 0.25 JD/hour for the first hour
   - 0.50 JD/hour after the first hour
   - 0.75 JD/hour after the second hour
4. a monthly subscription of 15 JD will be available;
5. the parking users will be divided into three different categories:
   - 50% would be people coming to King Tallal Street for shopping, thus they will occupy the parking for 1 hour on average;
   - 30% would be people coming to the city center not only for shopping reasons but also for business and to reach the public administration bureaux and will therefore occupy the parking for 3 hours on average;
   - 20% would be the owners of the many commercial activities located in King Tallal Street and in its proximity, who will occupy the parking for 8 hours a day on average each working day; most probably, those people will purchase the monthly subscriptions in order to save their money without incurring into fines.

As shown by the following table according to the hypothesis above, each parking stall will be occupied by the same car for 3 hours on average, and the hourly fee paid by each user will amount to 0.43 US$. This means that if the occupancy rate of the parking is 50%, the Municipality will gain about 19,700 US$ per year.

<table>
<thead>
<tr>
<th>Users category</th>
<th>Parking average length</th>
<th>% of total users</th>
<th>Hourly fee</th>
<th>Average hourly fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoppers</td>
<td>1 hour</td>
<td>50%</td>
<td>0.35</td>
<td>0.94</td>
</tr>
<tr>
<td>City center visitors</td>
<td>3 hours</td>
<td>30%</td>
<td>0.71</td>
<td>0.21</td>
</tr>
<tr>
<td>Shop-keepers (subscribers)</td>
<td>8 hours</td>
<td>20%</td>
<td>0.21</td>
<td>0.18</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td></td>
<td>0.43</td>
</tr>
</tbody>
</table>

On the other side, with reference to the running costs that the Municipal-ity would afford in order to manage the parking network, they will fall mainly under two items: personnel costs and maintenance costs.

As for personnel, considering that the 22 parking meters will function 16 hours per day, 4 public employees will be necessary in order to control and collect the money; 3 8-hour shift employees plus a supervisor. According to the cost estimates presented in Section 5 of this Annex as for the recruitment of personnel, an annual cost of 3,360 US$ can be estimated for each public employee, thus resulting in a total cost of 13,440 US$ per year for the personnel in charge of the management of the payment parking.

As for the maintenance, it has been estimated an annual cost of about 5,000 US$ per year.

**TRAFFIC MANAGEMENT PROGRAM**

In the medium term, a more comprehensive traffic management program is to be developed and enforced, to organize, administer, govern and rule the vehicular traffic within the historic core. The objectives of the traffic management plan will be:

1. to make the safest and most productive use of existing road-based transport system resources;
2. to adjust, adapt, manage and improve the existing transport system to meet specific objectives, including (but not limited to) the protection of the most sensible components of the urban environment;
3. to maximize the effectiveness of existing infrastructures, in order to avoid or minimize capital expenditures;
4. to improve traffic safety and protect the most vulnerable traffic components, such as pedestrians, bicycles and other non-motorized vehicles;
5. to reduce the impact of road traffic on the environment (i.e. to reduce pollution, noise, etc.).

The contents of the Traffic Management Program will include:

1. traffic regulation (function canalisations; signing and lining; traffic signals; area traffic control; pedestrian facilities and street space management; facilities for bicycles and other non-motorized vehicles; bus priority);
2. demand management (parking management; control and pricing; traffic calming; pedestrian only zones);
3. road use and classification (functional classification of road networks; road use regulation);
4. road safety (institutional arrangements and practices; accident data collection and analysis and remedial engineering; enforcement and education; road user education, enforcement, including equipment and training).
4. The physical actions

4.1 M.01 - UPGRADING OF THE CITY CORE STREET NETWORK

ABSTRACT OF THE PROPOSED PROJECT

The project's objective is that of creating a new circulation pattern within the historical city core that will rationalize the allocation of spaces dedicated to vehicular and pedestrian traffic.

In particular, the project focuses on the solution of the following site-specific problems:

- The rationalization and beautification of the street section of King Tallal Street (SEE KING TALLAL STREET UPGRADING - SITE SPECIFIC ACTION).
- The rationalization and beautification of the of King Tallal (Palestine street junction – “Church of the Map node” (SEE KING TALLAL STREET UPGRADING - SITE SPECIFIC ACTION).
- The creation of a quality urban pedestrian plaza in front of the Saraya Building.

The project proposes different levels of intervention depending on the location of the different streets and their role within the overall circulation dynamics within the urban fabric. The project aims at creating an integrated network of pedestrian paths so as to allow for an overall upgrading of the urban environment and its quality of life.

Below-grade infrastructural refurbishment will be provided in connection to the proposed road works including the provision of an efficient storm water drainage system (SEE DETAILED INFRASTRUCTURAL ASSESSMENT).

Vehicular accessibility shall be maintained for the entire area.

The necessary rationalization of vehicular movement through the historic core will be accomplished through the development of an organic traffic management plan during the detailed design phase.

The enforcement of traffic regulations and the careful reshaping of the street sections with the provision wherever possible of wider sidewalks and street side parking stalls for private cars and for loading and unloading of commercial goods will be necessary contributions to the overall success of the project.

ASSESSMENT OF THE EXISTING INFRASTRUCTURAL SITUATION AND PROPOSED INTERVENTIONS

TRAFFIC

The historic core of Madaba is completely taken over by the vehicular traffic and informal car parking.

The physical conditions of the existing road network are generally rather precarious (with the only possible exception of the peripheral Ring Road and the King Tallal/Al Hashimi street spine). Street sections are often too narrow to allow for the provision of efficient sidewalks and/or street side parking. In the past the Municipality had developed a traffic management plan which was never enforced and is now considered completely outdated.

SOLID WASTE COLLECTION

The Municipality of Madaba is in charge of street cleaning and solid waste collection. The total daily collection amounts to about 1.100 tons, 25% of which comes from the historic core.

Problems due to service vehicle and staff efficiency have been reported. Personnel hiring is centralized and taken care of by the MOMRA.

Behavioural problems on the part of the local population have also been reported.

The collected material is discharged into the new Madaba Landfill which serves 16 municipalities in the Madaba region.

The original landfill has recently been converted into a public park.

Awareness raising among the local population and a Municipal capacity building action are necessary in order to enforce virtuous civic behaviour and increase personnel efficiency.

STORM WATER DRAINAGE

The historic core is served by a single, 900 mm. wide storm water drainage line which runs down King Hussein Street towards Petra Street and discharges into the Habeas Wadi. Although this line was built only 4 years ago, it needs maintenance work.

There was a storm water flooding problem in front of the Church of the Map, which was dealt with through the construction of a 400 mm diameter storm water line running across the church yard and draining into a 12 mt. wide underground cavity running below the King Talal Street.

Often existing street sections are not sloped correctly thus impeding a smooth storm water surface flow.

A new, 400 mm. diameter storm water drainage line, connected to the existing one, is therefore necessary. The new line will run for about 200 mts, along King Talal Street, from the Church of the Map to the existing line below King Hussein Street.

WATER SUPPLY

Water supply is the responsibility of Ministry of Water and Irrigation.

The water supply network in the study perimeter was installed approximately 20 years ago. The supply is by gravity from the Madaba Reservoir (6000 cubic mts.) and a tower reservoir (450 cubic mts.).

During the summer season water shortages are frequent and water is supplied one day per week.

The existing steel and galvanized mains are in acceptable conditions while the galvanized house connections need to be replaced by polyethylene pipes.

SEWAGE

The study perimeter is completely served by the existing sewage network with the only exception of three old, yet inhabited houses on Zahra Street. Theses houses are lower than the adjacent street so in order to be properly served, the adjacent sewer line should be reconstructed at a lower level. The new line will have a 200 mm. diameter and run for roughly 50 mts. in order to connect to the line running under King Talal Street.

Manhole cover adjustment is expected following the redesign of the street sections.

A new waste water treatment plant was put into operation in 2002 and it is in a good working condition.

ELECTRICITY

The Jordan Electric Company supplies electrical power to the city. The historic core is completely served by the network.

PUBLIC LIGHTING

The entire historic core is served by the existing system which is in good working condition. Maintenance is provided by the municipality.

TELECOMMUNICATIONS

The study perimeter is completely covered by the Jordan Telecom network.
COST ASSESSMENT OF INFRASTRUCTURAL UPGRADEING

STORM WATER DRAINAGE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Quantity</th>
<th>Unit Rate</th>
<th>Total (JD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 mm. reinforced concrete pipe</td>
<td>200 mts</td>
<td>40 JD/mt</td>
<td>8,000</td>
</tr>
<tr>
<td>New manholes</td>
<td>5 (Nr.)</td>
<td>1000 JD/each</td>
<td>5,000</td>
</tr>
<tr>
<td>New inlets</td>
<td>4 (Nr.)</td>
<td>500 JD/each</td>
<td>2,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>15,000 JD</strong></td>
</tr>
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</table>

WATER SUPPLY

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Quantity</th>
<th>Unit Rate</th>
<th>Total (JD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>63 mm. polyethylene pipe</td>
<td>14,000 mts.</td>
<td>20 JD/mt</td>
<td>280,000</td>
</tr>
<tr>
<td>House connections</td>
<td>7,000 mts.</td>
<td>15 JD/mt</td>
<td>105,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>385,000 JD</strong></td>
</tr>
</tbody>
</table>

SEWAGE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Quantity</th>
<th>Unit Rate</th>
<th>Total (JD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer line to be reconstructed</td>
<td>100 mts.</td>
<td>50 JD/mt.</td>
<td>5,000</td>
</tr>
<tr>
<td>House connections</td>
<td>70 mts.</td>
<td>20 JD/mt</td>
<td>1,400</td>
</tr>
<tr>
<td>Adjustment of manholes</td>
<td>100 (Nr.)</td>
<td>50 JD/mt</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>11,400 JD</strong></td>
</tr>
</tbody>
</table>

FINAL COST OF INFRASTRUCTURAL REFURBISHMENT: **411,400 JD.**

PROJECT RATIONALE AND MAIN OBJECTIVE

The improvement of the streetscape and circulation patterns together with integral re-design of King Tallal Street and the rationalization and beautification of the Church of the Map node will enhance liveability and environmental conditions in the historic core, by making pedestrian movements safer and more pleasant.

The principal project objectives are:

- Improvement of the environmental quality of the public space in the historic core through the creation of a pattern of safe pedestrian paths, linking the different neighbourhoods and points of interest, in connection with the provision, wherever possible, of private and commercial street side parking facilities for visitors, residents and shopkeepers.
- Improvement of the city’s infrastructural network through the refurbishment of below-grade utilities, including the provision of an efficient storm water drainage system (SEE DETAILED INFRASTRUCTURAL ASSESSMENT).
- Re-design of the street sections in the city core, in order to improve the architectural and functional quality of the historic streetscape and the spatial continuity of the existing network economic activities.
- Reorganization of vehicular circulation with the provision of speed reducing devices and other traffic regulation measures according to the design and planning criteria of an organic traffic management plan to be developed during the detailed design phase.
- Rationalization of the allocation of spaces dedicated to parking and to vehicular and pedestrian traffic.
- Improvement of the streetscape and environment so as to create a pleasant walking and shopping experience for the local population and tourists.
- Awareness raising of the local population regarding the rehabilitation of building facades flanking the refurbished streets, within the framework of the new historic core regulation.

MAIN PROJECT COMPONENTS

The project will provide the integral refurbishment of the street network of the historical core according to the following typological categories:

1) Type A) PRIMARY STREETS (KING TALLAL STREET) - This street is the backbone of the city’s most significant morphological system which connects the important symbolic landmarks of the Church of the Map and the Saraya Building including the nearby new Leisure Park. Consequently, the upgrading of King Tallal Street acquires a strong symbolic significance as the expression of the city’s will to regenerate its urban, social and economic reality. The street will be provided with wider sidewalks (150 cm. minimum width) with 30 cm. curbs, new street lighting and street side parking for private and commercial vehicles, including parking stalls for the handicapped and stalls for loading and unloading of commercial goods. The street will also be provided with an efficient storm water drainage system within the framework of the planned, general infrastructural upgrading (SEE DETAILED ASSESSMENT). Street paving will be in basalt and sidewalk paving will be in natural local stone.

Street side planting of autochthonous tree species will be provided, together with new street furniture (garbage containers, seating facilities, etc.).

Type B) SECONDARY STREETS - All streets which provide strategic connections with the principal tourist and cultural assets of the city or which provide access to the major concentrations of urban commercial activity. These streets will be provided, wherever possible, with wider sidewalks with 30 cm. curbs, new street lighting and street side parking for private and commercial vehicles, including parking stalls for handicapped and stalls for loading and unloading of commercial goods. Wherever necessary the streets will also be provided with storm water drainage mains, drains and traps, within the framework of the overall infrastructural refurbishment. Street paving will be in bituminous asphalt, and sidewalk paving will be in modular concrete units with concrete curbs.

2) Type B) SECONDARY STREETS - All streets which provide strategic connections with the principal tourist and cultural assets of the city or which provide access to the major concentrations of urban commercial activity. These streets will be provided, wherever possible, with wider sidewalks with 30 cm. curbs, new street lighting and street side parking for private and commercial vehicles, including parking stalls for handicapped and stalls for loading and unloading of commercial goods. Wherever necessary the streets will also be provided with storm water drainage mains, drains and traps, within the framework of the overall infrastructural refurbishment. Street paving will be in bituminous asphalt, and sidewalk paving will be in modular concrete units with concrete curbs.
Type C) TERTIARY STREETS - All remaining streets. These street sections will be redesigned so as to allow for adequate storm water surface down flow towards nearby drains. These streets will be repaved with bituminous asphalt and provided, if possible, with sidewalks and/or protection devices for pedestrian traffic. Existing street lighting will be refurbished and/or new street lighting will be provided.

PROJECT INTERVENTIONS

TYPE A) PRIMARY STREETS
The intervention will consist of:
1) Land preparation (excavations and filling, demolitions and removal of all non required elements and debris)
2) Carriageway and parking stalls cover with basalt modular elements
3) Sidewalks widening and re-paving with modular elements of local stone (sidewalks 30 cm high).
4) Sidewalk curbs in local natural stone, including special ramped pieces for handicapped access.
5) Refurbishment of damaged below-grade utilities (SEE DETAILED ASSESSMENT).
6) Storm water drainage (WHEREVER NECESSARY/ SEE DETAILED ASSESSMENT) - The proposed storm water drainage network will comprise a combination of surface flows within the road cross section as well as, where necessary, a buried pipe network supported by gullies located at strategic points along the principal road network
7) Public lighting
8) Street furniture (Garbage cans, street side seating)
9) Signage (horizontal and vertical)
10) Planting of autochthonous tree species including planting grills with agricultural soil

TYPE B) SECONDARY STREETS
The intervention will consist of:
1) Land preparation (excavations and filling, demolitions and removal of all non required elements and debris)
2) Carriageway cover with bituminous asphalt
3) Sidewalks on the same level of the street with a protection with vertical elements in metal or natural stone (75 cm high, average distance: 1.5 mt.)
4) Refurbishment of damaged below-grade utilities (SEE DETAILED ASSESSMENT).
5) Surface sloping for storm water drainage
6) Public lighting refurbishment and/or provision of new lighting.
7) Street furniture (Garbage cans)
8) Signage (horizontal and vertical)

TYPE C) TERTIARY STREETS
The intervention will consist of:
1) Land preparation (excavations and filling, demolitions and removal of all non required elements and debris)
2) Carriageway cover with bituminous asphalt
3) Sidewalks on the same level of the street with a protection with vertical elements in metal or natural stone (75 cm high, average distance: 1.5 mt.)
4) Refurbishment of damaged below-grade utilities (SEE DETAILED ASSESSMENT).
5) Surface sloping for storm water drainage
6) Public lighting refurbishment and/or provision of new lighting.
7) Street furniture (Garbage cans)
8) Signage (horizontal and vertical)

STAKEHOLDER CONSIDERATIONS
Most of the Madaba central core population considers vehicular traffic as a major problem with regards to the possibility of outdoor social encounter. The original function of the suq as the traditional urban meeting place is no longer available due to the progressively decreasing areas reserved for pedestrians, streetscape upgrading will therefore contribute to the pedestrian re-appropriation of the streets.

Street section refurbishments should be preventively discussed with the local population and especially with shop owners in order to avoid preconceived opposition and promote the positive commercial repercussions deriving from the overall upgrading of the urban environment.

FURTHER STUDIES NEEDED
• Institutional implementation and monitoring responsibilities and agreements.
• Extensive topographical surveys; archaeological surveys and excavations.
• Extensive detailed infrastructure and utility assessment.
• Architectural surveys; structural surveys, analyses and assessments.
• Detailed traffic management plan.
• Detailed architectural and engineering design work.
• Careful phasing of the works so as to allow for the efficient operation of the streets during the course of the works.
COST ESTIMATES

A) WORKS

ROAD CONSTRUCTION:

<table>
<thead>
<tr>
<th>Type</th>
<th>Total area Sq. Mts</th>
<th>JD/sq.mt</th>
<th>JD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type B</td>
<td>24,585</td>
<td>16</td>
<td>393,360</td>
</tr>
<tr>
<td>Type C</td>
<td>21,974</td>
<td>11</td>
<td>246,109</td>
</tr>
<tr>
<td>Ring Road Type B</td>
<td>21,430</td>
<td>16</td>
<td>342,880</td>
</tr>
<tr>
<td>UTILITIES UPGRADING</td>
<td>see detailed cost estimate</td>
<td>JD 396,400</td>
<td></td>
</tr>
<tr>
<td>TRAFFIC MANAGEMENT PLAN</td>
<td>lump sum</td>
<td>JD 25,000</td>
<td></td>
</tr>
<tr>
<td>TOTAL COST OF THE WORKS</td>
<td></td>
<td>JD 1,403,749</td>
<td></td>
</tr>
</tbody>
</table>

B) ADDITIONAL PROVISIONS

b1) TECHNICAL EXPENSES

| Detailed design consultancy (8% of A) | JD 112,300 |
| Construction supervision and management (8% of A) | JD 112,300 |
| Topographical & archaeological surveys/specialistic investigations (5% of A) | JD 70,187 |
| CONTINGENCIES (15% of A) | JD 210,562 |
| TOTAL COST OF THE ADDITIONAL PROVISION | JD 505,350 |

FINAL ACTION PROJECT COST (A+B) | JD 1,909,099 |

Ring Road (optional)

A) WORKS

ROAD CONSTRUCTION:

| Ring Road Type C | Total area Sq. Mts 27,250 | JD/sq.mt 11 | JD 305,200 |
| TOTAL COST OF THE WORKS | JD 305,200 |

B) ADDITIONAL PROVISIONS

b1) TECHNICAL EXPENSES

| Detailed design consultancy (8% of A) | JD 24,416 |
| Construction supervision and management (8% of A) | JD 24,416 |
| Topographical & archaeological surveys/specialistic investigations (5% of A) | JD 15,260 |
| CONTINGENCIES (15% of A) | JD 45,780 |
| TOTAL COST OF THE ADDITIONAL PROVISION | JD 109,872 |

FINAL OPTIONAL ACTION PROJECT COST (A+B) | JD 415,072 |

PROJECT TIMING

The time allocated for the implementation of the action project is based on the following phasing:

Design stage – 11 months
Work stage – 18 months
Total implementation time – 29 months
SITE SPECIFIC PROJECT - THE REDESIGN OF KING TALLAL STREET

ABSTRACT OF THE PROPOSED PROJECT

King Tallal Street is one of the principal spines which determine the morphological and functional structure of the city together with the so-called Ring Road which defines the boundary of the core of historic Madaba. In fact, the King Tallal/Al Hashimi Street spine, together with the northern portions of Petra Street to the east and King Abdullah Street to the west (the former Lovers' Street) form the main commercial system within the contemporary urban structure of the city. King Tallal street in particular, acts as an important connector between the main cultural and symbolic landmarks of the historic city core. Regardless of its strategic role as a morphological urban axis, its spatial quality is severely compromised.

The project aims at enhancing the role of King Tallal Street through its formal and functional rehabilitation into an urban promenade connecting the following landmarks:

- The Church of the Map which is the main gateway to the historical urban fabric.
- The Saraya Building which is to become Madaba’s new Heritage Center.
- The planned new Leisure Park in the vicinity of the Saraya Building.

The sequence of the new King Tallal Street axis and the urban nodes of the Church of the Map and the Acropolis (with the new Saraya Heritage Center and the nearby new Leisure Park), will form the main morphological system within the urban fabric of the historical city.

The re-definition of the section of King Tallal street is an essential step towards the overall rehabilitation of the historic core of the city, and will comprise the provision of new street lighting, a new storm-water drainage system and the assessment and refurbishment of existing below-grade utilities (SEE DETAILED INFRASTRUCTURAL ASSESSMENT).

The design of new street section is based on the following morphotypical criteria:

- Wider sidewalks (1.50 mt. minimum width)
- Street side stalls for private car, moped and bicycle parking (including parking stalls for the handicapped).
- Street side stalls for loading and unloading of commercial goods.
- Parking meters for private parking.
- Street side planting of autochthonous tree species.
- Carriageway in basalt pavement and sidewalk paving in local stone with 30 cm. stone curbs.
- Newly designed street furniture (garbage cans, seating facilities, etc.).

The renovation of King Tallal Street is a pilot intervention which will act as an incentive for the private rehabilitation of the architectural facades overlooking the street.

The compound formed by the street junction and the nearby Church of the Map acts as the initial focus of the planned new Linear Civic Centre which proceeds in the direction of the “acropolis” and terminates with the Saraya Building/Leisure Park complex.

Its symbolic significance as the main gateway to the city needs to be adequately enhanced with a strong artistic statement. The project proposes the creation of a central isle, a generous triangular eye, paved with glass and/or ceramic mosaic and contained by local natural stone sidewalk curbs.

The mosaic paving will be gently sloped so as to reach a podium for the placement of a contemporary work of art symbolizing Madaba and its rich cultural heritage.

The work of art will have to be commissioned through a municipal competition involving local young artistic talents.

PRESENT STATE AND USE

The compound extending between the Church of the Map and the Saraya Building on the “acropolis”, supported by the King Tallal/Al Hashimi Street spine, represents part of the vaster urban system of the traditional “sug”.

The most relevant commercial activities are concentrated between the intersections with Prince Mohammad Street to the north and Al Saada and Al Hashimi streets to the south, at the foot of the “acropolis”.

Some of these activities are tourist oriented (souvenir shops, small hotels), but most of them are related to the local demand, especially food, vegetables and clothes shops.

The street section is not constant and often appears barely sufficient for the provision of efficient sidewalks.

King Tallal Street stretches between the two main “poles” that dictated the development of the urban pattern: the Greek orthodox church of St.George and the Acropolis with the catholic Church of St. John and the Saraya building. These represent, together with the nearby Mosque on Al Hashimi Street the main landmark buildings within the urban fabric.

Nevertheless, the urban environment is very poor, and is hampered by through traffic and by informal car parking in front of the shops. The architectural quality of most of the buildings is very ordinary and numerous 1-storey commercial buildings look “unfinished”. The visual disorder of shop windows and the traditional display of goods on the sidewalks, although representing the traditional vitality of urban life within the confines of the city core, make the streetscape confused and unattractive.

The street proceeds with a gentle slope, and with a 10 mt. average cross section, from the Church of St. George to the intersection with Al Hashimi Street, after which its section narrows down considerably as it starts ascending steeply towards the Saraya Building plaza.

The present circulation pattern gives the street the function of a “thoroughfare” that, together with Al Hashimi Street, connects the northwestern quadrant of the city centre to Petra Street and the eastern outskirts of the town.

Different types of traffic overlap with informal car parking and goods delivery.
PROJECT RATIONALE AND MAIN OBJECTIVE

The integral re-design of King Tallal Street can be considered the heart of the overall improvement of the streetscape and circulation pattern within Madaba’s historic core. While establishing quality standards for future urban rehabilitation initiatives, it will improve livability and environmental conditions in the historic core.

The principal project objectives are:

- Creation of a safe and comfortable pedestrian path, linking the main points of interest within historic Madaba, and providing spatial continuity for the existing network economic activities.
- Re-design of the street section in order to improve the architectural and functional quality of the historic streetscape while providing, wherever possible, private and commercial street side parking facilities for visitors, residents and shopkeepers.
- Rationalization of the King Tallal/Palestine Str. Junction and enhancement of the symbolic value of the area as the principal gateway to the Madaba city core.
- Reorganization of the vehicular circulation with the provision of speed reducing devices and other traffic regulation measures such as parking meters according to the design and planning criteria of an organic traffic management plan to be developed during the detailed design phase.
- Provision of an efficient storm water drainage system within the framework of the general refurbishment of damaged below-grade utilities.
- Awareness raising of the local population regarding the rehabilitation of building facades flanking the refurbished street.

PROJECT INTERVENTIONS

The intervention will consist of:

1. Land preparation (excavations and filling, demolitions and removal of all non required elements and debris).
2. Carriageway and parking stalls cover with basalt modular elements.
3. Sidewalks widening and re-paving with modular elements of natural stone (sidewalks 30 cm high).
4. Sidewalk curbs in local natural stone, including special ramped pieces for handicapped access.
5. Refurbishment of damaged below-grade utilities (SEE DETAILED ASSESSMENT).
6. Storm water drainage (WHEREVER NECESSARY/ SEE DETAILED ASSESSMENT) - The proposed storm water drainage network will comprise a combination of surface flows within the road cross section as well as, where necessary, a buried pipe network supported by gullies located at strategic points along the road.
7. Public lighting.
8. Street furniture (Garbage cans, street side seating).
10. Planting of autochthonous tree species including planting grills with agricultural soil.
11. Artistic paving in glass and/or ceramic mosaic.
12. Provision of a symbolic work of art.

STAKEHOLDER CONSIDERATIONS

Street section refurbishment should be preventative discussed with the local population and especially with shop owners in order to avoid pre-conceived opposition and promote the positive commercial repercussions deriving from the overall upgrading of the urban environment.

Rehabilitation of building facades flanking the refurbished street should be encouraged by the Municipality.

The Municipal competition for the work of art to be placed at the Church of the Map node should be enforced and implemented according to terms of reference to be developed during the detailed design phase with the active contribution of the local population, the local NGO’s and the Municipality.

FURTHER STUDIES NEEDED

- Institutional implementation and monitoring responsibilities and agreements including the detailed terms of reference for the “Church of the Map” sculpture competition.
- Extensive topographical surveys; archaeological surveys and excavations.
- Extensive detailed infrastructure and utility assessment.
- Architectural surveys; structural surveys, analyses and assessments.
- Detailed traffic management plan.
- Detailed architectural and engineering design work.
- Careful phasing of the works so as to allow for the efficient operation of the streets during the course of the works.

COST ESTIMATES

A) WORKS

<table>
<thead>
<tr>
<th>ROAD CONSTRUCTION:</th>
<th>JD 187,286</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A - King Tallal and Church of the Map node - (Total area Sq. Mts 8,513 X JD/sq.mt)</td>
<td></td>
</tr>
<tr>
<td>UTILITIES UPGRADE (see detailed cost estimate)</td>
<td>JD 15,000</td>
</tr>
<tr>
<td>ARTISTIC PAVING AND WORK OF ART (lump sum)</td>
<td>JD 40,000</td>
</tr>
<tr>
<td>TOTAL COST OF THE WORKS</td>
<td>JD 242,223</td>
</tr>
</tbody>
</table>

B) ADDITIONAL PROVISIONS

<table>
<thead>
<tr>
<th>TECHNICAL EXPENSES</th>
<th>JD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed design consultancy (8% of A)</td>
<td>JD 19,383</td>
</tr>
<tr>
<td>Construction supervision and management (8% of A)</td>
<td>JD 19,383</td>
</tr>
<tr>
<td>Topographical &amp; archaeological surveys/specialistic investigations (5% of A)</td>
<td>JD 12,114</td>
</tr>
</tbody>
</table>

| CONTINGENCIES (15% of A)               | JD 36,343   |
| TOTAL COST OF THE ADDITIONAL PROVISION | JD 87,223   |

FINAL ACTION PROJECT COST (A+B)        | JD 329,509  |

PROJECT TIMING

The time allocated for the implementation of the action project is based on the following phasing:

- Design stage – 11 months
- Work stage – 12 months
- Total implementation time – 23 months
4.2 M.O2 - THE CREATION OF A NEW HERITAGE CENTER IN THE SARAYA BUILDING

ABSTRACT OF THE PROPOSED PROJECT

The Saraya Building is an emblematic example of the Ottoman civic architectural heritage in Madaba. The building is today used for administrative activities (police station) and its architectural and symbolic potential is presently unexploited.

The Saraya Building forms, together with the nearby catholic Church of St. John, an architectural compound known as the local "acropolis", due to its location atop a topographical relief placed barycentrically within the urban fabric of the city core.

The high symbolic value which the "acropolis" compound has for the entire urban community, makes the Saraya Building ideally suited for the creation of a cultural centre, for the discovery and preservation of the city's history, cultural heritage and living traditions.

The Saraya Building is an emblematic example of the Ottoman civic architecture. The Saraya Building is a well defined architectural volume, entirely clad in local stone and with a tripartite organization in plan, which is clearly reflected in the symmetrical "partie" of the entrance façade. It is located slightly askew the axis of King Tallal Street and faced by a plaza which is currently used as a parking area. The building is connected to the east to Prince Hassan Street through a stairway flanked by an ungroomed slope.

PROJECT RATIONALE AND MAIN OBJECTIVE

Madaba’s history, the origins of its communities, and its living traditions are not adequately enhanced within the confines of the city’s historical core. The cultural awareness of the entire urban community and the pro-active attitude of the local civil organizations make the creation of a Heritage Center in the Saraya Building a strategic milestone in the re-generation of the city.

The Saraya Building is an outstanding opportunity for a Public/Private partnership in which the Municipality would contribute the site and the rehabilitation of the building, while the private sector would provide the internal furnishings and management skills and responsibilities. (SEE RELATED COST ASSESSMENT).

PRESENT STATE AND USE

The building is in rather precarious conditions although presently used as a police station. The building's transformation into a heritage center will imply extensive architectural and engineering refurbishment to be carried out according to the prescriptions of the new Historic Core Regulation.

The Saraya Building is a well defined architectural volume, entirely clad in local stone and with a tripartite organization in plan, which is clearly reflected in the symmetrical "partie" of the entrance façade. It is located slightly askew the axis of King Tallal Street and faced by a plaza which is currently used as a parking area. The building is connected to the east to Prince Hassan Street through a stairway flanked by an ungroomed slope.

PROJECT RATIONALE AND MAIN OBJECTIVE

Madaba's history, the origins of its communities, and its living traditions are not adequately enhanced within the confines of the city's historical core. The cultural awareness of the entire urban community and the pro-active attitude of the local civil organizations make the creation of a Heritage Center in the Saraya Building a strategic milestone in the re-generation of the city.

The center will comprise exhibition spaces and educational services for both the local population and tourists. The Center will also contribute to the recuperation of the city's social cohesion which has been severely compromised by the intense transformations which its social body has undergone in recent decades.

Considering the intrinsic architectural value of the building, all works will be carried out, whenever possible, through anastylosis techniques (reconstruction using original components), or, where unavoidable, through the use of surface cladding with similar stone, dimensions and coursing applied to a technologically compatible yet modern static sub-structure.

The planned, integral technological refurbishment of the building will be based on precise performance standards to be set during the detailed design phase, with the active contribution of the private partner and according to the exact functions that will be housed inside the building.

The project's main objectives are:

- Ensure, through proper restoration and adaptive re-use, the preservation of a landmark heritage building.
- Transform an underestimated, landmark, heritage building into a community asset, emphasizing its symbolic value as a place of collective memory.
- Provide a traditional, yet new, architectural expression of the city's identity.
- Raise the local population's awareness of its origins and traditions.
- Provide the new architectural focus for the proposed Linear Civic Center and a landmark architectural backdrop to the urban promenade which links the Church of the Map to the "acropolis" through the renovated King Tallal Street.
- Provide the city with an efficient museum structure which will comprise exhibition spaces for both the local population and tourists, and educational services for the improvement and promotion of traditional, local handicrafts and products.
- Improve the urban experience for both visitors and residents through the provision of advanced documentation and information services.
- Provide active, cultural support to the nearby new Leisure Park which is in turn intended to encourage social encounter and exchange between the different groups which make up the local community.

MAIN PROJECT COMPONENTS

The following elements will be included within the project's urban design and architectural layout:

- The complete static and technological refurbishment of the building on the basis of the detailed assessment of the building's conditions, to be carried out during the detailed design stage.
- The refurbishment of the building's facades and the restoration of all original typological and decorative elements.
- The demolition of the added volume on the south façade so as to allow the view of the adjacent church complex when approaching the building from the east.
- The refurbishment of all interior spaces including the provision of new hygienic services on each floor.
- The re-design of the entrance plaza.
- The refurbishment of the stairway and the landscape works on the building’s eastern front, on the hill slope along Prince Hassan street.
PROJECT INTERVENTIONS

The intervention will consist of:

• Land preparation for the realisation of the entrance plaza (excavations and filling, demolitions and removal of all non required elements and debris)

• Hard landscaped area for the realisation of the new entrance plaza as a slightly elevated pedestrian space paved in local natural stone modular elements, including stone cladded seating facilities.

• Soft landscaped area including planting of evergreen meadows and autochthonous greeneries and trees on the eastern hill slope connecting the building to Prince Hassan Street.

• Refurbishment of the stairway leading to the building from Prince Hassan Street including the integral re-paving of the stairway in local natural stone.

• Demolition of the existing added-volume on the south façade of the building.

• Hard landscaped area for the refurbishment of the interstitial spaces along the south and west facades of the building, including their integral re-paving in local natural stone modular units.

• Integral rehabilitation of the Saraya building for its adaptive reuse as a Heritage Center including:
  • Detailed assessment of the structural and technological conditions of the building to be carried out during the detailed design phase.
  • Structural consolidation works wherever needed.
  • Complete technological refurbishment of the building according to international museum performance standards.

• Complete restoration of the existing stone cladded facades:
  • Substitution of all the damaged stone decorations. Substitution of the existing window casements.
  • Substitution of the metal balcony railings and supports.

• Complete rehabilitation of the existing interior spaces including:
  • New pavements in local natural stone elements
  • New wall finishes
  • New doors
  • New hygienic services on all floors
  • New handicapped friendly lift

STAKEHOLDER CONSIDERATIONS

• The project implementation implies the relocation of the police station.

• A public private partnership should be set up for the provision of interior furnishings and management of the Heritage Center (SEE RELATED COST ASSESSMENT).

• The private partner should be actively involved in the refurbishment of all interior spaces so as to establish the architectural and technological standards connected to the actual functions which will be housed inside the building.

FURTHER STUDIES NEEDED

• Relocation of police station.

• Institutional implementation and monitoring responsibilities and agreements.

• Topographical surveys; archaeological surveys and excavations.

• Detailed infrastructure and utility assessment.

• Architectural surveys; structural surveys, analyses and assessments.

• Coordinated research with the private partner in order to cater for the future functional requirements of the Heritage Center.

• Detailed architectural and engineering design work.

COST ESTIMATES

A) WORKS

| Restoration of the existing building (Total area Sq. Mts 550 X JD/sq.mt 260) | JD 143,000 |
| Public Piazza and Garden (Total area Sq. Mts 863 X JD/sq.mt 20) | JD 17,260 |
| TOTAL COST OF THE WORKS | JD 160,260 |

B) ADDITIONAL PROVISIONS

| Technical Expenses | TOTAL COST OF THE ADDITIONAL PROVISION | JD 57,694 |
| Detailed design consultancy (8% of A) | JD 12,821 |
| Construction supervision and management (8% of A) | JD 12,821 |
| Topographical & archaeological surveys/specialistic investigations (5% of A) | JD 8,013 |
| CONTINGENCIES (15% of A) | JD 24,039 |

| TOTAL COST OF THE ADDITIONAL PROVISION | JD 57,694 |

FINAL ACTION PROJECT COST (A+B) | JD 217,954 |

PRIVATE SECTOR:

| Internal Furnishings (Total area Sq. Mts 550 X JD/sq.m1 120 | JD 66,000 |
| TOTAL COST PUBLIC/Private Partnership Action | JD 283,954 |

PROJECT TIMING

The time allocated for the implementation of the action project is based on the following phasing:

Design stage – 8 months

Work stage – 4 months

Total implementation time – 12 months
4.3 M.03 - THE RE-DESIGN OF THE EXISTING BUS STATION

ABSTRACT OF THE PROPOSED PROJECT

Due to its continuing role as the principal agricultural center of the region, Madaba attracts vast numbers of local commuters who reach the city on a daily basis.

The main Madaba Bus Station is located in a strategic position within the urban fabric of the city core, at a short distance away from the Al-Hashimi/Petra Street junction, one of the city’s busiest commercial areas, thus confirming its central role within the city’s economic and social life.

Moreover, regardless of the Municipality’s recent realization of a new, still un-utilized, bus station on the extreme, eastern periphery of the city, the main bus station compound continues to be an important urban node and a gateway to the city core for visitors from the surrounding towns.

The project aims at an integral refurbishment of the existing bus station buildings and the transformation of the related open air enclaves into quality spaces.

The project will include the rationalization of entrance and exit paths for pedestrians, private vehicles and buses, the provision of shaded stalls for buses equipped with protected seating facilities for passengers, decorative planting of autochthonous greeneries and trees and the rehabilitation of the existing bus terminal.

PRESENT STATE AND USE

The area occupied by the bus terminal, finds its access on Petra Street and its exit on Obeida Amer Bin Jarrah Street. The area and the existing buildings are in a very poor state of conservation. Moreover the intense commercial activity which takes place within the compound causes severe congestion which is not limited to the bus station itself, but extends along the approach roads leading to and from it causing danger to road users especially if pedestrian.

MAIN PROJECT COMPONENTS

The project proposes the integral rehabilitation of the bus station compound according with the following projects components:

- Complete refurbishment of the existing bus terminal.
- Creation of two urban soft landscaped areas located along the ring road, facing the existing bus station’s entrance canopy.
- Creation of a parking area for private vehicles adjacent to the existing bus terminal.
- Re-design of the passenger bus parking facilities with the provision of shaded stalls and protected outdoor seating facilities.
- Complete refurbishment of the existing bus terminal compound.
VIEWS OF THE EXISTING MUNICIPAL BUILDING TO BE REHABILITATED

VIRTUAL VIEWS OF THE BUS STATION
PROJECT INTERVENTIONS
The intervention will consist of:

- Land preparation (excavations and filling, demolitions and removal of all non required elements and debris).
- Refurbishment of damaged below-grade utilities including the provision of an efficient storm water drainage system (SEE DETAILED ASSESSMENT).
- Parking area and service road cover with bituminous asphalt.
- Sidewalks and bus stalls tiled with concrete modular units.
- Concrete curb stones including special ramped pieces for handicapped access.
- Signage (horizontal and vertical).
- New canopies for bus stalls. The stalls will be weather-treated teak wood construction with weatherproof textile overhead protection for easy maintenance and substitution. The stalls along the perimeter will include outdoor seating facilities for passengers, natural stone planters and weather-treated, teak wood, vertical trellises for the planting of creeping greenery.
- Planting of autochthonous trees and greeneries including planting grills with agricultural soil.
- Public lighting.
- New street furniture (garbage cans).
- Further studies needed.

STAKEHOLDER CONSIDERATIONS
Awareness raising among the local population will help the acceptance of the nuisance caused by construction and disruptions to both vehicular and pedestrian traffic.

FURTHER STUDIES NEEDED

- Institutional implementation and monitoring responsibilities and agreements.
- Topographical surveys; archaeological surveys and excavations.
- Architectural surveys; structural surveys, analyses and assessments.
- Detailed infrastructure and utility assessment.
- Detailed traffic management plan.
- Detailed architectural and engineering design work.
- Careful phasing of the works so as to allow for the efficient operation of the bus terminal during the course of the works.

VIRTUAL VIEW OF THE ACCESS TO THE BUS STATION FROM THE RING ROAD (PETRA STR.)
COST ESTIMATES

A) WORKS

<table>
<thead>
<tr>
<th>Description</th>
<th>Area (Sq. Mts)</th>
<th>Cost (JD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rehabilitation of Existing Buildings</td>
<td>1240</td>
<td>248,000</td>
</tr>
<tr>
<td>Parking Areas</td>
<td>5200</td>
<td>88,400</td>
</tr>
<tr>
<td>Green Areas</td>
<td>700</td>
<td>14,000</td>
</tr>
<tr>
<td>Special Canopy Structures</td>
<td></td>
<td>100,000</td>
</tr>
<tr>
<td><strong>Total Cost of the Works</strong></td>
<td></td>
<td><strong>450,400</strong></td>
</tr>
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</table>

B) ADDITIONAL PROVISIONS

b1) Technical Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (JD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed design consultancy (8% of A)</td>
<td>36,032</td>
</tr>
<tr>
<td>Construction supervision and management (8% of A)</td>
<td>36,032</td>
</tr>
<tr>
<td>Topographical &amp; archaeological surveys/specialistic investigations (5% of A)</td>
<td>22,520</td>
</tr>
<tr>
<td><strong>Total Cost of the Additional Provision</strong></td>
<td><strong>162,144</strong></td>
</tr>
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</table>

**Final Action Project Cost (A+B)**

<table>
<thead>
<tr>
<th>Cost (JD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>612,544</strong></td>
</tr>
</tbody>
</table>

PROJECT TIMING

The time allocated for the implementation of the action project is based on the following phasing:

- Design stage – 10 months
- Work stage – 6 months
- Total implementation time – 16 months
4.4 M.04 - REALIZATION OF OPEN AIR LEISURE FACILITIES

ABSTRACT OF THE PROPOSED PROJECT

The project’s objective is that of creating an enclave dedicated to social encounter, entertainment and promotion of local productive potentialities. The project proposes the transformation of a vast decayed void, located within the urban fabric of the city core, into a leisure park supported by a series of structures dedicated to the promotion of local handicrafts and to the provision of spaces where the local population can meet and socialize.

The new leisure park acts as the ideal terminus of the proposed new Linear Civic Centre which comprises the rehabilitation of the urban node of the Church of the Map, the redesign of the axis of King Tallal Street and the restoration of the Ottoman landmark building known as the Saraya and its re-use as the city’s heritage center.

The new Leisure Park will include the creation of an articulated ensemble of open air enclaves whose function is determined according to their location within the site boundaries (PARK, PLAYGROUND, OPEN AIR THEATER, PIAZZAS, ETC.).

The park will furthermore be supported by a series of enclosed spaces for leisure, socialization and promotion of local traditional handicrafts and products, developed through the rehabilitation of two semi-demolished heritage buildings present on site.

- The project is an outstanding opportunity for a Public/private partnership be based on the possibility of private ownership and exploitation rights of the new indoor facilities connected to private co-financing of the project works.

PRESENT STATE AND USE

The project site consists of vacant land located between King Abdullah street, the upper section of King Tallal street and the Saraya building. The site is surrounded by recent, decayed buildings, and by the ruins of some heritage stone masonry buildings. The site is characterized by a very articulated topography which descends from the central relief of the “Acropolis” towards the periphery of the urban fabric.

PROJECT RATIONALE AND MAIN OBJECTIVES

Due to its location, the area has an important potential to become a meeting point for the population so as to contribute to re-establish the city’s social cohesion which went progressively lost with the recent population growth and the consequent transformation of its original, prevailingly Christian social structure. The project therefore aims at providing the local population with both open air and enclosed spaces for leisure, entertainment and promotion of local production and creativity.

The park acts as a counterpoint to the Saraya Heritage Center and its main access faces the Saraya building entrance plaza.

The morphology of the site has been exploited for the creation of an articulated ensemble of open air enclaves whose function is determined according to their location within the site boundaries (PARK, PLAYGROUND, OPEN AIR THEATER, PIAZZAS, ETC.). The site is accessible through various interstitial spaces within the surrounding architectural fabric while the main entrance is located in direct connection to the Saraya Building plaza thereby reinforcing the park’s symbolic relationship with the city’s new heritage center.

The Municipality will expropriate the lands needed for the project which will function as a city park in the middle of the historic core. The required works in this project are preparing the land for development, excavation of all archaeological and heritage remains and assessment of the usability of the existing structures, preparation of the site as a public park and construction of its elements and the operation of the park for leisure and public occasions.

The existing abandoned heritage buildings will be restored so as to provide enclosed spaces dedicated to leisure activities and local handicraft promotion (INTERNET CAFÉ, RESTAURANT, HANDICRAFT CENTER, ETC.).

The rehabilitation of the heritage buildings will be based on a thorough assessment of their physical conditions and structural soundness. The design solution will be developed during the detailed design phase, within the framework of the technical prescriptions of the new historic core regulation, with the active participation of the private partner so as to cater for the functional needs of the activities which will be hosted.

The project will take the form of a public/private partnership in which the Municipality will provide the acquisition, rehabilitation and management of the outdoor space, while the private partner will ensure the rehabilitation of the heritage buildings and the management of the facilities (SEE RELATED COST ESTIMATE).

The principal project objectives are:

- Improvement of the environmental quality of the urban fabric by reclaiming and rehabilitating a decayed area within the city core.

SITE PANORAMIC VIEW FROM THE EAST SIDE TO THE
and integrating it within the King Tallal Linear Civic Centre.

- Provision of a much needed outdoor leisure compound for local residents.
- Creating new economic benefits for the city by providing it with a space dedicated to the promotion of local products and handcrafts.

**MAIN PROJECT COMPONENTS**

The following elements will be included within the park's urban design layout:

- The needed landscape and environmental rehabilitation works, including refurbishment of damaged below-grade utilities, provision of an efficient storm water drainage system, soil consolidation, land reshaping and tree planting.
- The needed landscape and environmental rehabilitation of the constructed site perimeter through the planting of autochthonous tree and plant species so as to mask the architectural decay of the rear facades of the existing buildings.
- A large public green open space, with greenery and shaded areas, including the following functions:
  - children's playground
  - amphitheatre for special events
  - two piazzas for social gatherings
- The privately financed restoration and adaptive reuse of existing vacant and/or partially demolished heritage buildings, to provide additional amenities and support functions to the open air leisure space (SEE RELATED COST ESTIMATE).

**PROJECT INTERVENTIONS**

The Municipality will expropriate the lands needed for this project which will function as a city park in the middle of the historic core.

The principal issues concerning this project are:

- Excavation of all archaeological and heritage remains and assessment of the feasibility for adaptive reuse of the existing heritage structures.
- Preparation of the site as a public park and construction of its elements.
- Assessment of the rehabilitation priorities related to the existing heritage buildings and monitoring of the technical and artistic quality of the rehabilitation works within the framework of the new historic core regulatory prescriptions.
- Management and maintenance of the park for leisure and public occasions (SEE RELATED CAPACITY BUILDING ACTION).

The intervention will consist of:

- Land preparation for the realisation of the leisure park and related structures (excavations and filling, demolitions and removal of all debris).
- Refurbishment of damaged below-grade utilities (SEE DETAILED ASSESSMENT).
- Storm water drainage (WHEREVER NECESSARY/SEE DETAILED ASSESSMENT) - The proposed storm water drainage network will comprise a combination of surface flows as well as, where necessary, a buried pipe network supported by gullies located at strategic points within the compound.
- Realisation of an open air reinforced concrete amphitheatre cladded in local natural stone.
- Stone cladded reinforced concrete retaining walls.
- Soft landscaped area including planting of evergreen meadows and autochthonous greenery and trees.
- Hard landscaped area and paths paved with local natural stone modular units.
- Sand-paved playground including fixed game-furnishings.
- Wooden trellis with waterproof textile overhead protection for the main entrance path.
- New urban furnishings (garbage cans, seating, etc.)
- Public lighting.

**STAKEHOLDER CONSIDERATIONS**

No resettlement of activities and population is foreseen. Land expropriation is needed for the realization of the proposed park and amenities.

A public-private partnership should be set-up for the rehabilitation and adaptive re-use of the existing heritage buildings (SEE RELATED COST ESTIMATE).

A capacity building action is needed in order to ensure proper specialized maintenance and management skills on the part of the Municipality (SEE RELATED CAPACITY BUILDING ACTION).

**FURTHER STUDIES NEEDED**

- Institutional implementation and monitoring responsibilities and agreements.
- Topographical surveys; archaeological surveys and excavations.
• Architectural surveys; structural surveys, analyses and assessments.
• Detailed infrastructure and utility assessment
• Architectural, landscape and engineering detailed design.
• Careful phasing of the works so as to allow for the efficient operation of the streets during the course of the works.

COST ESTIMATES

A) WORKS
- PUBLIC PIAZZA AND GARDEN (Total area Sq. Mts 4569 X JD/sq.m 20) JD 91,380
- HARD LANDSCAPE AND SPECIAL STRUCTURES (Lump sum) JD 200,000

COST OF THE WORKS JD 291,380

B) ADDITIONAL PROVISIONS
b1) TECHNICAL EXPENSES
- Detailed design consultancy (8% of A) JD 23,310
- Construction supervision and management (8% of A) JD 23,310
- Topographical & archaeological surveys/specialistic investigations (5% of A) JD 14,569
b2) CONTINGENCIES (15% of A) JD 43,707

COST OF THE ADDITIONAL PROVISION JD 104,897

TOTAL ACTION PROJECT COST (A+B) JD 396,277

C) LAND ACQUISITION (Lump sum developed from local market analysis) JD 255,000

FINAL ACTION PROJECT COST (A+B+C) JD 651,277

PRIVATE SECTOR :

A) WORKS
- REHABILITATION OF EXISTING BUILDINGS (Total area Sq. Mts 4569 X JD/sq.m 20) JD 170,600
- STATIC CONSOLIDATION AND STRUCTURAL RECONSTRUCTION JD 30,000
- INTERNAL FURNISHINGS (Total area Sq. Mts 853 X JD/sq.m 120) JD 102,360

TOTAL COST OF THE WORKS JD 302,960

B) ADDITIONAL PROVISIONS
b1) TECHNICAL EXPENSES
- Detailed design consultancy (8% of A) JD 13,648
- Construction supervision (5% of A) JD 8,530
- Construction site security (3% of A) JD 5,118
- Topographical & archaeological surveys/specialistic investigations (3% of A) JD 5,118
b2) CONTINGENCIES (15% of A) JD 25,590

TOTAL COST OF THE ADDITIONAL PROVISION JD 58,004

FINAL ACTION PROJECT COST (A+B) JD 360,964

TOTAL COST PUBLIC/Private PARTNERSHIP ACTION JD 1,012,241

PROJECT TIMING

The time allocated for the implementation of the action project is based on the following phasing:
- Design stage – 8 months
- Land acquisition – 4 months
- Work stage – 6 months
- Total implementation time – 18 months
PANORAMIC VIEW TO THE "ACROPOLIS" ACCESS
### 4.5 COST SUMMARY OF THE PHYSICAL ACTION

#### MADABA ACTION PROJECTS - COST SUMMARY

<table>
<thead>
<tr>
<th>PROJECT ACTIONS</th>
<th>COST OF WORKS &amp; ADDITIONAL PROVISIONS</th>
<th>COST FOR LAND ACQUISITIONS</th>
<th>PRIVATE SECTOR</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M.01: Upgrading of the street network.</strong></td>
<td>JD 1,909.99</td>
<td></td>
<td></td>
<td>1,909.99</td>
</tr>
<tr>
<td><strong>M.01a: Site specific action - King Talal and Church of the Map node</strong></td>
<td>JD 329.509</td>
<td></td>
<td></td>
<td>329.509</td>
</tr>
<tr>
<td><strong>M.02: The Creation of a new Cultural Center in the Saraya building</strong></td>
<td>JD 217,954</td>
<td></td>
<td></td>
<td>283,954</td>
</tr>
<tr>
<td><strong>M.03: The re-design of the existing bus station</strong></td>
<td>JD 612,544</td>
<td></td>
<td></td>
<td>612,544</td>
</tr>
<tr>
<td><strong>M.04: Realization of Open Air Leisure facilities</strong></td>
<td>JD 396,277</td>
<td>255,000</td>
<td></td>
<td>1,012,241</td>
</tr>
<tr>
<td><strong>TOTAL COST</strong></td>
<td>JD 3,465,382</td>
<td></td>
<td></td>
<td>4,147,346</td>
</tr>
</tbody>
</table>

**MADABA ACTION PROJECTS - COST SUMMARY - OPTIONAL upgrading of the remaining part of the "Ring Road"**

<table>
<thead>
<tr>
<th>PROJECT ACTIONS</th>
<th>COST OF WORKS &amp; ADDITIONAL PROVISIONS</th>
<th>COST FOR LAND ACQUISITIONS</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M.01: Upgrading of the street network.</strong></td>
<td>JD 415,072</td>
<td></td>
<td>415,072</td>
</tr>
<tr>
<td><strong>TOTAL COST</strong></td>
<td>JD 415,072</td>
<td></td>
<td>415,072</td>
</tr>
</tbody>
</table>
5. The capacity building actions

5.1 CONTEXT AND MAIN ISSUES

The decline of the historical centre, the degradation of its urban and residential fabric and the crisis of its functions of centrality are strongly related to the general weakness of the municipal institution. Conversely, the success and the sustainability of the program of revitalization and development of the historical centre are strongly conditioned by the commitment and the capacity of the municipality, and by the improvement of its capacity to mobilize the local resources and to play its role effectively, in particular in the fields of urban planning and management, in the provision of urban services of better quality and in the social and economic development of the city.

The institutional assessment shows that the weakness of the municipal institution is manifested on several interdependent levels:

- **Urban planning and management**: the municipality has very low capacity to provide for structural and strategic planning and management, to determine in a suitable way the location of the various commercial and urban activities and to put in place and to enforce urban regulations for construction and use of public spaces. This situation has resulted in an anarchistic and uncontrolled urban development and in the degradation of the environment and urban fabric of the historical center in particular.

Thus, several problems could still be highlighted:

- **The weakness of competences and technical capacities** of the department of urban planning and management, which, at present, exists only in an embryonic state and has very few qualified and trained personnel;

- **The weakness in regulations**: Absence of regulations defining the commercial activities in the various urban zones and more particularly in the historical center; absence of regulations related to construction, modification or restoration of buildings in the historical center; weakness of the functions of control and application of regulations related to the use of public pathways and spaces, and to the construction and compliance with the rules of town planning;

- **The absence of information and essential data** starting from available and updated base cartography, concerning streets and roadway systems, urban infrastructure, commercial buildings and activities, existing constructions and their conformity with regulations, properties and their limits, existing utilities networks etc. in the historical center as well as in the other parts of the city;

- **The absence of technical tools** necessary for urban management and planning (data-processing tools, GIS, databases, etc.);

- **Weakness of the functions of management and maintenance of public spaces**, and of the quality of urban services. The sustainability of the program of urban revitalization requires the improvement of the level and the quality of urban services and the sustainability of public spaces (maintenance of storm drainage and sewerage, street lighting; better management of garbage collection and cleanliness of public spaces and places such as the road station and markets; better maintenance of the roadway system; improvement of traffic management and better control of the parking issue, control over signage and shop windows etc.)

- **Weakness of the capacities to promote and enforce the compliance with sanitary and public health rules**. At present, the municipality monitors and enforces the compliance with the sanitary regulations, in particular those related to the marketing of foodstuffs. However, the municipality does not have sufficiently qualified and trained personnel to assume this responsibility. Even though, this is an imperative to protect the health of the local population, it is still of primordial importance from the point of view of the development of the touristic potentials of the city.

- **Absence of coordination between the municipality and the public utility companies**. This problem manifests on multiple levels and undermines the effectiveness of the majority of municipal services. It is in particular the case of the companies of Water and Electricity, which, often, carry out work without any form of dialogue or coordination with the municipal departments.

- **The great weakness of human resources and qualification**. In spite of a significant overstaffing and of the fact that an important part of the expenditure is devoted to the staff expenses, the municipality is heavily handicapped by the very low qualification and training level of its personnel and their weak engagement in the duties requested of them.

- **The scarcity of technicians and of qualified personnel**, of which all municipal departments and services suffer, constitutes today an obstacle for the organizational restructuring and improvement of the institutional capacities of the municipality. The new municipal professionals (primarily engineers) who were for their majority designated or detached by the Ministry of Municipal Affairs following the fusion of the municipalities have, undoubtedly, attenuated the problem without solving it because the majority of them were new graduates without experience. In addition, the skills required for the management of historic cores and heritage buildings are very specific, and require trained architects and urban planners.

Moreover this problem is accentuated by the difficulty of retaining qualified personnel because of the low pay and the working environment, which is little motivating.

- **The large majority of the personnel consists of employees who have a very low qualification and training level**. Moreover, having been often recruited on the basis of clientelism, the majority of these employees is little motivated and continues to see employment with the municipality as a source of income, which demands little or no return in terms of work and involvement.

Thus, the Mayor considers that the solution should combine the setting up of effective and adapted training schemes, the restructuring and reorganization of administration, the establishment of an equitable and transparent system of evaluation of competences and a follow-up of the work of employees including incentives, sanctions and dismissal.

- **An organizational problem**. To face the organizational weakness and the lack of coordination between the various services, the municipality started to set up plans for reorganization based on a general outline conceived by the Ministry of Municipal Affairs. However, the municipality considers that these plans remain insufficiently adapted to its needs and problems, and that it needs technical assistance based on specific analysis in order to be able to restructure and improve its services and functions.

- **Weakness of financial management and of revenues generated by the municipality**. The financial situation of the municipality improved during the last three years thanks to the increase in the revenues transferred by the State, to a better collection of revenues and local taxes, and to a better management of its expenditure. However, in spite of this effort, the financial situation remains marked by many weaknesses, particularly:

  - **Weakness of financial resources in comparison to the expenditure** and especially in comparison to the needs for improving the local services and for developing the municipal action, in particular in the field of management and town planning;

  - **Very limited revenue autonomy**. The decrease of the share of own revenues as a percentage of total revenues of the municipality (in spite of the increase of their absolute value) has strengthened the dependence of municipal financing on the governmental transfers;

  - **Weak efficiency of the collection of municipal revenues**: the collection of the majority of taxes and fees is still far from reaching the potential optimum level;

  - **Weakness of the revenues generated by the income-generating projects**;

  - **Irregularities and variation in the revenues from year to year**;

  - **Low capital investment**;

  - **Salaries and wages eat up a big part of the budget**;

  - **High payment on interests**;

Without taking here into account the structural factors which determine municipal finances (fields of competences and definition of the rights of the municipalities as regards taxes, nature of the relationship between the municipal institution and the State, etc.), and while limiting the discussion to taxes and revenues which the municipalities have currently the right to locally collect, one can underline sev-
eral problems which block the optimization of the resources and the improvement of the financial management of the municipality:

- Weakness of technical expertise and competences necessary for a good financial management;
- Absence of performing means and tools of management (computer tools) which would make it possible to improve to a significant degree the collection of taxes and fees and the management of municipal finances;
- Absence of a database and an information system allowing the identification of taxpayers, the evaluation and determination of taxes, fees and infringements which must be paid, and the monitoring of payments. It is the case for example of the Job Licensing tax, the revenues from planning and development, Fruits and vegetables fees, sign and announcement boards fees, car park fees, etc.;
- Low effectiveness of the procedures of evaluation of the Land and Building Tax (Musakafat) that the State currently collects for and in the name of the municipality, but which the municipality should take care of in the coming years. It should be stressed also that the optimization of the collection of this tax could not be done in the absence of a census and of a system of addressing of streets, buildings and land, and without the installation of a performing database and of procedures of evaluation and of collection;
- Weakness or inexistence of procedures for the control and monitoring of the process of collection of taxes and revenues;
- Lack of accountability mechanisms, low transparency of the procedures of evaluation and taxation, and inequality in the treatment of taxpayers because of clientelism;
- Insufficiency of the effectiveness and of the quality of services rendered by the municipality and consequently, of its legitimacy to impose the application of regulations and of payment of taxes.

- The absence of mechanisms of accountability and of forms of participation of the local population and stakeholders. The population currently has little information on the municipal actions and decisions and tends to perceive the municipality as a simple administration on which the citizens have little influence. This lack of participation and involvement of the population weakens in multiple ways the capacity of the municipality to co-produce with the users services of quality, to make them accept its decisions and its orientations, to make them respect the regulations and the standards of use of public services and spaces, and to obtain the approval and the collaboration of the local citizens in collecting municipal taxes. It also weakens the capacity of the municipality to continue to be the framework where the interests of and the rapport between the various social groups are negotiated and, consequently, to play its part in the construction and the reinforcement of social cohesion. However, the municipality recognizes the importance of this issue, in particular mobilizing the local resources necessary for the success and the sustainability of the program of urban revitalization, and therefore plans to set up local committees for consultation.

### 5.2 DESCRIPTION OF THE CAPACITY BUILDING ACTION

#### GENERAL OBJECTIVE

The general objective the action aims at is improving the organizational and institutional capacity of the municipality in order (i) to play its role within the context of the City Revitalization Program, and to manage and preserve in a sustainable way the historical centre, (ii) to improve its performance in service delivery; and (iii) to play an increased role in the reinforcement of social cohesion, urban integration, and social and economic development of the city.

The actions of capacity building approached here are limited to those which are strictly related to the implementation of the program of revitalization of the historical center. However, the success of these actions in ensuring the sustainability of the objectives of the program of urban revitalization depends on their articulation with other general and transversal activities aiming at reinforcing the capacities of the various municipal departments in various fields on the totality of the municipal territory, in particular in the fields of planning and urban management, organization and management of personnel, budgetary and financial management, the mobilization of resources and the improvement of local taxes collection.

#### SPECIFIC OBJECTIVES OF THE PROGRAM

1) Development of the technical and institutional capacity of the municipality to implement, monitor and ensure the sustainability of the core city revitalization plan, including the capacity building actions;
2) Strengthening the technical and institutional capacity of the municipality to enforce the new Historic Core Regulation, and to promote, assist, and monitor the conservation and the rehabilitation of the urban and architectural heritage;
3) Reinforcement of the institutional and organizational capacities of the municipality in urban planning and management, particularly in the historical core;
4) Improvement of the capacity of the municipality to provide urban services of better quality, in particular in the field of maintenance and management of urban public space of the historic core;
5) Improvement of the transparency and accountability of municipal management and reinforcement of the forms of participation of the population and local stakeholders.

The capacity building action plan for reinforcing the municipal capacities will be put in place, as much as possible, jointly by the four municipalities concerned (Madaba, Jarash, Salt and Karak). This will make it possible (i) to carry out an economy of scale and (ii) to institute a process of collaboration and transfer of competences between them.

### DESCRIPTION OF THE PROGRAM

1) Development of the technical and institutional capacity of the municipality to implement, monitor and ensure the sustainability of the core city revitalization plan, including the capacity building actions.

The efficient implementation and the sustainability of the core city revitalization plan require the adoption of an organizational scheme and of an integrated transversal approach that allows:

- To closely connect the urban physical actions with the institutional capacity building actions;
- To integrate the core city revitalization as well as the functions of urban planning and management of the historical center in a strategy aiming at the modernization of all municipal departments and the improvement of the service delivery over the totality of the municipal territory.

This approach could be achieved by setting up a "cross-departmental municipal unit" under the direct authority of the Mayor and with the participation of the chief of the "technical support unit" (see 2), the person in charge of the department of urban planning, as well as those in charge of the various municipal departments concerned with the provision of services.

This "cross-departmental municipal unit" would have the authority and the responsibility for supervising the implementation of the program of urban revitalization of the historical core and the municipal capacity building, including planning and urban management and the improvement of the quality and effectiveness of the municipal services.

In other words, this unit would materialize the concept of "Administration de mission" and would be in charge, by mobilizing and coordinating the various municipal departments and their actions in the historical core, of accomplishing the functions of:

- Coordination with the other institutional partners of: putting in place, monitoring and evaluation of the physical actions of the program of urban revitalization of the historical core;
- Setting up, monitoring and evaluation of the actions of capacity building;
- Identification or definition of the needs for scheduling, in terms of urban management, the provision of urban services in the historical center according to a timetable and a given level of quality;
- “Maîtrise d’ouvrage” or overall supervision of all actions aiming at improving the services as well as other actions and work related to the program of urban revitalization of the historical center;
- Monitoring and evaluation (including the definition of the criteria of performance) of the provision of services and the urban management of the historical center.

Admittedly, the "cross-departmental municipal unit" should focus initially on the revitalization of the historical center and its management. However, the transversal approach and the mobilization of all municipal departments will permit to make of this program of revitalization a ground
of experimentation and of building municipal capacities, so that the im-
provement of the services and urban management of the historical cen-
ter could extend gradually to the totality of the territories of the city.

2) Development of the technical and institutional capacity of the
municipality to enforce the new Historic Core Regulation, and to
promote, assist, and monitor the conservation and the rehabilita-
tion of the urban and architectural heritage.

This can be translated into action through the creation of a “technical
support unit” that will supervise the overall process and actions of con-
servation and restoration of the urban and the architectural heritage, and
will achieve more particularly the following specific objectives:

- To facilitate the access to clear, correct and detailed information
about the urban revitalization plan by the local community (informa-
tion & communication action, publication of the new regulations re-
lated to the historical core on different supports including the Inter-
net - this is particularly important for professionals like architects,
town planners, etc.)

- To orient both beneficiaries and stakeholders in the interpretation/implementation of the core city revitalization plan regulations;

- To provide technical assistance to the lower income strata of the lo-
cal communities in the identification, design, approval of projects for
the recovery, conservation, and upgrading of historic buildings in the
core city;

- To authorize/ deny building licenses and permits (i.e.: new construc-
tions, old building restoration and conservation, demolitions) accord-
ing to core city center regulatory discipline;

- To coordinate with both local and national institutions such as DOA;
MOTA, etc. on matters that are in their specific institutional compe-
tences (i.e. Archaeological site protection and promotion; Heritage
and Environmental protection, etc.)

- To monitor the implementation of all restoration, conservation, refur-
bishing and upgrading projects regarding the historic buildings stock;

- To work closely with the municipal urban planning department in or-
der to improve the urban planning and management of the Historic
Core;

- To participate actively in the effort to ensure a better coordination
between municipal departments in order to improve the delivery of
urban services in the historical core;

- To secure harmonization between actions targeting public spaces
and properties and actions targeting private buildings (i.e.: streets,
urban supplies networks, private buildings;

- To report irregularities and violations to rules and regulations con-
cerning the core city revitalization to the local authorities responsible
for the application of sanctions.

This technical support unit will consist of: 1 senior architect, 1 Architect
Conservator; 1 Structural engineer specialized in building consolidation;
and 3 Surveyors. The staff of this unit should be trained on the use of
GIS.

3) Reinforcement of the institutional and organizational capacities of
the municipality in urban planning and management, particularly
in the historic core.

- Reinforcement of human resources of the department of town plan-
ning by employing professionals having technical expertise (1 archi-
tect specialized in urban planning/management and 1 GIS specialist
who will work closely with the technical support unit);

- Staff training of this department;

- Equipping the municipality with the tools and technical instruments
necessary for planning and urban management (data-processing tools,
GIS, databases, aerial digital maps, etc.);

- Assisting the municipality in starting to collect information and es-
sential data concerning the historic core and to organize them in the
form of databases (cadastral data and land information system, in-
ventory of and addressage of streets and buildings, and of commer-
cial buildings and activities, data on existing constructions and their
conformity with regulations, intelligent mapping and inventories of
urban networks and infrastructures, etc.) These databases that will
be built for the historical center could be enlarged thereafter to in-
clude the whole city.

- Mobilization of the resources and the competences of the different
municipal departments in order to enforce the respect of regulations
and to set up mechanisms of control to deal with violations (land
use, zoning and building regulations; commercial activities regula-
tions; signs and announcement boards, parking and use of pave-
ments and public spaces, etc.)

4) Improving the capacity of the municipality to provide urban services
of better quality, in particular in the field of maintenance and
management of the urban space of the historical center.

- Reinforcement and improvement of the quality of maintenance
of public spaces (maintenance of sanitary networks and drainage;
street lighting; garbage collection and cleanliness of public spaces
and places such as the road station and markets; maintenance of
the street network; traffic road management, and control of parking -
both free and paid, etc.) This improvement could be achieved
through a four-level intervention:

  - Staff training;
  - Improvement of human resource management and setting up of
    evaluation and control procedures;
  - Implementation of information tools, monitoring and evaluation
    relating to urban services and to the functions of management
    and maintenance of public spaces.

- Setting up a mechanism of coordination and cooperation between
the municipality and the public sector companies and the public util-
ity providers, in particular the Water Authority and the Electricity
Company for a better programming and organization of their work
in the city, particularly in the historic core.

- Creation, under the authority of the Governor, of a working
group in order to reach and to set up a formal agreement be-
tween the municipality and the public utility providers. This
agreement should define the obligations and duties of each par-
ty and precize the conditions of intervention of these compa-
nies in the historic core and in the municipal territory, and the
modalities of coordination with the municipal services.

5) Improvement and reinforcement of the forms of participation of
the local population and stakeholders.

- Establish a local committee of consultation and follow-up of revitali-
zation formed from local stakeholders (associations, representative
of shopkeepers and traders...)

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1 Another approach of “territorial management” would have been possible. But the risks,
which it presented, made us prefer a transversal approach. That approach would have
consisted of creating a “municipal unit for specific management” which would have had
the responsibility of supervising the totality of the program of urban revitalization of the
historical core.

Such a unit would have been given the responsibility of:

- The functions of coordination, with the other institutional partners, of the unit of
the plan of revitalization of the historical core;

- The specific functions of applying the new regulation concerning the historical center;
of the conservation and rehabilitation of the architectural and urban heritage;

- The functions of planning and urban management of the historical center;

- The definition of the needs in terms of urban services (maintenance, etc); the mobil-
ization of the different municipal departments and the coordination of their interven-
tions to ensure the supply of these services in the historical center according to a
timetable and level of quality defined by this unit of management: the follow-up and
the evaluation of the provision of services as well as all other work and interventions
in the perimeter of the historical center.

In other words, this option would have led to a territorialisation of the municipal action
and would have given to this “management unit of the historical center” a certain autonomy vis-
à-vis the other municipal departments whose role, in the perimeter of the historical core,
would have been limited to a role of execution.

This option presents several risks and disadvantages:

- It reduces the benefits in terms of capacity building of the plan of revitalization of
the historical center, in particular the physical actions, inssofar as it limits the role and
the participation of the various municipal departments in putting in place those actions;

- The improvement of urban management and the quality of the municipal services in
the historical center could be accompanied by a stagnation and even by a deterio-
ration of the quality of these services in the other zones of the city.

- This option could, consequently, create and reinforce urban fragmentation and the
inequality of access to the municipal services of the populations of the various zones
of the city.

- It could also create a gap and an inequality, in terms of means, capacity, and effi-
ciency, between the unit in charge of the management of the historical center and the
other municipal departments. Such a gap would inevitably result in internal tensions
and conflicts, which would, in the long run, put at risk the sustainability of the im-
provement in the management and provision of services concerning the historical
center.

- On the financial level, this option could not be sustained because the improvement
of management and the municipal services supposes the reinforcement of the capacity
for financial management and collection of revenues. However, the improvement in
the collection of these revenues could neither be made nor accepted locally without
the municipality improving the effectiveness and the quality of the services, which it
renders to the whole of the population.
5.3 ESTIMATED COST OF CAPACITY BUILDING ACTIONS

The estimated cost takes into account:
- The economy of scale related to the coordinated realization of the actions for the four towns
- The collaboration and partnership with the CVDB in particular for the training and technical assistance
- The un-accounted for time-salary of the municipal staff participating in these actions

RECRUITMENT OF PERSONNEL

<table>
<thead>
<tr>
<th>Action</th>
<th>Objective</th>
<th>Modalities/Means</th>
<th>Schedule</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of a &quot;technical support unit&quot;</td>
<td>Development of the technical and institutional capacity of the municipality: • to enforce the new Historic Core Regulation; • to promote, assist, and monitor the conservation and the rehabilitation of the urban and architectural heritage.</td>
<td>Recruitment of 8 people: 1 senior architect 1 Architect conservator 1 Structural engineer specialized in building consolidation 3 Surveyors</td>
<td>Year 1</td>
<td>3,360 US$ per person per year</td>
</tr>
<tr>
<td>Reinforcement of capacities of the municipality in urban planning and management, particularly in the historic core.</td>
<td>• to ensure a better urban planning and management of the historic core.</td>
<td>1 architect specialized in urban planning/management 1 GIS specialist</td>
<td>Year 1</td>
<td>3,360 US$ per person per year</td>
</tr>
<tr>
<td>Total</td>
<td>8 people</td>
<td></td>
<td></td>
<td>134,400 US$ (for the 5 years)</td>
</tr>
</tbody>
</table>

TRAINING

<table>
<thead>
<tr>
<th>Action</th>
<th>Objective</th>
<th>Modalities/Means</th>
<th>Nb of days for each municipality</th>
<th>Nb of days for 4 municipalities</th>
<th>Cost for each municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training on: • Historic Core Regulations • Conservation and restoration of historic buildings</td>
<td>Development of the technical and institutional capacity of the municipality to enforce the new Historic Core Regulations, and to promote, assist and monitor the conservation and the rehabilitation of the urban and architectural heritage.</td>
<td>Training of 6 people from the &quot;Technical support unit&quot; and from the Urban Planning department</td>
<td>15</td>
<td>15</td>
<td>15*1,800+4,6750 US$</td>
</tr>
<tr>
<td>Training on: • The use of GIS and other tools (aerial digital maps, databases) for urban planning and management • The improvement of the urban planning and management capacity of the municipality in the historic core.</td>
<td>• Training of 6 people from the Technical support Unit and from the Urban Planning department</td>
<td>15</td>
<td>15</td>
<td>15*1,800+4,6750 US$</td>
<td></td>
</tr>
<tr>
<td>Training on the maintenance and management of urban services and spaces: • Sanitary networks and drainage • Maintenance of the street network; • Traffic road management</td>
<td>Improving the capacity of the municipality to provide urban services of better quality, in particular in the field of maintenance and management of the urban space.</td>
<td>Training of 6 to 9 people from different technical services • 2 or 3 persons from Sanitary networks and drainage; • 2 or 3 from Maintenance of the street network; • 2 or 3 from Traffic road management</td>
<td>15 (5 days for each service)</td>
<td>15</td>
<td>15*1,800+4,6750 US$</td>
</tr>
<tr>
<td>Total</td>
<td>26 people</td>
<td>45</td>
<td>45</td>
<td>20,250 US$</td>
<td></td>
</tr>
</tbody>
</table>

TECHNICAL ASSISTANCE

The training should be complemented by specific technical assistance of a limited duration. An assistance group, made up of consultants, could be established under the responsibility of the MOTA and in collaboration with the Ministry of Municipalities and the CVDB. Such a group could assist the four municipalities in:
- Enforcement of the new Historic Core Regulation
- Improvement of the urban management of the historic core
- Conception of the "Addressage"
- Setting up of indicators for the monitoring and evaluation of the urban service delivery

Cost : 40,000 US$

IN-KIND ASSISTANCE

- GIS tools for the department of Urban Planning and Technical Support Unit
- Software for the management of databases for the Technical Support Unit
- Plotter, printers, etc. digital camera, etc. (20,000)
- 10 Computers, printers for the Technical Support Unit (8 x 10,000 + 2 x 4,000)

Satellite imagery and aerial cartography for the Technical Support Unit and the department of Urban Planning (7,000)

Partial renovation of the equipment at the fourth year.

Cost : 223,000 US$

Total Cost for the municipality: 457,650 US$