

**THIRD TOURISM DEVELOPMENT PROJECT
SECONDARY CITIES REVITALIZATION STUDY**

Jerash

Proposal for public-private partnership

Attachment C

JOINT VENTURE OF COTECNO WITH ABT ALCHEMIA CDG MGA

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1. Introduction

In the analysis of individual PPP action, a three-level parking facility, the perspective considered is that of the single operator directly managing the economic activity. All the necessary investment costs have been considered in the financial analysis.

Revenues and operating costs are those directly connected with running of the activities. Consequently, also the costs associated with the rent of the areas and buildings are included under these items.

The analysis of the financial return of the proposed public-private partnership project has been elaborated according to the scheme set forth above. The indicators of return that have been considered are the Financial Net Present Value (FNPV) and the Financial Internal Rate of Return (FIRR).

The net flow of financial benefits is determined by the difference between financial benefits and costs, considered for the purpose of the profitability analysis. The assessment of profitability is made in relation to the specific operating agency standpoint, thus assuming that such operator will be responsible for the investment and that the capital invested will be repaid in the running of the site.

The discount rate used to calculate the NPV and to assess the acceptability of the FIRR is based on the calculation of the weighted average cost of capital (WACC), expressed on a constant price basis, used to finance the project¹.

¹ According to a capital structure entirely financed by private capital, the WACC coincides with a nominal cost of equity equal to 10%.

2. Business plan for PPP Action J04 “The reuse of the available open space pertaining to the ex-market place: three-level parking facility”; business plan

2.1. INTRODUCTION

The recent relocation of the Jerash market place has freed a 3200 sq. mt. triangular plot of land adjacent to the Bab-Amman Street for public development. The project aims at the realisation of a quality pedestrian public space within the confines of the Jerash city core, together with the provision of a low-impact parking structure as a service to the local community and to the visitors.

A three-level parking facility - in reinforced concrete post and beam construction with stone-cladded perimeter walls and ample post to post openings protected by galvanised steel grills for the planting of creeping greenery - will be included within the new plaza's urban design layout. The parking facility will have 270 parking stalls; It will be accessible exclusively from Al- Wade Street and will be served by an internal vehicular ramp connecting the two parking levels and by a staircase providing direct access to the roof-top pedestrian plaza.

The management hypothesis assumes that a private company will manage the facility

2.2. INVESTMENT COSTS

All the investment costs related to the project will be borne by the company managing the parking and amount to a total of 2,577 million US\$ (1,825 million JD), broken down as follows.

A) WORKS	JD	US\$
PUBLIC PIAZZA AND GARDEN (Total area Sq. Mts 3,200 X JD/sq. mt 23)	73,600	103,881
PARKING STRUCTURE (Total parking stall = 270 X JD/parking stall 4,700)	1,269,000	1,791,105
COST OF THE WORKS	1,342,600	1,894,986
B) ADDITIONAL PROVISIONS		
b1) TECHNICAL EXPENSES		
Detailed design consultancy (8% of A)	107,408	151,599
Construction supervision and management (8% of A)	107,408	151,599
Topographical & archaeological surveys/specialistic investigations (5% of A)	67,130	
b2) CONTINGENCIES (15% of A)	201,390	284,248
COST OF THE ADDITIONAL PROVISION	483,336	682,195
FINAL ACTION PROJECT COST (A+B)	1,825,936	2,577,181

TABLE 1 - INVESTMENT COSTS BY ITEM

2.3. OPERATING COSTS

As for personnel, considering that the parking will function 16 hours per day, 10 employees will be necessary in order to control and collect the money: 9 8-hour shift employees plus an area director.

According to the cost estimates presented in Section 5 of Annex 1 as for the recruitment of personnel (an average annual cost of 3,360 US\$), salaries costs for the director and the

employees have been estimated respectively in 4 and 3 thousand US\$ per year, thus resulting in a total cost of 31,000 US\$ per year for the parking personnel . The total costs of such personnel as shown in the table below.

STAFF	SALARY PER YEAR (US\$)	NUMBER OF STAFF	TOTAL COST (US\$)
Director of the area	4,000	1	4,000
Employees	3,000	9	27,000
1			
Total		10	31,000

TABLE 2 – COST OF PERSONNEL FROM THE THIRD YEAR OF BUSINESS ACTIVITY (US\$)

Based on experience, other yearly costs are assumed to be as follows, (in US\$):

- Material 3,000
- Ordinary Maintenance (0,6% of investment) 4,000
- Services (power, water, cleaning, etc.) 3,000

The running costs to be considered in the financial analysis are listed in the following table that refers to the first 5 years of business activity. While, from the 3rd year up to the end of the analysis period (20th year), these costs remain constant, in the first two years, they have been estimated to be 60% (first year) and 80% (second year) of the ones estimated from the 3rd year onwards.

ITEMS	YEARS				
	1	2	3	4	5
Salary	18,600	24,800	31,000	31,000	31,000
Material	1,800	2,400	3,000	3,000	3,000
Ordinary maintenance	3,000	4,000	5,000	5,000	5,000
Services	1,800	2,400	3,000	3,000	3,000
TOTAL	25,200	33,600	42,000	42,000	42,000

TABLE 3 - RUNNING COSTS CONSIDERED IN THE FINANCIAL ANALYSIS (US\$)

2.4. REVENUES

Revenues related to project are those deriving from the leasing of the 270 parking stalls.

To design a suitable management scenario and to correctly estimate the revenues of such an activity some preliminary hypotheses have been considered:

- 1) the parking meters would function 16 hours per day from 6 a.m, to 10 p.m. whereas, after 10 p.m the use of parking stalls will be free. ;
- 2) parking would be free on Friday and Saturday;
- 3) the parking fees would 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; the fee schedule for the new parking stalls would be as follows:

0.25 JD/hour	for the first hour
0.50 JD/hour	after the first hour
0.75JD/hour	after the second hour

- 4) a monthly subscription of 15 JD would be available;

5) the parking stalls users will be divided into three different categories:

- 50% would be people coming to the city centre for shopping, thus they will occupy the parking for 1 hour on average;
- 30% would be people coming to the city centre for shopping and for business as well as for reaching the public administration offices. This users' category will occupy the parking for 3 hours on average;
- 20% would be commuters coming from outside and having their activities located in the commercial core; therefore they will occupy the parking for 8 hours a day on average in working days; most probably, this users' category is the one more inclined to buy the monthly subscriptions.

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\$.

USERS CATEGORY	PARKING AVERAGE LENGTH	% OF TOTAL USERS	HOURLY FEE (US\$)
Shoppers	1 hour	50%	0.35
City center visitors	3 hours	30%	0.71
Shop-keepers (subscribers)	8 hours	20%	0.21
Average			0.43

In order to calculate the total revenues, an occupancy rate of 60% of the parking stalls has been considered. The following table lists the main parameters used in the revenue estimation. As shown in the table, the breakeven point will be reached with a parking stalls' occupancy rate of only 9%.

Average hourly fee	0.43
Parking stalls	270
Parking hours supplied yearly (16 hours/day X 270 parking stalls X 250 days)	1,080,000
Parking stalls occupancy rate	60%
Total revenues	278,640
Parking hours occupied of breakeven	97,674
Parking stalls occupancy breakeven rate	9%

It is assumed that during the first 3 years of operation the total revenues develop progressively as follows:

- year 1: 60% normal operation;
- year 2: 80% normal operation;
- year 3: 100% normal operation.

2.5. FINANCIAL PLAN

As for the implementation phase, the World Bank will finance 30% of the total financing required and privates the other 70%.

Estimated financial revenues already for the first year of business activity cover all financial needs related to the running phase.

2.6. FINANCIAL PROFITABILITY

The results obtained (see the table at the next page) show the sound profitability of the 3-

level parking: the calculated FNPV, evaluated at a back discounting rate of 10%, is of 186 thousand US\$ and consequently the FIRR is of 11.5%.

In order to evaluate the economic stability of the project, a sensitivity analysis has been carried out. Taking into account changes on: benefits, investment costs and running costs, three hypotheses have been developed; the results are listed in the table below.

	HP1	HP2	HP3
Benefits Change	0	-15%	-10%
Investment costs change	10%	0	10%
Running costs change	10%	0	10%
EIRR	10,1%	9,1%	8,5%
FNPV	9	-108	-187

TABLE 4 – PROFITABILITY ANALYSIS

Thus, the project seems to offer **a sound rate of profitability** even taking into account all investment costs including the ones of the public piazza and garden works (104 thousand US\$). On the other hand, to make the project attractive for private investors, a 30% World Bank co-financing has been considered.

FINANCIAL ANALYSIS OF THE PROJECT

	YEARS																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Investment costs	180	1.624	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Running costs	0		25	34	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Incomes	0		167	223	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279
Residual value																				1.289
Net benefits	(180)	(1.624)	142	189	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	1.525
Accrued net benefits	(180)	(1.804)	(1.662)	(1.473)	(1.236)	(999)	(763)	(526)	(290)	(53)	184	420	657	894	1.130	1.367	1.604	1.840	2.077	3.602

FINANCIAL IRR	11,5%
FINANCIAL PNV (,000 US\$)	186
BACK DISCOUNTING RATE	10,00%