

**ENGINEERING DESIGN, CONSTRUCTION MANAGEMENT,
AND ENVIRONMENTAL ASSESSMENT SERVICES FOR
SECONDARY CITIES PROJECT IN EGYPT**

**CITY OF LUXOR
ENVIRONMENTAL SCOPING REPORT**

Submitted to

**U.S. AGENCY for INTERNATIONAL DEVELOPMENT
CAIRO - EGYPT**

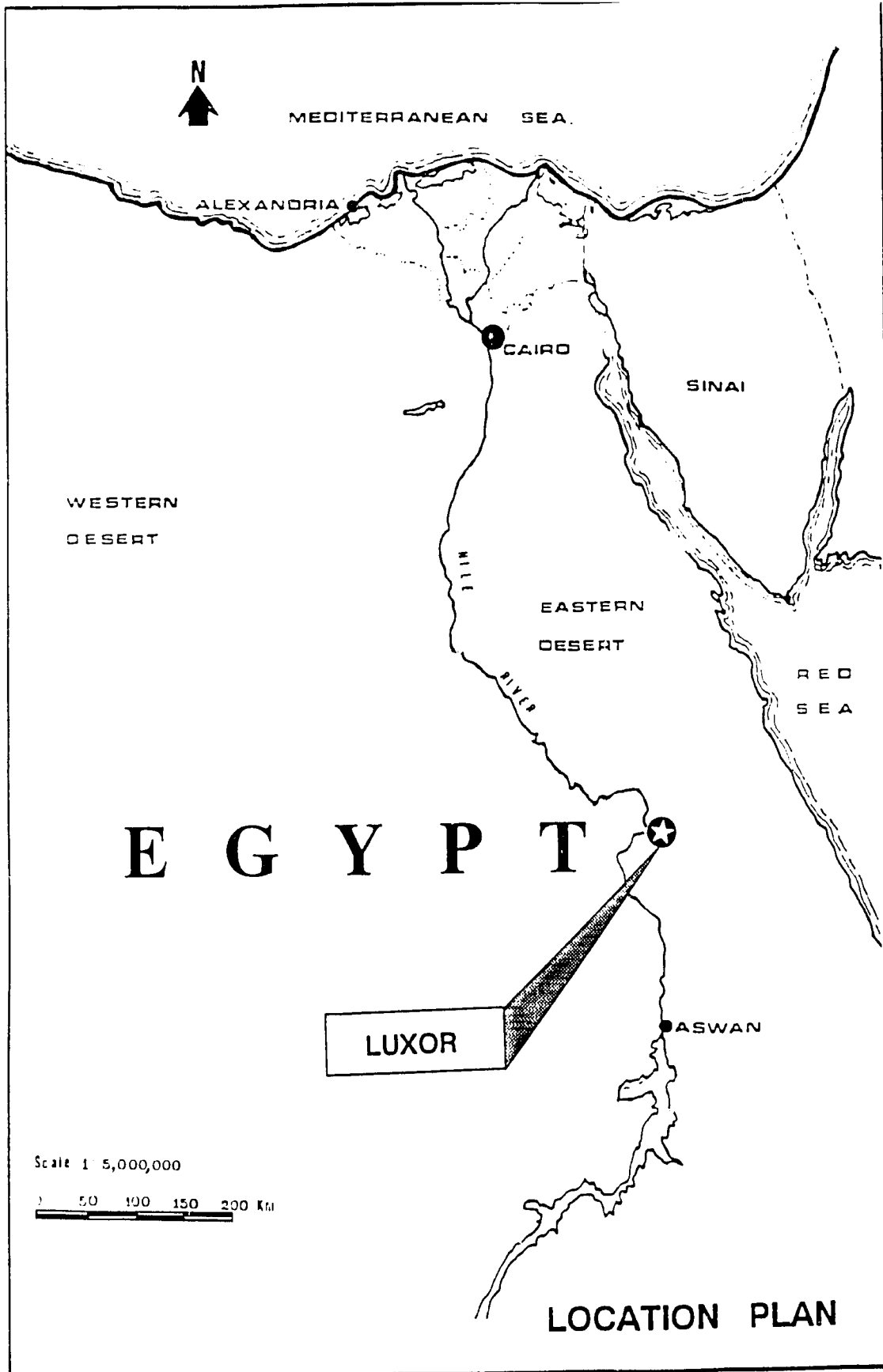
Project No. : 263-0236-3-940024, A.1

Contract No. : 265-0236-3-C-00-5883-00

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19 Oct. 1995



SECONDARY CITIES PROJECT

LUXOR GOVERNORATE

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SCOPING REPORT: LUXOR

1. Introduction

This is the Scoping Report for the Luxor water and wastewater facilities components of the Secondary Cities Project, undertaken for the Government of Egypt (GOE) through the National Organization of Potable Water and Sanitary Drainage (NOPWASD) and the United States Agency for International Development (USAID).

Background data and information for the proposed activities in Luxor were gathered and reported in the Secondary Cities Background Data and Information Report and Technical Annex, completed in March 1994 by USAID's Water and Sanitation for Health Project (WASH)

2. Project Description

Water supply. For Luxor, the proposed water supply improvements include expansion of the water distribution system, including, when necessary, additional storage tanks and/or booster pump stations.

The locations of these activities are shown in Figure 1

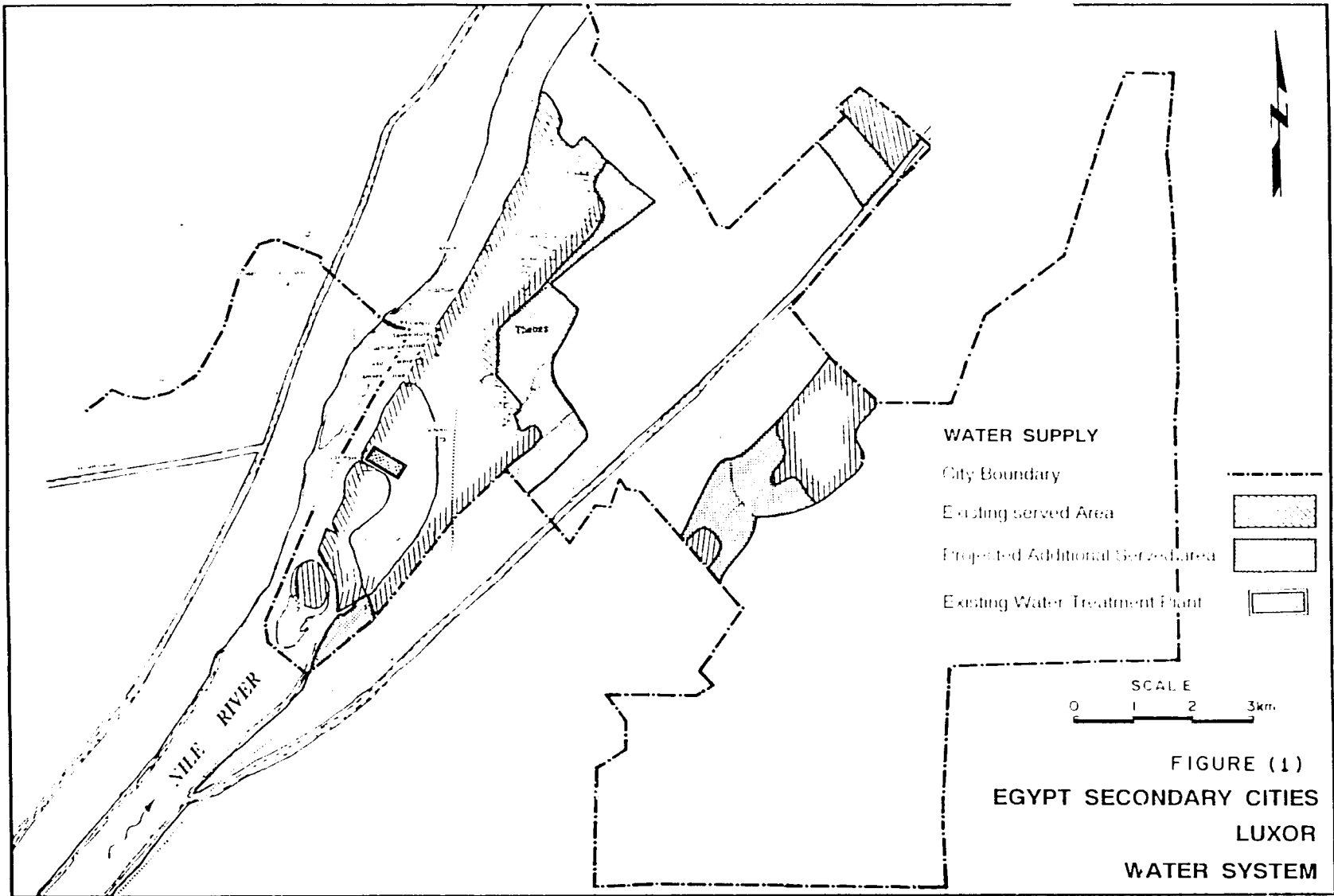
Wastewater. The proposed wastewater facilities and improvements include:

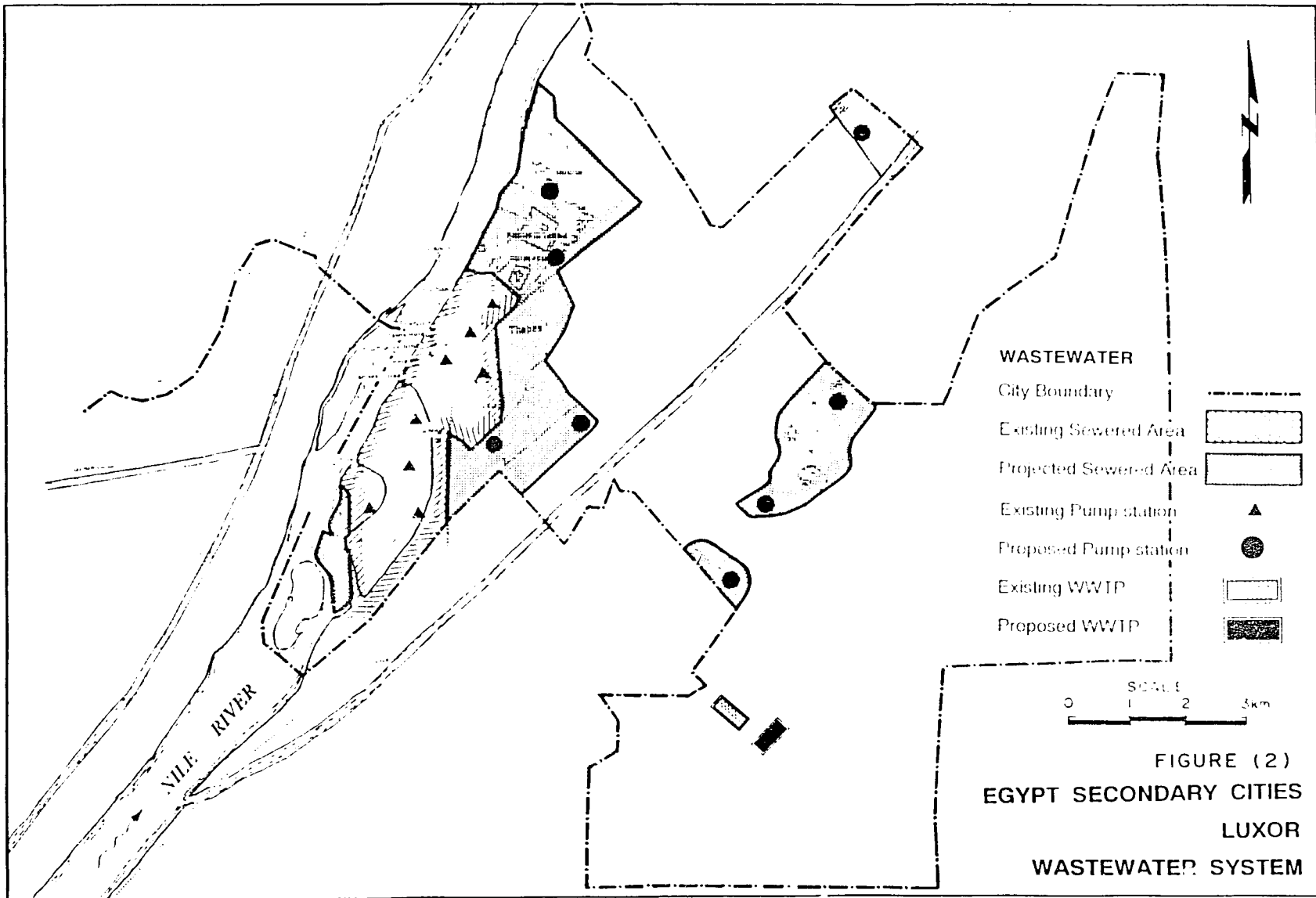
- a) Construction of new wastewater stabilization pond treatment plant, including facilities for effluent disposal
- b) Rehabilitation of the existing wastewater treatment plant
- c) Expansion of the wastewater service system, including installation of new wastewater pump stations and force mains, as required

The locations of activities (a), (b), and (c) above are shown in Figure 2.

3. Environmental Considerations and Key Issues

The USAID-funded Secondary Cities Project is conducting an Environmental Assessment (EA) of the facilities proposed for Luxor. An EA is a process used to identify and predict the environmental consequences of a newly planned activity and to assist in planning appropriate measures to reduce the adverse effects and maximize environmental benefits before such activities are allowed to go ahead. It is a practical and valuable means for aiding decision makers as regards to project implementation.





The EA provides the decision makers with reasonably accurate information concerning existing environmental conditions, potentially significant environmental impacts and possible mitigation measures, monitoring programs, opportunities for environmental enhancement and environmental management plans

"Scoping" is an EA activity which

- Identifies those attributes of the environment for which there are concerns, and
- Provides a plan that enables the EA team to be focused on these attributes

Scoping is a shared responsibility where the proponent government agencies, the Governorate of Luxor and USAID, and the public, both have a role. As part of this process, a Scoping Meeting was held in Luxor on 12 October, 1995. A list of the attendees at that meeting is given in Appendix A

Potential effects that have been identified, whether positive or negative, are listed in the following subsections. Hollow bullets ("o") denote issues that are routinely to be expected in projects of this nature. Asterisks ("*") denote issues raised during walkover surveys of facilities. Solid bullets ("●") denote issues specifically raised in the scoping meeting

3.1 Water Supply System: Expansion and Rehabilitation of the Local Distribution Network

- o There will be improved quantity and quality of water delivered to the city
- o Consider public safety, traffic control and interruptions during construction including interruptions of water services
- o Consider the stability of structures due to construction activities, e.g. alteration of water table due to site dewatering. Include Pharaonic structures
- o There will be an increased load on the sewerage system.
- o There will be an increased load on the local electrical network.
- Water pressure is inadequate in many parts of the city. A specific design goal should be to relieve this shortage.
- Bear in mind that there is a proposal to develop [another] new town, near Teba, for moving some of Luxor's population away from the greatest density of antiquities, near the center of Luxor.

3.2 Wastewater System

3.2.1 Construction of New Stabilization Ponds

- o Consider the location of the new stabilization pond site, and problems of associated land acquisition
- o There will be improvement in the quality of effluent used for irrigation or discharged to drains
- o After several years of operation, it may be necessary to remove and dispose of sludge accumulated in stabilization ponds
- Consider raising fish in stabilization ponds for animal fodder
- Search for ways to reuse the sludge removed from the stabilization ponds

3.2.2 Rehabilitation of Existing Wastewater Treatment Plant

Workers' and operators' housing is located on the treatment plant site. Resident children may be tempted to play too close to ponds and tanks. Consider putting up safety railings and fences

3.2.3 Rehabilitation and Expansion of Wastewater Collection System

There will be an increased load on the city's electrical network.

Consider public safety, traffic control and interruptions during construction including interruptions of sewage and other utility services.

Where new pump stations are added to the system, the impacts on land use, energy consumption and traffic control impacts must be assessed

Consider operation and maintenance activities at these new pump stations, e.g. problems of odors and disposal of screenings.

The tourist cruiser fleet of 250 to 280 vessels needs adequate sewage evacuation facilities along the reaches of the river most frequented. Other programs have made a strong start in providing such facilities at Luxor, but pumps still need to be installed. Consider how the facilities may be made operational.

Coordinate the extension of sewer lines with the extension of real estate development.

3.3 General

There will be an improvement in public health

There will be improvement in the quality of effluent used for irrigation or discharged to drains

Consider the potential impact of construction activities on antiquities and other services.

Some months of the year, wastewater is not accepted by farmers for irrigation. An acceptable alternate disposal system must be developed for this period

The population of Luxor needs increased public awareness on issues of water quality.

4. Outline of The Environmental Assessment Report

The Environmental Assessment Report will be written in standard NEPA (U.S. National Environmental Policy Act) format. The proposed outline for this report is given in Appendix B.

**APPENDIX A
LIST OF ATTENDEES**

**Luxor Environmental Scoping Session
12 October 1995**

	Name	Position
1.	H.E. Gen. Ahmed Fouad	Chairman of Luxor High Council
2.	Gen. Helmi Abd El Aleem	General Director for Housing and Utilities Mgr.
3.	Eng. Mohamed Abd El Mooti	Mgr. Potable Water Sector
4.	Eng. Mohamed Mahmoud Abou Zeid	Mgr. Wastewater Sector
5.	Eng. Mohamed Mahmoud Abd El Hafeez	Manager, Electricity Dept.
6.	Mr. M. Hamdi M. Allama	General Manager, Financial Affairs
7.	Mr. Hosni Balamon Mikhael	City Financial Auditor
8.	Mr. Hussein Abd El Rahman	Manager of Personnel
9.	Mr. Emad El Ammari	Deputy Chief Popular Local Council
10.	Eng. Ayman Abd El Rahman Borai	Mgr. Irrigation Dept.
11.	Eng. Ayaad Thabet Quiryaquos	Gen. Mgr. Agriculture Dept.
12.	Mr. Bahaa Abu El Hamad Osman	Chairman, Health committee, Popular Local Council
13.	Eng. Galal Kodsi Hana	Mgr. of Environmental Authority
14.	Eng. Ahmed El Said Emran	Undersecretary Min. of Irrigation
15.	Prof. Shakinaz Taha El Shaltawi	Faculty of Eng., Cairo University
16.	Mr. Abd El Rahman	Public Relations Dept.

17.	Eng. Atta Allah Guirguis	Project Engineer
18.	Mr. Allaa Tawfik	Journalist, El Ahram Newspaper
19.	Eng. Susan Guirguis Abd Allah	Save the Children Organization
20.	Mr. Medhat Mahrous Zakhary	Environmental Health Specialist
21.	Eng. Moustafa Nour Abou Bakr	Arab Contractors
22.	Mr. Salem Sharkawi Mahmoud	Businessman
23.	Mr. Sharoubeem Abd El Malak	Wastewater Specialist
24.	Mr. Abd El Hakim Khalil Abd El Hakim	Deputy Mgr. Water Utility
25.	Mr. Nasser Haridi	Journalist, El Arabi Newspaper
26.	Mr. Haggag Salama	Journalist, El Wafd Newspaper
27.	Mr. Gamil Hefni Abd El Malek	Public Relations Mgr. Etap Hotel
28.	Mr. Moustafa Hassan Heneda	Save the Children Organization
29.	Mr. Mahmoud Ahmed H. El Tayeb	Save the Children
30.	Eng. Mohamed Hassan Abd El Hakim	NOPWASD
31.	Eng. Negm El Din Shaaban	Arab Contractors
32.	Mr. Abd El Hamid Taher	Journalist, El Ahram Evening
33.	Eng. Ragab Awad Said Idris	Wastewater Department
34.	Mr. Mohamed Ayman Haggag	Save the Children
35.	Mr. Mohamed Bahaa El Din Thabet	Luxor
36.	Dr. Tandiari Samir	Save the Children
37.	Dr. Hashem Ahmed	Mgr. Luxor Hospital
38.	Mr. Mohamed Saad El Shazli	Public Relations Dept.

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| 39. | Mr. El Saad Hasan Ahmed | City Council |
| 40. | Mr. Hasan Gilani Mohamed | Public Relations Dept. |
| 41. | Mr. Bahai Ali El Masri | Public Relations Dept. |
| 42. | Dr. Samir Hanna Iskandar | Mgr. of Public Health |
| 43. | Eng. Mounir Kiddis Gaber | Mgr. Roads Dept. |
| 44. | Ms. Jacqueline Shaker | Save the Children |
| 45. | Ms. Souraya El Noubi Khodari | Save the Children |
| 46. | Dr. Sabri Saleeb Seifein | Mgr. Health Affairs, Luxor |
| 47. | Eng. Esmat Abou El Maali | Mgr. Tiba Project, Arab Contractors |
| 48. | Eng. Mohamed Ahmed Shaaban | Arab Contractors |
| 49. | Eng. Amani Mohamed El Medani | Chemist, Water Dept. |
| 50. | Mr. Mohsen Goud | Journalist, El Akhbar Newspaper |
| 51. | Mr. Hussein Fouad | Public Relations Dept. |
| 52. | Eng. Mamdouh Ezz El Regal | Winter Palace Hotel |
| 53. | Eng. Said Ali Morsi | Arab Contractors |
| 54. | Eng. Essam Thabet Abd El Hakim | NOPWASD |
| 55. | Mr. Abd El Atti Ali Ahmad | Middle East News Agency |
| 56. | Eng. Ramzi Abd El Rahman Ezz | Gen. Mgr. Reconstruction Authority |
| 57. | Mr. Erian Riad Kameh | Chemist, Water Treatment Plant |

USAID

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| 58. | Mr. Ernest Rojas | Project Officer |
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59.	Dr. Anne Patterson	Mission Environmental Officer
60.	Mr. Tarek Bekheit	Project Engineer
61.	Mr. Mamdouh Raslan	Project Officer
CDM/AAW		
62.	Leo St. Michel	Project Director
63.	David Doran	Project Manager
64.	Moustafa El Tayeb	Deputy Project Manager
65.	Hassan Morsi	Design Manager
66.	Jonathan French	Environmental Assessment Director
67.	Kent R. Weeks	Archaeologist
68.	Hesham El Badry	Environmental Assessment Manager
69.	Tarek Selim	
70.	Farida Morcos	Administrative Manager

APPENDIX B

OUTLINE OF THE ENVIRONMENTAL ASSESSMENT REPORT

Executive Summary (Arabic and English)

1. Introduction
 - 1.1 Background
 - 1.2 Proposed action
 - 1.3 Environmental regulatory procedures
 - 1.3.1 Egyptian environmental legislation
 - 1.3.2 USAID environmental procedures.

2. Project Description
 - 2.1 Background
 - 2.2 Layout and description of proposed facilities
 - 2.3 Construction activities
 - 2.4 Operation activities.

3. Environmental Setting
 - 3.1 Background
 - 3.2 Physical environment
 - 3.3 Socio-economic environment
 - 3.4 Cultural and aesthetic environment

4. Environmental Effects
 - 4.1 Background
 - 4.2 Physical environment impacts
 - 4.3 Socio-economic environment impacts
 - 4.4 Cultural and aesthetic environmental impacts
 - 4.5 No - action alternative

APPENDIX B

GUTLINE OF THE ENVIRONMENTAL ASSESSMENT REPORT (Continued)

- 5. Mitigation, Monitoring and Management
 - 5.1 Background
 - 5.2 Physical environment
 - 5.3 Socio-economic environment
 - 5.4 Cultural and aesthetic environment

Appendices

- List of EA preparers
- Scoping Report
- Public NGOs correspondence