

# Introduction





# TALAAT & IMAM CONSULTING ENGINEERS

# Introduction

TALAAT & IMAM Consulting Engineers (TICE) was founded in 1980 as a private engineering consulting firm. The firm offers strategic consulting, engineering, planning, architecture and construction management services. Since its founding, TICE has provided professional services for many large-scale projects throughout Egypt. Clients include government agencies, public and private utility companies, industrial and commercial firms as well as international organizations and donor agencies. T & I provides its services in five main market sectors, including transportation, environment, water, urban development and construction management. T & I offers consulting services at every stage of project delivery, from conceptual planning to commissioning. This includes project definition, site investigations, studies and feasibility reports, preliminary design, detailed design and specifications, preparation of tender and contract documents, construction supervision, contract administration and construction management.

The firm TICE had the highest grade from the Engineers Syndicate as **Engineering House of Experts**. Providing a reliable value expertise, for more than 35 years of hard work and aspired commitment to quality, TICE has gained a solid reputation as one of the top consulting firm in the country, certified in accordance with **ISO 9001:2015** requirements.

# **Basic Information**

Name: TALAAT & IMAM Consulting Engineers

**Nationality** EGYPTIAN

**Tax Card No:** 440-475-198, Agouza, Mohandseen, Giza

Commercial register: 232167

Main Office: 11 Sphinx Square-Mohandseen.

**Telephone:** (202) 33461888, 33045735, 33478411

**Fax.:** (202) 33036364

E-mail: <u>tice@talaat-imam.com</u>

Web-Site: www.talaat-imam.com

## **Fields of Services**

Since its founding, TICE has provided professional services for many large projects throughout Egypt. Clients included government agencies public and private utilities companies, industrial and commercial firms as well as international organizations and donor agencies. TICE has offered its consulting services in the following areas:

- Urban Planning and Architecture.
- Transportation, Highway and Airport Engineering.
- Water Supply and Irrigation.





- Wastewater and Environmental Engineering.
- Electromechanical Engineering including HVAC, LPG Distribution Networks, Fire Fighting, Plumbing ... etc.
- Structural Engineering.
- Gas Distribution Network LPG.

The consultant services of TICE are offered at every stage of a project, from conceptual planning to implementation, TICE offers a wide range of services including:

- Project definition.
- Site investigations.
- Studies and feasibility reports.
- Detailed design and specifications.
- Preparation of tender and contract documents.
- Contract formalities.
- Supervision of construction.
- Quality assurance.
- Training and technology transfer.
- Project management.
- Construction management.

The attached chart outlines the range of services being effectively offered since the foundation of the firm and the Certificates

# Resources

The firm has outstanding staff experts, specialists and engineers that are recognized either on the academic level as university professors or on the practical level as experienced practicing design and field engineers.

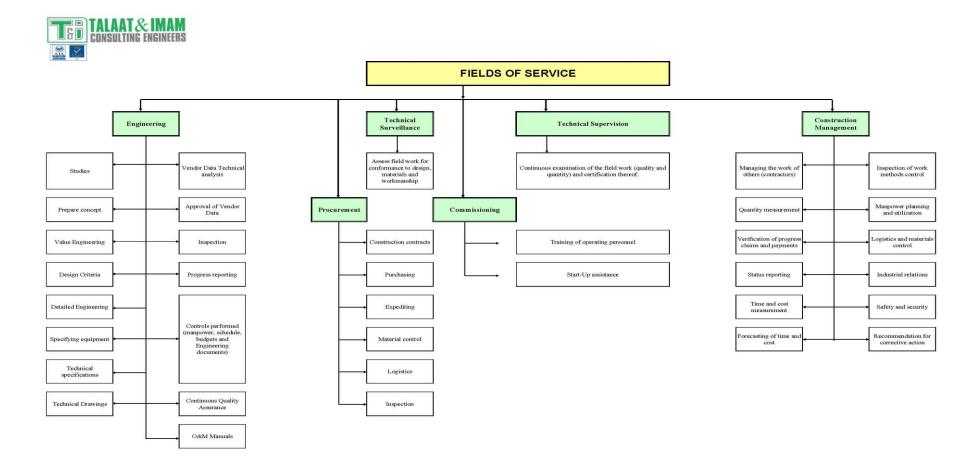
TICE performs projects through a competent workforce of more than 100 in-house professionals in the various engineering disciplines related to the firm's activities. The firm also cooperates with many local and international consulting firms which find TICE a powerful & reliable partner.

The staffs undertake their tasks and assignments supported by the most recent technologies, equipment, and devices as well as information systems. The firm is equipped with modern computer system and networks, advanced software, printers, plotters, copying machines, biding machines, Internet connections, electronic surveying equipments... etc. TICE also has a large technical library carrying all Major Engineering Fields.





# The Fields of Services - Attached (A3)







# **Structural Organization of the Firm**

- Talaat, Ahmed Tawfik, P.E. (Deceased)
- Talaat, Mahmoud Ahmed, P.E. (Deceased)
- President of the Firm Eng. Amr A. Talaat
- Vice President Prof. Dr. Emad H. Imam
- Vice President for Projects Abroad
   Eng. Ali Mahmoud Anis Abdelwahab

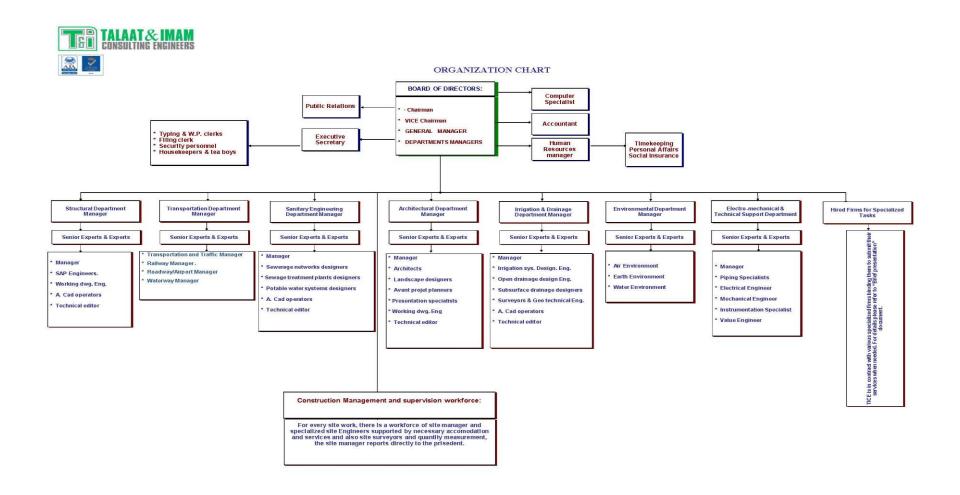
# **Permanent Consulting Experts**

- Prof. Dr Anan, Ibrahim
- Prof. Dr Attar, Adel
- Prof. Dr. Aref, Hesham
- Prof. Dr. Kamal, Ashraf
- Prof. Nabarawy, Mohamed
- Prof. Gendy, Ahmed
- Prof. Hamed, Khaled
- Eng. Raaft, Mostafa
- Prof. Dr. Osman, Hesham
- Prof. Dr. Imam, Yehya Emad
- Prof. Dr. Hanna, Waguid Youssef Shahed
- Prof. Dr. Ezz, Hesham Yehya
- Prof. Dr. Nagwan Gamal





# The Organization Chart of TICE - Attached (A3)







# **Cooperation With International Agencies**

#### 1. Canadian International Development Agency (CIDA)

Our firm cooperates with CIDA on the River Nile Protection and Development Project. Our role in this project is to provide expertise to assist in the establishment of the central laboratory for environmental quality monitoring (CLEQM). The laboratory will be composed mainly of four divisions: Inorganic Chemistry Lab., Organic Chemistry Lab., Microbiology Lab. and Soil Physics Lab. CLEQM will apple quality control and quality assurance procedures to provide a comprehensive and accurate assessment of the environmental quality of surface water, ground water and soils associated with River Nile.

This laboratory will be established in El-Kanater and will be managed by National Water Research Center.

# 2. <u>U.S. AID</u>

During the period 1987 - present, our firm cooperates with the U.S.AID on many projects, through the local development program No. 2. Some of these projects are:

- Methodology and terms of Reference to conduct Rural Water Supply and Wastewater Needs Assessment and Strategic Planning, Biehera Governorate.
- Roads Sectional. Strategic Plan and Needs Assessment Study for Biehera Governorate.
- Underground Water Drainage and Upgrading of Wastewater System and treatment of Sief El-Din Village, Damitta.
- Underground Water Drainage and Upgrading of Wastewater system and treatment of Meet Abo-EL Kom Village, Munifyia.
- Underground Water Drainage and Upgrading of Wastewater system and treatment of Sakkara Village, Giza.
- Underground Water Drainage and Upgrading of Wastewater system and treatment of El-May and Estanha Villages, Munifyia.
- Upgrading of Wastewater system and treatment of Meet El-Amel Village, Dakahalyia.



# 3. <u>United Nations Children's Fund (UNICEF)</u>

Our firm cooperates with UNECEF on the Tema District Water Supply Project. The duties include the design of a complete water supply system (wells, pump stations, transport and distributing piping and storage tanks). Also, a team from our firm supervises the construction of the project as well as its management.

#### 4. German Agency for Technical Cooperation (G.T.Z)

With G.T.Z., the firm cooperates on Qasr Rural Development Project (Egyptian - German cooperation) in Matrooh Governorate. The duties include conducting surveying works and preparation of contour maps.

# 5. Japan International Cooperation Agency, JICA

With JICA, the firm cooperates on the Master Plan and Rehabilitation Scheme of the Greater Alexandria Port in the Arab Republic of Egypt.

### 6. Danish International Development Agency

With Danida, the firm cooperates on the project "Water Supply and Sanitary Drainage in Esna District, Qena Governorate.



# The Partnership With Other Egyptian Cons. Firms

**Talaat & Imam,** Cons. Eng. Cooperates and Shares with a lot of other Egyptian Expert Cons. firms in different projects such as:

# The Arab Bureau for Design and Technical Consultations

- 15<sup>th</sup> May New City.
- El-Obour New City.
- Damitta New City.

# **Arab International Consultants (Aricon)**

 Physical Planning for Total Development for Northern Delta and the International Northern Coastal Highway.

# **Center for Arab Development Studies and Consultan (Cadsak)**

- Development of the Green Belt of 10<sup>th</sup> of Ramadan City.
- Irrigation System for the 6<sup>th</sup> of October City Farm.

# <u>**A. A.W**</u>

Raw Water Carrying Line for Northern Coast Tourist Villages.

# **SUBBOUR ASSOCIATES**

 Construction Supervision of MADINAT AL-SHARQ - AL-DALIL HIGHWAY. Republic of Yemen.

#### **ADIPCO**

Hydraulic Modeling and Review of Design of Esna New Barrage.

#### Cairo Group for Planning & Architecture

- The Infrastructure for NEW HELIOPOLES CITY
- The Infrastructure for EL-REHAB CITY

#### **Building Researches Center**

Sharing in the following proposals:

- El-Monieb Bridge Project.
- Free Intersection at El-Obour City.
- El-Minia Bridge Project.



# **The Association With Foreign Consulting Firms**

#### In USA

- Louis Berger International, Inc. Washington, DC, USA
- Greiner Engineering Inc. Tampa, Florida, USA
- SADAT Associates, Inc.
   Princeton, New Jersey, USA
- Development Design Group
   7 Saint Paul Street
   Baltimore, Maryland 21202 USA
- MICHAEL F. GEBHART ARCHITECT AIA, NCARB 221 MOUNT AUBURN STREET, UNIT 203 CAMBRIDGE, MASSACHUSETTS 02138, USA.

#### In Canada

FORREC LTD.,
 211 Laird Drive, Toronto,
 Ontario, Canada M4G 3W8

### In Japan

• PACIFIC Consultants International Tamashi, Tokyo, Japan

# In England

 DEREK LOVEJOY PARTNERSHIP
 8-11 Denbigh Mews London SWIV 2 HQ, London, England

# In Kuwait

• Pan Arab Consulting Engineers W.L.L. Kuwait City, Kuwait

# In Denmark

COWI A/S: Palrallelvej 2, DK 2800 Kongens Lyngby, Denmark



# GEOGRAPHICAL DISTRIBUTION OF "TALAAT – IMAM" PROJECTS



# **Geographical Distribution of "TALAAT - IMAM"s Project**

The firm has a long experience, distributed all over the regions of Egypt. The following table gives the names of the projects that are studied and designed by the firm and their locations.

In most of these projects, an Socio-Economic Study as well as an environmental impact study were conducted.

Governorate / City	Projects
Cairo	• Egypt's Airports Master Plan (in Association with
	LB)
	• Railway Traffic Management System for Egypt with Louis Berger.
	Wastewater Master Plan for Greater Cairo and New Cities around Cairo.
	• Airports Master Plan in Egypt (22 Airport) (TICE with LB)
	Development of Ather Elnabi Terminal
	• Consultancy services for (Kafr El-Elw water station project) – Helwan.
	Upgrading Water Supply and Sewage Networks for El-Nasr Company for Glass and Crystal.
	<ul> <li>Topographic survey and earth work for Cairo new airport</li> <li>Terminal 2.</li> </ul>
	• Rehabilitation of runway 16-34 of Cairo International Airport.
	Road network for Cairo International Airport.
Monofia	Wastewater System of El-May Village
	• Underground Water Drainage and Upgrading of Wastewater system & Treatment of Estanha Village and
	Met Abu-El Kom Village.
	Wastewater Networks for Tala City.  Wastewater Networks for Ashman City.
	Wastewater Networks for Ashmoon City.  Wastewater Networks for Barbet El Sahar City.
Beheira	Wastewater Networks for Berket El-Sabaa City.  M. C. L.
Bellella	<ul> <li>Methodology and Terms of Reference to Conduct Rural WS/WW Needs Assessments and Strategic Planning for Beheira Governorate.</li> </ul>
	<ul> <li>Roads Sectional Strategic Plan and Needs Assessment</li> </ul>
	Study for Beheira Governorate.
Damietta	The Road Network for the New City of Damietta.
	<ul> <li>3 RC Bridges on 3 drainage's in Damieta.</li> </ul>
	Topographic Survey for the Sites of the Regional Roads
	of new Damieta City.
	<ul> <li>Underground Water Drainage and Upgrading of Wastewater system and treatment of Sief El-Din Village, Damitta.</li> </ul>
	<ul> <li>Construction Supervision, Surveying and Final Detailed</li> </ul>



Governorate / City	Projects
	for Roads Network – El-Rehab Town – Damitta
	Governorate.
Dakahlya	Wastewater Networks for Meet Ghamr City.
J	Wastewater Networks for El-Mataria City.
	• Upgrading of Wastewater system and treatment of Meet
	El-Amel Village.
	Physical Planning and Detailed Plans for Beni-Ebid City.
	Physical Planning and Detailed Plans for Gamassa City.
	International Northern Coastal highway.
Nubaria	Physical Planning and Detailed Plans.
	Potable Water and Wastewater systems for El-Nubaria City.
	• Irrigation System.
	Road Network.
	Electrical supplies networks and telephone communication
	lines.
	Soil Investigation and Foundation design for the buildings in
	Nubaria city.
	Master Plan, Final Deatailed and Tender Documents for
	Nubaria Dairy Farm (Roads, Water, Wastewater, Irrigation
	and Drainage Systems and Ground Water Control)
El-Obour	Wastewater Master Plan for El-Obour City.
	Potable and Wastewater networks.
	• Irrigation System.
	Meteorological, Hydraulic and Hydrological studies for
	runoff studies and design the protection civil structures
	against runoff
	Hazards.
	• Electrical supplies networks and telephone communication
	lines.
	Road Network.
Kafr EI-Shiekh	International Northern Coastal Highway.
	El-Burllus Bridge.
	• Physical Planning for the Total Development of the
	Northern Delta Region.
Rossetta	Rossetta Nile Bridge.
	• International Northern Coastal Highway.
15 <sup>th</sup> of May – Helwan	Reviewing and approving of the construction drawings and
- J	supervision for Kafr Elalw Water Treatment Plant
	40000m3/day.
	• Wastewater Master Plan for 15 <sup>th</sup> of May City.
	• Road network for the extension of the city.
	Meteorological, Hydraulic and Hydrological studies for
	runoff studies and designs the protection civil structures
	against runoff hazards.
	Reviewing and approving of the potable water and sewage
	pumping stations tender documents for the civil and
	electrical works and site visits- 15 May Development
	Authority.



Governorate / City	Projects
Sadat City	<ul> <li>International exhibition halls in Sadat City.</li> <li>Reviewing and approving of the construction drawings and site visits on the construction works for water plant with total capacity 1200liter/sec- Sadat City Development Authority.</li> </ul>
Sohag	Tema District Water Supply Project – Sohag.
El-Menia	<ul> <li>Preparing preliminary, detailed and tender documents for the connecting road between Bani Mazar district at Minya governorate with Al Bawity district at Giza governorate</li> <li>Wastewater Networks for Smaloot City.</li> <li>Wastewater Networks for Bani Mazar City.</li> <li>Wastewater Networks for Malowi City.</li> </ul>
El-SharKia	<ul> <li>Wastewater Networks for Malawi City.</li> <li>Sustainable Rural Sanitation Services Program for Results (SRSSP) Funded by The World Bank</li> <li>Wastewater Networks for Belbies City.</li> <li>Wastewater Networks for Abu-Kabeer City.</li> <li>Wastewater Networks for Abu-Kabeer City.</li> </ul>
El-Garbia	Wastewater Networks for Ziefta City.
Alexandria & Mattrouh	<ul> <li>Duplication of MATROUH - SIWA road</li> <li>Turf Irrigation System for Marina El-Alamain Touristic Center.</li> <li>Water Distribution, Fire fighting and the Wastewater Systems for Marina El-Alamain Tourist Center.</li> <li>Designing the Western-North Coast, Canal Water Pipe Line Region.</li> <li>Road Network for Marina El-Alamain Tourist Center.</li> <li>Upgrading of Nozha Airport.</li> <li>El Mandara Housing Complex.</li> <li>Preparation of a Master Plan and Detailed Plans for the Engineers Tourist Village-Western North Coast.</li> <li>Electrical Supply Networks and Telephone communication lines for the Engineers Tourist Village.</li> <li>Soil Investigation for the Engineers Tourist Village.</li> <li>Soil Investigation and Foundation Design for the Gabco Tourist Village.</li> <li>Topographic Survey for the sites of the International</li> </ul>



Governorate /City	Projects
Alexandria &	Conducting Surveying Works and Preparation of Contour
Mattrouh	Maps for the Firm Cooperates on Qasr Rural
	Development Project (Egyptian – German Cooperation).
6 <sup>th</sup> of October	Development, design and construction of the main
	corridors for the third sector of the ring road at 6th of
	October city
	Social Housing 1185 Buildings District Infrastructure
	Works -6th of October City
	Wastewater Master Plan for 6th of October
	Design & Supervision for El-Motawreen Zons
	• Supervision "The Main Pump station."
	• Supervision "The North Pump Station."
	Model Forest Farm (500 Feddans)
	Main Irrigation Carrier for Dream Land Project
	Irrigation Network for Dream Land Project
	Main Settling Pond for dreamland Project.
	Potable & Wastewater for Dream Land Project
	Artificial Decorative Golf Course Ponds for dreamland
	Project.
10th CD 1	Road Network for Dream Land Project
10 <sup>th</sup> of Ramadan	• Development of the green belt of the 10 <sup>th</sup> of Ramadan
	City.
Esna	Kawitia - Egyptian Factory for Building Materials.  Esna Dam.
Listia	Review and approve the hydraulic design of the dam,
	spillway, powerhouse, and lock. Supervise the conduct of
	the dam physical model.
Edfu	Retention Dam for Phosphate Slimes Tailing Pond (Full)
	design and monitoring of the system operation.
EI-Qaluobia	Kafr Shokr Wastewater Network for 3 villages "Tesfa",
	Kafr Tesfa & Elsafeen".
	Simo Underground Drainage System.
El-Shorouk	Social Housing District at the Eastern Façade
	Infrastructure Works- Shorouk City
	Flood Protection Scheme for EI-Shorouk City.
	Meteorological, Hydraulic and Hydrological Studies for
	runoff studies and design the protection civil structures
	against runoff hazard.
Giza	• Final Detailed, Tender Documents and Supervision for
	Manyal Sheha And Tamouh Villages (Wastewater
	Network)
	Irrigation System for Sakara Horses Club Shoubrament.
	• Underground Water Drainage and Upgrading of
Humaha da Dida	Wastewater System and Treatment of Sakkara Village.
Hurghada – Red Sea	Electrical Supply Networks and Telephone  Communication Lines for Hillery Toynist Village in
	Communication Lines for Hilton Tourist Village in



Governorate /City	Projects
_	Hurghada – Red Sea.
Port Said	• Studying the best solution for the intersection of 30th of June corridor with the modified routing of Bahr El Baqr drain
Ismailia	<ul> <li>Wastewater Treatment Plant with capacity 20,000 m³/d and two pump stations at New Ismailia City</li> <li>Water &amp; Wastewater Master Plan for Canal Cities "Suez, Ismalia &amp; Portsaid"</li> <li>Ismailia Governorate Rural Development Project Public Works Program</li> </ul>
New Valley	<ul> <li>Works Program.</li> <li>Preparing preliminary, detailed and tender documents for Assiut Plateau corridor with length 22 km</li> <li>Design the Infrastructure for El-Khair &amp; El-Namaa Village – Moot City.</li> <li>Topographic Survey for the Site of El-Dakhla- Assiut Highway.</li> <li>Design of the Assiut El-Dakhla Highway (235 Km) and preparation of the tender documents</li> </ul>
El-Fayoum	<ul> <li>Fayoum Governorate Head Quarts.</li> <li>Abu Dawod Mosque.</li> <li>Karoun Lake Mosque.</li> <li>An Islamic Complex.</li> <li>Soil Investigation for Damashkeen Bridge Fayoum.</li> <li>Soil Investigation and Foundation Design for the Basic Schools.</li> </ul>



TRANSPORTATION, ROADS AND AIRPORTS PROJECTS



Title Infrastructure Detailed Design for Baywest Valley

Soma Bay - Hurghada

**Date** 2024

**Location** Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

Brief Description | Conducting the consulting works related to preparing the concept, detailed

design and the tender documents for the Road, Potable Water, Firefighting, Irrigation, Sewage, Electricity, Communications Networks for the Soma

Coves Resort

Scope of Services T & I provided the following set of services:

• Propose a rough grading surface for the project site to:

• Assure revising all levels and entrances for the roads.

Prepare layouts for the roads network as follows:

At - grade junctions

Design of parking areas in allocated areas as per the latest master plan

Road Corridors

Access/ Egress Strategies

Provide the proposed road horizontal alignment including tie in into the existing roads

• Accommodate the location of the footpaths, road surface or crossing treatments proposed by the landscaping consultant.



Title	Transportation Masterplan for Bashteel Triangle
<b>Starting Date</b>	November, 2023
Location	Cairo Governorate
Consultant	Talaat & Imam Consulting Engineers
Client	Ministry of Housing, Utilities & Urban Communities (MHUUC) - General Organization for Physical Planning
Brief Description	The General Organization for Physical Planning, in Egypt, has embarked in the urban development of Bashteel Triangle Area (at the vicinity of Bashteel train station).
	The T&I was commissioned to develop the Transportation masterplan for the area.
Scope of Work	T & I provided the following set of services:
	<ul> <li>Assessment of current traffic conditions and identification of operational issues/challenges.</li> </ul>
	<ul> <li>Travel demand modeling and analysis.</li> </ul>
	Parking demand analysis.
	Development of Traffic Simulation Model.
	Transportation masterplan development.
	Train station access/egress strategy.



Title Infrastructure Detailed Design for Wadi Soma

Soma Bay - Hurghada

**Date** 2023

**Location** Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

**Brief Description** Conducting the consulting works related to preparing the concept, detailed design and the tender documents for the Road, Potable Water, Firefighting,

Irrigation, Sewage, Electricity, Communications Networks for the Soma

Coves Resort

Scope of Services T & I provided the following set of services:

• Propose a rough grading surface for the project site to:

• Assure revising all levels and entrances for the roads.

Prepare layouts for the roads network as follows:

At - grade junctions

Design of parking areas in allocated areas as per the latest master plan

Road Corridors

Access/ Egress Points

Provide the proposed road horizontal alignment including tie in into the existing roads

• Accommodate the location of the footpaths, road surface or crossing treatments proposed by the landscaping consultant.



Title Infrastructure Detailed Design for Blanca – Phase 1

Soma Bay - Hurghada

**Date** 2023

**Location** Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

**Brief Description** Conducting the consulting works related to preparing the concept, detailed design and the tender documents for the Road, Potable Water, Firefighting,

Irrigation, Sewage, Electricity, Communications Networks for the Soma

Coves Resort

Scope of Services T & I provided the following set of services:

Propose a rough grading surface for the project site to:

• Assure revising all levels and entrances for the roads.

Prepare layouts for the roads network as follows:

At - grade junctions

Design of parking areas in allocated areas as per the latest master plan

Road Corridors

Access/ Egress Points

Provide the proposed road horizontal alignment including tie in into the existing roads

• Accommodate the location of the footpaths, road surface or crossing treatments proposed by the landscaping consultant.

15



Title Infrastructure Detailed Design for Reef Town

Soma Bay - Hurghada

**Date** 2023

**Location** Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

**Brief Description** Conducting the consulting works related to preparing the concept, detailed design and the tender documents for the Road, Potable Water, Firefighting,

Irrigation, Sewage, Electricity, Communications Networks for the Soma

Coves Resort

Scope of Services T & I provided the following set of services:

Propose a rough grading surface for the project site to:

Assure revising all levels and entrances for the roads.

Prepare layouts for the roads network as follows:

• At - grade junctions

Design of parking areas in allocated areas as per the latest master plan

Road Corridors

Access/ Egress Points

Provide the proposed road horizontal alignment including tie in into the existing roads

• Accommodate the location of the footpaths, road surface or crossing treatments proposed by the landscaping consultant.



Title	Transportation Masterplan for Al-Dahab Island
<b>Starting Date</b>	November, 2022
Location	Cairo Governorate
Consultant	Talaat & Imam Consulting Engineers
Client	Ministry of Housing, Utilities & Urban Communities (MHUUC) - General Organization for Physical Planning
<b>Brief Description</b>	The General Organization for Physical Planning, in Egypt, has embarked in the urban development of Al-Dahab Island (area around 500 acre) in the middle of the Nile River, in Greater Cairo Region.
	The T&I was commissioned to develop the Transportation masterplan for the island together with the connections with the regional road network.
Scope of Work	T & I provided the following set of services:
	• Assessment of current traffic conditions and identification of operational issues/challenges.
	Travel demand modeling and analysis.
	Parking demand analysis.
	Traffic Simulation Model Development
	Transportation masterplan development.
	Island access/egress strategy.



Traffic Study for 6th of October Bridge Doubling Title **Starting Date** October, 2022 Location Cairo Governorate Consultant Talaat & Imam Consulting Engineers Client Ministry of Housing, Utilities, and Urban Communities (MHUUC) - Central Agency for Reconstruction - Reconstruction Research and Studies Authority A proposal was put forward by the ministry of Housing to expand 6th of **Brief Description** October bridge (a major elevated travel corridor that connects east/west Cairo). T&I has developed a microscopic simulation model for this major travel corridor and used it as a testbed for evaluating the proposed expansion. T & I provided the following set of services: Scope of Work Data Collection. Travel Demand Analysis. Simulation based traffic analysis at a microscopic level using advanced transport modeling and traffic simulation software, VISSIM.



Title Infrastructure Detailed Design for Arc of Soma - Hurghada

**Date** 2022

**Location** Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

Brief Description

Conducting the consulting works related to preparing the concept, detailed design and the tender documents for the Road, Potable Water, Firefighting, Irrigation, Sewage, Electricity, Communications Networks for the Soma

Coves Resort

Scope of Services T & I provided the following set of services:

• Propose a rough grading surface for the project site to:

• Assure revising all levels and entrances for the roads.

Prepare layouts for the roads network as follows:

At - grade junctions

Design of parking areas in allocated areas as per the latest master plan

Road Corridors

Access/ Egress Points

Provide the proposed road horizontal alignment including tie in into the existing roads

 Accommodate the location of the footpaths, road surface or crossing treatments proposed by the landscaping consultant.



Title Infrastructure Detailed Design for Soma Coves - , Hurghada

**Date** 2022

**Location** Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

Brief Description

Conducting the consulting works related to preparing the concept, detailed design and the tender documents for the Road, Potable Water, Firefighting, Irrigation, Sewage, Electricity, Communications Networks for the Soma

Coves Resort

#### Scope of Services

#### T & I provided the following set of services:

- Propose a rough grading surface for the project site to:
- Assure revising all levels and entrances for the roads.
- Prepare layouts for the roads network as follows:
- At grade junctions
- Design of parking areas in allocated areas as per the latest master plan
- Road Corridors
- Access/ Egress Points
- Provide the proposed road horizontal alignment including tie in into the existing roads
- Accommodate the location of the footpaths, road surface or crossing treatments proposed by the landscaping consultant.



Title Traffic Study for Jehan Al Sadat Corridor **Starting Date** April, 2022 Location Cairo Governorate Consultant Talaat & Imam Consulting Engineers Client Ministry of Housing, Utilities, and Urban Communities (MHUUC) - Central Agency for Reconstruction - Reconstruction Research and Studies Authority **Brief Description** A proposal was put forward by the ministry of Housing to evaluate and enhance the traffic conditions for Jehan Al-Sadat corridor, this corridor is a major corridor connects 5th settlement (East of Cairo) with downtown of Cairo through 6 of October bridge. T&I has developed a microscopic simulation model for this corridor and used it as a testbed for evaluating the traffic condition and propose new strategy for the study area. T & I provided the following set of services: Scope of Work Data Collection. Travel Demand Analysis. Simulation based traffic analysis at a microscopic level using advanced transport modeling and traffic simulation software, VISSIM.



Title West Of Greater Cairo Axes (The Southern Entrance to Giza) "Monib Area")

Starting Date September, 2021

**Location** Giza Governorate

**Consultant** Talaat & Imam Consulting Engineers

Client Central Agency for Reconstruction

Reconstruction Research and Studies Authority

**Brief Description** The Southern Entrance of Giza Governorate is being regenerated. T&I was commissioned to develop a Transportation masterplan and detailed road

design for the area under study.

Scope of Work | T & I provided the following set of services:

 Transport modelling and demand analysis including multimodal and intermodal solutions for passenger and goods movement.

- Development, execution and analysis of transport surveys (Traffic Counts, and others).
- Simulation based traffic analysis at a microscopic level using advanced transport modeling and traffic simulation software, VISSIM.
- Parking demand analysis and design for the study area.
- Preparing planning studies, detailed design drawings and tender documents
- Surveying works for the road track.
- Designing the necessary complementary works for the road (lighting taxis - fences - traffic signs ... etc.).



Title	Al Sadat Axis
<b>Starting Date</b>	2021
Location	Giza Governorate
Consultant	Talaat & Imam Consulting Engineers
Client	Reconstruction Research and Studies Authority
<b>Brief Description</b>	Planning and design of a major corridor connecting the urban districts of Al-Haram area with the North Ring Road and Kamal Amer axis to reduce the traffic jam over this zone.  This corridor consists of surface roads, flyover bridges with direct and
	This corridor consists of surface roads, flyover bridges with direct and semi-direct ramps to North Ring Road and Kamal Amer axis
Scope of Work	T & I provided the following set of services:
	<ul> <li>Traffic study for the project area</li> </ul>
	Preparing planning studies.
	Preparing detailed designs
	• Choosing an optimal alternative for two overhead bridges and ramps connecting the axis with the northern arc of the ring road, axis of Kamal Amer and the surface road.



Title Amr Ibn Al-A'as Axis, March, 2021 **Starting Date** Location Giza Governorate Consultant Talaat & Imam Consulting Engineers Client Central Agency for Reconstruction Reconstruction Research and Studies Authority **Brief Description** There was a great need for direct connection between North Ring Road and South Ring Road over the Al-Haram area, so by the construction of Amr Ibn Al-A'as axis, this connection is provided with also many ramps between the surface road and Amr Ibn Al-A'as axis. Scope of Work T & I provided the following set of services: Collect and update data required. Traffic study for the project area Surveying works for the project area. Studying the works of expropriation and using facilities for public benefits. Soil tests Planning the axis route and industrial works. Documents are submitted according to the following stages: First: Primary studies Second: Detailed designs Finally: Tender documents



Title Axis of The Western Arc of The Ring Road

Alexandria Governorate, with a length of about 20 km

**Starting Date** 

April,.2021

Location

Alexandria Governorate

Consultant

Talaat & Imam Consulting Engineers

Client

Central Agency for Reconstruction

Reconstruction Research and Studies Authority

**Brief Description** 

The project aims to transfer the movement of vehicles of all kinds to and from Borg El Arab Airport, the North Coast and the rest of the "industrial – logistical – agricultural" development areas in the city of Borg El Arab and its surroundings directly to the Alexandria Desert Road and from there to the rest of the axes and regions of the Republic.

The implementation of the western arch project was approved from the axis of Omar Suleiman, from El Hawariya square to the Alexandria Desert Road, with a length of 20 km and a width of 12 lanes, with 6 lanes for each direction.

# Scope of Work

# T & I provided the following set of services:

- Collect and update data and information.
- Traffic study for the project area
- Surveying works for the study area.
- Study of expropriation works.
- Engineering planning for the route of the axis and industrial works.
- The documents are submitted according to the following stages:
  - First: Primary studies
  - Second: Detailed designs
  - Finally: Tender documents
- Periodical supervision at construction stages



Title Updating Infrastructure Master plan of Soma-Bay, Hurghada

2019 Date

Location Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

**Brief Description** Studying the current status of the infrastructure works (Roads - Water -Irrigation - Sewage - Electricity) for the tourist resort of Soma Bay, which is located on an area of 10 million square meters in Ras Soma

area on the Red Sea shore.

Planning of the future facilities required during the various stages of

development of the project.

**Scope of Services** T & I provided the following set of services:

Study of the current situation.

Preparing conceptual designs for infrastructure works (roads - water - sewage - electricity - information transmission network - sea water purification plant - sewage treatment plant - irrigation tanks from

desalinated and treated water)



Title	Duplication of MATROUH - SIWA road
<b>Starting Date</b>	October, 2018
Location	The western desert – between MATROUH and SIWA
Consultant	Talaat & Imam Consulting Engineers
Client	Ministry of Housing, utilities and Urban communities
	Reconstruction research and studies Authority
<b>Brief Description</b>	Design the duplication of the road connecting Siwa city with Matrouh city to convert the existing road from two-way two-lane to divided highway.
	The road length is almost 300 km with many pipes and culverts crossings along the road
Scope of Work	T & I provided the following set of services:
	Preparing preliminary studies report including field works
	Traffic study for the project area
	Preparing hydrological study for flood protection
	Preparing detailed deigns for the road and crossing structures
	Preparing tender documents and the estimated cost for the project
	<ul> <li>Periodical supervision at construction stages</li> </ul>



Title Intersection of 30th of June corridor with the modified routing of Bahr El Bagr drain June,.2018 **Starting Date** Location Port Said Governorate Consultant **Talaat Imam Consulting Engineers** Client Ministry of Housing, utilities and Urban communities Reconstruction research and studies Authority **Brief Description** Preparing preliminary, detailed designs and selection of the best solution for the intersection of 30th of June corridor with the modified routing of Bahr El Baqr drain with 5 million cubic meters per day (Bridge - Pipe Jacking Tunnels) including the following works: - Pavement works for inlet and outlet ramps and the complementary works (New Jersey barriers, marking, traffic signs, etc.) - Detailed design of the steel bridge with one span 40 m and width 52 m including foundations, supports, deck, finishing, etc. - Cutting works, forming and protection of the design cross section for the modified routing of Bahr El Baqr drain with width 80 m T & I provided the following set of services: Scope of Work Selection of the best solution for intersection Preparing the preliminary designs Preparing detailed design for the bridge with span 40 m Preparing detailed design for a box culvert with dimensions 2 \* 2 m Preparing tender documents



**Title** Master Plan Study for Egypt Future National Airports Development **Starting Date** May 2017 **Duration** 12 Months Location Egypt (23 Airports) Consultant JV between Talaat Imam Consulting Engineers and IOS Partners Client World Bank World Bank Funded by **Brief Description** The main objective is to produce a National Airport Master Plan for the next twenty years that will: - Identification of a pipeline of potential public – private partnerships. - Provide capacity extension nationwide, as required - Assist Government policy to develop public-private partnerships and construct, manage and operate airports, - Define improvements needed in the regulatory framework that is consistent with the two above objectives. **T&I** participation in the following set of services: Scope of Work Assessment of Future Traffic Growth Analysis of Strength and Weaknesses of the National Airport System. Identification of Airport Capacity Gaps. Definition of Strategy for Private Sector Participation in Airport Development. Preparation of a National Investment Schedule and Costing. Identification of Investments for Private Sector Financing. Streamlining the regulatory framework.



Title Al Aquiah Road Low-Density Development Infrastructure Works

Riyadh, KSA

Date December, 2016

Location Diriyah town, Riyadh, Kingdom of Saudi Arabia

Consultant **Talaat Imam Consulting Engineers** 

Client **AWJ Holding Company** 

**Brief Description** Complete infrastructure works for 1,200,000m2 of a mixed-use community

> comprising of residential, commercial and retail areas, municipal services and public amenities to serve the community residents, open spaces and

public realm.

Infrastructure works included, storm water drainage, mass grading and

road design

**Scope of Services** At the onset of the project, T&I performed a comprehensive review of the

proposed physical master plan to ensure an efficient and effective

infrastructure master plan. Following this task

**T&I** provided the following set of services:

Travel demand analysis for the project area.

Traffic operations analysis for the project area.

Preparation of the road network master plan.

Conceptual design of the road network

Detailed design and preparation of tender documents for the road network

Planning the construction design of the intersection with Asfan

highway road.



Location

Title

Development, design and construction of the main corridors for the third sector of the ring road at 6<sup>th</sup> of October city

Starting Date

December, 2016

Consultant Talaat Imam Consulting Engineers

South of 6th of October city

Client New Urban Communities Authority, October Gardens city Authority

**Brief Description** The project represents the third sector of the ring road for 6th of October city, and consist of the following:

- The south arc – stage 1 with length 20 km

- The intersection number (14) that include bridge, 4 loops and 4 ramps

Scope of Work T&I provided the following set of services:

 Review of all designs prepared and represented by the contractor's consultant, and supervision at all the construction stages

 Quality control / assurance and define the field test and recommendations needed for roads and crossing structures

 Studying the suitable solutions or alternatives in case of finding any notes or rejecting the designs represented by the contractor



Preparing preliminary, detailed and tender documents for Assiut Title Plateau corridor with length 22 km May, 2015 **Starting Date** Location Assiut governorate, starting from the western desert road, crossing Assiut plateau and ending at the intersection of Assiut bridge road with the armed forces railway crossing Consultant **Talaat Imam Consulting Engineers** Client Central Authority for Reconstruction Ministry of Housing, utilities and Urban communities **Brief Description** The project represent a direct connection link between Cairo / Assiut western desert road and Assiut bridge with length 22 km, and the aim of the project is: - Completion of the lateral connection corridor between the Upper Egypt's eastern and western desert roads - Creation of new urban communities above Assiut plateau - Shortening of the trip distance from / to Assiut airport Scope of Work T&I provided the following set of services: Preparing preliminary studies report including field works Traffic study for the project area Preparing hydrological study for flood protection Preparing detailed deigns for the road and crossing structures

- Preparing detailed designs for the storm water crossing culverts intersected with the road
- Preparing tender documents and the estimated cost for the project



Title Preparing preliminary, detailed and tender documents for the

connecting road between Bani Mazar district at Minya governorate

with Al Bawity district at Giza governorate

Starting Date October, 2013

**Location** The western desert – between Bani Mazar district at Minya governorate

with Al Bawity district at Giza governorate

**Consultant** Talaat Imam Consulting Engineers

Client Reconstruction research and studies Authority

Ministry of Housing, utilities and Urban communities

**Brief Description** Design of the lateral road connecting Bani Mazar and Al Bawity districts

with length 160 km to create new development areas around the road

Scope of Work T&I provided the following set of services:

Preparing preliminary studies report including field works

Traffic study for the project area

Preparing hydrological study for flood protection

Preparing detailed deigns for the road and crossing structures

Preparing tender documents and the estimated cost for the project



Title Al Mousa view Site Grading works- Jeddah, KSA Date June 2013 Location Jeddah, Kingdom of Saudi Arabia Consultant Talaat Imam Consulting Engineers Client Al Mousa International Real Estate Development Site Grading works for 3,000,000m<sup>2</sup> of a mixed-use community **Brief Description** comprising of residential, commercial and retail areas, municipal services and public amenities to serve the community residents, open spaces and public realm. The works included: - Storm water drainage, - Mass Grading and Profiles. **Scope of Services** 3D Mass Grading Plan based on the current master plan, approved final master plan, Concept grading plan, site topography and T& I recommendations. Considering direct coordination with the international master planner along the stages. Following this task T & I provided the following:

- Initial concept Grading Plan in Civil 3D format reflecting proposed final contours.
- Final concept Grading Plan in Civil 3D format reflecting proposed final contours based on the final approved master plan.



Title Construction and pavement of the third stage of the Old East Qantara

City roads network, Ismailia governorate

Starting Date March, 2013

**Location** East Qantara City – Ismailia governorate

**Consultant** Talaat Imam Consulting Engineers

Client Reconstruction research and studies Authority

Ministry of Housing, utilities and Urban communities

**Brief Description** Construction and pavement of the third stage of the Old East Qantara City

roads network with length of 35 km at Ismailia governorate

Scope of Work T&I provided the following set of services:

Field works including survey and soil investigation

Travel demand analysis for the project area.

• Traffic operations analysis for the project area.

Preparing preliminary studies report

Preparing detailed deigns

Preparing tender documents and the estimated cost for the project



Title Masharef 2E Community Infrastructure Works

Jeddah, KSA

Date June, 2012

**Location** Jeddah, Kingdom of Saudi Arabia

**Consultant** Talaat Imam Consulting Engineers

Client Kinan International Real Estate Development

Brief Description | Complete infrastructure works for 1.0 million m2 of a mixed-use community comprising of residential, commercial and retail areas,

municipal services and public amenities to serve the community residents,

open spaces and public realm.

Infrastructure works included Storm water drainage, Mass Grading and

Road's profiles..

**Scope of Services** At the onset of the project, T&I performed a comprehensive review of the

proposed physical master plan to ensure an efficient and effective

infrastructure master plan.

Following this task T&I provided the following set of services:

Travel demand analysis for the project area.

• Traffic operations analysis for the project area.

Preparation of the road network master plan.

Conceptual design of the road network

Detailed design for the road network



Title Infrastructure works for the fourth district and the Industrial zone

services area- Badr City

Date February, 2012

**Location** Badr City, Egypt

**Consultant** Talaat Imam Consulting Engineers

Client The Construction Authority for Potable Water and Wastewater (CAPW)

**Brief Description** Preparing preliminary, detailed and tender documents for the infrastructure

works at the Industrial zone services area (250 feddans).

Infrastructure works included, mass Grading and Road Profiles.

Scope of Services At the onset of the project, T&I performed a comprehensive review of the proposed physical master plan to ensure an efficient and effective infrastructure master plan.

## Following this task T&I provided the following set of services:

- Travel demand analysis for the project area.
- Traffic operations analysis for the project area.
- Preparation of the road network master plan.
- Conceptual design of the road network.
- Detailed design and preparation of tender documents for the road network.
- Preparing tender documents and the estimated cost for the project.



Title Infrastructure works for East of the clubs' zone with area of 61.3

feddans- Shorouk City

Date October, 2011

**Location** Shorouk City - Egypt

**Consultant** Talaat Imam Consulting Engineers

Client The Construction Authority for Potable Water and Wastewater (CAPW)

**Brief Description** Preparing preliminary, detailed and tender documents for the infrastructure works for East of the clubs' zone with area 61.3 feddans at Shorouk City.

Infrastructure works included, Mass Grading and Road Profiles

**Scope of Services** At the onset of the project, T & I performed a comprehensive review of the proposed physical master plan to ensure an efficient and effective

infrastructure master plan.

Following this task T & I provided the following set of services:

**Road infrastructure:** 

• Preparation of the road network master plan.

Conceptual design of the road network

 Detailed design and preparation of tender documents for the road network

Preparing tender documents and the estimated cost for the project

38



Title Traffic, parking areas study & design of roads for the residential,

commercial & administrative complex (AKWAN) at Cairo -

Alexandria desert road

Date October, 2010

**Location** Cairo - Alexandria, Egypt

**Consultant** Talaat Imam Consulting Engineers

**Client** AKWAN for Development and Real state

Brief Description | Preparing study for traffic and parking lots and design of roads for the

residential, commercial and administrative complex (AKWAN) at Cairo – Alexandria desert road at the intersection with 26th of July corridor with

area 66 feddan.

**Scope of Services** At the onset of the project, T & I performed a comprehensive review of the

proposed physical master plan.

Following this task T & I provided the following set of services:

• Traffic study and connection points to the surrounding roads.

Preparing detailed designs for roads network including profiles and

cross sections

Preparing detailed designs for parking lots including study of the

vehicles' movement inside the parking lots



Title	Railway Traffic Management System for Egypt
<b>Starting Date</b>	October 2007
Duration	October 2007 – March 2009
Location	Egypt
Consultant	JV between Talaat Imam Consulting Engineers and Louis Berger Group
Client	Ministry of Transportation (MOT)
Funded By	USTDA
<b>Brief Description</b>	The main objectives are:
•	- Providing Technical Assistance for the Railway Traffic Management System for Egypt.
	- Developing the Work Plan, the Consultant has taken into consideration the objectives established by the Ministry of Transport to develop a comprehensive railway safety program.
	- Assist the Government of Egypt (GOE) and the Ministry of Transport (MOT) in determining the most appropriate and cost effective technical and institutional solutions to improve the safety and operations of Egypt's National Railway
Scope of Work	T&I provided the following set of services:
	Gathering, reviewing and analyzing existing data
	Design of an ENR traffic management solution and action plan
	<ul> <li>Analysis of current traffic management safety policy and practices in the Egyptian railway sector</li> </ul>
	<ul> <li>Design the traffic management components of an ENR safety program and an independent oversight and enforcement agency</li> </ul>
	Master Traffic Management Plan and Public Information Strategy
	Preliminary Environmental Impact Assessment



Title	Airport Development Project
<b>Starting Date</b>	June 2005
Duration	12 Months
Location	Egypt (22 Airports)
Consultant	JV between Talaat Imam Consulting Engineers and Louis Berger Group
Client	The Egyptian Holding Company for Airport and Air Navigation
Funded by	World Bank
<b>Brief Description</b>	The main objective is to produce a National Airport Master Plan for the next twenty years that will:
	- Provide capacity extension nationwide, as required
	- Guide Government policy to develop public-private partnerships , construct, manage and operate airports,
	- Define improvements needed in the regulatory framework that is consistent with the two above objectives
	- Develop, test, provide and train ministry of civil aviation and EHCAAN with a mechanism and model for the national airport master plan for future update.
Scope of Work	T&I provided the following set of services:
•	Assessment of Future Traffic Growth
	<ul> <li>Analysis of Strength and Weaknesses of the National Airport System.</li> </ul>
	<ul> <li>Identification of Airport Capacity Gaps.</li> </ul>
	<ul> <li>Definition of Strategy for Private Sector Participation in Airport Development.</li> </ul>
	• Strategic Environmental Assessment and Airports Development Planning.
	Preparation of a National Investment Schedule and Costing.
	Alternative Airport Development Options.
	<ul> <li>Identification of Investments for Private Sector Financing.</li> </ul>
	Streamlining the regulatory framework
	• To develop a mechanism and a model for updating the future traffic growth and consequently the assess the necessary modifications in airports master plan.



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Title	Al-Sharq – Al-Daliel Highway
Starting Date	Oct. 1999
Duration	2 Years
Location	Republic of Yemen
Consultant	JV between Talaat Imam Consulting Engineers and Sabbour Consulting
Client	Ministry of Construction, Housing & Urban Planning, Republic of Yemen.
<b>Brief Description</b>	Construction Supervision of Al-Sharq – Al-Daleel Highway "about 24 km length.
Scope of Work	T&I provided the following set of services:
	<ul> <li>Supervision of construction and maintenance including procurement, financial, environmental and reporting process.</li> </ul>



Title Construction Management and Supervision for Infrastructure Works

Golf Resort- Dreamland.

Starting Date Nov. 1999.

**Duration** 2 Years.

**Location** Dreamland Resort - 6th of October city (Area 350 Feddans).

**Consultant** Talaat Imam Consulting Engineers

Client Dreamland company - Bahgat Group.

- Construction supervision of the infrastructure for the amusement park (168 feddans) Golf course (187 feddans, the tennis complex (15 feddans)

and Golf Resort (350 feddans)

- The work include also the street lighting.

Scope of Work T&I provided the following set of services:

 Construction Management & Supervision for the infrastructure systems, these systems are: Roadways and Parking facilities, waste supply and distribution system, wastewater collection and management system, irrigation of turf and green areas, power supply and lighting

systems and telecommunication system.

• Including procurement, financial, environmental and reporting process.



Title	The Roads Network for El Rehab town-Damietta Governorate.
<b>Starting Date</b>	August 1998.
Duration	One year.
Location	New Damietta city – Damietta Governorate.
Consultant	Talaat Imam Consulting Engineers
Client	Saudi – Egyptian Company for Investment and Reconstruction - El Rehab.
<b>Brief Description</b>	- The project area is 500 feddans and both residential and industrial areas will be constructed
	- The role of the firm is to design and supervise the construction of the roads network of the town.
Scope of Work	T&I provided the following set of services:
	<ul> <li>Surveying works and preparation of topographic maps.</li> </ul>
	Final detailed design and preparation of tender documents.
	<ul> <li>Construction supervision on the roads' networks.</li> </ul>
	<ul> <li>Including procurement, financial, environmental and reporting process</li> </ul>



Title Design, Construction Management and Supervision for Infrastructure

of the Free Industrial Zone Development Project.

November 1998. **Starting Date** 

**Duration** 2 Years

Location East of Port Said City.

Consultant **Talaat Imam Consulting Engineers** 

Free Industrial Zone Development Company - Port Said East.

**Brief Description** - Design preparation as topographic survey work that include the natural ground surface leveling maps and the plan metric maps for the sites of the roads, plants and storehouses.

> - Design the infrastructure systems, these systems are: Roadways and Parking facilities, waste supply and distribution system, wastewater collection and management system, irrigation of turf and green areas, power supply and lighting systems and telecommunication system

- Construction Management & Supervision.

## Scope of Work **T&I** provided the following set of services:

- Final detailed design and preparation of tender documents.
- Construction Management & Supervision, including procurement, financial, environmental and reporting process

Client



Title Construction Management and Supervision for Infrastructure Works

for EL-Madena El-Khadra – El-Khartoum – Sudan (800 Feddan)

Starting Date 2008

**Duration** Current

**Location** El-Khartoum City – Sudan

**Consultant** Talaat Imam Consulting Engineers

Client BARWA Co. Qater

Brief Description | Construction Management & Supervision for the infrastructure systems,

these systems are: Roadways and Parking facilities, waste supply and distribution system, wastewater collection and management system, irrigation of turf and green areas, power supply and lighting systems and

telecommunication system.

Scope of Work T&I provided the following set of services:

• Preparation of the infrastructure networks master plan.

• Planning and conceptual design of the infrastructure network.

• Final detailed design and preparation of the tender documents.



Title The infrastructure works for the extension of the Rehab city (the

districts no. Six, Seven, Eight, Nine, and Ten)

Starting Date 2005 / 2017 (Over Many Phases)

**Location** New Cairo City

**Consultant** Talaat Imam Consulting Engineers

Client Arab Company for Projects and Housing Development

Brief Description | Conducting the consulting works related to preparing the Master Plan and

the detailed design and the tender documents for the Road, Potable Water, Firefighting, Irrigation, Sewage, Electricity, Communications Networks

for the extension for El-Rehab City on total area 895 feddans

**Scope of Work** At the onset of the project, T&I performed a comprehensive review of the proposed physical master plan.

## Following this task T&I provided the following set of services:

- Studying sources of potable water, electricity, communications, and the systems for disposing of the sewage water then studying the available solutions to connect with the public networks around the city.
- Studying the site grading.
- Determining the design basis for all the components in the master plan
- Preparing the master plan for all the infrastructure networks.
- Final detailed design and preparation of the tender documents for all infrastructures.

48



Title Construction Management and Supervision for Infrastructure Works

Dreamland Residential City- El-Khartoum - Sudan (1200 Feddan)

Starting Date May 2004

**Duration** Current

**Location** El-Khartoum City – Sudan

**Consultant** Talaat Imam Consulting Engineers

Client Bahgat Group & Co.

**Brief Description** | - Construction Management & Supervision for the infrastructure systems,

- These systems are: Roadways and Parking facilities, waste supply and distribution system, wastewater collection and management system, irrigation of turf and green areas, power supply and lighting systems and

telecommunication system.

## Scope of Work T&I provided the following set of services:

• Preparation of the infrastructure networks master plan.

Planning and conceptual design of the infrastructure network.

• Final detailed design and preparation of the tender documents.



Title	Development of Ather EL-Naby Terminal
Starting Date	Sept. 2002
Duration	Current
Location	Cairo Governorate
Consultant	Talaat Imam Consulting Engineers
Client	River Transport Authority
Brief Description	<ul> <li>Development of Ather El-Naby terminal</li> <li>Constructing the bridge ramps</li> <li>Connecting the terminal to the ring road.</li> </ul>
Scope of Work	<ul> <li>T&amp;I provided the following set of services:</li> <li>Detailed design of the ramps of the bridge and setting its horizontal alignment</li> <li>Preparing the final drawings</li> <li>Preparing the tender documents.</li> </ul>



Title Nubaria dairy farm Nubaria dairy complex.

Starting Date February 2000.

**Duration** Two years.

Nubaria area nearly 70 km south of Alexandria. The farm is bounded from

the west by the Cairo-Alexandria desert highway.

**Consultant** Talaat Imam Consulting Engineers

Client International Co. for Agro-Industrial projects.(Interagro)

**Brief Description** Design of the road network for the farm & the internal roads of the Dairy

Complex including the inlets & exits to the national highways surrounding

the farm.

Scope of Work | T&I provided the following set of services:

 Preparation of the master plan of the farm roads including conceptual planning & design of roads network.

• Final detailed design of roads network.

Preparation of the tender documents.



Title	The roads network for new HELIOPOLES city.
Starting Date	Nov. 1997.
End Date	Nov. 2001.
Location	New HELIOPOLES city (area: 5888 feddans) east of Cairo (confined between Cairo Suez and Cairo – Ismailia desert highways.
Consultant	Talaat Imam Consulting Engineers
Client	Misr El – Gadida company for housing and development.
<b>Brief Description</b>	Design the road network for the city including the inlets and exits to the national highways surrounding the city.
Scope of Work	T&I provided the following set of services:
	• Preparation of the master plan of the city roads, including conceptual planning and design of the roads network.
	• Final design of the roads' networks for the six districts of the city (of the total length of 54 Km).
	<ul> <li>Preparation of tender documents for the roads in these six districts.</li> </ul>



Title Infrastructure systems for the Sharm Town Center

Sharm El Sheikh.

Starting Date Oct. 1997.

**Duration** One year.

**Location** Sharm El Sheikh – Sinai, Egypt.

**Consultant** Talaat Imam Consulting Engineers

Client Sharm Egypt for Tourist Real Estate Development Company (SETRED

C).

**Brief Description** Design the infrastructure systems for the integrated resort (area: 50

feddans).

These systems are: Roadways and Parking facilities, waste supply and distribution system, wastewater collection and management system, irrigation of turf and green areas, power supply and lighting systems and

telecommunication system.

Scope of Work T&I provided the following set of services:

• Preparation of the infrastructure Master plan.

• Preliminary design of the infrastructure systems.

• Final detailed design and preparation of tender documents.



Title	Infrastructure systems for Sharm - El Qbli Resort Red sea.
<b>Starting Date</b>	May. 1997.
Duration	2 years.
Location	On the red sea coast between Al-Qusir and Marsa Alam (33 Km south of Al-Qusir.
Consultant	Talaat Imam Consulting Engineers
Client	Red sea Sharm for Tourism Development.
Brief Description	The Project Occupies about 800 feddans and the main components of the project are residential area Golf course, two-town center and several, sports and recreation facilities  The role of the firm in to design the infrastructure systems for the resort.
Scope of Work	<ul> <li>T&amp;I provided the following set of services:</li> <li>Preparation of the infrastructure Master plan.</li> <li>Preliminary design of the infrastructure systems.</li> <li>Final detailed design and preparation of tender document.</li> </ul>



Title	Central Mountain Tunnel In Dreamland Tourist Resort
Starting Date	1996.
Duration	Two years
Location	Dreamland resort – 6 <sup>th</sup> of October city (Area: 2200 feddans).
Consultant	Talaat Imam Consulting Engineers
Client	Dreamland Company – Bahgat Group.
<b>Brief Description</b>	Design and construction supervision of the resort's central mountain tunnel.
Scope of Work	T&I provided the following set of services:
	• Designing and supervising the implementation of the tunnel passing under the central mountain in Dream Park amusement park, with a length of about 120 linear meters and an average width of 5 meters.



Title	Roads Network for Dreamland Resorts.
<b>Starting Date</b>	Oct. 1996.
Duration	Two years.
Location	Dreamland resort – 6 <sup>th</sup> of October city (Area: 2200 feddans).
Consultant	Talaat Imam Consulting Engineers
Client	Dreamland Company – Bahgat Group.
<b>Brief Description</b>	Design and construction supervision of the resort's roads.
	The road length is about 150 Km and it ranges from main collectors (6 lanes – 20 m width) to service roads (2 lanes – 7.5 m width).
Scope of Work	T&I provided the following set of services:
	<ul> <li>Preparation of the roads' networks master plan.</li> </ul>
	<ul> <li>Planning and conceptual design of the network.</li> </ul>
	<ul> <li>Final detailed design and preparation of the tender documents.</li> </ul>
	• Permanent supervision on the road construction, including procurement, financial, environmental and reporting process.



**Title** Assiut El-Dakhla Highway (285 km). **Starting Date** August 1993. **Duration** 10 Months. Location Egyptian Western Desert. Consultant **Talaat Imam Consulting Engineers** Client Ministry of Reconstruction. **Brief Description** The Highway extent is from Assiut City at the east to El-Dakhla City at the west. Its length is about 285Km. It crosses the Egyptian Western Desert. T&I provided the following set of services: Scope of Work Conceptual design. Surveying and soil investigations. Final design of the highway



Title	The International Northern Coastal Highway.
<b>Starting Date</b>	Feb. 1992.
Duration	10 Months.
Location	Egyptian northern coast on the Mediterranean Sea.
Consultant	Talaat Imam Consulting Engineers
Client	Ministry of Reconstruction, New Settlement and State for Housing and Infrastructures.
Brief Description	The Highway extent is from Rafaa City at the east to Saloom City at the west. Its length is about 300 Km from Port Saied till Alexandria, and its right of way is 200m It crosses some lakes as well as the Rosetta Nile Branch.
Scope of Work	T&I provided the following set of services:
	<ul> <li>Surveying investigation.</li> </ul>
	Soil investigation.
	Final design of the highway.
	Preparation of tender documents.



Title	Rashid Bridge
<b>Starting Date</b>	1992.
Duration	10 Months.
Location	Rashid Nile branch - South of Rashid
Consultant	Talaat Imam Consulting Engineers
Client	Reconstruction research and studies Authority
<b>Brief Description</b>	It was established to link the northern coastal international road at the Nile branch Rashid with the city
Scope of Work	T&I provided the following set of services:
	■ Engineering planning.
	• Structural design of the bridge of the pre-stressed concrete with a length of about 420 meters and a width of four traffic lanes on the path of the northern international road.



Title	Mahmodia Bridge
<b>Starting Date</b>	1992.
Duration	10 Months.
Location	Rashid Nile branch - South of Rashid
Consultant	Talaat Imam Consulting Engineers
Client	Reconstruction research and studies Authority
<b>Brief Description</b>	It was established to link the northern coastal international road at Mahmodia canal
Scope of Work	T&I provided the following set of services:
	■ Engineering planning.
	• Structural design of the bridge of the pre-stressed concrete with a length of about 420 meters and a width of four traffic lanes on the path of the northern international road.



Title	Borolos Bridge
<b>Starting Date</b>	1992.
Duration	10 Months.
Location	Borolos Strait
Consultant	Talaat Imam Consulting Engineers
Client	Reconstruction research and studies Authority
<b>Brief Description</b>	It was established to link the northern coastal international road at Borolos strait
Scope of Work	T&I provided the following set of services:
	Engineering planning .
	• Structural design of the bridge of the pre-stressed concrete with a length of about 600 meters and a width of four traffic lanes on the path of the northern international road.



Title	Gharbia Main Drain Bridge (Ketchiner)
Starting Date	1992.
Duration	10 Months.
Location	Gharbia Main Drain Hammad District
Consultant	Talaat Imam Consulting Engineers
Client	Reconstruction research and studies Authority
<b>Brief Description</b>	It was established to link the Northern coastal international road at Gharbia main drain
Scope of Work	T&I provided the following set of services:
	Engineering planning .
	• Structural design of the bridge of the pre-stressed concrete with a length of about 53 meters and a width of four traffic lanes on the path of the northern international road.



Road Network for El-Noubaria City. **Title Starting Date** Feb. 1990. **Duration** 8 Months. Location Noubaria City Talaat Imam Consulting Engineers Consultant Client Ministry of Housing and Reconstruction. **Brief Description** The planning road network for City (area 1600 Feddan.) and designing it. Scope of Work **T&I** provided the following set of services: Preparation of Master Plan. Preparation conceptual design. Preparation final detailed drawings Preparing the tender documents.



Title	Determination of the International Northern Coastal Highway Path.
<b>Starting Date</b>	July 1988.
Duration	One Year.
Location	Egyptian northern coast on the Mediterranean Sea.
Consultant	Talaat Imam Consulting Engineers
Client	Ministry of Reconstruction and state for Housing and land reclamation.
<b>Brief Description</b>	Choosing the best trajectory for a coastal international road connects Rafaa at the east to Saloom at the west and prepares the conceptual design for it.
Scope of Work	T&I provided the following set of services:
	• Choosing the trajectory of the coastal northern international highway.
	Preparing its conceptual design.



Title	Road Network for El-Obour New City.
<b>Starting Date</b>	Jan. 1988.
Duration	14 Months.
Location	El-Obour City (population about 500,000 Inh.).
Consultant	Talaat Imam Consulting Engineers
Client	The Arab Bureau for Design and Technical Consultations, Ministry of Housing.
<b>Brief Description</b>	The main road network (main, local and service roads).
Scope of Work	<ul> <li>T&amp;I provided the following set of services:</li> <li>Initial studies.</li> <li>Conceptual design.</li> <li>Final design.</li> <li>Preparation of tender documents.</li> </ul>



Title The Road Network for Marina El-Allamain Tourist Center at the

North Coast.

Starting Date Nov. 1984.

**Duration** 4 Months.

**Location** The western northern coast (Km 94 – Km 100).

**Consultant** Talaat Imam Consulting Engineers

Client Ministry of reconstruction, new settlements and state for Housing and

infrastructures.

**Brief Description** Design of the road network (Main and Local, 30 Km in length) for the

Tourist Center.

Scope of Work | T&I provided the following set of services:

• Conceptual design.

• Final design.

• Preparation of tender documents.



Title	The Road Network for the New City of Damietta.
<b>Starting Date</b>	Dec. 1983.
Duration	3 Months.
Location	The New City of Damietta.
Consultant	Talaat Imam Consulting Engineers
Client	The Arab Bureau for Design and Technical Consultations, Ministry of Housing.
<b>Brief Description</b>	Design of the road network for the ITV and its industrial zone. This network consists of main highways, as well as local and service roads, of a total length of about 30 Km.
Scope of Work	T&I provided the following set of services:
	Preparing, the final design and drawings
	Preparing the tender documents.



Title Road Network for the Extension of the City of the 15<sup>th</sup> of

May-Helwan.

**Starting Date** May 1981.

**Duration** 6 Months.

**Location** Subdivision of the city of the 15<sup>th</sup> of May, Helwan.

**Consultant** Talaat Imam Consulting Engineers

Client The Arab Bureau for Design & Technical Consultations, Ministry of

Housing.

**Brief Description** Design of the road network for the whole town includes the main roads,

branches and the service roads, with total length of about 35 Km.

Scope of Work T&I provided the following set of services:

Detailed Design of Roads Network

• Preparation of tender documents.



Title	Upgrading of Tazz International Airport.
<b>Starting Date</b>	1992.
Duration	3 Months.
Location	Tazz International Airport. Rep. Of Yemen.
Consultant	Talaat Imam Consulting Engineers
Client	Government of Yemen.
<b>Brief Description</b>	Provision of taxiway system and Surface Treatment Study of runways.
Scope of Work	T&I provided the following set of services:
	■ Preliminary Study Site Visit –
	■ Testing and Results Analysis –
	<ul> <li>Preparation of Technical Specification for Runways and taxiways executions.</li> </ul>



Title	Upgrading of Sanaa International Airport.
<b>Starting Date</b>	1991.
Duration	6 months.
Location	Sanaa International Airport. Rep. Of Yemen.
Consultant	Talaat Imam Consulting Engineers
Client	Government of Yemen.
Brief Description & Scope of Work	<ul> <li>T&amp;I provided the following set of services:</li> <li>Provision of engineering and master plan upgrading for Sanaa airport.</li> </ul>



Title Rehabilitation of Runway 16-34

Cairo International Airport.

Starting Date March 1987.

**Duration** 3 Months.

**Location** Cairo International Airport.

**Consultant** Talaat Imam Consulting Engineers

Client Cairo Airport Authority represented by the Nile General Company for

Roads and Bridges.

**Brief Description** Technical evaluation of pavement conditions and repairing of cracks and

damages.

Scope of Work T&I provided the following set of services:

Preliminary Studies

• Final Reports and Preparation of Final Design drawings.



Title Treatment of Surface Cracks

The Southern Apron Region

Cairo International Airport Terminal 2.

Starting Date

June 1986.

**Duration** 

Four Months.

Location

Cairo International Airport, Terminal 2.

Consultant

**Talaat Imam Consulting Engineers** 

Client

Egyptian Aviation Authority.

**Brief Description** 

The apron is formed of concrete slabs (thickness 60 cm) and due to the heat, some cracks that were formed require inspection and treatment.

Scope of Work

- Inspection of cracks (Determination of location, type, density, thickness, depth, length and direction of cracks)
- Treatment of existing cracks and recommendations to avoid the occurrence of these cracks in the future.



Title	Cairo International Airport.
<b>Starting Date</b>	1981.
Duration	One year.
Location	Cairo International Airport, Cairo.
Consultant	Talaat Imam Consulting Engineers
Client	Nile General Company for Roads and Bridges.
<b>Brief Description</b>	Upgrading of airport facilities to accommodate international aviation.
Scope of Work	T&I provided the following set of services:
	Detailed design, workshop drawing and construction
	Supervision.



Title Nouzha Airport. **Starting Date** May 1980. **Duration** One year. Nouzha Airport, Alexandria. Location **Talaat Imam Consulting Engineers** Consultant Client Alexandria Governorate. **Brief Description** Upgrading of airport facilities to accommodate international aviation. Scope of Work T&I provided the following set of services:

General consultant.



# SANITARY, HYDRAULIC AND IRRIGATION PROJECTS

Title

**Expansion of El-Khobar Sewage Treatment Plant with Capacity of** 



# $200,000 \text{ m}^3/\text{d}, \text{KSA}$

**Date** 2024

**Location** Kingdom of Saudi Arabia

Client Al-Yamama Trading and Contracting Company

**Brief Description** The project involves the expansion of the El-Khobar Sewage Treatment

Plant in the Kingdom of Saudi Arabia, increasing its treatment capacity to 200,000 m³/day. The scope includes the design of both process and non-process structures using BIM methodologies in Revit, in compliance with Saudi Building Code (SBC), American Concrete Institute (ACI), and American Institute of Steel Construction (AISC) standards. Additionally, technical support was provided to the

contractor throughout the construction phase.



Title Long-term O/M Contractors for STP Package 5 with Capacity of

270,000 m<sup>3</sup>/d, Riyadh, KSA

**Date** 2024

**Location** Manfoha, Kingdom of Saudi Arabia

Client Al-Khorayef Group

**Brief Description** The project includes the rehabilitation of existing structures at the El-

Khobar Sewage Treatment Plant, involving structural assessments to verify the adequacy of the existing elements under revised loading conditions resulting from changes in mechanical equipment or functional use. It also encompasses the design of new non-process structures, ensuring compliance with applicable codes and integration with the existing facilities. Continuous technical support was provided to the contractor throughout the construction phase to ensure proper

implementation and coordination



Consulting services, preparing design studies and tender documents for the construction of the new tunnel for the Western Region, diameter (3000 mm)

Date

2024

Location

Alexandria Governorate - Egypt

Client

The construction authority of potable water and wastewater (CAPW)

**Brief Description** 

The project aims to support the sewage tunnel of the existing 2750 mm diameter western region tunnel via a new tunnel parallel to the western region tunnel with a proposed 3000 mm diameter to increase the system's capacity, especially during winter storms. The reinforcement will include increasing the capacity of the inlet lift station for the western treatment plant in Alexandria, with a capacity of 220,000 m³/day.

# **Scope of Services**

- ➤ Reviewing previous studies, population censuses, current and projected future actual drainage, the capacity of the existing complex and the existing inlet lift station.
- > Survey maps of the project area boundaries.
- > Census and behavior data from the areas served by the project.
- > Surveying works for the expansion site and the proposed route for the forcemains.
- ➤ Investigations and preparing a soil investigation report and foundation recommendations
- > Preparing hydraulic designs for the inlet line, the main sump, pump room, and the forcemains
- Preparing of electromechanical designs
- Preparing technical specifications and bills of quantities.



Rehabilitation, Development, and Capacity Enhancement of the Industrial Wastewater Treatment Plant in Jeddah 1<sup>st</sup> Industrial City - 40,000 m³/day

Date

2024

Location

Jeddah - Makkah - Kingdom of Saudi Arabia

Client

HESCO

**Brief Description** 

Rehabilitation, upgrade, and expand the capacity of Jeddah 1<sup>st</sup> Industrial Wastewater Treatment Plant (IWWTP) from 25,000 m³/day to 40,000 m³/day, including the sludge treatment and the tertiary treatment.

### **Scope of Services**

- ➤ The analysis of current and projected influent characteristics determined necessary upgrades.
- ➤ Determine the possibility of repairing the civil works or constructing a completely new building due to the deterioration of the current structure.
- ➤ Provide capacity assessment of each unit against current loads, and potential utilization of oversized units against future loads.
- ➤ Redesign the treatment plant to increase its capacity to treat a flow rate of 40,000 m³/day, including the sludge treatment (aerobic digestion) and the tertiary treatment (UF/RO).
- ➤ Develop a BioWin software model to simulate the biological treatment process of the treatment plant.
- ➤ Design of the required Odor management system to remove hydrogen sulfide (H<sub>2</sub>S) and other odorous compounds to eliminate any adverse environmental impacts on surrounding areas.



Title Infrastructure Detailed Design for Coves 2

Soma Bay - Hurghada

**Date** 2024

**Location** Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

Brief Description

Studying the current status of the infrastructure works (Roads - Water - Irrigation - Sewage - Electricity) for the tourist resort of Soma Bay, which is located on an area of 10 million square meters in Ras Soma area on the Red Sea shore.

Planning of the future facilities required during the various stages of development of the project.

# Scope of Services T & I provided the following set of services:

Water Supply

- > Calculate the population and the daily water demands
- > Calculate the irrigation water demand for the public green areas
- ➤ Determine the routing of the main water pipelines based on the surveying data.
- ➤ Determine the pipes sizing to ensure the minimum of friction losses and satisfying the firefighting requirements
- Propose connection points with the existing/proposed main network
- > Preparing the detailed design for the potable water network
- ➤ Coordinate with MEP, Landscape regarding any site works for potable water and irrigation network including pump stations.

- ➤ Calculate the wastewater discharges and design the networks in accordance with the road network levels
- ➤ Provide the routing and diameters of the proposed sewer lines
- Propose location of the proposed sewage pump station
- Propose alignment of the sewage force-main
- ➤ Propose connection points with the existing/ proposed main network
- Complete the detailed calculations and design drawings for the sewer network



Title Infrastructure Detailed Design for Baywest Valley

Soma Bay - Hurghada

**Date** 2024

**Location** Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

Brief Description

Studying the current status of the infrastructure works (Roads - Water - Irrigation - Sewage - Electricity) for the tourist resort of Soma Bay, which is located on an area of 10 million square meters in Ras Soma

area on the Red Sea shore.

Planning of the future facilities required during the various stages of development of the project.

**Scope of Services** 

# T & I provided the following set of services:

# Water Supply:

- ➤ Calculate the population and the daily water demands
- ➤ Calculate the irrigation water demand for the public green areas
- ➤ Determine the routing of the main water pipelines based on the surveying data.
- ➤ Determine the pipes sizing to ensure the minimum of friction losses and satisfying the firefighting requirements
- ➤ Propose connection points with the existing/proposed main network
- ➤ Coordinate with MEP, Landscape regarding any site works for potable water and irrigation network including pump stations.

- ➤ Calculate the wastewater discharges and design the networks in accordance with the road network levels
- ➤ Provide the routing and diameters of the proposed sewer lines
- Propose location of the proposed sewage pump station
- ➤ Propose alignment of the sewage force-main
- Propose connection points with the existing/ proposed main network
- ➤ Complete the detailed calculations and design drawings for the sewer network



Title Infrastructure Detailed Design for Blanca – Phase I

Soma Bay - Hurghada

**Date** 2023

**Location** Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

Brief Description

Studying the current status of the infrastructure works (Roads - Water - Irrigation - Sewage - Electricity) for the tourist resort of Soma Bay, which is located on an area of 10 million square meters in Ras Soma

area on the Red Sea shore.

Planning of the future facilities required during the various stages of development of the project.

**Scope of Services** 

# T & I provided the following set of services:

# Water Supply:

- ➤ Calculate the population and the daily water demands
- ➤ Calculate the irrigation water demand for the public green areas
- ➤ Determine the routing of the main water pipelines based on the surveying data.
- ➤ Determine the pipes sizing to ensure the minimum of friction losses and satisfying the firefighting requirements
- ➤ Propose connection points with the existing/proposed main network
- ➤ Coordinate with MEP, Landscape regarding any site works for potable water and irrigation network including pump stations.

- ➤ Calculate the wastewater discharges and design the networks in accordance with the road network levels
- ➤ Provide the routing and diameters of the proposed sewer lines
- Propose location of the proposed sewage pump station
- Propose alignment of the sewage force-main
- Propose connection points with the existing/ proposed main network
- > Complete the detailed calculations and design drawings for the sewer network



Alexandria West Wastewater Treatment Plant Extension and Upgrade Project Funded by The European Investment Bank (EIB)

Date

2023

Location

Alexandria, Egypt.

Client

The construction authority of potable water and wastewater (CAPW)

**Brief Description** 

Extend the capacity of the Alexandria West Wastewater Treatment Plant (AWWWTP) from 462,000 m³/d to 630,000 m³/d, and upgrade to secondary (biological) treatment level with sludge treatment and digestion to allow for biogas generation. In order to improve the current sanitation and environmental services in the city of Alexandria and bordering Lake Mariout

# **Scope of Services**

- ➤ Providing Procurement Support to CAPW during tendering phase of the Design and Build contract (international open or closed tender based on FIDIC Yellow Book) including support during evaluation of tenders and contracting of works;
- ➤ Elaboration of the final Environmental and Social Impact Assessment;
- ➤ Review of the designs, design changes and operation manuals, prepared by the Works Contractor;
- > Supervision and management of construction works (i.e. completion of construction of the WWTP extension, commissioning of plant and trial operation) within the budget and time stipulated;
- ➤ Supervision and management during the 24 months Operation and Defects Notification Period (DNP)
- > Assistance in issuing taking over Certificate



Title Unit III Water Transmission Scheme (Lot A)

**Date** 2023

**Location** Abu Dhabi, United Arab Emirates

Client Société Egyptienne D'Entreprises (SEDE)

- Extending the existing New Pumping Station in Unit III (AUH) at Unit III with a capacity of 48 MIGD to transmit the flow to new interface points along the pipeline, existing interface points in Unit IV

existing transmission pipelines at Unit III PS.

- New DN1200 mm and 43 km length pipeline with Fiber Optic Cable (FOC) from the newly proposed pumping station/group at Unit III PS to Unit IV area with all associated interconnection with the existing

area and new Unit V PS, including the interconnection works with the

lines.

- New DN1000 mm pipeline with FOC branching off from the above DN1200 mm pipeline and running towards Unit V pumping station.

# **Scope of Services**

- Review of hydraulic analysis reports, plans, and profiles of pipelines.
- ➤ Review of the stress analysis and surge analysis reports.
- ➤ Preparation of design criteria, structural calculations and reinforced concrete drawings for valve chambers, foundation of surge vessels, and pipes supports
- ➤ Preparing design calculations for C.S pipes and fittings wall thickness.
- ➤ Preparing detailed design calculation to the temporary shoring for trenches side support of valve chambers, NDRC Pits
- Review and Coordinate among all project different specialized entities from the Owner, Contractor site office, Stakeholders, Authorities, and Outsource / third party specialists
- Technical support during construction
- Preparing As-built Drawings



Title Infrastructure Detailed Design for Arc Of Soma

Soma Bay - Hurghada

**Date** 2022

**Location** Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

Brief Description

Studying the current status of the infrastructure works (Roads - Water - Irrigation - Sewage - Electricity) for the tourist resort of Soma Bay, which is located on an area of 10 million square meters in Ras Soma

area on the Red Sea shore.

Planning of the future facilities required during the various stages of development of the project.

**Scope of Services** 

# T & I provided the following set of services:

# Water Supply:

- > Calculate the population and the daily water demands
- Calculate the irrigation water demand for the public green areas
- > Propose the connection line to existing potable water main network
- ➤ Determine the routing of the main water pipelines based on the surveying data.
- ➤ Determine the pipes sizing to ensure the minimum of friction losses and satisfying the firefighting requirements
- > Prepare the detailed design for the potable water network
- ➤ Coordinate with MEP, Landscape regarding any site works for potable water and irrigation network including pump stations.

- ➤ Calculate the wastewater discharges and design the network in accordance with the road network levels
- ➤ Provide the routing and diameters of the proposed sewer lines
- > Propose location of the proposed sewage pump station
- ➤ Propose a suggested connection point to the existing main sewer line to receive the wastewater discharge by the force main
- > Propose alignment of the sewage force-main
- ➤ Complete the detailed calculations and design drawings for the sewer network



Infrastructure Detailed Design for Soma Coves Soma Bay - Hurghada

Date

2022

Location

Soma Bay, Hurghada Governorate, Egypt

Client

Abu soma development company

# **Brief Description**

- Studying the current status of the infrastructure works (Roads Water Irrigation Sewage Electricity) for the tourist resort of Soma Coves, which is located on an area of 10 million square meters in Ras Soma area on the Red Sea shore.
- Planning of the future facilities required during the various stages of development of the project.

# **Scope of Services**

# T & I provided the following set of services:

# Water Supply

- > Calculate the population and the daily water demands
- ➤ Calculate the irrigation water demand for the public green areas
- ➤ Propose the connection line with an estimated length of 1300 m to existing 500 mm potable water main line
- ➤ Determine the routing of the main water pipelines based on the surveying data.
- ➤ Determine the pipes sizing to ensure the minimum of friction losses and satisfying the firefighting requirements.
- > Prepare the detailed design for the potable water network.
- ➤ Coordinate with MEP, Landscape regarding any site works for potable water and irrigation network including pump stations.

- ➤ Calculate the wastewater discharges and design the network in accordance with the road network levels
- ➤ Provide the routing and diameters of the proposed sewer lines
- Propose location of the proposed sewage pump station
- ➤ Propose a suggested connection point to the existing pump station No (4) to receive the wastewater discharge by the force main
- ➤ Propose alignment of the sewage force-main with approximate length of 2100 m
- Complete the detailed calculations and design drawings for the sewer network



Consulting Services, Studies, Conceptual Design, and preparing Tender documents for extensions of the main screw sewerage lift station (Bridge 3), East Cairo.

**Starting Date** 

2022

Location

Al Salam, Cairo, Egypt.

Client

Greater Cairo Sanitary Drainage Company "GCSDC"

#### **Brief Description**

- Study the impacts of the changes that occurred in recent years on the Ain Shams station and the screw lift station (Bridge 3).
- Preparing preliminary design and tender documents for extensions of the existing screw lift station (Bridge 3) with a capacity of 600,000 m<sup>3</sup>/d, to accommodate the increased domestic discharges and rainwater discharges coming to the station in the current situation and the expected in the future

#### **Scope of Services**

- ➤ Surveying works for the expansion site and the proposed route for the forcemains with diameter 2\*1500 mm
- ➤ Investigations and preparing a soil investigation report and foundation recommendations
- > Preparing hydraulic designs for the inlet line, the main sump, pump room, and the forcemains
- > Preparing of electromechanical designs
- > Preparing technical specifications and bills of quantities



Water Transmission Scheme from Madinat Zayed to Liwa and Ousahwira

Date

2021

Location

Al Dhafra Region, United Arab Emirates

Client

Société Egyptienne D'Entreprises (SEDE)

**Brief Description** 

The project aims to transmit by direct pumping from the NMZPS 49.8 MIGD to the following locations via the DN 1200 pipelines from NMZPS to NMPS.

- 7.7 MIGD to the SPSs of the ASRP through 2x DN 900 pipelines connecting to the IVS
- 2.7 MIGD to the STF in case of emergency.
- 10.08 MIGD to the Liwa Master Plan
- 25.2 MIGD to the NMPS
- 2.9 MIGD to the EMPS

Transmit by pumping from the NMPS up to 23.99 MIGD to the following consumers

- 11.13 MIGD to various ADDC network consumers via new DN 1000, DN 800 & DN 400 pipelines extending up to the Palace at Ousawirah
- 12.86 MIGD to future Liwa Master Plan and other consumers via DN 800 branch line from the new DN 1000 pipeline.

# **Scope of Services**

- > Review of hydraulic analysis reports, plans, and profiles of pipelines.
- Review of the stress analysis and surge analysis reports.
- Preparation of design criteria, structural calculations and reinforced concrete drawings for valve chambers, foundation of surge vessels, and pipes supports
- ➤ Preparing detailed design calculation to the temporary shoring for trenches side support of valve chambers, NDRC Pits
- > Technical support during construction
- Preparing As-built Drawings



Title Extension of Abu Tig Potable Water Treatment Plant with capacity

500 L/sec

**Date** 2021

**Location** Abu Tig City, Assuit Governorate, Egypt

Client Metito Water Treatment Egypt

**Brief Description**Preparing the hydraulic, mechanical and electrical designs and site infrastructure works for Abu Tig water plant extension with a capacity of 500 L/sec to reach the total capacity of the plant to 1000 L/sec

(86,400 m<sup>3</sup>/day) within the framework of the presidential initiative

(Hayah Karima).

Scope of Services T & I provided the following set of services:

Preparing hydraulic designs, hydraulic profile, and general layout

drawings for the plant.

Preparing civil guide drawings

> Preparing detailed mechanical design drawings (General

Arrangement drawings) for all tanks and buildings

Preparing detailed design for electrical and control works

> Technical support during construction

> Preparing As-built Drawings



Sustainable Rural Sanitation Services Program for Results (SRSSP) - (Additional Financing Phase) Funded by The World Bank

Date

2020

Location

Menofia, Gharbia and Damietta Governorates, Egypt

Client

Ministry of Housing, Utilities, and Urban Communities (MHUUC)

**Brief Description** 

- Preparing conceptual design, review of detailed designs and tender documents, and support during tendering stage for sewage network, Pump Stations, Force mains at 45 villages.
- Preparing detailed design and tender documents for 4 WWTPs, and preparing design & build tender documents for 7 WWTPs

# **Scope of Services**

# T & I provided the following set of services:

# **Conceptual design:**

- ➤ Aerial Survey for each WWTP site.
- ➤ Geotechnical works including boreholes with different depths and preparing geotechnical report
- Preparing population studies and flow estimates
- > Preparing conceptual design report including planning of the wastewater system.

# **Detailed Design**

- ➤ Preparing process, hydraulic, architectural, structural, mechanical, and electrical design for 4 WWTPs
- ➤ Preparing tender documents, technical specifications, B.O.Q and estimated costs
- ➤ Preparing design and build tender documents for 7 WWTPs

# **Project Management**

- > Technical support during tendering stage
- Preparing progress reports for the project management unit and the world bank
- Follow up the performance of the implementation support consultant at each governorate



Title Golf Paradise Residential Compound at Dreamland

**Date** 2019

**Location** Dreamland - 6<sup>th</sup> of October city, Egypt

Client Dreamland Egypt – Member of Bahgat Group

Brief Description Preparing detailed designs for infrastructure works including (Roads -

Potable water - Irrigation - Wastewater - Electricity) for the residential

compound inside dreamland city.

Scope of Services T & I provided the following set of services:

> Preparing conceptual design report and drawings for all

infrastructure works.

Preparing detailed design drawings

> Preparing design calculation sheets for all networks and sewage

pump station

> Preparing tender documents

> Technical support during construction



Title **CPC Industrial Park at Sadat City** Date 2019 Location Industrial Zone -Sadat City, Menofia Governorate, Egypt Client Mega Build for Urban Development and Project Management & CPC Egypt for Industrial Development Company **Brief Description** Preparing detailed designs for infrastructure works including (Roads -Potable water - Irrigation - Wastewater - Electricity - Firefighting) for the industrial park with total area of 1.1 million m<sup>2</sup>. T & I provided the following set of services: **Scope of Services** > Preparing conceptual design report and drawings for all infrastructure works. Preparing detailed design drawings Preparing design calculation sheets for all networks Preparing tender documents

Technical support during construction



Title Zayed City Water Supply Main

**Date** 2019

**Location** Abu Dhabi, United Arab Emirates

Client Société Egyptienne D'Entreprises (SEDE)

**Brief Description**- Pipeline along the Abu Dhabi-Sweihan Road with an approximate length of about 20 km with pipe diameters of 1200 mm and 1600mm,

with Transco Lines.

- Additional 2km branch connection from the twin DN900 pipeline

with all necessary control and instrumentation devices at interfaces

connecting UAN and Unit IV Pumping Station.

# Scope of Services T & I provided the following set of services:

Review of hydraulic analysis reports, plans, and profiles of pipelines.

- ➤ Review of the stress analysis and surge analysis reports.
- ➤ Preparation of design criteria, structural calculations and reinforced concrete drawings for valve chambers, foundation of surge vessels, and pipes supports
- ➤ Preparing detailed design calculation to the temporary shoring for trenches side support of valve chambers, NDRC Pits
- ➤ Review and Coordinate among all project different specialized entities from the Owner, Contractor site office, Stakeholders, Authorities, and Outsource / third party specialists
- Technical support during construction
- Preparing As-built Drawings



Title Updating Master plan of Infrastructures Soma-Bay Resort, Hurghada

Date 2019

Location Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

**Brief Description** Studying the current status of the infrastructure works (Roads - Water - Irrigation - Sewage - Electricity) for the tourist resort of Soma Bay, which is located on an area of 10 million square meters in Ras Soma

area on the Red Sea shore.

Planning of the future facilities required during the various stages of development of the project.

#### T & I provided the following set of services: **Scope of Services**

- Study of the current situation.
- > Preparing conceptual designs for infrastructure works (roads water - sewage - electricity - information transmission network - sea water purification plant - sewage treatment plant - irrigation tanks from desalinated and treated water)



Al Urubah Road Low-Density Development Infrastructure Works-Riyadh, KSA

Date

2018

Location

Riyadh, Kingdom of Saudi Arabia

Client

HAK Architecture & Engineering Company

**Brief Description** 

Complete infrastructure works for 1,440,000 m<sup>2</sup> of a mixed-use community comprising of residential, commercial and retail areas, municipal services and public amenities to serve the community residents, open spaces and public realm.

#### Infrastructure works included:

- > Storm water drainage, Mass Grading and Road Profiles.
- Municipal water supply and firefighting system
- > Irrigation Water Supply System
- ➤ Wastewater collection system
- > Electrical Power Distribution Network
- > Street Lighting Network
- > Telecommunication Network

#### **Scope of Services**

At the onset of the project, T & I performed a comprehensive review of the proposed physical master plan to ensure an efficient and effective infrastructure master plan. Following this task T & I provided the following set of services:

# Water Infrastructure

- > Preparation of the water system's master plan.
- > Conceptual design of the water system
- Detailed design and preparation of tender documents for the water system

# **Sewer Infrastructure**

- > Preparation of the wastewater system's master plan.
- > Conceptual design of the wastewater system
- ➤ Detailed design and preparation of tender documents for the wastewater system



Title Sustainable Rural Sanitation Services Program for Results (SRSSP)

Funded by The World Bank

**Date** 2017

**Location** Sharkia Governorate, Egypt

Client Sharkia Water and Wastewater Company -Holding Company for

Potable Water and Wastewater

**Brief Description** Preparing detailed design, tender documents, support during tendering stage and construction supervision for sewage network, Pump Stations,

Force mains and Treatment plants at 63 villages distributed at 7

districts.

Field works:

Scope of Services T & I provided the following set of services:

Aerial Survey for each village and the surrounding satellites and the routes of force mains.

➤ Geotechnical works including boreholes with different depths and preparing geotechnical report

**Detailed Design** 

> Preparing plans, profiles and details for sewer network including roads, canals and drains crossing

> Hydraulic, architectural, structural, mechanical and electrical design for pump stations

- > Preparing plans, profiles and valve chambers details for force mains
- > Preparing tender documents, technical specifications, B.O.Q and estimated costs

#### **Construction Supervision**

- Evaluation of contractors technical and financial proposals
- Supervision of all construction works
- > Review of safety plan and risk management plan
- Supervision of operation and maintenance works for 1 year after



Preparation of preliminary and detailed designs, and preparation of tender documents for the irrigation water system of the farm located in Wadi El-Natrun

Date

2017

Location

Wadi El-Natrun, Beheira Governorate

Client

Mr. Samir Teriaq

**Brief Description** 

The farm is located in a desert area, specifically Wadi El-Natrun in Beheira Governorate, with an area of 1,200 feddans. Therefore, it is planned to use one of the modern irrigation systems, namely the drip irrigation system, as well as to select crops that require a low water quota in order to reduce the farm's overall water requirements. Irrigation will be carried out by constructing a number of artesian wells, with one well for every 100 feddans, making a total of 12 wells to supply the entire farm. The water from each well will be directed to a balancing reservoir, where a pumping station will be established at each reservoir to deliver the required flow rates and pressures to the drip irrigation network.

# **Scope of Services**

- ➤ **Topographic survey** of the entire farm area for Phase One (200 feddans), and preparation of survey drawings indicating all existing structures and roads.
- ➤ Preparation of the master plan of the farm, showing the subdivision of the land into a group of secondary farms, service roads, and locations of the required service facilities.
- > Study of the water requirements for the secondary farms, their distribution, and how to meet them.
- > Development of a proposed irrigation system and scheduling plan to serve the project.
- ➤ Carrying out soil investigations and sampling along the irrigation pipeline routes to determine soil properties down to a depth of approximately 5 meters, and at pumping station sites to a depth of 20 meters.
- > Selection of optimal locations and preparation of designs (architectural structural hydraulic electromechanical) for the required pumping station(s) within the farm to deliver water to all cultivated areas, in addition to the transmission pipelines.
- ➤ Design of the main and secondary irrigation networks, according to the types of crops proposed by the company.
- ➤ **Design of the agricultural drainage network** and study of how to manage the volumes of water collected through the drainage system.
  - > Study of the electrical requirements of the project and



- calculation of the required capacity.
- > Preparation of bills of quantities (BOQ) for civil and electromechanical works.
- > Study of the expected project costs and preparation of the cost estimate for the works.



Title Social Housing 1185 Buildings District Infrastructure Works 6th of

**October City** 

**Date** 2017

**Location** 6<sup>th</sup> Of October City, Egypt

Client New October city Authority

Brief Description

Conceptual and detailed design for infrastructure works for 2,500,000 m<sup>2</sup> including 1185 residential building for social housing and related commercial and retail areas, municipal services and public amenities to serve the community residents

#### **Infrastructure works included:**

- > Municipal water supply and firefighting system
- ➤ Irrigation Water Supply System
- Wastewater collection system

# **Scope of Services**

# T & I provided the following set of services:

# Water Network

- > Preparation of the water system's master plan.
- > Conceptual design of the water system
- Detailed design and preparation of tender documents for the water system

# **Sewer Network**

- > Preparation of the wastewater system's master plan.
- > Conceptual design of the wastewater system
- ➤ Detailed design and preparation of tender documents for the wastewater system

# **Irrigation Network**

- > Preparation of the treated water irrigation system's master plan
- ➤ Detailed design and determination of connection points with the main network of the city
- Final detailed design and preparation of the tender documents.



Al Aquiah Road Low-Density Development Infrastructure Works-Riyadh, KSA

Date

2016

Location

Diriyah town, Riyadh, Kingdom of Saudi Arabia

Client

**AWJ Holding Company** 

**Brief Description** 

Complete infrastructure works for 1,200,000 m<sup>2</sup> of a mixed-use community comprising of residential, commercial and retail areas, municipal services and public amenities to serve the community residents, open spaces and public realm.

#### Infrastructure works included:

- > Storm water drainage, Mass Grading and Road Profiles.
- > Municipal water supply and firefighting system
- > Irrigation Water Supply System
- ➤ Wastewater collection system
- ➤ Electrical Power Distribution Network
- > Street Lighting Network
- > Telecommunication Network

#### **Scope of Services**

At the onset of the project, T & I performed a comprehensive review of the proposed physical master plan to ensure an efficient and effective infrastructure master plan. Following this task T & I provided the following set of services:

# Water Infrastructure

- > Preparation of the water system's master plan.
- > Conceptual design of the water system
- Detailed design and preparation of tender documents for the water system

# **Sewer Infrastructure**

- > Preparation of the wastewater system's master plan.
- Conceptual design of the wastewater system
- ➤ Detailed design and preparation of tender documents for the wastewater system

#### **Electrical Infrastructure**

- ➤ Preparation of Power Supply & Lighting systems and telecommunication System Master Plan.
- ➤ Conceptual design of Power Supply , Lighting systems and telecommunication System Master Plan



- ➤ Detailed design and preparation of tender documents for Power Supply, Lighting systems and telecommunication System Master Plan
- Final detailed design and preparation of the tender documents.



Title Master Plan for tertiary treated wastewater system

**New Ismailia City** 

**Date** 2016

**Location** New Ismailia City, Egypt

Client Veolia Water Technology Egypt

Brief Description Preparing master plan for transmission and reuse of tertiary treated

wastewater for irrigation of public green areas inside New Ismailia city, and design of the transmission lines to the proposed irrigation water

tanks at each district of the city.

Scope of Services T & I provided the following set of services:

> Studying the hydraulic balance of the transmission lines network starting from the WWTP to the irrigation water tanks at each

district of the city

Studying discharge and head of the required irrigation pumps at

each stage of the project

> Studying the way to dispose of excess quantities of treated water



Title Master Plan for wastewater system at New Ismailia City

**Date** 2016

**Location** New Ismailia City, Egypt

Client Safa Misr for Contracting and Trading (SAMCO)

**Brief Description** Preparing master plan for collection and transmission of wastewater from different districts of New Ismailia city, and design of the inlet

tower for the 1st P.S forcemain to the treatment plant and the tertiary

treated water P.S.

Scope of Services <u>First Stage</u>:

➤ Preparing the master plan for the wastewater collection and transmission system

Second Stage:

> Preparing detailed design and technical support including:

> Structural design of the inlet tower for the 1<sup>st</sup> P.S forcemain to the treatment plant

Preparing detailed design for the tertiary treated pump station

> Technical support during construction

Preparing As-built Drawings



Title AZHA Resort, Ain Sokhna

**Date** 2016

**Location** Ain Sokhna City, Egypt

**Client** Farida Resort Company

Brief Description Preparing hydrological study, water resources study and hydraulic

balance for AZHA resort

Scope of Services T & I provided the following set of services:

> Studying the storm water sheds at the project area

➤ Preparing hydrological study to calculate the estimated discharges of storm water and the required protection works

> Studying the available water resources at the project location

> Studying different alternatives to provide the project with the required water demands

> Studying capacity of booster station, water tanks, desalination plant and wastewater treatment plant required for the project



Title Social Housing District at the Eastern Façade Infrastructure

**Works-Shorouk City** 

**Date** 2016

**Location** Shorouk City, Egypt

Client Shorouk City Authority

Brief Description

Conceptual and detailed design for infrastructure works for the Social Housing District at the Eastern Façade of Shorouk city and related commercial and retail areas, municipal services and public amenities to serve the community residents.

# **Infrastructure works included:**

- > Municipal water supply and firefighting system
- > Irrigation Water Supply System
- ➤ Wastewater collection system

#### **Scope of Services**

At the onset of the project, T & I performed a comprehensive review of the proposed physical master plan to ensure an efficient and effective infrastructure master plan. Following this task T & I provided the following set of services:

#### Water Infrastructure

- > Preparation of the water system's master plan.
- Conceptual design of the water system
- Detailed design and preparation of tender documents for the water system

#### **Sewer Infrastructure**

- > Preparation of the wastewater system's master plan.
- ➤ Conceptual design of the wastewater system
- ➤ Detailed design and preparation of tender documents for the wastewater system

#### **Irrigation Network**

- > Preparation of the treated water irrigation system's master plan
- ➤ Detailed design and determination of connection points with the main network of the city
- Final detailed design and preparation of the tender documents.



Title Wastewater Treatment Plant with capacity 20,000 m<sup>3</sup>/d and two

pump stations at New Ismailia City

**Date** 2016

**Location** New Ismailia City, Egypt

Client Safa Misr for Contracting and Trading (SAMCO)

**Brief Description** Preparing detailed design for the architectural, structural, electrical and lighting works for the wastewater treatment plant with capacity 20,000

m<sup>3</sup>/d at new Ismailia city, and the main and secondary pump stations at

the first district of the city.

Scope of Services T & I provided the following set of services:

> Preparing architectural detailed designs

> Preparing structural detailed designs

> Preparing electrical and lighting detailed designs

> Technical support during construction

> Preparing As Built drawings



Title

Updating the Master Plan of the sewage projects for the East Bank Sector at the Greater Cairo

Date

2015

Location

Greater Cairo (Cairo - Helwan - Qalyubia)

Client

The Construction Authority for Potable Water and Wastewater (CAPW)

**Brief Description** 

Updating the master plan for wastewater at the greater Cairo East Bank Sector according to the new development plans and population increase and distribution, to evaluate the wastewater system at the current situation and recommend the required projects to sustain and update the level of service until the target year 2040

#### **Scope of Services**

- ➤ Build a geographic information system (GIS) database
- ➤ Identification and classification of different population activities (Residential Commercial Industrial Administrative etc.) and determine the peak factors that covers the peak hours
- ➤ Collection of all available data, including previous studies, technical reports and operation and maintenance reports in order to monitor operational problems
- Assessment of the current and future situation for Gravity pipe networks, pump stations, Force mains and 4 wastewater treatment plants with a total capacity of 3.5 million m3/day by conducting a hydraulic and process analysis of all items to identify its adequacy to the technical standards
- ➤ Updating of the Master plan for the East Bank Sector until the target year 2040
- ➤ Preparation of cost estimates for the proposed projects and an annual Budget plan which describes the order of projects according to their priority and the most appropriate date for implementation



Title Wastewater Treatment Plant with capacity 2,000 m<sup>3</sup>/d

Service Village – Farafra - New Valley Governorate

**Date** 2015

**Location** Farafra - New Valley Governorate, Egypt

Client Arabic Projects Company for Urban Development

**Brief Description** Preparing detailed design for the architectural, structural, electrical and

lighting works for the wastewater treatment plant with capacity 2,000

m<sup>3</sup>/d at the service village

Scope of Services T & I provided the following set of services:

Preparing all layout drawings

Preparing architectural detailed designs

Preparing structural detailed designs

Preparing electrical and lighting detailed designs

> Technical support during construction

> Preparing As Built drawings



Title Rehabilitation of the Balance Tank at Arab Abo Said - Helwan Date 2013 Arab Abo Said - South of 15th of May City, Helwan, Egypt Location Client Arab Contractors, Dredging and Marine Constructions Rehabilitation of the existing balance tank with capacity 1,000,000 m<sup>3</sup> **Brief Description** located at the first reach of Al Saf Canal, which receive the treated wastewater from Helwan wastewater treatment plant

**Scope of Services** 

- Studying the current situation for the system
- Hydraulic study for the tank and the inlet feeding forcemains
- Studying slope stability for inlet and outlet side slopes
- Preparing detailed design of the riprap protection works for side slopes
- Preparing As Built drawings



Title Al Mousa view Site Grading works- Jeddah, KSA

**Date** 2013

Location Jeddah, Kingdom of Saudi Arabia

Client Al Mousa International Real Estate Development

Brief Description

Site Grading works for 3000000 m<sup>2</sup> of a mixed-use community comprising of residential, commercial and retail areas, municipal services and public amenities to serve the community residents, open

spaces and public realm.

#### **Works included:**

Storm water drainage,

Mass Grading and Profiles.

# **Scope of Services**

# T & I provided the following set of services:

➤ 3D Mass Grading Plan based on the current master plan, approved final master plan, Concept grading plan, site topography and T& I recommendations. Considering direct coordination with the international master planner along the stages.

# Following this task T & I provided the following:

- ➤ Initial concept Grading Plan in Civil 3D format reflecting proposed final contours.
- Final concept Grading Plan in Civil 3D format reflecting proposed final contours based on the final approved master plan.



Title Al-Muhaid

Al-Muhaideb Community Infrastructure Works-Jeddah, KSA

**Date** 2013

**Location** Jeddah, Kingdom of Saudi Arabia

Client Al-Muhaideb Real Estate Development

Brief Description

Complete infrastructure works for 700000 m2 of a mixed-use community comprising of residential, commercial and retail areas, municipal services and public amenities to serve the community residents, open spaces and public realm.

**Infrastructure works included:** 

Storm water drainage, Mass Grading and Road Profiles.

Municipal water supply and firefighting system

➤ Irrigation Water Supply System

➤ Wastewater collection system

➤ Electrical Power Distribution Network

Street Lighting Network

> Telecommunication Network

#### **Scope of Services**

# T & I provided the following set of services:

At the onset of the project, T & I performed a comprehensive review of the proposed physical master plan to ensure an efficient and effective infrastructure master plan. Following this task T & I provided the following set of services:

#### Water Infrastructure

- > Preparation of the water system's master plan.
- > Conceptual design of the water system
- Detailed design and preparation of tender documents for the water system

#### Sewer Infrastructure

- > Preparation of the wastewater system's master plan.
- ➤ Conceptual design of the wastewater system
- > Detailed design and preparation of tender documents for the wastewater system



Title Masharef 2E Community Infrastructure Works-Jeddah, KSA

**Date** 2012

**Location** Jeddah, Kingdom of Saudi Arabia

Client Kinan International Real Estate Development

Brief Description

Complete infrastructure works for 1.0 million m² of a mixed-use community comprising of residential, commercial and retail areas, municipal services and public amenities to serve the community residents, open spaces and public realm.

#### **Infrastructure works included:**

- > Storm water drainage, Mass Grading and Road Profiles.
- Municipal water supply and firefighting system
- ➤ Irrigation Water Supply System
- ➤ Wastewater collection system
- ➤ Electrical Power Distribution Network
- Street Lighting Network
- > Telecommunication Network

#### **Scope of Services**

# T & I provided the following set of services:

At the onset of the project, T & I performed a comprehensive review of the proposed physical master plan to ensure an efficient and effective infrastructure master plan. Following this task T & I provided the following set of services:

#### Water Infrastructure

- > Preparation of the water system's master plan.
- > Conceptual design of the water system.

#### **Sewer Infrastructure**

- > Preparation of the wastewater system's master plan.
- > Conceptual design of the wastewater system.



Title Salman bay Community Infrastructure Works-Jeddah, KSA

**Date** 2012

**Location** Jeddah, Kingdom of Saudi Arabia

Client Kinan International Real Estate Development

Brief Description

Complete infrastructure works for Salman Bay north Jeddah on the west coast of the Kingdom of Saudi Arabia on 1.2 million m<sup>2</sup> of a mixed use community comprising of residential, commercial and retail areas, municipal services and public amenities to serve the community

residents, open spaces and public realm.

**Infrastructure works included:** 

➤ Water distribution system

> Wastewater collection system

> Irrigation Water Supply System

> Fire Fighting system

#### **Scope of Services**

#### T & I provided the following set of services:

At the onset of the project, T & I performed a comprehensive review of the proposed physical master plan to ensure an efficient and effective infrastructure master plan. Following this task T & I provided the following set of services:

#### **Water Infrastructure**

- ➤ Preparation of the water, Irrigation and Fire Fighting system's master plan.
- Conceptual design of the water system
- Detailed design and preparation of tender documents for the water system

#### **Sewer Infrastructure**

- > Preparation of the wastewater system's master plan.
- > Conceptual design of the wastewater system
- ➤ Detailed design and preparation of tender documents for the wastewater system



Title Consulting Services, Studies, Detailed Design, Preparing Tenders

documents and Construction supervision for Al Husayneya 7 km of 900mm Transmission line & Raw Water Pump Station with

capacity 75,000 m<sup>3</sup>/day Station

Starting Date August 2010

**Duration** 15 Months

**Location** Al Husayneya City – Al Sharkeya

Client National Organization for Potable Water & Sanitary Drainage

**Brief Description & Scope of Services** 

- Analysis and Study of the water quality and capacity of the existing canals as a source of Raw Water
- > Topographic Surveying and Geotechnical works
- ➤ Detailed Hydraulics, Electro-mechanics, Structural, and Architectural Design for a new Intake, Raw Water pump station with 78,000 m³/day capacity, 900mm diameter transmission line to serve Al-Husayneya water treatment plant.
- Water Hammer protection analysis
- Preparing Required Tender Documents
- > Construction Supervision



Title Consulting Services, Studies, Detailed Design, preparing Tender documents and Construction Supervision for sewerage network

rehabilitation project at Hamamat Al Koba and Al Zayton

**Starting Date** 

June 2010

**Duration** 

14 Months

Location

Hamamat Al Koba and Al Zayton

Client

The Construction Authority for Potable Water and Wastewater "CAPW

**Brief Description & Scope of Services** 

- ➤ Preparing studies considering the existing sewerage network upstream and downstream conditions to withstand expected population growth and saturation stage.
- Topographic Surveying and Geotechnical works
- ➤ Detailed Hydraulic design for sewerage network rehabilitation from 300mm up to 1200mm diameter sewer lines.
- > Preparing required Tender documents
- > Construction Supervision



Title Analyze the pressurized irrigation Transmission line and distribution pipe network for 30,000 feddans at New Cairo City.

Starting Date May, 2010

End Date December, 2010

**Location** New Cairo City

Client Construction Authority For Potable Water And Wastewater (CAPW) In

Egypt

**Brief Description** Analysis and check of design for the pressurized treated wastewater conveyance systems for New Cairo City.

Scope of Work T & I provided the following set of services:

- ➤ Collecting data and Layouts of the pressurized treated wastewater conveyance systems for New Cairo City.
- Analysis and check of design for the pressurized transmission line 1000mm and distribution pipe network to investigate it's frequent bursting
- Analysis and check of design for the storage facilities, and calculation of pumping requirements.
- ➤ Provide detailed design solutions for the pressurized transmission line and distribution pipe network to eliminate this frequent bursting.
- Preparation of Specifications and tender documents.



Title Consulting Services, Studies, Detailed Design, preparing Tender

documents and Construction Supervision for sewerage network

rehabilitation project at the Fern area of Cairo

Starting Date February 2010

**Duration** 14 Months

**Location** Shoubra – Al Zawia Al Hamra, Cairo

Client The Construction Authority for Potable Water and Wastewater "CAPW"

**Brief Description & Scope of Services** 

- ➤ Preparing studies considering the existing sewerage network upstream and downstream conditions to withstand expected population growth and saturation stage.
- Topographic Surveying and Geotechnical works
- ➤ Detailed Hydraulic design for sewerage network rehabilitation from 300mm up to 600mm diameter sewer lines.
- Preparing required Tender documents
- > Construction Supervision



Title Design Reviewing and Construction Supervision of water and waste water projects in some areas in 10th of Ramadan City October 2009 **Starting Date** 12 Months Duration Location 10th of Ramadan City Client The Construction Authority for Potable Water and Wastewater "CAPW" **Brief Description &** T & I provided the following set of services: **Scope of Services** ➤ Reviewing of preliminary design and technical specification Reviewing of Method Statement and time schedule Reviewing of Topographic Surveying and Geotechnical works Reviewing of water and waste water network Detailed Design Drawings for Industrial area A-4 and A-6 > Reviewing of Detailed Hydraulic, Electromechanical Structural and architectural Design Drawings for irrigation pump station and networks for the Second stage of planting 2000 Acres Reviewing of Water Hammer protection analysis Reviewing of Bill of Quantity Construction Supervision



Title Consulting Services, Studies, Detailed Design, preparing Tender

documents and Construction Supervision for sewerage network

rehabilitation project at Ain Shams area.

Starting Date September 2009

**Duration** 45 Months

**Location** Ain Shams- Cairo

Client The Construction Authority for Potable Water and Wastewater "CAPW"

**Brief Description & Scope of Services** 

- ➤ Preparing studies considering the existing sewerage network upstream and downstream conditions to withstand expected population growth and saturation stage.
- ➤ Topographic Surveying and Geotechnical works
- ➤ Detailed Hydraulic design for sewerage network rehabilitation from 600mm up to 2250mm sewer lines and main trunks.
- > Preparing required Tender documents
- > Construction Supervision



Title Consulting Services, Reviewing Detailed Design and Construction

Supervision for Ain Shams wastewater pump station expansion with capacity  $600,000~\text{m}^3/\text{day}$  and new 8.3 km of 1500mm Pre-Stressed

R.C Force Main Pipe Line.

**Starting Date** 

September 2009

**Duration** 

18 Months

Location

Ain Shams - Cairo

Client

The Construction Authority for Potable Water and Wastewater "CAPW"

# **Brief Description & Scope of Services**

- Reviewing of preliminary design and technical specification
- ➤ Reviewing of Method Statement and time schedule
- Reviewing of Topographic Surveying and Geotechnical works
- Reviewing of Detailed Hydraulic, Electromechanical, Instrumentation, control, Structural and Architectural Design Drawings For pump station with 600,000 m³/day capacity and 1500mm force main with 8.5Km Length for stage one.
- ➤ The design review included of ground water control systems
- ➤ The design review included of Water Hammer protection analysis
- The design review included of Bill of Quantity
- > The design review included of SCADA system.
- Construction Supervision



Title Consulting Services, Studies and preparing Tender documents for

(water - waste water - Irrigation -Roads) networks for Koraa (A-B), Al-Mostasmer and Al-Mo'asast Al-Dowlia areas at 6th of October

City.

Starting Date August 2009

**Duration** 24 Months

**Location** 6th of October City

Client The Construction Authority for Potable Water and Wastewater "CAPW"

**Brief Description & Scope of Services** 

T & I provided the following set of services:

Topographic Surveying and Geotechnical works

➤ Detailed Hydraulics Design for water and Irrigation networks.

➤ Detailed Hydraulics Design for waste water network.

> Detailed Road network Design



Title Design Reviewing and Construction Supervision of Al-Senbelaween water treatment plant Expansion **Starting Date** August 2009 18 Months Duration Location Al-Senbelaween city – Al-Dakahleya Governorate Client National Organization for Potable Water & Sanitary Drainage **Brief Description &** T & I provided the following set of services: **Scope of Services** Reviewing of preliminary design and technical specification Reviewing of Method Statement and time schedule Reviewing of Topographic Surveying and Geotechnical works Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for water treatment plant Expansion from 34,000 m<sup>3</sup>/day capacity to 68,000 m<sup>3</sup>/day. Reviewing of ground water control systems Reviewing of Water Hammer protection analysis Reviewing of Bill of Quantity Construction Supervision



Title Consulting services, Reviewing designs and construction Supervision of El-Waleedyah water treatment plant (52,000 m<sup>3</sup>/day) **Starting Date** August 2009 18 Months **Duration** Location El- Waleedyah city -Assiout Client National Organization for Potable Water & Sanitary Drainage **Brief Description &** T & I provided the following set of services: **Scope of Services** Reviewing of preliminary design and technical specification Reviewing of Method Statement and time schedule Reviewing of Topographic Surveying and Geotechnical works Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for the plant Reviewing of ground water control systems Reviewing of Water Hammer protection analysis Reviewing of Bill of Quantity Construction Supervision



Title	Nile's West Bank Sanitary Drainage Master plan
Starting Date	April 2009
Duration	24 Months
Location	Giza Governorate
Client	The Construction Authority for Potable Water and Wastewater "CAPW"
Brief Description & Scope of Services	<ul> <li>T &amp; I provided the following set of services:</li> <li>Preparing studies considering the existing sewerage network upstream and downstream conditions to withstand expected population growth and saturation stage.</li> <li>Reviewing the situation of the two sewage treatment plants existing in Abu Rawash and Zeneen with 1.5 million m³/day capacity.</li> <li>Studying the capability of main sewer lines re-routing to new pumping station at the southern zone with tow force mains 1500mm diameter to new waste water treatment plant in Shabrament with 600,000 m³/day capacity.</li> <li>Preparing required Tender documents</li> </ul>



Title Consulting Services, Studies and Construction Supervision for

(water - waste water - Irrigation -Roads) networks for 5th ,6th

and 8th industrial area at El-Sadat City

Starting Date April 2009

**Duration** 24 Months

**Location** El-Sadat City

Client National Organization for Potable Water & Sanitary Drainage

**Brief Description & Scope of Services** 

T & I provided the following set of services:

> Topographic Surveying and Geotechnical works

Detailed Hydraulics Design for water and Irrigation network.

> Detailed Hydraulics Design for waste water network.

> Detailed Road network.

> Construction Supervision



**Title** Consulting services, studies and **Detailed Design** the Rehabilitation of the existing Wastewater treatment plant (60,000

m<sup>3</sup>/day) in Shebeen El Koam - Egypt

April 2009 **Starting Date** 

**Duration** 24 Months

Location Shebeen El koom- El Monofeya

Client National Organization for Potable Water & Sanitary Drainage

**Brief Description & Scope of Services** 

- Reviewing the existing structural, Hydraulics, process, Electromechanical and architectural works for each item of the waste water treatment plant.
- Preparing the tender documents, Technical specifications and Bill of Quantities for the rehabilitation of the existing waste water treatment



Title Consulting services, studies and Detailed Design for Replacement of the pump stations (No.1 and No.4) force mains in Shibeen el Koom **Starting Date** April 2009 24 Months Duration Location Shebeen El koom- El Monofeya Client National Organization for Potable Water & Sanitary Drainage **Brief Description &** T & I provided the following set of services: **Scope of Services** > Preparing studies considering the expected population growth and saturation stage. Topographic Surveying and Geotechnical works Detailed Hydraulic design for the new force main with total length of 6.0 Km and 600mm diameter for pump station no.1. Detailed Hydraulic design for the new force main with total length of 4.5 Km and 500mm diameter for pump station no.4. Preparing the tender documents, Technical specifications and Bill of Quantities for the new force mains



Title Consulting Services, detailed design drawings, Technical Support for

the construction company for pump station and 18 km of 1000mm D.C.I. Transmission Pipe line at Al-Shorouk City with capacity

 $100,000 \text{ m}^3/\text{day}.$ 

Starting Date

February 2009

**Duration** 

12 Months

Location

Al-Shorouk & Badr Cities

Client

Arab Contractors "Osman Ahmed Osman"

**Brief Description & Scope of Services** 

- Topographic Surveying and Geotechnical works
- ➤ Detailed Hydraulics, Electro-mechanics, Structural, and Architectural Design for Booster station with 100,000 m³/day capacity and transmission line 1000mm to Badr City with length of 18Km.
- ➤ Water Hammer protection analysis
- > SCADA system design.
- > Consulting service for implementation of construction



Title Consulting Services, detailed design drawings, Technical Support for

the construction company for Pump Station at Al-Obour 30 km of 1000 mm D.C.I. Transmission Pipe line, from Al-Obour to

Al-Shrouk and Badr City.

Starting Date

February 2009

**Duration** 

12 Months

Location

Al-Obour & Al-Shorouk

Client

Arab Contractors "Osman Ahmed Osman"

# **Brief Description & Scope of Services**

- Topographic Surveying and Geotechnical works
- ➤ Detailed Hydraulics, Electro-mechanics and Structural Design for Booster station with 100,000 m³/day capacity and transmission line 1000mm to Al-Shorouk City with length of 33Km.
- ➤ Water Hammer protection analysis
- > SCADA system design.
- > Consulting service for implementation of construction



Title Consulting Services, detailed design Drawings, Technical Support for

the construction company for intake, 1 km of 1800 mm pre-stressed R.C. Transmission Pipe line and Intermediate Raw Water Pump stations for the extension of El-Oubor water Treatment plant with

capacity  $440,000 \text{ m}^3/\text{day}$ .

Starting Date February 2009

**Duration** 12 Months

**Location** El-Obour City

Client Arab Contractors "Osman Ahmed Osman"

# **Brief Description & Scope of Services**

- > Study the water quality and capacity of the existing canals as a source of Raw Water
- > Topographic Surveying and Geotechnical works
- ➤ Detailed Hydraulics, Electro-mechanics, Structural, and Architectural Design for a new shore Intake, Intake & Intermediate Raw Water Pump stations, Transmission line 1800mm diameter with length of 10Km.
- ➤ Design of four manipulation valve chambers to connect the new transmission line 1800mm diameter with the two existing 1800mm diameter transmission lines
- Water Hammer protection analysis
- > SCADA system design.
- > Consulting service for implementation of construction



Title **Consulting Services, Studies and Construction Supervision of Potable** and waste water projects in El-Sadat City **Starting Date** January 2009 Duration 48 Months Location **El-Sadat City** Client National Organization for Potable Water & Sanitary Drainage **Brief Description &** T & I provided the following set of services: **Scope of Services** > Preparing studies considering the existing water and sanitary drainage networks, population growth and saturation stage. Studying water and waste water treatment plants capacity and its capability to withstand future demands Green areas Irrigating Network with total length 50km and diameters from 250mm up to 800mm Green areas irrigation pump station with 60,000 m<sup>3</sup>/day capacity. Balancing Lagoons with capacity of 40,000 m<sup>3</sup>/day Rehabilitation of the existing Waste Water Treatment plant **Construction Supervision** 



Title Consulting services, Reviewing designs and construction Supervision of Fayoum No.1 & No.2 **Starting Date** January 2009 Duration 24 Months Location 6<sup>th</sup> of October City Client National Organization for Potable Water & Sanitary Drainage **Brief Description &** T & I provided the following set of services: **Scope of Services** Reviewing of preliminary design and technical specification Reviewing of Method Statement and time schedule Reviewing of Topographic Surveying and Geotechnical works Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for Fayoum no.1 waste water pump station with total capacity 100,000 m<sup>3</sup>/day. > Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for Fayoum no.2 waste water pump station with total capacity 50,000 m<sup>3</sup>/day. Reviewing of ground water control systems Reviewing of Water Hammer protection analysis Reviewing of Bill of Quantity Construction Supervision



Title Consulting services, Reviewing designs and construction Supervision for the main pump station no.2 March 2007 **Starting Date** 36 Months Duration 6<sup>th</sup> of October City Location Client National Organization for Potable Water & Sanitary Drainage **Brief Description &** T & I provided the following set of services: **Scope of Services** Reviewing of preliminary design and technical specification Reviewing of Method Statement and time schedule Reviewing of Topographic Surveying and Geotechnical works Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for waste water pump station with total capacity 260,000 m<sup>3</sup>/day. Reviewing of ground water control systems Reviewing of Water Hammer protection analysis Reviewing of Bill of Quantity Construction Supervision



Title Nubaria Canal Lock.

Starting Date October 2008

**Location** Nubaria Canal, Km 100 Ameria, Alexandria.

**Duration** 36 Months

Client The Arab Contractors, Osman Ahmed Osman

Brief Description

The construction of new lock at km 100 on El-Nubaria Canal. The project objectives are to replace the current lock, decrease the average of the traffic time for the navigation units from 30 to 20 minutes, decrease the waste water, face the expected increase on the river transport, decrease the water pressure on the gates to 50% and achieve the

possibility of passing the river units in case of the river low level.

**Scope of Services** 

- ➤ Hydraulic design of covering El-Tahrir drain (Inlet, Outlet, Pipes & pipe's serving structure).
- > Structure design of covering El-Tahrir drainage (Inlet, Outlet, & pipe's serving structure).
- > Study of the in-situ slope stability during and after construction considering the traffic loads, railway & dewatering effects.
- Prepare the method statement for construction.
- Providing technical support during construction.
- Preparing BOQ and the as built drawings



Title Construction Management and Supervision for Infrastructure Works

for El-Madena El-Khadra – El-Khartoum – Sudan (800 Faddan)

Starting Date August 2008

**Duration** 12 Month

**Location** El-Khartoum City – Sudan

Client BARWA Co. Qater

Brief Description | Complete infrastructure works for the 800 feddan (335 hectare)

Infrastructure works included Water distribution system, Wastewater collection system, Road network, Firefighting network, Permanent wastewater treatment plant, Power supply, lighting systems and

telecommunication network

Scope of Services T & I provided the following set of services:

At the onset of the project, T & I performed a comprehensive review of the proposed physical master plan to ensure an efficient and effective infrastructure master plan. Following this task T & I provided the following

set of services:

Road infrastructure:

Preparation of transportation studies for the resort

> Preparation of the road network master plan.

**Water Infrastructure** 

> Preparation of the water system's master plan.

> Conceptual design of the water system

**Sewer Infrastructure** 

> Preparation of the wastewater system's master plan.

Conceptual design of the wastewater system

**Lighting and communication Infrastructure** 

➤ Preparation of the Power supply and lighting systems network master plan.

- Preparation of telecommunication network master plan.
- > Preparation of the Infrastructure networks master plan.
- Planning and conceptual design of the infrastructure network.
- Final detailed design and preparation of the tender documents.
- ➤ Construction Management & Supervision for the infrastructure systems, including: Roadways, Parking facilities, water supply and distribution system, wastewater collection, treatment and management system, irrigation of green areas, power supply and lighting systems and

# telecommunication system





Title Consulting services, studies, Detailed Design and Construction

**Supervision for Infrastructure Works for Dreamland Residential** 

City (1200 Feddan) El Khartoum - Sudan

Starting Date May 2008

**End date** Current

**Location** El-Khartoum City – Sudan

Client Talaat and Imam Consulting Engineering (TICE)

Bahgat Group & Co.

**Brief Description & Scope of Services** 

- > Preparation of the Infrastructure networks master plan.
- Planning and conceptual design of the infrastructure network.
- Final detailed design and preparation of the tender documents.
- Construction Management & Supervision for the infrastructure systems, including: Roadways, Parking facilities, water supply and distribution system, wastewater collection, treatment and management system, irrigation of green areas, power supply and lighting systems and telecommunication system



Title

Consulting services, Reviewing designs and construction supervision of Water & Wastewater Projects - Assuit Governorate – Egypt.

**Starting Date** 

July 2008

**Duration** 

36 Months

Location

Assuit Gov. - Egypt

Client

National Organization for Potable Water & Sanitary Drainage

# Brief Description & Scope of Services

- ➤ Reviewing of preliminary design, Method Statement, technical specification and time schedule
- ➤ Reviewing of Topographic Surveying and Geotechnical works
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for waste water treatment plant (El Badary Sedfa El Ganyem) with total 65,000 m³/day capacity.
- ➤ Reviewing of Detailed Hydraulic Design Drawings for waste water network with total length of 85 Km and diameters from 200mm to 900mm.
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for water treatment plant (Abo Teg El Badary Sedfa El Ganyem) with total 175,000 m³/day capacity.
- ➤ Reviewing of Detailed Hydraulic Design Drawings for water network with total length of 130 Km and diameters from 200mm to 1200mm.
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for 5 sewage pump Stations with total 65,000 m³/day
- Reviewing of Detailed Hydraulic Design Drawings for Force mains with total length of 22 Km and diameters from 400mm to 800mm
- Reviewing of ground water control systems
- ➤ Reviewing of Water Hammer protection analysis
- Reviewing of Bill of Quantity
- ➤ Construction Supervision



Consulting services, Reviewing designs and construction Supervision of Water & Wastewater Projects at Ismailia Governorate.

**Starting Date** 

July 2008

**Duration** 

36 Months

Location

Ismailia Gov. - Egypt

Client

National Organization for Potable Water & Sanitary Drainage

## Brief Description & Scope of Services

- ➤ Reviewing of preliminary design, Method Statement, technical specification and time schedule
- > Reviewing of Topographic Surveying and Geotechnical works
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for 9 waste water treatment plants with total 170,000 m³/day capacity.
- ➤ Reviewing of Detailed Hydraulic Design Drawings for waste water network with total length of 250 Km and diameters from 175mm to 900mm.
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for 3 water treatment plants with total 260,000 m3/day capacity.
- ➤ Reviewing of Detailed Hydraulic Design Drawings for water network with total length of 400 Km and diameters from 200mm to 1200mm.
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for 44 sewage pump Stations with total 550,000 m3/day
- ➤ Reviewing of Detailed Hydraulic Design Drawings for Force mains with total length of 125 Km and diameters from 100mm to 700mm
- Reviewing of ground water control systems
- Reviewing of Water Hammer protection analysis
- Reviewing of Bill of Quantity
- Construction Supervision



Consulting services, Reviewing designs and construction Supervision of Water & Wastewater Projects Qwesna & Berket Elsabaa – Monofeia Governorate - Egypt.

**Starting Date** 

July 2008

**Duration** 

36 Months

Location

Monofeia Gov. - Egypt

Client

National Organization for Potable Water & Sanitary Drainage

## Brief Description & Scope of Services

- ➤ Reviewing of preliminary design, Method Statement, technical specification and time schedule
- > Reviewing of Topographic Surveying and Geotechnical works
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for 4 waste water treatment plants with total 110,000 m3/day capacity.
- ➤ Reviewing of Detailed Hydraulic Design Drawings for waste water network with total length of 210 Km and diameters from 175mm to 900mm.
- Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for 3 water treatment plants with total 200,000 m3/day capacity.
- ➤ Reviewing of Detailed Hydraulic Design Drawings for water network with total length of 210 Km and diameters from 300mm to 1400mm.
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for 16 sewage pump Stations with total 250,000 m3/day
- ➤ Reviewing of Detailed Hydraulic Design Drawings for Force mains with total length of 125 Km and diameters from 250mm to 600mm
- Reviewing of ground water control systems
- Reviewing of Water Hammer protection analysis
- Reviewing of Bill of Quantity
- Construction Supervision



Consulting services, Reviewing designs and construction supervision of Water & Wastewater Projects at Tala & Shebeen El Kom Monofeia Governorate - Egypt

**Starting Date** 

July 2008

**Duration** 

36 Months

Location

Monofeia Gov. - Egypt

Client

National Organization for Potable Water & Sanitary Drainage

## Brief Description & Scope of Services

- ➤ Reviewing of preliminary design, Method Statement, technical specification and time schedule
- > Reviewing of Topographic Surveying and Geotechnical works
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for 1 wastewater treatment plant with total 30,000 m3/day capacity.
- ➤ Reviewing of Detailed Hydraulic Design Drawings for waste water network with total length of 200 Km and diameters from 175mm to 700mm.
- Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for 2 water treatment plants with total 190,000 m3/day capacity.
- ➤ Reviewing of Detailed Hydraulic Design Drawings for water network with total length of 70 Km and diameters from 250mm to 1200mm.
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for 16 sewage pump Stations with total 160,000 m3/day
- ➤ Reviewing of Detailed Hydraulic Design Drawings for Force mains with total length of 75 Km and diameters from 250mm to 600mm
- Reviewing of ground water control systems
- Reviewing of Water Hammer protection analysis
- Reviewing of Bill of Quantity
- Construction Supervision



Title Reviewing Supervision of Detailed Construction Drawing of Sewage Projects – Kafr Shokr – Qalyubia Governorate - Egypt.

Starting Date November 2007

**Duration** 36 Months

**Location** Qalubia - Egypt

Client The Construction Authority for Potable Water and Wastewater "CAPW"

# **Brief Description & Scope of Services**

- ➤ Reviewing of preliminary design, Method Statement, technical specification and time schedule
- ➤ Reviewing of Detailed Hydraulic Design Drawings for waste water networks.
- ➤ Reviewing of Topographic Surveying and Geotechnical works
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for 3 sewage pump Stations
- Reviewing of Detailed Hydraulic Design Drawings for Force mains
- > Reviewing of ground water control systems
- > Reviewing of Water Hammer protection analysis
- Reviewing of Bill of Quantity
- Construction Supervision



Consulting Services, Studies, Detailed Design, preparing Tender documents and Construction Supervision for infrastructure works at the developers Zone –  $6^{th}$  of October - Egypt .

**Starting Date** 

October 2007

**Duration** 

11 Months

Location

6<sup>th</sup> of October - Egypt

Client

The Construction Authority for Potable Water and Wastewater "CAPW"

# **Brief Description & Scope of Services**

- > Preparing studies considering the expected population growth and industrial development to saturation stage.
- > Topographic Surveying and Geotechnical works
- ➤ Detailed Hydraulic design for the new pump station with 130,000 m3/day capacity.
- ➤ Detailed Hydraulic design for the new Water Networks with 400mm up to 800mm diameter.
- ➤ Detailed Hydraulic design for the new sewerage Networks with 800mm up to 1200mm diameter.
- ➤ Detailed Hydraulic design for the new force main
- Detailed Road Networks design
- Preparing the tender documents, Technical specifications and Bill of Quantities for the new force mains
- Construction Supervision



Consulting services, Reviewing designs and construction Supervision for the Northern pump station No.2

**Starting Date** 

March 2007

**Duration** 

36 Months

Location

6th of October - Egypt

Client

The Construction Authority for Potable Water and Wastewater "CAPW"

## **Brief Description & Scope of Services**

- ➤ Reviewing of preliminary design, Method Statement, technical specification and time schedule
- > Reviewing of Detailed Hydraulic Design Drawings for waste water networks.
- ➤ Reviewing of Topographic Surveying and Geotechnical works
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for the northern pump station with total capacity of 120,000 m3/day
- ➤ Reviewing of Detailed Hydraulic Design Drawings for Force mains 800mm diameter for stage 1
- > Reviewing of ground water control systems
- ➤ Reviewing of Water Hammer protection analysis
- Reviewing of Bill of Quantity
- Construction Supervision



Title Design, review and construction of Water Treatment Plant Project

Kafr El-Elw – (400,000 m<sup>3</sup>/Day) Helwan - Egypt

**Starting Date** March 2007

**Duration** 48 Months

**Location** Helwan - Egypt

Client The Construction Authority for Potable Water and Wastewater "CAPW"

**Brief Description & Scope of Services** 

- ➤ Reviewing of preliminary design and technical specification
- Reviewing of Method Statement and time schedule
- ➤ Reviewing of Topographic Surveying and Geotechnical works
- ➤ Reviewing of Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for water treatment plant 400,000 m³/day capacity.
- > Reviewing of ground water control systems
- ➤ Reviewing of Water Hammer protection analysis
- ➤ Reviewing of Bill of Quantity
- ➤ Construction Supervision



Preparing Studies, Detailed Design and Supervision of Wastewater Project for Manyal Sheha & Tamoh – Giza Governorate.

**Starting Date** 

March 2007

**Duration** 

38 Months

Location

Giza - Egypt

Client

The Construction Authority for Potable Water and Wastewater "CAPWO"

# Brief Description & Scope of Services

- ➤ Preparing studies considering the expected population growth and saturation stage.
- Topographic Surveying and Geotechnical works
- ➤ Detailed Hydraulic, Electromechanical, Structural and Architectural Design Drawings for the 3 pump Stations with total capacity of 30,000 m3/day
- ➤ Detailed Hydraulic design Drawings for waste water networks with total length 31 km and 175mm to 1000mm diameters.
- ➤ Detailed Hydraulic design Drawings for Force mains with total length 6.5 Km and 250mm to 800mm diameters.
- ➤ Preparing the tender documents, Technical specifications and Bill of Quantities for the new force mains
- Construction Supervision



Preparation of water and wastewater master plan for the Canal cities

**Starting Date** 

September 2007

**Duration** 

12 Months

Location

Suez - Ismailia - Port said

Client

Holding Company for Water and Wastewater (HCWW)

# Brief Description & Scope of Services

- ➤ Build a geographic information system (GIS) database
- ➤ Identification and classification of different population activities (Residential Commercial Industrial Administrative etc.) and determine the peak factors that covers the peak hours
- ➤ Collection of all available data, including previous studies, technical reports and operation and maintenance reports in order to monitor operational problems
- Assessment of the current and future situation for potable water networks with a total length of 2600 Km, 10 potable water pump station with a total capacity of 0.3 million m3/day, 77 water treatment plant with a total capacity of 1.9 million m3/day, Gravity pipe networks with a total length of 960 km, 86 pump stations with a total capacity of 3.1 million m3/day, Force mains with total lengths of 280 km and 18 wastewater treatment plants with a total capacity of 0.75 million m3/day by conducting a hydraulic and process analysis of all items to identify its adequacy to the technical standards
- > Preparation of high-priority projects for the sewage collection system and waste water treatment plants
- > preparation of a Master plan for the Canal cities until the target year 2037
- Preparation of cost estimates for the proposed projects and an annual Budget plan which describes the order of projects according to their priority and the most appropriate date for implementation



Preparation of water and wastewater master plan for the Sohag Governorate

**Starting Date** 

September-2007

**Duration** 

13 month

Location

(Tahta - Sohag - New Sohag - Gerga - Balyana - etc.)

Client

Holding Company Of Potable Water And Sewage

Brief Description & Scope of Services

- ➤ Build a geographic information system (GIS) database
- ➤ Identification and classification of different population activities (Residential Commercial Industrial Administrative etc.) and determine the peak factors that covers the peak hours
- Collection of all available data, including previous studies, technical reports and operation and maintenance reports in order to monitor operational problems
- Assessment of the current and future situation for potable water networks with a total length of 3200 Km, 10 potable water pump station with a total capacity of 0.45 million m3/day, 43 water treatment plant with a total capacity of 1.3 million m3/day, 17 Iron and Manganese Plants with a total capacity of 0.1 million m3/day, 1060 Artesian wells, 137 Artesian Plants, 211 Elevated and Ground Tanks, Gravity pipe networks with a total length of 650 km, 62 pump stations with a total capacity of 1 million m3/day, Force mains with total lengths of 240 km and 12 wastewater treatment plants with a total capacity of 0.35 million m3/day by conducting a hydraulic and process analysis of all items to identify its adequacy to the technical standards
- Preparation of high-priority projects for the sewage collection system and waste water treatment plants
- ➤ Preparation of a Master plan for the Sohag Governorate until the target year 2037
- Preparation of cost estimates for the proposed projects and an annual Budget plan which describes the order of projects according to their priority and the most appropriate date for implementation



Title Preparation of water and wastewater master plan for the new cities surrounding Greater Cairo

Starting Date June 2007

Duration 12 Months

**Location** 6<sup>th</sup> of October – El Sheikh Zayed – El Obour – Badr – El Shorouk New Cairo – 15<sup>th</sup> of May

Client Holding Company for Water and Wastewater (HCWW)

## **Brief Description & Scope of Services**

- ➤ Build a geographic information system (GIS) database
- ➤ Identification and classification of different population activities (Residential Commercial Industrial Administrative etc.) and determine the peak factors that covers the peak hours
- Collection of all available data, including previous studies, technical reports and operation and maintenance reports in order to monitor operational problems
- Assessment of the current and future situation for Gravity pipe networks with a total length of 800 km, 47 pump stations with a total capacity of 3 million m³/day, Force mains with total lengths of 140 km and 12 wastewater treatment plants with a total capacity of 2,6 million m³/day by conducting a hydraulic and process analysis of all items to identify its adequacy to the technical standards
- Preparation of high-priority projects for the potable water/sewage collection system and water/waste water treatment plants
- preparation of a Master plan for the new cities surrounding Greater Cairo until the target year 2037
- ➤ Preparation of cost estimates for the proposed projects and an annual Budget plan which describes the order of projects according to their priority and the most appropriate date for implementation.



Preparing the future Master Plan of the sewage projects for the Greater Cairo

**Starting Date** 

June 2006

Duration

12 month

Location

Greater Cairo (Cairo - Helwan - Giza)

Client

Holding Company Of Potable Water And Sewage

## **Brief Description & Scope of Services**

- ➤ Build a geographic information system (GIS) database
- ➤ Identification and classification of different population activities (Residential Commercial Industrial Administrative etc.) and determine the peak factors that covers the peak hours
- Collection of all available data, including previous studies, technical reports and operation and maintenance reports in order to monitor operational problems
- Assessment of the current and future situation for Gravity pipe networks with a total length of 1500 km, 187 pump stations with a total capacity of 10 million m3/day, Force mains with total lengths of 1240 km and 6 wastewater treatment plants with a total capacity of 4.0 million m3/day by conducting a hydraulic and process analysis of all items to identify its adequacy to the technical standards
- > Preparation of high-priority projects for the sewage collection system and waste water treatment plants
- preparation of a Master plan for the Greater Cairo until the target year 2037
- ➤ Preparation of cost estimates for the proposed projects and an annual Budget plan which describes the order of projects according to their priority and the most appropriate date for implementation



Title Preparing Studies, Detailed Design for Infrastructure Works of El

Rehab City 6th, 7th, 8th, 9th and 10th Stages.

Starting Date Sept. 2005 -2017

**Duration** Many Phases

**Location** El Rehab City - Egypt

Client Talaat-Mostafa Co.

## **Brief Description & Scope of Services**

- ➤ Preparing studies considering the expected population growth and saturation stage.
- ➤ Preparation of the Infrastructure networks master plan including: Roadways, Parking facilities, water supply and distribution system, wastewater collection and management system, irrigation of green areas, power supply and lighting systems and telecommunication system.
- ➤ Planning and conceptual design of the infrastructure networks.
- > Final detailed design and preparation of the tender documents



Title: Development of Sokhna Port and Logistics Center to become the

interface for import and export cargo flows serving the Suez special

**Economic Zone** 

Starting Date: Sept. 2003

**Duration**: 12 month

**Location**: Sokhna Port – Red Sea

Client: Sokhna Port Development Company (AMIRAL)

# **Brief Description & Scope of Services**

- Preparing studies considering the expected population growth and industrial development and Logistics Center to become the interface for import and export cargo flows serving the Suez special Economic Zone.
- ➤ Preparation of the Infrastructure networks master plan including: Roadways, Parking facilities, water supply and distribution system, wastewater collection, treatment and management system, irrigation of green areas, power supply and lighting systems and telecommunication system.
- > Planning and conceptual design of the infrastructure network.
- > Final detailed design and preparation of the tender documents.



Title Reclamation & Irrigation for Armant Farm using the Treated Water

of Wastewater Treatment Plant

Starting Date June, 2003

**Duration** 13 month

**Location** Armant City, Qena Governorate.

Client Ministry of Housing, Utilities and Urban Communication

**Brief Description** Conducting studies, designs, and preparing implementation documents for

the reclamation, cultivation, and irrigation of a 600-acre farm using treated wastewater from Armant City in Qena Governorate. The study area is located in Armant City, southwest of Qena City, approximately

105 kilometers from Qena City.

Scope of Services T & I provided the following set of services:

➤ Topographic Surveying and Geotechnical works

Analysis and Study of the water quality, capacity and degree of treatment.

➤ Preparation of the Irrigation networks master plan including: Roadways, water supply and distribution system.

Planning and conceptual design of the Irrigation network.

➤ Detailed Hydraulics, Electro-mechanics, Structural, and Architectural Design for the pump station to accommodate the water requirement for Irrigation.



Title Design Reviewing and Construction Supervision of AL Amria Water **Treatment Plant** June., 2003 **Starting Date Duration** 30 Months Location Alexandria - Cairo Road at km 40 - Al Amria Client Ministry of Housing and Reconstruction **Brief Description &** T & I provided the following set of services: Scope of Work Reviewing of preliminary design and technical specification Reviewing of Method Statement and time schedule Reviewing of Topographic Surveying and Geotechnical works Reviewing of Detailed Hydraulic, Electromechanical, Instrumentation, control, Structural and Architectural Design Drawings For pump station with 260,000 m³/day capacity. Water Hammer protection analysis Reviewing of Bill of Quantity

**Construction Supervision** 



Title Consulting Services, Studies, Detailed Design, Preparing Tenders

documents and Construction supervision for El Kharga Water Pump

**Station** 

Starting Date August., 2003

**Duration** 18 Months

**Location** El-Kharga City – El-Wadi El-Gadeed Governorate

Client Ministry of Housing and Reconstruction

**Brief Description**Preparing preliminary studies, executive design drawings, and tender documents necessary for the construction of a 2,500 m3/day underground

tank model with its own pumps for pumping into the water network,

providing citizens with potable water at all times.

Connecting the tank to the purification plant, the service network, and the

necessary pumping station.

Establishing a diesel-powered electricity generation unit for use in the

event of a power outage.

#### Scope of Work

#### T & I provided the following set of services:

• Topographic Surveying and Geotechnical works

 Detailed Hydraulics, Electro-mechanics, Structural, and Architectural designs and construction supervision for Booster Station and underground tank with capacity of 2500 m<sup>3</sup>/day at El Kharge City – New Valley Governorate

• Water Hammer protection analysis

- Preparing Required Tender Documents
- Construction Supervision



Title Seriagos Regulator and Lock **Starting Date** October 2002 **Duration** 24 month Location The Arab Contractors "Osman Ahmed Osman" Client The Arab Contractors Contractor **Brief Description** A project is to construct bridges with 10 openings to regulate water of the Ismailia Canal, with a width of 5 m per opening, and a lock of (120 m x 90 m) with a width of 17 m after removing the current lock. The project includes the construction of a bridge and metal. T & I provided the following set of services: Scope of Work Reviewing of Detailed Hydraulic and Structural Design Drawings Design of ground water control systems Structural Design of side support system Prepare the method statement for construction. Providing technical support during construction. Consulting service for implementation of construction.



Consulting Services, detailed design Drawings, implementation of Wastewater Treatment Plant of Al-Ahsaa Industrial City.

**Starting Date** 

November 2001.

**Duration** 

18 Months.

Location

Al-Ahsaa industrial city is located beside Oyoun city, 28 km from El-Hefoof city, at Dammam Road entrance-Eastern Region, Kingdom of Saudi Arabia.

Client

Ministry of Industry and Electricity, Saudi Arabia.

El Beeah Planners, Architects & Engineers.

## Brief Description & Scope of Work

- Study the water quality and quantity of the expected effluent from the Industrial city according to the future plan
- Topographic Surveying and Geotechnical works for total area of 1.5 million m<sup>2</sup>
- Detailed Hydraulics, Electro-mechanics, Structural, and Architectural Design for 2 waste water treatment plant with total of 14000 m3/day capacity.
- Preparation the master plan for the irrigation network to reuse of treated wastewater.
- Preparing the tender documents, Technical specifications and Bill of Quantities



Title	Dreamland Water Resources Management Study.
Starting Date	April, 2001
Duration	12 Months .
Location	Dreamland, 6 <sup>th</sup> of October City.
Client	Bahgat group.
Brief Description & Scope of Work	T & I provided the following set of services:
	> Study of municipal, irrigation, and recreational demand through stages of Dreamland development.
	> Study of rainstorm water quantities and their probabilities.
	➤ Modeling of water balance for different growth stages of dreamland.
	Assessing risks of water shortage as well as excess water excess water and flooding.
	Sizing storage facilities to manage the water balance and reduce risks of flooding.



Title Rehabilitation/improvement of water system at Edfu villages. January 2001 **Starting Date End Date** December 2002 Location Edfu district-Aswan Governorate. Client Government of the Arab Republic of Egypt & Danida. **Brief Description &** T & I provided the following set of services: Scope of Work > Prepare a summary of technical feasible options to improve water supply and low cost sanitation services. > Conduct a socio-economic survey to provide baseline information on socio-economic aspects of the population, community preferences and habits for water supply, sanitation and hygiene. > Identify areas in which the integrated community based demand responsive approach will be tested. Rehabilitation of the treatment plant at (El-Zinika, Abu Ghalab, El-Zwidia, and El-Nassra). Rehabilitation of the distribution of water network at (El-Bosila, Helal,

El-Zinika and El-Ghonimia).



Title Preparing Studies and Detailed Design of Wastewater Project for

Meet Ghamr - Dakhlia Governorate.

Starting Date August 2000

End Date August 2004

**Location** Meet Ghamer-Dakhaliya Governorate.

Client National organization for portable water and sanitary drainage.

Brief Description & Scope of Work

Total area: 1300 feddans, population 200,000 Inh.

- ➤ Design (collection system, pump stations, crosses, raising mains, treated wastewater plant with design capacity 77000 m3/day).
- ➤ Topographic surveying and preparation of topographic maps (scales 1:2500, 1:1000).
- ➤ Preliminary design (population, land use, economic activities, utilities, building's condition, sanitary drainage)
- > Preparing Preliminary Design:
  - Hydraulic design of gravity sewers.
  - Choice the location of pump stations.
  - Raising mains studies.
  - Hydraulic and mechanical design for pump station.
  - Hydraulic and mechanical design for treated wastewater plant.



Title Village environment assistance project Governorate of "Bani Suief-

Fayoum-El-Minia"

Starting Date June 2000

End Date August 2000

**Location** Beni Suief, Fayoum and El-Minia.

Client USAID and UNICEF

Brief Description This project was established under the natural co-operation agreement

between USAID and UNICEF for the implantation of a project of integrated water, sanitation, environment and hygiene education and

environmental awareness in the three governorates

Scope of Work T & I provided the following set of services:

➤ Conduct rapid assessment survey depending on all the given and available data from (CAMPAS, IDSC, ORDEV, GOVERNORATE Mpstudies etc).

Rank different districts and villages; to select the village for project intervention, this will be achieved through the following procedure:

- Estimating an index to assess the deprivation of service
- Develop data collection form to be completed for local village units through the official data basis available and have the data approved and confirmed by Governorates.
- Analyze collected data to establish the final index.
- Develop the final ranking tables



Title Tushka South Valley Farm Project (100,000 feddans).

Starting Date May, 2000

End Date May, 2003

**Location** Tushka South Valley

Client Kingdom Agriculture Development Company (KADCO)

**Brief Description** The Tushka South Valley Farm Project will encompass at least 103,731

acres (100,000 feddans) within the South Valley Project. The project is located in southern Egypt, west of Lake Nasser. The purpose of the project is to irrigate large areas of land, with development to support the irrigation. Lake Nasser has been created by the construction of Aswan High Dam. Due to the project large-scale professional expert in irrigation field to work as a technical advisor for irrigation and drainage systems to manage,

review, and approve the studies and design is essential

Scope of Work T & I provided the following set of services:

Tushka South Valley Farm Project will be conduct in three phases.

➤ Review the conceptual design the items of irrigation design which include

- > Survey on water supply, resources
- > Irrigation system alternatives
- ➤ Pipe lines network
- > Irrigation methods
- ➤ Designing of pumping station, canal intake, booster pump, main (pipe or open channels) and laterals that will be connect to either drip or pivot system according to the type of the crop.
- > Approval and recommendation on the design points.
- > Preparation of the tender documents



Title Nubaria dairy farm.

Nubaria dairy complex (Almarai).

**Starting Date** 

February 2000.

**End Date** 

February 2003.

Location

Nubaria area nearly 70 km south of Alexandria. The farm's area is 7000 feddans and bounded from the west by the Cairo-Alexandria desert highway.

Client

International Co. for Agro-Industrial projects. (Interagro).

**Brief Description** 

Design the Irrigation, Drainage, Roads, Wastewater systems and Ground water control for the Nubaria Dairy Farm.

Design the Internal Roads, Landscape, Stormwater, PWTP and IWWTP systems for the Beyti Dairy Complex.

Scope of Work

- ➤ Irrigation works provide construction documents, to cover all irrigation system requirements, including all water structures, culverts, pipe works, pumping station...etc.
- ➤ Drainage works provide construction documents, to cover all drainage system requirements, including all water structures, culverts, pipe works, pumping station...etc.
  - Collect input data, analysis and recommend location of primary water treatment plant, and provide raw water supply to the plant including provision of construction documents for associated works (pumping station, pipe works, canals, RC reservoirs).
  - Review, coordinate, refine and update raw water, semi treated water and treated water networks.
  - Collect input data, analyze and recommend locations of some drainage facilities: process effluent treatment plant and wastewater treatment plant facilities: process effluent treatment (if needed) and provide construction documents for their discharge) including pipe lines, septic tanks, pumping station).
  - Review, coordinate, refine and update waste drainage networks



Title	Operational Management System for EL-Salam Canal
<b>Starting Date</b>	Feb., 2000
End Date	May, 2002
Location	El-Salam Canal in Northern Sinai.
Client	The Dutch Government and the Government of Egypt.(GOE)
<b>Brief Description</b>	Feasibility study and detailed design for a remote system for operational management of EL-Salam Canal
Scope of Work	T & I provided the following set of services:
	> Study and Analysis of the complex problems related to the operation of EL-Salam Canal.
	> Setup of a mathematical model of EL-Salam Canal and confirmation of hydraulic design of the Canal.
	> Identification and design of a preferred control system.
	> Preparation of tender documents for the control system.



Title Water supply and sanitary drainage in Esna district Qena Governorate.

Starting Date February, 1998

End Date March, 2000

**Location** Esna district-Qena Governorate.

Client Governorate of the Arab Republic of Egypt & Danida.

**Brief Description** | Total Esna district population; 292,289 Inh.

The objective of the pre-project study is to create the necessary technical basis for the start of phase 1 of the project, especially in the fields of:

- Appropriate village sanitation

- Implementation of an immediate improvement program for the existing water supply systems

### Scope of Work T & I provided the following set of services:

- Assessments of the existing rural networks in Esna districts including recommendation for rehabilitation.
- Assessments of the need for rehabilitation and strengthening of the distribution system in Esna district.
- An assessment of the need for bulk water meters, workshop, basis laboratory equipment, and tools, measuring devices, and leakage detection equipment.
- > Tender documents and cost estimates for purchase and installation of the proposed equipment.
- An assessment of the hydrological situation in Esna district including:
- ➤ A preliminary assessment of the potential for future groundwater abstraction in Esna district based on existing hydrogeological and water quality data.
- > A proposal for explanatory of the feasibility of the implementing rural sanitation pilot schemes and selection of two potential pilot villages.



Title Design the pressurized Transmission line & irrigation distribution

pipe network for 140,000 feddans at Bir El-Abd, Sheikh Gaber Canal

(Northern Sinai).

Starting Date May, 1998

End Date May, 2000

**Location** Bir El-Abd, Sheikh Gaber Canal (Northern Sinai).

Client Sinai Development Organization (NSDO)

**Brief Description** Analysis and design of pressurized water conveyance systems for Sheikh

Gaber Canal

Scope of Work T & I provided the following set of services:

➤ Layout of water conveyance system

> Design of pressurized conveyance pipelines, storage facilities, and

calculation of pumping requirements.

> Preparation of Specifications and tender documents.

> Telemetry Control System



Design, Construction Management and Supervision for Infrastructure of the Free Industrial Zone Development Project - East of Port Said.

**Starting Date** 

November 1998.

Duration

2 Years

Location

East of Port Said City.

Client

Free Industrial Zone Development Company - Port Said East.

**Brief Description** 

- Design preparation as topographic survey work that include the natural ground surface leveling maps and the plan metric maps for the sites of the roads, plants and storehouses.
- Design the infrastructure systems, these systems are: Roadways and Parking facilities, waste supply and distribution system, wastewater collection and management system, irrigation of turf and green areas, power supply and lighting systems and telecommunication system

#### Scope of Work

- ➤ Construction Management & Supervision
- Final detailed design and preparation of tender documents.
- > Construction Management & Supervision.



The Wastewater Project for New Heliopoles City.
Jan. 1998.
Jan. 2002.
New HELIOPOLES city (area: 5888 feddans) east of Cairo (confined between Cairo Suez and Cairo – Ismailia desert highways).
Misr El–Gadida company for housing and development.
Design the wastewater system, which include gravity sewers, pump station and raising mains.
Preparation of tender documents for the compact sewage treatment plant.
T & I provided the following set of services:
> Preparation of the wastewater master plan.
> Conceptual of the wastewater system.
Final design of the gravity sewers networks for six districts of the city (240,000 Inh) and preparation of the tender document.
➤ Preparation of tender documents for the compact sewage treatment plant for new HELIOPOLES city – Startup phase (Design flow: 1500 m3/day) Design and built – turn key project.



Title	The potable water supply project for new HELIOPOLES City.
<b>Starting Date</b>	Jan. 1998.
End Date	Jan. 2002.
Location	New HELIOPOLES city (area: 5888 feddans) east of Cairo (confined between Cairo-suez and Cairo-Ismailia desert highways).
Client	Misr El-Gadida company for housing and development.
<b>Brief Description</b>	Design the potable water distribution network including all the piping, storage tanks, fire fighting systems for the new city.
Scope of Work	T & I provided the following set of services:
	> Preparation of the water supplies master plan.
	<ul><li>Conceptual design of the water distribution networks.</li></ul>
	Final design of the water distribution networks for six districts of the city (240,000Inh) and preparation of the tender documents.



Title Infrastructure systems for Sharm - El Qbli Resort, Red sea. **Starting Date** May. 1997. **Duration** 2 years. Location On the red sea coast between Al-Qusir and Marsa Alam (33 Km south of Al-Qusir. Client Red sea Sharm for Tourism Development. **Brief Description** The Project Occupies about 800 feddans and the main components of the project are residential area Golf course, two-town center and several, sports and recreation facilities The role of the firm in to design the infrastructure systems for the resort. Scope of Work T & I provided the following set of services: > Preparation of the infrastructure Master plan. > Preliminary design of the infrastructure systems. > Final detailed design and preparation of tender document.



Title Infrastructure systems for the Sharm Town Center, Sharm El Sheik. **Starting Date** Oct. 1997. **Duration** One year. Location Sharm El Sheik – Sinia, Egypt. Client Sharm Egypt for Tourist Real Estate Development Company (SETRED C). **Brief Description** Design the infrastructure systems for the integrated resort (area: 50 feddans). These systems are: Roadways and Parking facilities, waste supply and distribution system, wastewater collection and management system, irrigation of turf and green areas, power supply and lighting systems and telecommunication system. Scope of Work T & I provided the following set of services: > Preparation of the infrastructure Master plan.

171



Title	Wastewater system for Dreamland Resort.
Starting Date	April 1997.
End Date	Dec. 2001.
Location	Dreamland Resort–6 <sup>th</sup> of October city (Area 2200 feddans).
Client	Dreamland Company–Bahgat Group.
<b>Brief Description</b>	Design, construction supervision for the Wastewater systems for the amusement park (168 feddans), Golf course (197 feddans) and the tennis complex (15 feddans) including the resort's WM treatment plant. The system includes the gravity sewers, pump stations and raising mains.
Scope of Work	T & I provided the following set of services:
	> Preparation of the wastewater system's master plan.
	<ul><li>Planning and conceptual design of the Wastewater system.</li></ul>
	Design the temporary W.W treatment plant (Design flow: 1400m³/day).
	Design the resort Permanent W.W treatment plant (Design flow: 32000m³/day).
	> Final detailed design and preparation of the tender documents.
	➤ Permanent supervision on the construction of the W.W system in the amusement park, Golf course and the Tennis complex.
	<ul> <li>1400m³/day).</li> <li>Design the resort Permanent W.W treatment plant (Design flow: 32000m³/day).</li> <li>Final detailed design and preparation of the tender documents.</li> <li>Permanent supervision on the construction of the W.W system in the</li> </ul>



Title	Irrigation and subsurface drainage systems for Dreamland Resort.
Starting Date	Oct. 1996.
Duration	2 years.
Location	Dreamland Resort 6 <sup>th</sup> of October city (area 2200 feddans).
Client	Dreamland Company-Bahgat Group.
<b>Brief Description</b>	Design and construction supervision of the resort's irrigation and subsurface drainage systems that consists of:
	- Main carrying water pipe (5 km long)
	- Five lakes and the connecting gravity lines between them.
	- Fully automated irrigation network and subsurface drainage system for the golf course (187 feddans) amusement park (168 feddans) and the tennis complex (15 feddans), including pumping station, irrigation piping and sprinklers
Scope of Work	T & I provided the following set of services:
	> Preparations of the irrigation and subsurface drainage systems master plan.
	Planning and conceptual design of the irrigation and subsurface drainage works (carrying water pipe, 5 lakes serve as storage facilities and decoration purpose, fully automated irrigation and subsurface drainage networks, pumping stations, piping and sprinklers.
	➤ Final detailed design and preparation of tender documents.
	➤ Permanent supervision on the construction of the irrigation and subsurface drainage systems.



Potable water systems for Dreamland Resort.
Nov. 1996.
Two years.
Dreamland Resort–6 <sup>th</sup> of October city (Area 2200 fed.).
Dreamland Company–Bahgat Group.
Design, construction supervision of the Potable water network for the amusement park (168 feddans) Golf course (187 feddans) and the tennis complex (15 feddans) and also two storage ground tanks (capacity: 1000 m <sup>3</sup> and 250 m <sup>3</sup> ).
T & I provided the following set of services:
> Preparations of the potable water supply master plan.
➤ Planning and conceptual design of the potable water and fire fighting systems including the tanks.
> Final detailed design and preparation of the tender document.
➤ Permanent supervision on the construction of the potable and fire fighting piping and systems in the amusement park, Golf course and the Tennis complex.



Title Central Laboratory for Environmental Quality Monitoring (CLEQM).

Starting Date Feb. 1995.

End Date July 1997.

**Location** National Water Research Center (NWRC) Kanater, Egypt.

Client CIDA (SNC-Lavalin Inc.)

**Brief Description** CLEQM is established in order to satisfy the analytical needs of NWRC, its 12 research institutes, assist MPWWR for the control and protection of

water resources and various water quality monitoring activities.

Scope of Work T & I provided the following set of services:

> Review of RNPDII documents related to CLEQM.

> Survey and evaluation of the existing laboratories (instruments, staff, analytical parameters, sampling techniques, data processing, analysis and reporting).

and reporting).

> Determination of the analytical parameters.

> Preparation of the laboratory's instrumentations and Equipment's.

> Preparation of the laboratory manuals.

> Training of CLEQM Junior Staff.



**Title** Halaieb and Shalaten Water Resources Development. 1994. **Starting Date Duration** One Year. Location Halaieb and Shalaten City. Client EDIPCO-Ministry of Public Works and Water Resources. **Brief Description** Water Resources Studies of the area, irrigation improvement, irrigation management programs. Scope of Work T & I provided the following set of services: Monitoring the ground water storage as well as the rain falls. > Modeling of the water quantities, water demands and needs. > Survey of the region irrigation facilities.



Title Methodology and Terms of Reference to Conduct Rural WS/WW

Needs Assessments and Strategic Planning for Beheira Governorate.

Starting Date June 1993.

**Duration** 9 Months.

Location | 609 villages of Beheira Governorate (Population more than 1000

Inh./village)

Client USAID and Beheira Governorate.

**Brief Description** Preparation of a database for wastewater services in the villages with an

evaluation of the existing situation in these villages. Also, Preparation of a conceptual design for the wastewater systems for these villages with

suggestions of their stages of execution.

Scope of Work T & I provided the following set of services:

> Field Surveying of Wastewater Facilities in all the Villages.

> Preparation of database

> Preparing of preliminary design of the wastewater systems.



Title Ismailia Governorate Rural Development Project Public works program Feb. 1993 **Starting Date** Duration 6 Months Location Ismailia Governorate Villages (These villages are within the five markazes of Ismailia "Qantara Gharb, Qantara Sharq, Tal El-Kabeer, Fayed and Ismailia". Client Social Fund for Development (SFD). Reviewing the rural development project submitted by Ismailia **Brief Description** Governorate (67 subprojects in the public works sector "water supply, wastewater systems, roads and public buildings" to ensure that it satisfies the needs of the target groups as well as reviewing these subprojects technically. Scope of Work T & I provided the following set of services: Prepare the technical appraisal of the 67 sub-projects and also the following studies: > The economic analysis of the sub-projects. > The social impact of the sub-projects.

> The environmental impact assessment of the sub-projects.



Title Wastewater project in Belbuis city-Sharqiya Governorate. Dec. 1992. **Starting Date Duration** 3 years. Belibus city-Sharqiya Governorate area 772 feddans, Population: Location 78068 Inh (1986 census), expected 273000 Inh in year 2040). Client National organization for potable water and sanitary Drainage. **Brief Description** Design a wastewater system for the city which include: 31.5 km of gravity sewers, 5 pump stations and 5 raising mains of total length 10550 m and several crossing works for the canals and highways. Scope of Work T & I provided the following set of services: > Surveying works and preparations of topographic maps (scales 1:2500 and 1:1000). ➤ Boring works and soil Investigations (28 borings) and preparation of the technical report. > Preliminary studies (land use, population, economic activities, utilities, ...etc) followed by a preliminary design of the sewage system. Final detailed design for the sewerage, pump stations, raising mains and crossing works and preparation of tender documents.



Title

Wastewater project for Minya El-Kamah city – Sharqiya Governorate.

**Starting Date** 

Nov. 1992, Updating 2001 – 2003

Duration

4 years.

Location

Minya El Kamah city - Sharqiya Governorate {area 894 feddans, population 53977 Inh (1986 census), expected 132000 Inh in year 2040}.

Client

National organization for potable water and sanitary Drainage.

**Brief Description** 

Design a wastewater system for the city which include the following:

Gravity sewers of total length 45 km, 4 pump stations, 4 raising mains of total length 14455 in as well as several crossing works for highways and bridges.

Scope of Work

## T & I provided the following set of services:

- > Surveying works and preparations of topographic maps (scales 1:2500 and 1:1000).
- ➤ Boring works and soil Investigations (28 borings) and preparation of the technical report.
- ➤ Preliminary studies (land use, population, economic activities, utilities, etc) followed by a preliminary design of the sewage system.
- Final detailed design for the sewerage, pump station, raising mains and crossing works and preparation of tender documents.
- ➤ Planning study for a part of gravity sewers and alignment modification for raising mains and pump stations appropriation with this modification . 2001 2003.



Title Wastewater project in Abu Kabeer city, Sharqiya Governorate. **Starting Date** Nov. 1992. Duration 4 years. Abu Kabeer city-Sharqiya Governorate {area: 796 feddans, Population: Location 68394 Inh (1986 census), expected 247,000 Inh in year 2040}. Client National organization for potable water and sanitary Drainage. **Brief Description** Design the city wastewater project, which consists of Gravity sewers network of total length 3 6.3 60 km, 3 pump stations, 3 raising mains of total length 14290 meter and several crossing works of the highways, canals and the railways. Scope of Work T & I provided the following set of services: > Surveying works for the city area and preparations of the topographic maps (scales 1:2500 and 1:1000). > Boring works and soil Investigations (33 borings) and preparation of the technical report. > Preliminary studies (land use, Physical planning, population, economic activities, utilities, ...etc) followed by a preliminary design of the sewage project components.

preparation of tender documents.

Final detailed design of the project components (gravity sewers network, pump stations, raising mains and crossing works, and



Title	Tema District Water Supply Project-Sohag.
Starting Date	Nov. 1992.
Duration	6 Months.
Location	Five villages in Tema. They are "Geziret Tema, Al-Madmar, Nag Al Kharat, Kom Al Arab and Nag Al Gisha.
Client	United Nations Children's Fund (UNICEF).
Brief Description	Design and construction management and supervision of the water supply system (wells, pumping stations, elevated tanks and piping) for the five villages.
Scope of Work	T & I provided the following set of services:
	> Feasibility studies.
	> Preliminary design.
	> Final design.
	> Preparation of tender documents and construction management and supervision.



Title Wastewater project for Berket El-Sabaa Monofiya Governorate. August 1992. **Starting Date Duration** 2 years. Berket El-Saab city-Monofiya Governorate {area: 431 feddans, population Location 24005 Inh (1986 census), expected 73645 Inh in year 2040} Client National organization for potable water and sanitary Drainage. **Brief Description** Design a wastewater system for the city including the following: Gravity sewers (33 km), 4 pump stations, 4 raising mains of total length 5900 m in addition to highways and bridges crossing works. Scope of Work T & I provided the following set of services: > Surveying works and preparation of topographical maps (scales 1:2500 and 1:1000). ➤ Soil Investigations (35 borings) and preparation of the technical report and protection against dewatering report. > Preliminary studies (population, land use, economic activities, utilities, building's conditions, sanitary drainage... etc) followed by a preliminary design of the project. > Final detailed design and Preparation of the tender documents for the project's various elements.



Title Wastewater project for Ashmoon city-Monofiya Governorate. August. 1992. **Starting Date Duration** 2 years. Location Ashmoon city-Monofiya Governorate {are census 482 feddans, population 54450 Inh. (1986) And expected population 110000 Inh in year2040}. Client National organization for potable water and sanitary Drainage. **Brief Description** Design a wastewater system for the city including the following: Gravity sewers (35 km), 4 pump stations, 4 raising mains of total length of 5850m. Scope of Work T & I provided the following set of services: ➤ Surveying works and preparation of topographical maps (scales 1:2500 and 1:1000). ➤ Soil Investigations (29 borings) and preparation of the technical report. > Preliminary studies (population, land use, economic activities, utilities, building's conditions, sanitary drainage... etc) followed by a preliminary design of the project. Final detailed design and Preparation of the tender documents for the project's three main elements: gravity sewers, pumping stations and raising mains.



Title	Wastewater project for Tala city-Monofiya Governorate.
<b>Starting Date</b>	August 1992.
Duration	3 years.
Location	Tala city–Monoftya Governorate {area: 655 feddans, population 38584 Inh (1986 census), expected 114770 Inh in year 2040}.
Client	National organization for potable water and sanitary Drainage.
<b>Brief Description</b>	Design a wastewater system for the city consists of
	Gravity sewers of total length 46 km, 4 pump stations, 4 raising mains of total length 7010 m.
Scope of Work	T & I provided the following set of services:
	Surveying works and preparation of topographic maps (scales 1:2500 and 1:1000).
	> Soil Investigations (32 borings) and preparation of the technical report.
	➤ Preliminary studies (population, land use, economic activities, utilities, building's condition, sanitary drainage etc) followed by a preliminary design.
	> Final detailed design and Preparation of tender documents.



Title Wastewater project for El-Matariya city Dakhaliya Governorate. **Starting Date** August 1992. **Duration** 3 years. Location El Matariya city-Dakhaliya Governorate. Client National Organization for potable water and sanitary drainage. **Brief Description** Design a wastewater project of the city that consists of: Gravity sewers network of total length 35 km, 3 pumping stations, 4 raising mains of total length 5.1 Km. Scope of Work T & I provided the following set of services: > Surveying works and preparations of topographic maps (scales 1:2500 and 1:1000). ➤ Soil Investigations (36 borings) and preparation of the technical report. > Preliminary studies (population, land use existing wastewater disposal means, economic activities, utilities, building's conditions, drainage ...etc) followed by a preliminary design of the project. Final details design and preparation of the final drawings and the tender documents.



Title Wastewater project for Bani Mazar city–Menya Governorate.

Starting Date April 1993.

**Duration** 3 years.

**Location**Bani Mazar city-Menya Governorate {area: 488 feddans, population: 48791 Inh. (1986 census), expected 186770 Inh in year 2040}.

Client National organization for potable water and sanitary drainage.

Brief Description

Design a wastewater project for the city consists of:

Gravity sewers network of total length 9 km, 4 pump stations, 4 raising mains of total length 9440 m, and bridges, railways and highways crossing

Scope of Work T & I provided the following set of services:

works.

- ➤ Surveying works and preparation of topographic maps (scales 1:2500 and 1:1000).
- > Soil Investigations (28 borings) and preparation of the technical report.
- ➤ Preliminary studies (population, land use, economic activities, utilities, building's conditions, sanitary drainage...etc) followed by a preliminary design.
- ➤ Preparation of the final drawings and the tender documents for the three main elements of the project: gravity sewers, pump stations, raising mains and crossing works.



Title	Wastewater project for Samalloot city-Menya Governorate.
Starting Date	Feb. 1993.
Duration	3 years.
Location	Samalloot city-Menya Governorate {area 520 feddans, population 62159 Inh. (1986 census), expected 238,000 Inh in year 2040}.
Client	National organization for potable water and sanitary Drainage.
<b>Brief Description</b>	Design a wastewater network for the city including the following:
	Gravity sewers of total length 20 km, 4 pump stations, 4 raising mains of total length 2100 m and 3 bridge crossing works.
Scope of Work	T & I provided the following set of services:
	Surveying works and preparation of topographic maps (scales 1:2500 and 1:1000).
	➤ Soil Investigations (28 borings) and preparation of the technical report.
	➤ Preliminary studies (population, land use, economic activities, utilities, building's conditions, sanitary drainageetc) followed by a preliminary design.
	➤ Preparation of the final drawings and the tender documents for the three main elements of the project: gravity sewers, pump station, raising mains and crossing works.



Title Wastewater project for Mallawei city-Menya Governorate. Jan. 1993. **Starting Date Duration** 3 years. Location Mallawei city-Menya Governorate {area: 560 feddans, population 98632 Inh. (1986 census), expected 378000 Inh in year 2040} Client National organization for potable water and sanitary Drainage. **Brief Description** Design a wastewater system for the city to cover the period until year 2040 and it consists of Gravity sewers of total length 13300 m, 5 pump stations, 5 raising mains of total length 11150 m and 3 main bridge crossing works. T & I provided the following set of services: Scope of Work > Surveying works including preparations of topographic maps (scales 1:2500 and 1:1000). > Soil Investigations (29 borings) and preparation of the foundation's technical report. > Preliminary studies (land use population, economic activities, utilities, building's conditions, sanitary drainage...etc) followed by a preliminary design of the WW system. > Final design and preparation of the final drawings and tender documents.



Title Wastewater project for Ziefta city-Gaharbia Governorate.

Starting Date Jan. 1993, Updating 2003

**Duration** 3 years.

Location Ziefta city—Gaharbia Governorate (Area 696 feddans, population 69253

Inh (1986 census), expected 187000 Inh in year 2020}.

Client National Organization for potable water and sanitary drainage.

**Brief Description**Design a wastewater project of the city that consists of Gravity sewers network of total length 37.15 km, 4 pumping stations, 4 raising mains of total length 7.925 Km as well as crossing works (canals, Nile branch of

Damitta and highways)

Scope of Work T & I provided the following set of services:

Surveying works and preparations of topographic maps (scales 1:2500 and 1:1000).

> Soil Investigations (29 borings) and preparation of the technical report.

➤ Preliminary studies (population, land use existing wastewater disposal means, economic activities, utilities, building's conditions, drainage...etc) followed by a preliminary design of the project.

Final detailed design and preparation of tender documents for each element of the project including the crossing works.

➤ Planning study for a part of gravity sewers and alignment modification for raising mains and pump stations appropriation with this modification – 2003.

190



Title Study and Design of Sanitary Drainage at Meet Abo El-Kom Village.

Starting Date Oct.1991

**End Date** Oct. 1993 – Up dated 2000.

**Location** Meet Abu El-Kom village and the neighbored five villages-Tala Center-

Monofia Governorate.

Client Ministry of Housing and Reconstruction

Monofeiya Governorate.

**Brief Description** The main objective are to study and design the sanitary drainage system

and all it is facilities for Meet Abu El-kom village and the neighbored five villages including rehabilitation of wastewater plants. Which is necessary to avoid many problems such as water leakage in the villages, formation of swamps in shallow area's, despertion area were it has a bad effects on

houses, sanitation, health, and contamination of canals & drains.

Scope of Work

## T & I provided the following set of services:

➤ Technical and study for the village sanitary drainage which include:

- Population study
- Social and sanitation study
- Study of ground water problems and hydraulic meter
- Field surveying of wastewater facilities
- Environmental study and it is effect
- Economical study
- Preparation of the conceptual design which include:
  - Preparations of the hydraulic design for gravity sewer line, pump station, and force main.
  - Preparation of preliminary design for pump station and the designated location.
  - Recommendation of rehabilitation for the existed of wastewater treatment plant.
  - Preparation of master plan for the whole project.
- ➤ Preparation of complete and detailed final design and tender documents:
  - Calculation sheets of complete hydraulic, structural, mechanical, electrical design
  - Preparation of specifications
  - Preparation of bill of quantity
  - Preparation of estimated cost



- Final and detailed design drawings
- ➤ Up-date to the specifications, bill of quantity and the estimated cost for the wastewater treatment plants has been done in June/2000.



Title Development of the green belt of The Tenth of Ramadan City. March 1991. **Starting Date Duration** 8 Month. 10<sup>th</sup> of Ramadan City. Location Ministry of Housing and Reconstruction (in association with CADSAC). Client **Brief Description** Water resources studies and designing the irrigation and drainage networks. Scope of Work T & I provided the following set of services: > Preliminary report > Conceptual and final designs > Preparation of tender documents.



Title Irrigation and Drainage networks for a pilot project (500 Acres) farm

using treated sewage water in 6th October City.

Starting Date Feb. 1991.

**Duration** 4 Months.

**Location** 6<sup>th</sup> October City.

Client Ministry of Housing and Reconstruction in association with CADSAK.

**Brief Description** Design of the irrigation and drainage networks for this pilot project (500

Acres Farm) using the treated sewage water.

Scope of Work T & I provided the following set of services:

> Conceptual design.

Detailed design

> Preparation of tender documents.



Title Designing the Western-North coast region, Canal Water Pump

Station & Transmission Line.

Starting Date Jan. 1991.

**Duration** 8 Months.

**Location** Western North Coast.

**Client** Ministry of Housing and Reconstruction.

**Brief Description** Designing the Canal transmission Line with its pump stations, tanks ... etc.

(of length 70 Km) which carries the needed irrigation water for the green

areas in the western - north coast region.

Scope of Work T & I provided the following set of services:

> Preliminary report

> Conceptual and final designs.

> Preparation of tender documents.



6<sup>th</sup> of October City, Model Forest Farm (500 feddans). **Title** Sept. 1990. **Starting Date Duration** 4 Months. 6<sup>th</sup> of October City. Location Client Ministry of Housing and Reconstruction, Egypt. **Brief Description** Irrigation and fire-fighting system for the farm using treated effluent, the system includes force main, main irrigation systems and a plot irrigation system. Scope of Work

T & I provided the following set of services:

> Conceptual and detailed design.



**Title** Upgrading of Wastewater System and Treatment of Sakara Village. Aug. 1990. **Starting Date Duration** 4 Months. Location Egypt, Giza Governorate. Client Housing and Reconstruction Dept., Giza Governorate, Egypt. **Brief Description** Upgrading of the actual system of wastewater, collection, treatment, and disposal for 35000 inhabitants. Scope of Work T & I provided the following set of services: > Preparation of Master Plan, & detailed design of collection system, treatment plant, & disposal.



Title Upgrading Water Supply and Sewage Networks for EI-Nasr Company for Glass and Crystal.

Starting Date July 1990.

**Duration** 9 Months.

Location EI-Nasr Company for Glass and Crystal at Shoubra EI-Khima

City-Qualyobia.

Client EI-Nasr Company for Glass and Crystal (in association with The Bureau

of Technical Consultants).

**Brief Description** Up-grading water supply, sewage and industrial wastewater networks for

the company.

Scope of Work T & I provided the following set of services:

> Final design and preparation of tender documents.



Title Underground Water Drainage and Upgrading of Wastewater

system & Treatment of Estanha Village.

Starting Date July 1990.

**Duration** 4 Months.

**Location** Egypt, Monofia Governorate.

Client Housing and Reconstruction Dept., Monofia Governorate, Egypt.

**Brief Description** Monitoring the underground water table and designing a drainage

system to it, also an upgrading of the actual system of wastewater

"Collection, treatment & disposal" for 35000 persons.

Scope of Work T & I provided the following set of services:

> Preparation of Master plan.

> Conceptual and detailed design of collection system, treatment plant &

disposal.



Title	Wastewater System of EI-May Village.
<b>Starting Date</b>	July 1990
Duration	4 Months
Location	Egypt, Monofia Governorate.
Client	Housing and Reconstruction Dept., Monofia Governorate, Egypt.
<b>Brief Description</b>	A wastewater collection system, pump stations & force mains for "25000 persons".
Scope of Work	T & I provided the following set of services:
	> Preparation of Master plan.
	Conceptual design and detailed design of the collection system.



**Title** Potable Water and Wastewater systems for El-Noubaria City. Feb. 1990. **Starting Date Duration** 8 Months. Location Noubaria City. Client Ministry of Housing and Reconstruction. **Brief Description** Designing the water supply network, the fire fighting network and tanks. Also, designing the wastewater system (sewers, force mains and the treatment plant). Scope of Work T & I provided the following set of services: > Preparation of preliminary report. > Conceptual design Final detailed design.



**Title** Upgrading of wastewater system and treatment of MEET EL-AMEL Village. Feb. 1990. **Starting Date Duration** 6 Months. Location Egypt, Dakahlya Governorate. Client Housing and Reconstruction Department, Dakahlya Governorate, Egypt. **Brief Description** Upgrading of the actual system of wastewater, if collection, treatment, and disposal" for 30000 persons. Scope of Work T & I provided the following set of services: > Preparation of Master plan & detailed final design of collection system, treatment plants (oxidation ditches) and disposal.



Title	ESNA Barrage
Starting Date	May 1989
Duration	12 months
Location	ESNA, Egypt
Client	Ministry of Public Works and Water Resources
<b>Brief Description</b>	A rock-fill dam across the River Nile with 12 bays, 13m spillway, 6 vents, power house and lock
Scope of Work	T & I provided the following set of services:
	Review and approve the hydraulic design of the dam, spillway, power house and lock.
	> Supervise the conduct of the dam physical model.



SIMO, Underground Drainage System.
May 1988.
Months.
Middle East Paper Company "SIMO" - Bahteem, EI- Qaluobia Governorate.
Middle East Paper Company "SIMO".
Monitoring the level of the underground water, designing a system mainly depends on pumps" to drain the excess water and lift it to the learest drainage.
<b>T &amp; I provided the following set of services:</b>
Field monitoring of the underground table.
Preliminary design.
> Detailed design.



Title Retention Dam for Phosphate Slimes Tailing Pond.

Starting Date Jan. 1988.

Duration 24 months.

Location Edfu, Egypt.

Client EL-NASR PHOSPHATE CO.

Brief Description A retention dam with feeding and decanting system to handle slime wastes.

Scope of Work T & I provided the following set of services:

> Full design and monitoring of the system operation.



Title Flood Protection Scheme for El Shorouk City.

Starting Date Oct. 1987.

**Duration** 6 months.

**Location** Greater Cairo.

Client Industrial & Engineering Projects Co.

**Brief Description** A full flush flood protection scheme for the city.

Scope of Work T & I provided the following set of services:

Detailed Final Design.



Title	Turf Irrigation System for Marina El-Almain Tourist Center.
Starting Date	Jan. 1987.
Duration	4 Months.
Location	Marina El-Almain Tourist Center-western north coast "Km 94 - 100".
Client	Ministry of Housing and Reconstruction, Egypt.
<b>Brief Description</b>	Irrigating the green areas "500 feddans" and the street trees within the center. The system used is the turf irrigation system.
Scope of Work	T & I provided the following set of services:
	<ul><li>Preliminary design and detailed final design.</li></ul>



Title	Integrated Soil and Water Improvement Project (ISAWIP).	
Starting Date	Jan. 1987.	
Duration	7 years (1987-1994).	
Location	Daqhliya Governorate – Egypt.	
Client	Cadsak-and Canadian International Development Agency (CIDA)-SNC-Lavalin Inc.	
Brief Description & Scope of Work	ISAWIP is a project joint undertaking by Egypt and Canada designed to demonstrate how an integrated approach to agricultural development can increase production by 25 % in the old lands of the Nile Delta.	
	The project embraces many improvements in irrigation, surface and subsurface drainage, soil improvements and agricultural extension.	



**Title** Potable Water and Wastewater networks for ElObour New City. Oct. 1988. **Starting Date Duration** 2 Years. Location EI-Obour New City. Client Ministry of Housing and Reconstruction. **Brief Description** Designing a water supply network and a wastewater network for the new city (500000 Inh) and its industrial zone. Scope of Work T & I provided the following set of services: > Preparation of Master plan > Conceptual design and final detailed design > Preparation of the tender documents.



Title Water distribution, Fire fighting and the Wastewater systems for

Marina El-Alamin Tourist Center, West North Coast (Km 94-

Km100).

Starting Date Oct. 1984.

**Duration** 6 Months.

**Location** Western-North Coast (Km 94 - Km 100).

Client Ministry of Housing and Reconstruction.

**Brief Description** The project is concerned with designing complete systems for both the

potable water and wastewater for the Tourist Center (26000Inh.).

Scope of Work T & I provided the following set of services:

> Preliminary design and detailed final design.



Title: Irrigation System for Sakara Horses Club- Shoubrament.

Starting Date: Dec. 1983.

**Duration:** 2 Months.

**Location :** Shoubrament–Giza.

Client: Mr.Shrief Samy.

**Brief Description :** An irrigation system "using hidden sprinkler" to irrigate the club paddocks

"40 feddans".

Scope of Work: T & I provided the following set of services:

> Preliminary design and detailed final design.



Title Meteorological Hydraulic and Hydrological studies for runoff studies

and designs the protection civil structures against runoff hazards.

**Duration** 6 months.

Client The Arab Bureau for Design and Technical Consultations-Ministry of

Housing and Reconstruction.

**Brief Description** Meteorological Hydraulic and Hydrological studies for runoff studies and

design the protection civil structures against runoff hazards for the

following new cities:

- EI-Obour new city (400000 Inh).

- 15th of May new city (60000 Inh).

- EI-Shorouk new city (50000 Inh).

Scope of Work T & I provided the following set of services:

Preliminary studies

> Conceptual design

Final design and preparation of tender documents.



**ELECTRICAL SUPPLY NETWORKS & COMMUNICATIONS** 



Infrastructure Detailed Design for Coves 2 Soma Bay - Hurghada

Date

2024

Location

Soma Bay, Hurghada Governorate, Egypt

Client

Abu soma development company

**Brief Description** 

Studying the current status of the infrastructure works (Roads - Water - Irrigation - Sewage - Electricity) for the tourist resort of Soma Bay, which is located on an area of 10 million square meters in Ras Soma area on the Red Sea shore.

Planning of the future facilities required during the various stages of development of the project.

## **Scope of Services**

## T & I provided the following set of services:

## **Power Supply**

- ➤ Calculate the electrical power demand for each plot
- ➤ Preparing the electrical load schedules along with the load requirements of the infrastructure facilities
- Preparing the routing of the various cables and the placement of the substations
- > Propose tie in points with the main power supply network
- > Calculating preliminary cost estimate for the power supply network
- Finalizing the design and selection of the power supply network components such as:
  - Transformer (if needed)
  - Underground lines
  - Switchgears
  - Feeder pillar
- Providing load schedules, power flow, voltage drop and short circuit calculations
- ➤ Providing standard details and sections for feeder pillar foundation, cable laying arrangement, duct sizes and protection.
- ➤ Coordinate with MEP, Landscape regarding any site works for power supply network including sub stations.

#### **Telecommunication**

- > Develop the preliminary routing for the telecommunication cable
- Provide locations of manholes and sub-manholes
- ➤ Provide the telecommunication network, tie in points and other requirements according to the updated master plan



# Infrastructure Detailed Design For Baywest Valley Soma Bay - Hurghada

Date

2024

Location

Soma Bay, Hurghada Governorate, Egypt

Client

Abu soma development company

## **Brief Description**

- Studying the current status of the infrastructure works (Roads Water Irrigation Sewage Electricity) for the tourist resort of Soma Coves, which is located on an area of 10 million square meters in Ras Soma area on the Red Sea shore.
- Planning of the future facilities required during the various stages of development of the project.

## **Scope of Services**

## T & I provided the following set of services:

## **Power Supply**

- ➤ Calculate the electrical power demand for each plot
- ➤ Preparing the electrical load schedules along with the load requirements of the infrastructure facilities
- Preparing the routing of the various cables and the placement of the substations
- Propose tie in points with the main power supply network
- > Calculating preliminary cost estimate for the power supply network
- Finalizing the design and selection of the power supply network components such as:
  - Transformer (if needed)
  - Underground lines
  - Switchgears
  - Feeder pillar
- Providing load schedules, power flow, voltage drop and short circuit calculations
- ➤ Providing standard details and sections for feeder pillar foundation, cable laying arrangement, duct sizes and protection.
- ➤ Coordinate with MEP, Landscape regarding any site works for power supply network including sub stations.

## **Telecommunication**

- > Develop the preliminary routing for the telecommunication cable
- Provide locations of manholes and sub-manholes
- ➤ Provide the telecommunication network, tie in points and other requirements according to the updated master plan



# Infrastructure Detailed Design For Blanca – Phase I Soma Bay - Hurghada

Date

2023

Location

Soma Bay, Hurghada Governorate, Egypt

Client

Abu soma development company

## **Brief Description**

- Studying the current status of the infrastructure works (Roads Water Irrigation Sewage Electricity) for the tourist resort of Soma Coves, which is located on an area of 10 million square meters in Ras Soma area on the Red Sea shore.
- Planning of the future facilities required during the various stages of development of the project.

## **Scope of Services**

## T & I provided the following set of services:

# **Power Supply**

- > Calculate the electrical power demand for each plot
- ➤ Prepare the electrical load schedules along with the load requirements of the infrastructure facilities
- > Prepare the routing of the various cables and the placement of the substations
- Propose tie in points with the main power supply network
- > Calculate preliminary cost estimate for the power supply network
- Finalize the design and selection of the power supply network components such as:
  - Transformer (if needed)
  - Underground lines
  - Switchgears
  - Feeder pillar
- Providing load schedules, power flow, voltage drop and short circuit calculations
- ➤ Providing standard details and sections for feeder pillar foundation, cable laying arrangement, duct sizes and protection
- ➤ Coordinate with MEP, Landscape regarding any site works for power supply network including sub stations

#### **Street Lighting**

- ➤ Propose types and shapes of the lighting poles that will be used according to the updated master plan
- > Studying lighting options and estimate related loads
- ➤ Prepare layout drawings showing the exact location the street lighting poles, cable reticulation, feeder pillars distribution, and circuit referencing



- > Provide single line diagrams for each feeder pillar
- > Prepare lighting calculations and voltage drop calculation
- > Provide lighting fixture schedules including the type and size of poles, lantern and lamp from three different approved manufacturers
- ➤ Provide standard details and sections for street lighting poles, flanges, lanterns, brackets, feeder pillars, foundations, pull boxes, duct marking, cables and duct arrangements



Title Infrastructure Detailed Design For Arc Of Soma

Soma Bay - Hurghada

**Date** 2022

**Location** Soma Bay, Hurghada Governorate, Egypt

Client Abu soma development company

Brief Description

Studying the current status of the infrastructure works (Roads - Water - Irrigation - Sewage - Electricity) for the tourist resort of Soma Bay, which is located on an area of 10 million square meters in Ras Soma

area on the Red Sea shore.

Planning of the future facilities required during the various stages of development of the project.

Scope of Services

## T & I provided the following set of services:

## **Power Supply**

- > Calculate the electrical power demand for each plot
- ➤ Prepare the electrical load schedules along with the load requirements of the infrastructure facilities
- > Prepare the routing of the various cables and the placement of the substations
- > Propose tie in points with the main power supply network
- > Calculate preliminary cost estimate for the power supply network
- Finalize the design and selection of the power supply network components such as:
  - Transformer (if needed)
  - Underground lines
  - Switchgears
  - Feeder pillar
- Providing load schedules, power flow, voltage drop and short circuit calculations
- ➤ Providing standard details and sections for feeder pillar foundation, cable laying arrangement, duct sizes and protection
- ➤ Coordinate with MEP, Landscape regarding any site works for power supply network including sub stations



# Infrastructure Detailed Design For Soma Coves Soma Bay - Hurghada

Date

2022

Location

Soma Bay, Hurghada Governorate, Egypt

Client

Abu soma development company

## **Brief Description**

- Studying the current status of the infrastructure works (Roads Water Irrigation Sewage Electricity) for the tourist resort of Soma Coves, which is located on an area of 10 million square meters in Ras Soma area on the Red Sea shore.
- Planning of the future facilities required during the various stages of development of the project.

## **Scope of Services**

## T & I provided the following set of services:

# **Power Supply**

- > Calculate the electrical power demand for each plot
- ➤ Prepare the electrical load schedules along with the load requirements of the infrastructure facilities
- > Prepare the routing of the various cables and the placement of the substations
- > Propose tie in points with the main power supply network
- > Calculate preliminary cost estimate for the power supply network
- Finalize the design and selection of the power supply network components such as:
  - Transformer (if needed)
  - Underground lines
  - Switchgears
  - Feeder pillar
- Providing load schedules, power flow, voltage drop and short circuit calculations
- ➤ Providing standard details and sections for feeder pillar foundation, cable laying arrangement, duct sizes and protection
- ➤ Coordinate with MEP, Landscape regarding any site works for power supply network including sub stations

#### **Street Lighting**

- ➤ Propose types and shapes of the lighting poles that will be used according to the updated master plan
- > Studying lighting options and estimate related loads
- ➤ Prepare layout drawings showing the exact location the street lighting poles, cable reticulation, feeder pillars distribution, and circuit referencing



- > Provide single line diagrams for each feeder pillar
- > Prepare lighting calculations and voltage drop calculation
- > Provide lighting fixture schedules including the type and size of poles, lantern and lamp from three different approved manufacturers
- ➤ Provide standard details and sections for street lighting poles, flanges, lanterns, brackets, feeder pillars, foundations, pull boxes, duct marking, cables and duct arrangements



Title Extension of Abu Tig Potable Water Treatment Plant with capacity

500 L/sec

**Date** 2021

**Location** Abu Tig City, Assuit Governorate, Egypt

Client Metito Water Treatment Egypt

Brief Description Preparing the hydraulic, mechanical and electrical designs and site

infrastructure works for Abu Tig water plant extension with a capacity of 500 L/sec to reach the total capacity of the plant to 1000 L/sec (86,400 m<sup>3</sup>/day) within the framework of the presidential initiative

(Hayah Karima).

Scope of Work T & I provided the following set of services:

> Preparing detailed design for the electro-mechanical works

Preparing detailed design for the internal and external lighting works

> Preparing calculation sheet for power cables

> Technical support during construction

Preparing As-built Drawings



Title Sustainable Rural Sanitation Services Program for Results (SRSSP)

- (Additional Financing Phase) Funded by The World Bank

**Date** 2020

**Location** Menofia, Gharbia and Damietta Governorates, Egypt

Client Ministry of Housing, Utilities, and Urban Communities (MHUUC)

Brief Description Preparing conceptual design, review of detailed designs and tender

documents, and support during tendering stage for sewage network,

Pump Stations, Force mains at 45 villages.

Preparing detailed design and tender documents for 4 WWTPs, and

preparing design & build tender documents for 7 WWTPs

Scope of Work T & I provided the following set of services:

> Preparing detailed design for the electro-mechanical works at 4

WWTPs

> Preparing detailed design for the internal and external lighting

works

> Preparing calculation sheet for power cables

> Preparing tender documents and B.O.Q



Title Golf Paradise Residential Compound at Dreamland

**Date** 2019

**Location** Dreamland - 6<sup>th</sup> of October city, Egypt

Client Dreamland Egypt – Member of Bahgat Group

**Brief Description**Preparing detailed designs for infrastructure works including (Roads - Potable water – Irrigation – Wastewater – Electricity) for the residential

compound inside dreamland city.

Scope of Work T & I provided the following set of services:

➤ Preparing conceptual design report and drawings for the electrical distribution network.

Preparing detailed design drawings

> Preparing detailed design for internal lighting & power distribution works

Preparing design calculation sheets for the electrical distribution and street lighting networks

> Preparing tender documents and B.O.Q

Technical support during construction



Title **CPC Industrial Park at Sadat City** Date 2019 Location Industrial Zone -Sadat City, Menofia Governorate, Egypt Client Mega Build for Urban Development and Project Management & CPC Egypt for Industrial Development Company **Brief Description** Preparing detailed designs for infrastructure works including (Roads -Potable water - Irrigation - Wastewater - Electricity - Firefighting) for the industrial park with total area of 1.1 million m<sup>2</sup>. Scope of Work T & I provided the following set of services: > Preparing conceptual design report and drawings for the electrical distribution network feeding the industrial plots. Preparing detailed design drawings > Preparing design calculation sheets for the electrical distribution and street lighting networks > Preparing tender documents and B.O.Q Technical support during construction



**Updating Master plan of Infrastructures Soma-Bay Resort, Hurghada** 

**Date** 

2019

Location

Soma Bay, Hurghada Governorate, Egypt

Client

Abu soma development company

## **Brief Description**

- Studying the current status of the infrastructure works (Roads Water Irrigation Sewage Electricity) for the tourist resort of Soma Bay, which is located on an area of 10 million square meters in Ras Soma area on the Red Sea shore.
- Planning of the future facilities required during the various stages of development of the project.

## **Scope of Services**

## T & I provided the following set of services:

## **Power Supply**

- ➤ Calculate the electrical power demand for each plot
- ➤ Preparing the electrical load schedules along with the load requirements of the infrastructure facilities
- Preparing the routing of the various cables and the placement of the substations
- ➤ Provide tie in points with the main power supply network according to the updated master plan
- ➤ Calculating preliminary cost estimate for the power supply network

#### **Telecommunication**

- > Develop the preliminary routing for the telecommunication cable
- ➤ Provide the telecommunication network, tie in points and other requirements according to the updated master plan
- Calculating preliminary cost estimate for the telecommunication network

## **Street Lighting**

- ➤ Propose types and shapes of the lighting poles that will be used according to the updated master plan.
- > Studying lighting options and estimate related loads.
- Calculating preliminary cost estimate for the street lighting network.



Title Al Urubah Road Low-Density Development Infrastructure Works-

Riyadh, KSA

2018 Date

Location Riyadh, Kingdom of Saudi Arabia

Client HAK Architecture & Engineering Company

Complete infrastructure works (Roads & Mass grading- Potable water – **Brief Description** Irrigation - Wastewater - Electricity - Telecommunication) for 1,440,000 m<sup>2</sup> of a mixed-use community comprising of residential, commercial and retail areas, municipal services and public amenities to

serve the community residents, open spaces and public realm.

Scope of Work At the onset of the project, T & I performed a comprehensive review of the proposed physical master plan to ensure an efficient and effective infrastructure master plan.

Following this task T & I provided the following set of services:

> Preparation of Power Supply & Lighting systems and telecommunication System Master Plan.

Conceptual design of Power Supply, Lighting systems and telecommunication System Master Plan

> Detailed design and preparation of tender documents for Power Supply, Lighting systems and telecommunication System Master Plan.

Final detailed design and preparation of the tender documents.



Title Al-Muhaideb Community Infrastructure Works-Jeddah, KSA

**Date** 2013

Location Jeddah, Kingdom of Saudi Arabia

Client Al-Muhaideb Real Estate Development

Brief Description Complete infrastructure works for 700000 m2 of a mixed-use community comprising of residential, commercial and retail areas, municipal services and public amenities to serve the community

residents, open spaces and public realm.

**Scope of Work**At the onset of the project, T & I performed a comprehensive review of the proposed physical master plan to ensure an efficient and effective infrastructure master plan.

Following this task T & I provided the following set of services:

➤ Preparation of Power Supply & Lighting systems and telecommunication System Master Plan.

➤ Conceptual design of Power Supply, Lighting systems and telecommunication System Master Plan

➤ Detailed design and preparation of tender documents for Power Supply, Lighting systems and telecommunication System Master Plan.

Final detailed design and preparation of the tender documents.



Title Infrastructure Network for El-Rehab (2)

Starting Date May 2005

**Duration** Current

**Location** New Cairo City

Consultant T&I

Client Arab Company for Projects and Housing Development

Brief Description | Construction Management & Supervision for the Infrastructure Systems,

these systems are: Roadways and Parking facilities, Waste Irrigation of Turf and Green Areas, Power Supply and Lighting systems and

Telecommunication System.

Scope of Work T & I provided the following set of services:

> Preparation of the power supply & lighting networks master plan.

> Planning and conceptual design of the network.

> Final detailed design and preparation of the tender documents.



Title Construction Management and Supervision for Infrastructure Works

for Dreamland Residential Town El-Sudan

Starting Date May 2004

**Duration** Current

**Location** El-Khartoum City – Sudan

Consultant T&I

Client Bahgat Group & Co.

**Brief Description** Construction Management & Supervision for the infrastructure systems,

these systems are: Roadways and Parking facilities, waste supply and distribution system, wastewater collection and management system, irrigation of turf and green areas, power supply and lighting systems and

telecommunication system.

Scope of Work T & I provided the following set of services:

Preparation of Power Supply & Lighting systems and

telecommunication System Master Plan..



**Title SOKHNA Port Starting Date** Sept. 2005 **Duration** 12 month Location Sokhna Port – Red Sea Client Sokhna Port Development Company (AMIRAL) **Brief Description** Development of Sokhna New Port and Logistics Center to become the major port and logistics center south of Suez Canal to provide the necessary interface for import and export cargo flows serving the Suez special Economic Zone as well as the Red Sea area. T & I provided the following set of services: Scope of Work > Owner Consultant for Extension for the Infrastructure Works (Electrical Power Supply, Distribution network and fire fighting).



Title
Nubaria dairy farm.
Nubaria dairy complex.

**Starting Date** February 2000.

End Date February 2003.

**Location** Nubaria area nearly 70 km south of Alexandria. The farm is bounded from

the west by the Cairo-Alexandria desert highway.

Client International Co. for Agro-Industrial projects.INTERAGRO

Brief Description Design the Irrigation, Drainage, Roads, Wastewater systems, Ground

water control, Power & Light for irrigation pump station for the Nubaria

Dairy Farm.

Design the Internal Roads, Landscape, Stormwater, PWTP, IWWTP and

Light Scape systems for the Nubaria Dairy Complex.

Scope of Work T & I provided the following set of services:

➤ Light Scape for dairy complex – Road Lighting – Medium Volt over

head transmission lines around farm roads.

➤ Light Current cabling for central pivot

➤ Power & Light for irrigation Pump Station



Title Electrical Power supply, distribution network and the communication

systems for Dreamland Resort.

Starting Date Nov. 1996.

**Duration** 5 years.

**Location** Dreamland Resort - 6th'h of October city (Area 2200 Feddans).

Client Dreamland company - Bahgat Group.

**Brief Description** Construction supervision of the electrical power supply, distribution and

telecommunication systems for the amusement park (168 feddans) Golf course (187 feddans, the tennis complex (15 feddans) and Golf Resort

(350 feddans) the work include also the street lighting.

Scope of Work T & I provided the following set of services:

➤ Permanent supervision on the construction of all the electrical Power supply and distribution cables (medium and low voltage networks) as well as the communication systems of the amusement park, Golf

course, the tennis complex and Golf Resort as well as the streets

lighting.



Title Electrical Supply Networks and Telephone Communication Lines for

New Noubaria City (second district and the city downtown).

Starting Date April 1992

**Duration** One Year

**Location** Noubaria City.

**Client** Ministry of Housing and Reconstruction.

**Brief Description** | Supplying the new Noubaria City (second district and the city downtown)

with the needed electrical energy through the mean and low voltage networks. Also, supply the city and its Central with the telephone lines,

beside the street lighting systems.

Scope of Work T & I provided the following set of services:

> Preliminary design and final detailed design.



Title Electrical Supply networks and telephones Communication lines for

Hilton Tourist Village in Hurghada - Red Sea.

Starting Date Dec. 1989.

**Duration** 6 Weeks.

**Location** Hurghada - Red Sea.

Client The Sahara Company for Development.

**Brief Description** Planning and designing the low and mean voltage electrical distribution

networks as well as street lighting systems. Also, design the village phone

communication system.

Scope of Work T & I provided the following set of services:

> Preliminary and final detailed designs.



Title Electrical Supply Networks and Telephone Communication Lines for

the Engineers Tourist Village - Western North Coast (Km 76).

Starting Date Dec. 1987.

**Duration** 2 Months.

**Location** Western North Coast (Km 76).

**Brief Description** The Cooperative Society for building houses for Engineers.

Scope of Work T & I provided the following set of services:

> Preliminary design and final detailed design.



Title Electrical Supply network and Telephone Communication lines for

Marina EI-Alamin Tourist Center - Western North Coast (Km 94 -

100).

**Ostarting Date** Oct. 1984.

**Duration** 2 Months.

**Location** Western North - Coast (Km 94 – 100).

Client Ministry of Housing and Reconstruction.

**Brief Description** Supplying the center with the needed electrical energy and designing the

low - voltage and mean - voltage networks, Telephone lines and streets

lighting systems.

Scope of Work T & I provided the following set of services:

> Preparation of Master Plan, preliminaries design, and final detailed

design.



# ARCHITECTURAL, STRUCTURAL PROJECTS



Title Sustainable Rural Sanitation Services Program for

Results (SRSSP) - (Additional Financing Phase) Funded

by The World Bank

**Date** 2020

**Location** Menofia, Gharbia and Damietta Governorates, Egypt

Client Ministry of Housing, Utilities, and Urban Communities

(MHUUC)

Brief Description Preparing conceptual design, review of detailed designs and

tender documents, and support during tendering stage for sewage network, Pump Stations, Force mains at 45 villages.

Preparing detailed design and tender documents for 4 WWTPs, and preparing design & build tender documents for

7 WWTPs

Scope of Services T & I provided the following set of services:

• Preparing detailed architectural design for the service buildings at 4 WWTPs

• Preparing detailed structural design for the treatment unites and service buildings for 4 WWTPs

• Preparing structural analysis models and calculation sheets

• Preparing tender documents and B.O.Q



Title CPC Industrial Park at Sadat City

**Date** 2019

**Location** Industrial Zone -Sadat City, Menofia Governorate, Egypt

Client Mega Build for Urban Development and Project Management &

CPC Egypt for Industrial Development Company

**Brief Description** Preparing detailed designs for infrastructure works including

(Roads - Potable water - Irrigation - Wastewater - Electricity - Firefighting) for the industrial park with total area of 1.1 million

 $m^2$ .

Scope of Services T & I provided the following set of services:

• Preparing detailed architectural design for the Electrical sub-

station 22 KV.

• Preparing detailed structural design for the firefighting under ground tank with capacity 2000 m3 and the Electrical sub-

station.

• Preparing structural analysis models and calculation sheets.



Title Sustainable Rural Sanitation Services Program for Results

(SRSSP) Funded by The World Bank

**Date** 2017

**Location** Sharkia Governorate, Egypt

Client Sharkia Water and Wastewater Company -Holding Company for

Potable Water and Wastewater

Brief Description Preparing detailed design, tender documents, support during

tendering stage and construction supervision for sewage network, Pump Stations, Force mains and Treatment plants at 63

villages distributed at 7 districts.

Scope of Services T & I provided the following set of services:

• Preparing detailed architectural design for more than 25

wastewater pump stations

• Preparing detailed structural design for the more than 25 wastewater pump stations and valves chambers on the

forcemains.

• Preparing structural analysis models and calculation sheets

• Preparing tender documents and B.O.Q



Title Wastewater Treatment Plant with capacity 20,000 m<sup>3</sup>/d and

two pump stations at New Ismailia City

**Date** 2016

**Location** New Ismailia City, Egypt

Client Safa Misr for Contracting and Trading (SAMCO)

Brief Description Preparing detailed design for the architectural, structural,

electrical and lighting works for the wastewater treatment plant with capacity 20,000 m<sup>3</sup>/d at new Ismailia city, and the main and

secondary pump stations at the first district of the city.

Scope of Services T & I provided the following set of services:

• Preparing detailed architectural design for the service

buildings

• Preparing detailed structural design for the treatment unites

and service buildings

• Preparing structural analysis models and calculation sheets

• Technical support during construction

• Preparing As Built drawings



Title Wastewater Treatment Plant with capacity 2,000 m<sup>3</sup>/d at the

service village - Farafra - New Valley Governorate

**Date** 2015

**Location** Farafra - New Valley Governorate, Egypt

Client Arabic Projects Company for Urban Development

**Brief Description** Preparing detailed design for the architectural, structural,

electrical and lighting works for the wastewater treatment plant

with capacity 2,000 m<sup>3</sup>/d at the service village

Scope of Services T & I provided the following set of services:

• Preparing detailed architectural design for the service

buildings

• Preparing detailed structural design for the treatment unites

and service buildings

• Preparing structural analysis models and calculation sheets

• Technical support during construction

• Preparing As Built drawings



Title Al Husayneya Transmission line & Raw Water Pump

Station with capacity 75,000 m3/day Station

Starting Date 2010

**Location** Al Husayneya City – Al Sharkia Governorate

Client National Organization for Potable Water & Sanitary Drainage

(NOPWSD)

**Brief Description** Preparing detailed design, Tenders documents and Construction

supervision for Al Husayneya 7.0km of 900 mm Transmission line & Raw Water Pump Station with capacity 75,000 m<sup>3</sup>/day

Station

Scope of Services T & I provided the following set of services:

Preparing detailed architectural design for the service

buildings

• Preparing detailed structural design for the treatment unites,

service buildings, and valves chambers

Preparing structural analysis models and calculation sheets

Preparing Tender Documents and B.O.Q

• Construction Supervision



Title Al-Shorouk City potable water booster station

and Transmission Pipe line with capacity 100,000 m<sup>3</sup>/day

Starting Date 2009

**Location** Al-Shorouk & Badr Cities

Client Arab Contractors "Osman Ahmed Osman" – Canal Branch

**Brief Description** Preparing detailed design drawings, Technical Support for the

construction company for potable water booster station and 18 km of 1000mm D.C.I. Transmission Pipe line at Al-Shorouk

City with capacity 100,000 m<sup>3</sup>/day.

Scope of Services T & I provided the following set of services:

• Preparing detailed architectural design for the service

buildings

• Preparing detailed structural design for the underground tank with capacity 30,000 m3, pump room, service buildings, and

valves chambers

• Preparing structural analysis models and calculation sheets

• Technical support during construction

• Preparing As Built drawings



Intake and intermediate raw water booster station and Transmission Pipe line with capacity 440,000 m<sup>3</sup>/day for the extension of El-Oubor Potable water Treatment plant

**Starting Date** 

2009

Location

**El-Obour City** 

Client

Arab Contractors "Osman Ahmed Osman" – The Marine Construction Department

**Brief Description** 

Preparing detailed design drawings, Technical Support for the construction company for intake, 1km of 1800mm pre-stressed R.C. Transmission Pipe line and Intermediate Raw Water Pump stations for the extension of El-Oubor water Treatment plant with capacity 440,000 m<sup>3</sup>/day.

**Scope of Services** 

## T & I provided the following set of services:

- Preparing detailed architectural design for the service buildings
- Preparing detailed structural design for a new shore Intake, Intake & Intermediate Raw Water Pump rooms, and valves chambers
- Preparing detailed structural design for 4 manipulation valve chambers to connect the new transmission line 1800mm diameter with the two existing 1800 mm diameter transmission lines
- Preparing structural analysis models and calculation sheets
- Technical support during construction
- Preparing As Built drawings



Title ZAYTONA MALL Commercial Center

Starting Date October 2001

**Location** Helmia El Zatoen – Cairo

Client Nile Company for Roadway and bridges

**Brief Description** The project consist of a 3300 m2 commercial center and a multi

floor parking.

The project consist of ten floors and four underground floors

arranged as follows:

- Four floors of underground Parking spaces

- Commercial Entertainment center on five floors including the

ground floor

Office Spaces on four floors

## Scope of Work T & I provided the following set of services:

• General Consultancy for Design and Supervision works including:

Preparation of Preliminary design.

Financial Feasibility study

- Final detailed design and preparation of the tender

documents.

Construction supervision



Title Marble factory – El Menia – Upper Egypt.

**Starting Date** Feb. 1999.

**Duration** 7 Months.

**Location** New industrial area, Menia Governorate.

Client El Menia Marble Co. (Bahgat Group).

**Brief Description** A. Marble factory with production capacity of 250.000 in 2 years

on an area of  $26.700 \text{ m}^2$ .

Scope of Work T & I provided the following set of services:

• Conceptual and final detailed designs

• Construction management



Title Bio – fertilizers factory - El Menia – Upper Egypt.

**Starting Date** Feb. 1999.

**Duration** 18 Months.

**Location** New industrial area, Menia Governorate.

Client El Menia Bio – fertilizers Co. (Bahgat Group).

**Brief Description** A. Factory for drying and packing of Bio – fertilizers on an area of

 $1455 \text{ m}^2$ .

Scope of Work T & I provided the following set of services:

• Conceptual and final detailed designs

• Construction management



Title Electronics factory El Menia - Upper Egypt.

**Starting Date** Feb. 1999.

**Duration** 7 Months.

**Location** New industrial area, Menia Governorate.

Client El Menia Electronics Co. (Bahgat Group).

**Brief Description** An Electronics factory with production capacity of 100.000 TV

sets per year on an area of 7,420 m<sup>2</sup>.

Scope of Work T & I provided the following set of services:

• Conceptual and final detailed designs,

• Construction management



Title Fabric and Textiles factory, - El Menia – Upper Egypt.

Starting Date Feb. 1999.

**Duration** 14 Months.

**Location** New industrial area, Menia Governorate.

Client El Menia Fabric and Textiles Co. (Bahgat Group).

**Brief Description** A factory to produce sheets cartons and other fabric and textiles.

Scope of Work T & I provided the following set of services:

Conceptual and final detailed designs,

• Construction management



Title Oil and soap factory, - El Menia - Upper Egypt.

Starting Date Feb. 1999.

**Duration** 18 Months.

**Location** New industrial area, Menia Governorate.

Client El Menia Oil and soap (Bahgat Group).

**Brief Description** A factory to produce, corn Oil & soap on an area of 19.300 m<sup>2</sup>.

Scope of Work T & I provided the following set of services:

• Conceptual and final detailed designs,

• Construction management



Title Furniture factory, - El Menia - Upper Egypt.

Starting Date Feb. 1999.

**Duration** 8 Months.

**Location** New industrial area, Menia Governorate.

Client El Menia Furniture Co. (Bahgat Group).

**Brief Description** A furniture factory on an area of 15,352 m<sup>2</sup>.

Scope of Work T & I provided the following set of services:

• Conceptual and final detailed designs,

• Construction management



Title Food industries factory, - El Menia – Upper Egypt.

Starting Date Feb. 1999.

**Duration** 12 Months.

**Location** New industrial area, Menia Governorate.

Client El Menia Food Industries Co. (Bahgat Group).

**Brief Description** A factory to produce Pasta, Biscuits, chases and honey on an area

of 16.488 m<sup>2</sup>.

Scope of Work T & I provided the following set of services:

• Conceptual and final detailed designs,

• Construction management



Title 7 Factories in El-Minia Industrial Zone Area.

Starting Date Dec. 1998.

**Duration** 15 Months.

**Location** El- Minia Governorate.

Client El-Minia Industrial Zone Development Company (Bahgat Group).

**Brief Description** The project consists of establishing 7 Factories (Marble, Soap and

Oil, Food Industries, Organic Fertilizers, Furniture, Electronics,

Fabrics and Textiles) on an area of 120000 m<sup>2</sup>.

Scope of Work T & I provided the following set of services:

• Design, Project management

 Construction Supervision of the project including Roads, Water, Supply, Wastewater Networks, Electrical Power and

Communication Systems, Buildings ... etc.



Title Abu-Dawod Mosque in Keman-Faris, Fayoum.

**Starting Date** April 1993.

**Duration** 10 Months.

**Location** Keman-Faris, Fayoum Governorate.

Client Fayoum Governorate in association with Eng. Ismail Abu-Dawod.

**Brief Description** A Mosque with an Islamic Library on an area of 1000m<sup>2</sup>.

Scope of Work T & I provided the following set of services:

• Conceptual and final detailed designs.

• Construction management



Title El-Burullus Bridge.

Starting Date Nov. 1992.

**Duration** 2 Months.

**Location** Burullus Lake outlet to the Mediterranean Sea.

**Client** Ministry of Reconstruction and Housing.

**Brief Description** A R.C. bridge of length 600m and width 18m.

Scope of Work T & I provided the following set of services:

Architectural design and structural design of the bridge

• Preparing the final drawings and the tender documents.



Title Rossetta Nile Bridge.

Starting Date Oct. 1992.

**Duration** 3 Months.

**Location** Nile Branch at Rossetta.

**Client** Ministry of Reconstruction and Housing.

**Brief Description** A prestressed R.C. bridge of length 700m and width 18m.

Scope of Work T & I provided the following set of services:

• Architectural design and structural design of the bridge.

• Preparing the final drawings and the tender documents.



Title International Exhibition Halls in Sadat City.

Starting Date July 1992.

**Duration** 9 Months.

**Location** Sadat City.

**Client** Ministry of Reconstruction and Housing.

**Brief Description** An International Exhibition halls in Sadat City on an area of 25

acres, located near the entrance of the city.

Scope of Work T & I provided the following set of services:

• Feasibility studies,

• Determination of the site,

• Surveying,

• Soil investigation,

• Architectural and structural design and

• Preparing the complete tender documents.



Title Karoun - Lake Mosque, Fayoum.

Starting Date Oct. 1990.

**Duration** 12 Months.

**Location** Karoun-Lake, Fayoum Governorate.

**Client** Fayoum Governorate.

**Brief Description** A mosque and Islamic Center on an area of 1700 m<sup>2</sup>.

Scope of Work T & I provided the following set of services:

• Conceptual and final detailed designs.

• Construction management



Title Resident and Office Building in Fayoum.

Starting Date Feb. 1989.

**Duration** 3 Months.

**Location** Fayoum City.

**Client** Fayoum City Council.

**Brief Description** The building consists of 14 floors with a total builder area of 8000

 $m^2$ .

Scope of Work T & I provided the following set of services:

• Preliminary design.

• Final detailed and periodic supervision.



Title Islamic Complex in Keman - Faris, Fayoum.

Starting Date Dec. 1988.

**Duration** 11 Months.

**Location** Keman – Faris, Fayoum Governorate.

**Client** Fayoum Governorate.

Brief Description This Islamic complex Have: a basic school, a hospital and a

mosque on an area of 20000 m<sup>2</sup>.

Scope of Work T & I provided the following set of services:

• Conceptual and final detailed designs



Title R.C. Bridges in Damietta Governorate.

Starting Date March 1985.

**Duration** 3 months.

**Location** Damietta Governorate.

Client Arab Bureau for Design and Technical Consultations, Ministry of

Reconstruction and Housing.

**Brief Description** Three R.C. bridges (each about 40-m length) on 3 drainages in

Damietta Governorate.

Scope of Work T & I provided the following set of services:

• Architectural and structural design of these bridges

• Preparing the complete tender documents.



Title Kawitia – Egyptian Factory for Building Materials.

Starting Date Dec. 1984.

**Duration** 14 Months.

**Location** 10<sup>th</sup> of Ramadan City.

Client Kawitia – Egyptian Company for Building Materials.

**Brief Description** The factory Have: silos, production hangers, stores and an office

building. The area is 40 Acres.

Scope of Work T & I provided the following set of services:

• Reviewing the design and permanent supervision on the.

Factory construction.



Title Fayoum Governorate Head Quarters.

**Starting Date** August 1983.

**Duration** 3 Months.

**Location** Fayoum City.

Client Housing and Reconstruction Division – Fayoum Governorate.

**Brief Description** A Governorate complex (5 Buildings on an area of 15000 m<sup>2</sup>).

Scope of Work T & I provided the following set of services:

Conceptual design

Final detailed design

• Periodic supervision.



Title El – Mandara Housing Complex.

**Starting Date** Jan. 1983.

**Duration** 6 Months.

**Location** Alexandria.

Client EI-Balaah Society for Housing - Suez Canal Authority.

**Brief Description** EI-Mandara housing complex consists of two buildings (13 and 6

floors) with total housing area of 22000 square meters.

Scope of Work T & I provided the following set of services:

• Conceptual design

• Detailed final design



## Interior Designs and Decoration

## (1) <u>Preparation of the Interior Decoration for Fayoum</u>

The Governorate head garters occupies 5 buildings with an area of = 8000m<sup>2</sup>. It consists of offices for the governor, the secretary general, the assistant secretary general and all the other offices for the employees.

It also contains a large cafeteria and two halls for conferences. Talaat's Firm prepared the design of the interior decorations and supervised the execution of them as well as the furniture of all the offices, cafeteria and the conference halls.

## (2) <u>Fayoum's Pearl Cafeteria</u>

It is a large restaurant, built on the beach of Karoun's Lake in Fayoum. The restaurant's area is - 1600 m<sup>2</sup> and it contain an outside cafeteria. The second floor of the building is prepared to be a conference hall.

The role of Talaat's Firm was to:

- Prepare both the architectural and structural design of the restaurant and supervise its erection.
- Prepare the interior design oft restaurant, the conference hall and the cafeteria.
- Supervise the execution of decoration for the restaurant, cafeteria and the conference hall.

## (3) <u>Sadat's City National Exhibition Halls for the Products of Egypt's New Cities</u>

- The area of the exhibition halls is =  $10000 \text{ m}^2$ .
- The project includes a 5-star restaurant and 3 cafeterias.
- Talaat's Firm prepared the followings:
  - Planning of the Exhibition area.
  - Architectural and structural designs of the exhibition halls.
  - Interior design of the halls.