

## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Tarhunah Settlement

(The Govt. of Libya Funded Project)

## Libya Tarhunah

### Project Brief

The settlement is spread out to an area of 731 Ha with a design population of 39,675 for year 2025. The present population of Tarhunah is about 19,000. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage, Storm Water Drainage systems and Road Works.

### Financing Agency

Govt. of Libya

### Client Name

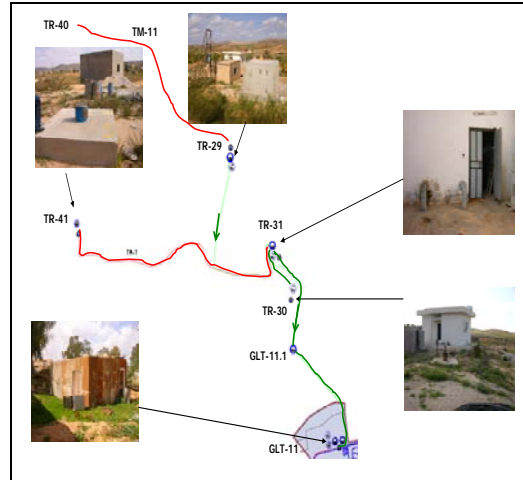
National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 153543.00**

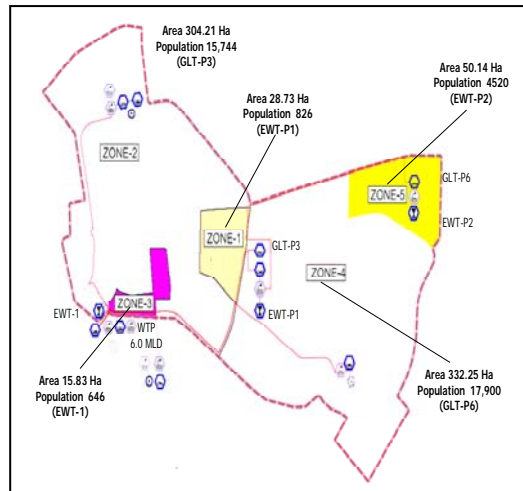
**Year and Period of consultancy: 2006/07**

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
- ❖ Design of Sewerage system-Collection Network, Pumping Stations, Pumping Mains, Sewage Treatment Plants, Treated Water Disposal and Reuse.
- ❖ Design of Storm Water Drainage- Estimation of Rainfall and Run-off, Collection Network, Disposal System-Soakways and Collection Reservoirs.
- ❖ Architectural & Structural Design of Water Supply and Sewerage Systems.
- ❖ Electrical and Mechanical Design of Pumping Stations & Treatment Plants for Watersupply & Sewerage Systems.
- ❖ Preparation of Bill of Quantities and Estimates.
- ❖ Technical Specifications and Tender Documents
- ❖ Technical Training for NCB Engineers.



### Existing Water Supply System



### Water Supply Zones

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**National Program of Water Supply and Sewerage  
Systems for Tripoli Region, Libya  
Qaser Khiyar Settlement**  
(The Govt. of Libya Funded Project)

**Libya  
Qaser Khiyar**

**Project Brief**

The settlement is spread out to an area of 248.17 Ha with a design population of 6,613 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

**Financing Agency**

Govt. of Libya

**Client Name**

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 52115.00**

**Year and Period of consultancy:** 2006/07

**Our Services**

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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**Route of GMMR**



**3000mm Dia Pipe in GMMR**

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**National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya**  
**Suk Al Khamis Settlement**  
(The Govt. of Libya Funded Project)

**Libya**  
**Suk Al Khamis**

**Project Brief**

The settlement is spread out to an area of 191.18 Ha with a design population of 6,900 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

**Financing Agency**

Govt. of Libya

**Client Name**

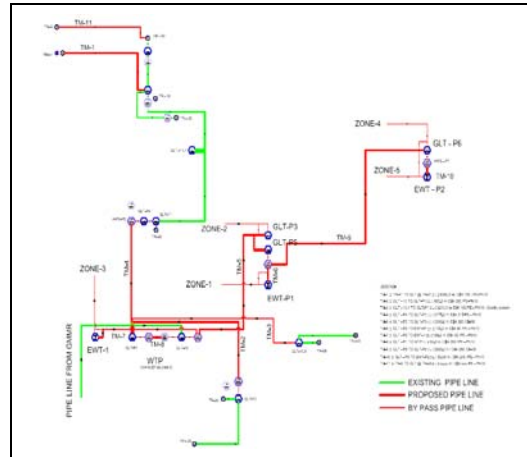
National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 40147.00**

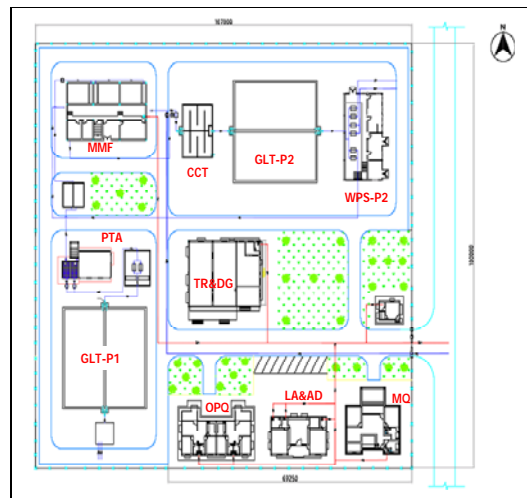
**Year and Period of consultancy: 2006/07**

**Our Services**

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**Schematic layout of proposed Water Supply System**



**Water Treatment Plant: Layout**

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya

### Miskah Settlement

(The Govt. of Libya Funded Project)

**Libya**  
**Miskah**

#### Project Brief

The settlement is spread out to an area of 6.81 Ha with a design population of 345 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

#### Financing Agency

Govt. of Libya

#### Client Name

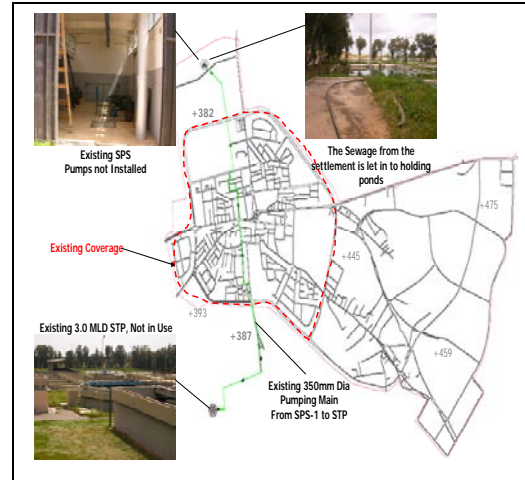
National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 1430.00**

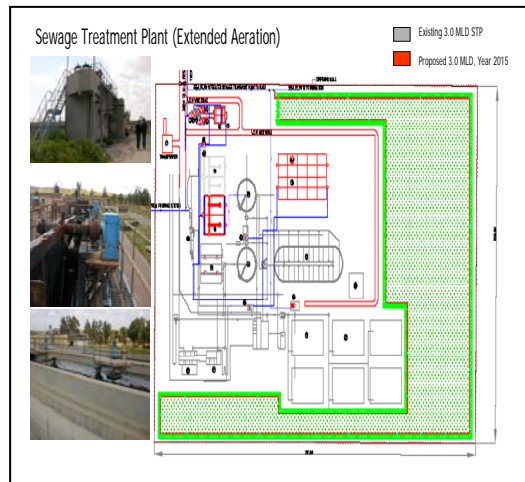
**Year and Period of consultancy: 2006/07**

#### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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**Existing Sewerage System**



**Sewage Treatment Plant**

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Esbeya Settlement

(The Govt. of Libya Funded Project)

Libya  
Esbeya

### Project Brief

The settlement is spread out to an area of 154.03 Ha with a design population of 2929 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 32346.00**

**Year and Period of consultancy:** 2006/07

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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Existing Water supply valve chamber



Corroded valve chamber

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Bin Gashir Settlement

(The Govt. of Libya Funded Project)

Libya  
Bin Gashir

### Project Brief

The settlement is spread out to an area of 334.02 Ha with a design population of 19838 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 70144.00**

**Year and Period of consultancy:** 2006/07

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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- ❖ Preparation of Bill of Quantities and Estimates.
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- ❖ Technical Training for NCB Engineers.



**Sewage Stagnation in open Drain**



**Sewage over flowing on street**

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Al Khums Settlement

(The Govt. of Libya Funded Project)

Libya  
Al Khums

### Project Brief

The settlement is spread out to an area of 1742 Ha with a design population of 92575 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 365820**

**Year and Period of consultancy:** 2006/07

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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- ❖ Technical Training for NCB Engineers.



Existing Sewerage System



Existing GLRS

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Yifren Settlement

(The Govt. of Libya Funded Project)

**Libya**  
**Yifren**

### Project Brief

The settlement is spread out to an area of 242.97 Ha with a design population of 13800 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

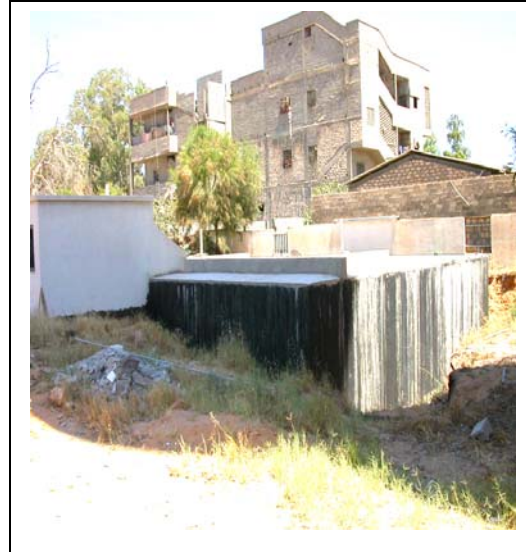
National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 51023.00**

**Year and Period of consultancy: 2006/07**

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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- ❖ Electrical and Mechanical Design of Pumping Stations & Treatment Plants for Watersupply & Sewerage Systems.
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- ❖ Technical Training for NCB Engineers.



**GLT-200 cum capacity**



**Existing Borewell**

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Gharyana Settlement

(The Govt. of Libya Funded Project)

Libya  
Gharyana

### Project Brief

The settlement is spread out to an area of 458.22 Ha with a design population of 33063 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 128324.00**

**Year and Period of consultancy: 2006/07**

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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Existing Reservoir



Existing Drainage System

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**National Program of Water Supply and Sewerage  
Systems for Tripoli Region, Libya  
Qaser Khiyar Settlement**  
(The Govt. of Libya Funded Project)

**Libya  
Qaser Khiyar**

**Project Brief**

The settlement is spread out to an area of 248.17 Ha with a design population of 6,613 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

**Financing Agency**

Govt. of Libya

**Client Name**

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 52115.00**

**Year and Period of consultancy:** 2006/07

**Our Services**

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**Route of GMMR**



**3000mm Dia Pipe in GMMR**

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Misllatah Settlement

(The Govt. of Libya Funded Project)

Libya  
Misllatah

### Project Brief

The settlement is spread out to an area of 458.22 Ha with a design population of 33063 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 96226.2**

**Year and Period of consultancy: 2006/07**

### Our Services

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- ❖ Preparation of Bill of Quantities and Estimates.
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- ❖ Technical Training for NCB Engineers.



**GMMR, Turnout**



**Existing outlet pipes**

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**National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya**  
**Miskah Settlement**

(The Govt. of Libya Funded Project)

**Libya**  
**Miskah**

**Project Brief**

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**Financing Agency**

Govt. of Libya

**Client Name**

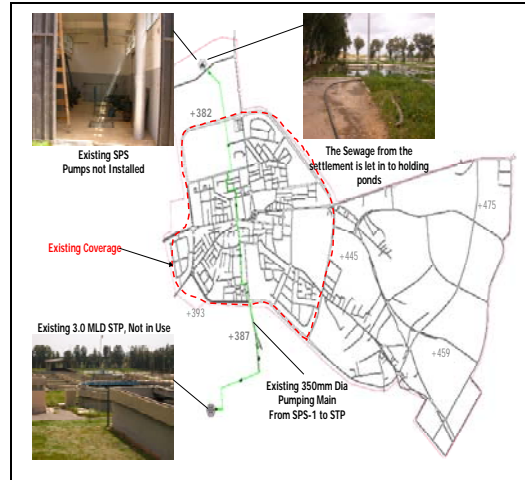
National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 1430.00**

**Year and Period of consultancy: 2006/07**

**Our Services**

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
- ❖ Design of Sewerage system-Collection Network, Pumping Stations, Pumping Mains, Sewage Treatment Plants, Treated Water Disposal and Reuse.
- ❖ Design of Storm water Drainage- Estimation of Rainfall and Run-off, Collection Network, Disposal System-Soakways and Collection Reservoirs.
- ❖ Architectural & Structural Design of Water Supply and Sewerage Systems.
- ❖ Electrical and Mechanical Design of Pumping Stations & Treatment Plants for Watersupply & Sewerage Systems.
- ❖ Preparation of Bill of Quantities and Estimates.
- ❖ Technical Specifications and Tender Documents
- ❖ Technical Training for NCB Engineers.



**Existing Sewerage System**



**Sewage Treatment Plant**

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Fax: 61 2 96483944

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Esbeya Settlement

(The Govt. of Libya Funded Project)

Libya  
Esbeya

### Project Brief

The settlement is spread out to an area of 154.03 Ha with a design population of 2929 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 32346.00**

**Year and Period of consultancy:** 2006/07

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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Existing Water supply valve chamber



Corroded valve chamber

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Bin Gashir Settlement

(The Govt. of Libya Funded Project)

Libya  
Bin Gashir

### Project Brief

The settlement is spread out to an area of 334.02 Ha with a design population of 19838 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 70144.00**

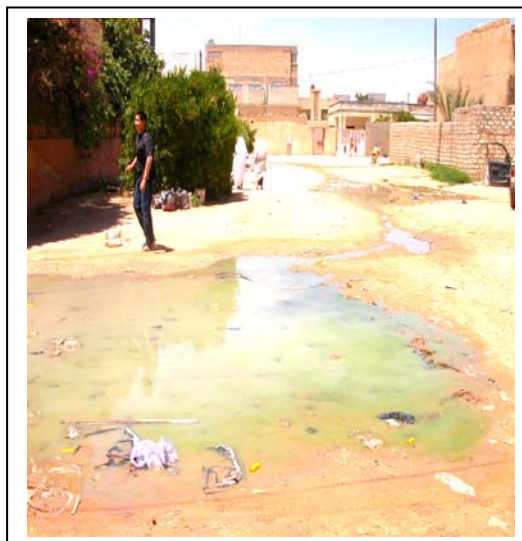
**Year and Period of consultancy:** 2006/07

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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**Sewage Stagnation in open Drain**



**Sewage over flowing on street**

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Al Khums Settlement

(The Govt. of Libya Funded Project)

Libya  
Al Khums

### Project Brief

The settlement is spread out to an area of 1742 Ha with a design population of 92575 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 365820**

**Year and Period of consultancy:** 2006/07

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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- ❖ Technical Specifications and Tender Documents
- ❖ Technical Training for NCB Engineers.



Existing Sewerage System



Existing GLRS

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Yifren Settlement

(The Govt. of Libya Funded Project)

Libya  
Yifren

### Project Brief

The settlement is spread out to an area of 242.97 Ha with a design population of 13800 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

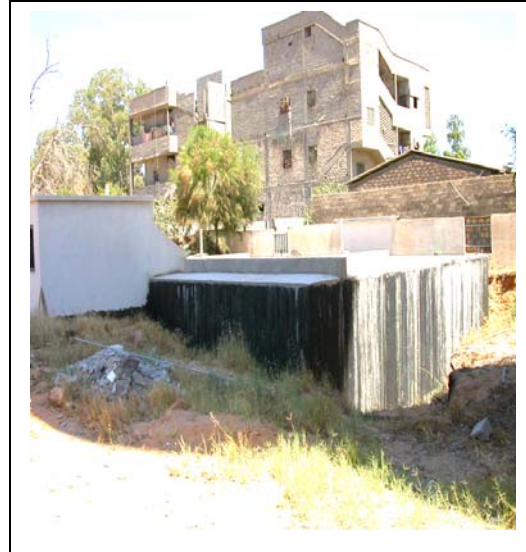
National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 51023.00**

**Year and Period of consultancy:** 2006/07

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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- ❖ Technical Specifications and Tender Documents
- ❖ Technical Training for NCB Engineers.



GLT-200 cum capacity



Existing Borewell

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Gharyana Settlement

(The Govt. of Libya Funded Project)

Libya  
Gharyana

### Project Brief

The settlement is spread out to an area of 458.22 Ha with a design population of 33063 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 128324.00**

**Year and Period of consultancy: 2006/07**

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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- ❖ Technical Training for NCB Engineers.



Existing Reservoir



Existing Drainage System

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## National Program of Water Supply and Sewerage Systems for Tripoli Region, Libya Misllatah Settlement

(The Govt. of Libya Funded Project)

Libya  
Misllatah

### Project Brief

The settlement is spread out to an area of 458.22 Ha with a design population of 33063 for year 2025. The scope of work for infrastructure design consultancy services is the detailed design of Water Supply, Sewerage and Storm Water Drainage systems.

### Financing Agency

Govt. of Libya

### Client Name

National Consulting Bureau(NCB), Libya

**Consultancy Fees (USD): US \$ 96226.2**

**Year and Period of consultancy: 2006/07**

### Our Services

- ❖ Review and validation of Technical Studies and Reports
- ❖ Site Verification
- ❖ Design of Water Supply System-Source, Pumping mains, Pumping Stations, Water Treatment, Storage Tanks, Distribution Network
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- ❖ Technical Specifications and Tender Documents
- ❖ Technical Training for NCB Engineers.



**GMMR, Turnout**



**Existing outlet pipes**

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