

Project Name:
Dhaka Mass Rapid Transit
Development Project
(MRT - line 6)

Total Length:
19.83 km x Double Track
(20.1 km from Depot to
Motijheel)

**Track Type: All elevated Lines** 

No of Stations: 16



**PMC Appointed : Dhaka Mass Transit Company** 

**EPC Appointed: L&T – Marubeni JV** 

L&T Construction has bagged a **BDT 3,191 crore** order from Dhaka Mass Transit Company for construction of a railway line for Dhaka Metro.

L&T has secured the order in JV with Marubeni Corporation (Japan) through an international competitive bidding process.

"The railways strategic business group of L&T Construction's transportation infrastructure business has won a major design and build order from the Dhaka Mass Transit ..





# Safesea Bangladesh Ltd has been awarded as the Logistic Service Provider for handling logistic activity of Rails- Phase I

1<sup>st</sup> Lot Shipment about 8000 mt Steel Rails Length of each rails varies from 14 – 18 meters

### Scope of Work:

- Receiving of Rails from the mother vessel- Terms CIF- Chittagong Port
- Project registration and Custom handling at the port.
- Survey and route study
- Movement of rails from the port to the Uttara Metro Project Site.
- Unloading/ Safe and secure handling of the Rails at the site.





### **Critical Performance Parameters**

- Meet project delivery timelines
- Cost competitiveness
- Minimum Cargo handling
- Compliance
- QHSSE





### **Scope of Work:**

#### **PHASE I**

- Chartering of 4 Nos of Feeder Vessel 2300 DWT each (IMO Class)
- Apply for Discharging Guarantee / Direct Delivery Permissions, i.e. Section 78 to release M/Vessel to save port demurrages.
- Custom Clearance & Examination & settling Port river dues charges.
- Deployment of 4 Vessels starboard Side of & on arrival of Mother Vessel & plan discharging of all rails to our Vessel by using vessel crane & spreader. Stowage plan as per the Feeder Vessel load capacity was been provided to vessel Chief officers/Vessel Agents & Stevedores.
- Appointing Surveyors to check & monitor unloading of rails with respect to Cargo Qty count & Quality of Operation.
- Monitoring of sailing loaded vessel & Placing of other vessels for loading in time to avoid detention.





### Scope of Work:

#### **PHASE II**

- All feeder vessels to anchor on an allocated & surveyed for maximum draft available area
- Chartering of 5 No's of Tugs & Barges for Mid river Lighterage operation
- Booking of 2 no's of Barge mounted Crane with Lifting capacity
  of 70 Mt & boom length of 80 feet long so as to perform mid river
  lighterage operation from Vessel to Barge.
- Appointing Surveyors to check & monitor unloading of rails with respect to Cargo Qty count & Quality of Operation.
- Procurement of Slings, Nylon Belts, Shackles & other gears required for lifting of the cargo & its safety
- Arranging for sufficient manpower like Riggers, Loaders, Helpers
   & Supervisors with all safety gears to ensure safety through out the operations.





### Scope of Work:

#### PHASE III

- Identification of Temporary Jetty Land, Completing Legal compliances to use the identified land as work area
- Constructing/Strengthening of Jetty & near by area to make it feasible to perform unloading operation.
- Booking of Barge Mounted Crane with Lifting capacity of 70 Mt
   & boom length of 80 feet long so as to perform lighterage operation from Barge to Jetty Storage area.
- Modification of 6 x 40FT Trailers to 60 FT Long Bed for safely loading 59 feet of Rails
- Booking of Mobile Telescopic Crane with Lifting Capacity of 35
   Mt to perform lifting of Cargo from Storage area to Trailers
- Appointing Surveyors to check & monitor unloading of rails with respect to Cargo Qty count & Quality of Operation.





### Scope of Work:

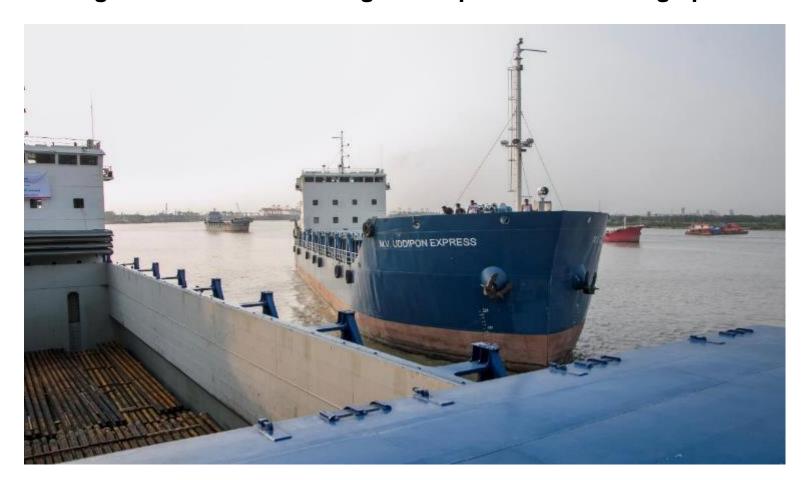
#### **PHASE IV**

- Movement of Trailers from Jetty to L&T Unloading Site Area Distance of 3 km between both the points.
- Booking of Mobile Telescopic Crane with lifting capacity of 25 MT to perform unloading operation at L&T Dhaka Site.
- Ensuring per vehicle regular movement rotations for maintaining Time Lines towards completion of Project.
- Stacking of Steel rails at Site only as per Universal unloading methods with concern to the safety of the Rails.
- Appointing Surveyors to check & monitor unloading of rails with respect to Cargo Qty count & Quality of Operation.





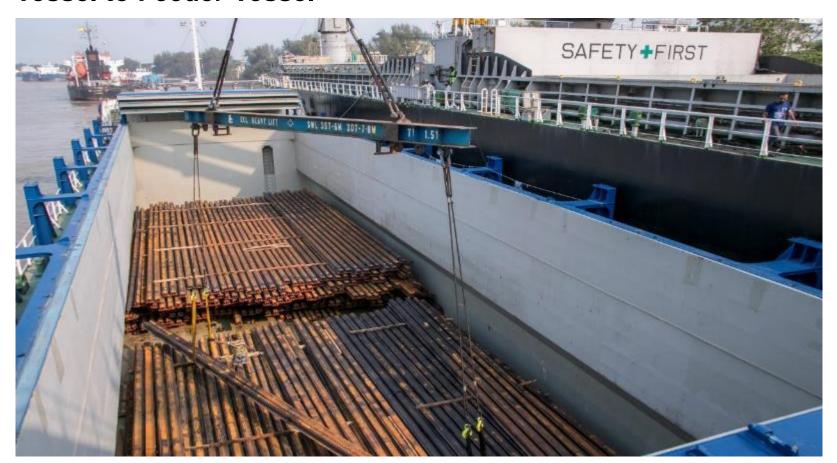
# Placing of Feeder Vessel alongside to perform unloading operation







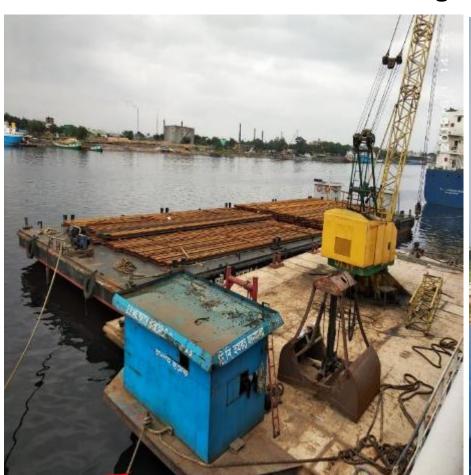
# Lighterage Operation showing Unloading of Rails from Mother Vessel to Feeder Vessel







# Mid River Lighterage Operation showing Unloading of Rails from Feeder Vessel to Fatullah Anchorage









# Temporary Jetty Lighterage Operation showing Unloading of Rails From Barge using Barge Mounted Crane on to the Jetty Warf







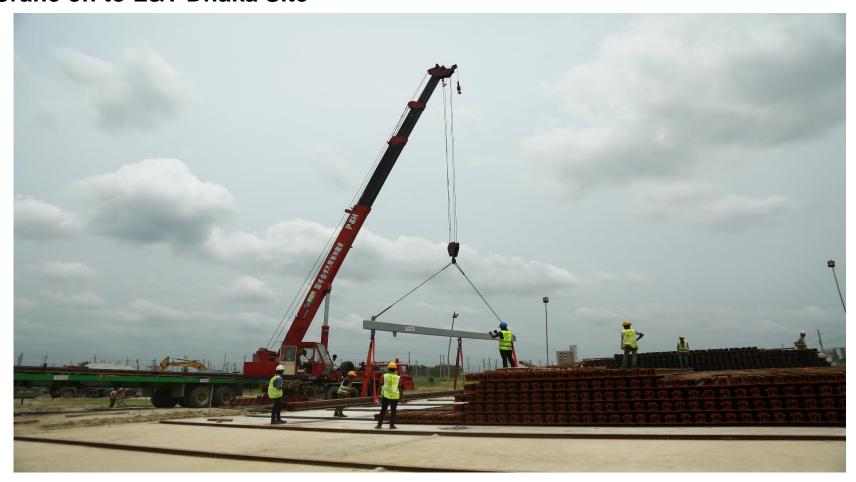
# Jetty Operation showing Loading of Rails From Jetty Warf using Mobile Telescopic Crane on to Modified Trailers







# Unloading Operation of Rails From Trailers using Mobile Telescopic Crane on to L&T Dhaka Site







# Stacking of Rails at Site using Universal rail stacking Methods







# Lifting Plan for Operation to be performed at Temporary Jetty for Unloading of Steel Rails (Length 18 meter & 13 meter)

### Material Handling Equipment used for the shipment:

Telescopic Crawler Crane – 35mt Lifting Capacity

Make: KATO Works

Crane capacity: 35,000 kg at 3.0 m

4-section long boom: 10.6 m - 34.0 m

2-staged bi-fold jib: 8.8/15.2 m

Maximum lifting height: 34.0 m (Boom) 49.2 m (Jib)

Maximum load radius: 30.0 m (Boom) 35.5 m (Jib)

Strong winches: 3,190 kgf

### Proposed Temporary Jetty Area Located:

Near Dhaka Metro Project Depot Site 2km away from the area of Site Total Area: 180 ft Wide & 300 ft Long





Lifting Plan for Operation to be performed at Temporary Jetty for Unloading of Steel Rails (Length 18 meter & 13 meter)

#### Type of Lifting Material Used:

Wire Slings (For upper section of Spreader Beam):

23mm thickness – 28ft Long - 2 Nos

Wire Sling (For Lower Section of Spreader Beam)

18mm thickness – 18ft Long – 2 Nos

Nylon Belts (For extension to Lower Section)

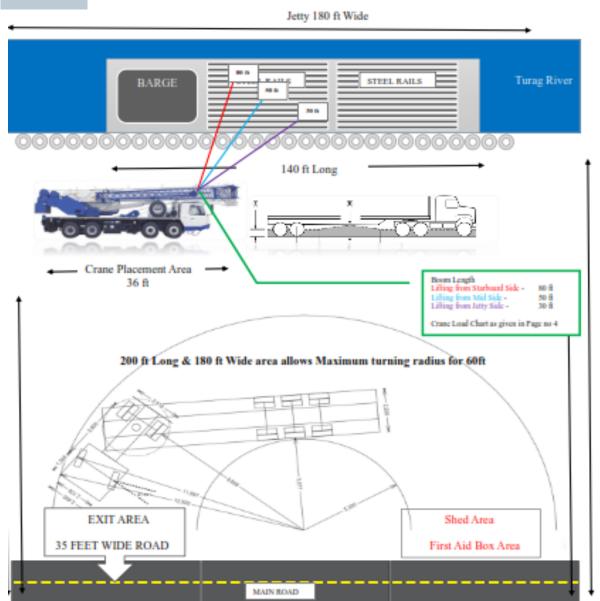
18 ft Long – 4 Nos

Attachments used:

D-Shackles – 10 to 12 Tons Capacity – 8 Nos







Work Plan Area

### **Temporary Jetty Area Plan:**

Area Plan was been explained to L&T Dhaka Safety team





Sign of Relief – Team worked 24 x 7 to make it successful



Project was completed before the deadline given by LIPL to the Project team



# Thank You

