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MMRDA

No. MMRDA/MTHL-PIU/JICA/QPR-21/1293/2022 Date: 20th July 2022

To,
Chief Representative,
Mumbai Trans Harbour Link Project (I)
16th Floor, Hindustan Times House,
18-20, Kasturba Gandhi Marge, New Delhi-110-001

Kind Attn: Mr. Katsuo Matsumoto,

Sub : Mumbai Trans Harbour Link Project (I) (ID-P255)
- **Quarterly Progress Report (QPR) No. 21 for April 2022 to June 2022.**

Sir,

The loan agreement for the Official Development Assistance (ODA) loan for the Mumbai Trans Harbour Link Project (I) is signed between Mumbai Trans Harbour Link Project (I) and Mumbai Metropolitan Region Development Authority (MMRDA) on 31st March 2017 & 29th March 2020 with MMRDA as a direct borrower of the loan.

The Quarterly Progress Report (QPR) No. 21 for the Mumbai Trans Harbour Link Project (I) for the period of April 2022 to June 2022 is enclosed herewith for information please.

Thanking you.

Yours faithfully,

Wandhekar.

(S. A. Wandhekar)
Engineer- In- Chief

Encl.: QPR-21 (April 2022 to June 2022)

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MMRDA

Mumbai Metropolitan Region Development Authority

Mumbai Trans Harbour Link Project

Quarterly Progress Report - No. 21

(From 1st April 2022 to 30th June 2022)

Mumbai Trans Harbour Link Project
Quarterly Progress Report No. 21
1st April 2022 to 30th June 2022
Loan Agreement No. ID-P255 (Tranche–I)

ORGANIZATION INFORMATION

Borrower	**Mumbai Metropolitan Region Development Authority**	
	Person in Charge	**Metropolitan Commissioner, MMRDA**
	Contact Address	M.M.R.D.A. New Office Building, Bandra-Kurla Complex, Plot no. R-5, R-6 & R-12, E Block, Bandra (East), Mumbai - 400051 Phone: +91-22-26594000 Fax No:+91-22-2659 1264
Executing Agency	**Mumbai Trans Harbour Link Project Implementation Unit**	
	Headed by:	Chief Engineer Mumbai Trans Harbour Link Project Implementation Unit
	Contact Address	M.M.R.D.A. New Office Building, Bandra-Kurla Complex, Plot no. R-5, R-6 & R-12, E Block Bandra (East), Mumbai - 400 051 Phone: +91-22-2659 4034 Fax No: +91-22-2659 4179

Details of JICA Loan

Source of Finance	JICA ODA Loan Portion:	238,572 million Japanese YEN (JPY)
	Tranche-I:	144,795 million Japanese YEN (JPY) (Loan Agreement signed on 31st March 2017)
	Tranche-II:	66,909 million Japanese YEN (JPY) (Loan Agreement signed on 27th March 2020)
Terms and Conditions of JICA ODA Loan (Tranche-1)	Repayment Period:	30 years, including 10 years of the grace period.

DOCUMENT VERIFICATION AND REVISION RECORD

PROJECT NAME	Mumbai Trans Harbour Link Project		
DOC NO.	21	DATE OF ISSUE	12/07/2022
DOC TITLE	Quarterly Progress Report No. 21		

REV No.	DATE OF ISSUE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY
R0	05/07/2017	Quarterly Progress Report No. 1 (Apr-Jun 17)	J Senthil	Dr T K Sundaram	Dr Robin Sham
R0	05/10/2017	Quarterly Progress Report No. 2 (Jul-Sep 17)	J Senthil	Dr T K Sundaram	Dr Robin Sham
R0	05/01/2018	Quarterly Progress Report No. 3 (Oct-Dec 17)	J Senthil	Dr T K Sundaram	Dr Robin Sham
R0	05/04/2018	Quarterly Progress Report No. 4 (Jan-Mar 18)	J Senthil	Dr T K Sundaram	Dr Robin Sham
R0	24/07/2018	Quarterly Progress Report No. 5 (Apr-Jun 18)	Prashant B	Dr T K Sundaram	Dr Robin Sham
R0	10/10/2018	Quarterly Progress Report No. 6 (Jul-Sep 18)	Prashant B	Dr T K Sundaram	Dr Robin Sham
R1	08/02/2019	Quarterly Progress Report No. 7 (Oct-Dec 18)	Prashant B	J Senthil/ Dr T K Sundaram	Dr Robin Sham
R0	05/04/2019	Quarterly Progress Report No. 8 (Jan-Mar 19)	Prashant B	J Senthil	V. D. Sharma/ Dr Robin Sham
R0	18/09/2019	Quarterly Progress Report No. 9 (Apr-Jun 19)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	13/11/2019	Quarterly Progress Report No. 10 (Jul-Sep 19)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	11/02/2020	Quarterly Progress Report No.11 (Oct-Dec 19)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	25/11/2020	Quarterly Progress Report No.12 (Jan-Mar 20)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	15/12/2020	Quarterly Progress Report No.13 (Apr-Jun 20)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	06/01/2021	Quarterly Progress Report No.14 (Jul-Sept 20)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	12/02/2021	Quarterly Progress Report No.15 (Oct-Dec 20)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	06/05/2021	Quarterly Progress Report No.16 (Jan-Mar 21)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	30/07/2021	Quarterly Progress Report No.17 (Apr-Jun 21)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	11/11/2021	Quarterly Progress Report No.18 (Jul - Sep 21)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	17/01/2022	Quarterly Progress Report No.19 (Oct-Dec 21)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	22/04/2022	Quarterly Progress Report No.20 (Jan - Mar 22)	Prashant B	Mr. Som Ghosh	Dr Robin Sham
R0	12/07/2022	Quarterly Progress Report No.21 (Apr-Jun 22)	Prashant B	Mr. Som Ghosh	Dr Robin Sham

Contents

1.0 PROJECT DESCRIPTION

1.1 Project Objective

Original:

To improve connectivity in Mumbai Metropolitan region by constructing the Mumbai Trans Harbour Link connecting Mumbai with Navi Mumbai, thereby contributing to mitigation of traffic congestion and promoting regional economic development.

Actual *(P/R, PCR)*

There is no change in the Project Objective.

1.2 Necessity of the Project

The Project is consistent with the development policy, sector plan, national/regional development plans and demand of target group of the recipient country.

Benefits from MTHL Project

- Saving in travel time for commuters from Mumbai to Navi Mumbai.
- Improved comfort and accessibility between the island and the mainland.
- Reduced operating costs of vehicles due to lesser congestion.
- Smooth traffic flow from Navi Mumbai airport to Mumbai Island.
- Accelerated economic development of Navi Mumbai and nearby regions.
- Greater economic integration of Mumbai Island with Navi Mumbai and extended regions of Pune, Goa, Panvel and Alibaug.
- Improvement in environment and reduced pollution levels.
- Improved safety due to reduction in accidents.
- Improvement in trade competitiveness through faster and improved logistics.
- Accelerated growth of Navi Mumbai.
- Decongestion of Mumbai Island and dispersal of population to Navi Mumbai region & beyond.

Necessity of the Project

1. Although the urbanization in India has been rapidly progressing, infrastructure development in the urban areas has not caught up its progress. Particularly, the traffic congestion in the urban areas due to a lack of road network hinders the economic development. Thus, Government of India (GOI) places transport and connectivity as one of the "Growth Enablers" and plans to enhance road network in the "Three Year Acton Agenda 2017-2018 to 2019-20 (NITI Aayog)".
2. Mumbai Metropolitan Region, which includes Mumbai and Navi Mumbai, has about 18.4 million people in population as of 2011 (Census 2011) and the population density reaches 20,694 people per square km in the center of Mumbai, which is one of the most overpopulated and high-density cities in the world.
3. Mumbai, the narrow stretch of land that has traditionally been the epicentre of India's commerce, has seen a steady increase in population in the last three decades despite obvious spatial constraints. Thus, the development of Navi Mumbai has been identified as

an urgent requirement for broad development in Mumbai Metropolitan Region.

4. The Government of Maharashtra (GoM), of which Mumbai Metropolitan Region is under jurisdiction, has been facilitating various development plans particularly in Navi Mumbai area, which stands at the opposite site of Mumbai across the Mumbai Bay and still has spacious area for development, such as a new international airport, Special Economic Zone (SEZ) and expansion of Jawaharlal Nehru Port in order to promote the sustainable economic development in Mumbai Metropolitan Region.

5. Furthermore, a lack of connectivity in Mumbai has stunted its growth. The GoM has given importance to construct the faster connection with Mumbai to Navi Mumbai International Airport, Jawaharlal Nehru Port, Mumbai-Pune expressway and main hinterland.

6. Accordingly, the Mumbai Trans Harbour Link (MTHL) has been identified as the important infrastructure to improve the connectivity between Mumbai and Navi Mumbai and continue economic development in Mumbai Metropolitan Region.

   The MTHL is proposed to be developed as an expressway link comprising of a dual three-lane main carriageway bridge connecting Sewri in Mumbai to Chirle in Navi Mumbai. When completed, MTHL will reduce the distance between Mumbai and Navi Mumbai and will help save approximately an hour in travel time. Also, development of Navi Mumbai along with the imminent construction of the Navi Mumbai airport will lead to increased traffic between Mumbai and Navi Mumbai. Consequently, the project is envisaged to; improving accessibility between Mumbai and Navi Mumbai, accelerating growth of Navi Mumbai, smooth traffic flow from Navi Mumbai airport to Mumbai, accelerating economic development of Navi Mumbai and surrounding regions, greater economic integration of Mumbai with Navi Mumbai and extended regions of Pune, Goa, Panvel and Alibaug, and decongestion of Mumbai and dispersal of population to Navi Mumbai region and beyond.

7. The Comprehensive Transportation Study (CTS) for Mumbai Metropolitan Region which was guided by Mumbai Metropolitan Region Development Authority (MMRDA) and supported by World Bank, was completed in July 2008, which was over 25 years after the issuance of the last comprehensive transport study. The report provided a vision for Mumbai's future transportation as seamless and integrated system, in which commuters can make their journeys safely and conveniently by various modes of transport, particularly by public transport, and recommended the development of Multi Modal Corridor to take care of the varied travel demands of the region for the period up to 2031. The CTS proposed to develop the highway network in the region. The MTHL has been regarded as the priority road for Mumbai, considering its function and importance connecting between Mumbai and Navi Mumbai.

8. Necessity of the Project: - To promote economic development in Mumbai Metropolitan Region it is essential to improve the connectivity between Mumbai and Navi Mumbai, by constructing MTHL.

Actual *(P/R, PCR)*

There is no change in the Necessity of the Project preamble.

1.3 Rationale of the Project Design

- Timing, Scale, Technology of the Project:

Demand Analysis

1. At the opening year 2022, the daily traffic on the main bridge is expected to be 39,300 PCU. The traffic is projected to increase up to 103,900 by 2032 and up to 145,500 by the year 2042. The daily breakdown by vehicle class on the main bridge link is presented in the Table 1.3.1 below:

Table 1.3.1 Demand Projections Over the Period

Vehicle Type	Between Sewri Interchange and Shivaji Nagar Interchange			Between Shivaji Nagar Interchange and Chirle Interchange		
	2022	2032	2042	2022	2032	2042
Car	24,100	66,400	94,100	4,900	21,300	43,300
Taxi	2700	14,100	20,200	100	400	2,300
Bus	2,700	3,700	3,700	2,700	3,700	3,700
LCV	2,200	4,100	5,600	700	1,300	1,800
HCV	3,000	6,500	8,100	1,000	2,000	2,200
MAV	4,600	9,100	13,800	400	900	1,700
Total	**39,300**	**103,900**	**145,500**	**9,800**	**29,600**	**55,000**

LCV: Light Commercial Vehicle; HCV: Heavy Commercial Vehicle; MAV: Multi Axle Vehicle

2. At the opening year in 2022, the traffic flow on MTHL represents a diversion of 10% on the traffic across Thane creek which will increase up to 16% in 2032. If only Thane Creek Bridge is considered, then the diverted traffic from the bridge will be 21% in 2022 which will rise up to 35% in 2032.

3. 6-lane of main carriageway was decided by GoM. It was reviewed based on the forecasted result of future traffic volume by Manual of Specification and Standards for Expressways (IRC: SP:99-2013). The result of the review shows that 6-lane will be required in 2032 (10 years later after traffic open). Although, 8-lane will be required in 2042, it is assumed that the level of service of MTHL would be maintained as additionally metro might be constructed in parallel with MTHL.

Design Parameters / Overall Design

4. The MTHL which is 21.8 km long road bridge partly on the land and partly over the creek across the Mumbai Bay between Sewri in Mumbai and Chirle in Navi Mumbai, is to be constructed with the approach sections and interchanges. ITS (Intelligence Transport System) and the other necessary facilities will be provided for full access-controlled bridges.

5. As per the provisions of IRC (Indian Road Congress) SP:99-2013, the Width of each lane of the Main Carriageway is 3.5 meters.

6. When the design speed is 100 km/h according to the traffic demand forecast the large vehicle, ratio will be as low as 9.4% (2022).

7. The shoulder width of bridge towards outside of each carriageway is 2.5 meters and towards median side of each carriageway is 0.75 meters.

8. The major portion of MTHL structure is on sea and partly towards ends is on land with different type and with different span, viz., PC box girder with 50 m spans which is typically applied on marine viaduct since, it is economical, easy to construct and maintain.

9. On the land portion, the PC box girder having span of generally 30m is used.
10. As far as the location in which long span (150-180 m) is required to cross significant obstacles, such as navigation channels, pipelines and creeks, the steel box girder bridge with steel deck is proposed with large block erection method to shorten the construction period.
11. The project is coded with three lanes of traffic in each direction. The reference toll is presented in the Table 1.3.2 below for each vehicle class in Year 2022 (based on 2015 monetary value reflecting price escalation).

Table 1.3.2: Base Toll Rates (Rs) for different class of vehicles between Interchanges

Vehicle Type	Sewri to Shivaji Nagar	Shivaji Nagar to Chirle	Total
Car	180	60	240
Bus	420	130	550
LCV	240	70	310
HCV	420	130	550
MAV	600	180	780

Intelligent Transport Systems (ITS) and **Toll Management System (TMS)**

12. The Toll Management System will be implemented in MTHL to collect tolls from all road users of MTHL. Two types of toll collection method will be adopted: Electronic Toll Collection (ETC) and Manual (paying by cash).
13. The lanes corresponding to these toll collection methods are dedicated ETC lanes and Manual lanes, and Manual system shall be installed to ETC lanes for backup to be able to cope at the time of the trouble of ETC equipment failure.

Traffic management System

14. Traffic Management System is a support system to Manage the traffic on MTHL safely and efficiently. The System consists of the information collection system including Closed-Circuit Television (CCTV), Emergency Call Box (ECB), Automatic Traffic Counter-Cum-Classifier (ATCC) and Meteorological Data System (MDS), and Information Dissemination System including Variable message Sign (VMS).
15. CCTV Cameras shall be installed at around three places per 1 km, on Both side of main route and the monitoring of the traffic condition of the whole stretch of MTHL will be almost enabled in the Traffic Control Centre and VMS displays the appropriate information for road users on the collated information.
16. The Information collected by these devices shall be transmitted to the Command Control Centre through the medium of an Optical Fiber Cable laid in MTHL.

Actual *(P/R, PCR)*

There is no change in the Rationale of the Project Design.

2.0 PROJECT IMPLEMENTATION

2.1 Project Scope

Refer Table 2.1.1 and 2.1.2 for details on Scope of the Project.

Table 2.1.1 Comparison of Original and Actual location

Location	**Original: (P/M)** Mumbai Metropolitan Region Development Authority, Mumbai, State of Maharashtra	Actual: *(P/R and PCR)*

Table 2.1.2 Comparison of Original and Actual Scope

Items	Original	Actual
Construction work: 6-lane Marine Bridge Road (21.8 km)		
Package-1 Ch 0+000-10+380 (10.380 km)	• 1 Interchange (Sewri) • Viaduct superstructure (Marine Portion: PC Box Girder & Steel Box Girder with Steel Slab Land Portion: PC Box Girder & PC-I Girder) • Viaduct Substructure (RC Concrete Structure) • Viaduct Foundation (Bored piles) • Road Furniture and roadside facilities (Traffic Signs and Pavement Marking, Traffic Safety Devices, Crash Barrier, Drainage Structures, Noise Barriers, View Barriers)	*(P/R and PCR)*
Package-2 Ch 10+380-18+187 (7.80 km)	• 1 Interchange (Shivaji Nagar) • Viaduct superstructure (Marine Portion: PC Box Girder & Steel Box Girder with Steel Slab Land Portion: PC Box Girder & PC-I Girder) • Viaduct Substructure (RC Concrete Structure) • Viaduct Foundation (Bored piles) • Road Furniture and roadside facilities (Traffic Signs and Pavement Marking, Traffic Safety Devices, Crash Barrier, Drainage Structures, Noise Barriers, View Barriers)	*(P/R and PCR)* Actual: *No View Barriers*
Package-3 Ch 18+187-21+800 (3.61 km)	• 2 Interchanges (State Highway-54, National Highway-4B) • Viaduct superstructure (Marine Portion: PC Box Girder & Steel Box Girder with Steel Slab Land Portion: PC Box Girder & PC-I Girder & Steel Truss Girder for Rail-over-Bridges (ROB) • Viaduct Substructure (RC Concrete Structure) • Viaduct Foundation (Bored piles) • Cutting Section (6-lane with Slope Protection) • Road Furniture and roadside facilities (Traffic Signs and Pavement Marking, Traffic Safety Devices, Crash Barrier, Drainage Structures, Noise Barriers, View Barriers)	*(P/R and PCR)* Actual: *No* Noise Barriers & *View Barriers*

Items	Original	Actual
Package-4 ITS (Intelligent Transport System)	• Administrative Buildings • Toll Booths (1 for main alignment and each on and off rumps for 3 interchanges) • Traffic Management System (Traffic Control Centre, Closed Circuit Television (CCTV), Meteorological Observation System (MET), Emergency Call Box (ECB), Automatic traffic Counter-cum-Classifier (ATCC), Variable Message Sign (VMS)) • Highway Lighting (Whole sections Low-positioned lighting for some sections) • Electrical Powering System including HV/ LV Ring Network across the Bridge.	*(P/R and PCR)*
Consulting Services	• Tender Assistance • Construction Supervision • Facilitation of Implementation of Environmental Management Plan (EMP), Environmental Monitoring plan (EMoP).	*(P/R and PCR)*

2.2 Implementation Schedule

2.2.1 The Original Implementation Schedule

Table 2-2-1 Comparison of Original and Actual Schedule

Items	Original	Status *(P/R and PCR)* as on 30th June 2022
1) Completion of Land Acquisition and Resettlement	March 2019	Sept 2022
2) Consulting Services		
a) Selection of Consultant	May – December 2016	May – December 2016
b) Consultancy Works	December 2016 – September 2024	December 2016 – September 2024
3) Selection of Contractor		
Package-1, Package-2 & Package-3 (Civil)		
a) Pre-Qualification Process	May – December 2016	May – December 2016
b) Main Bidding	January – December 2017	January – December 2017
c) JICA's Concurrence of Contract	February-2018	February-2018
Package-4 (ITS)		
a) Pre-Qualification Process	Single Stage Bidding as concurred by JICA	
b) Main Bidding	June 2019 – September 2020	Jan 2021 – Dec 2021
4) Civil Construction		
Package-1 and Package-2	March 2018 – September 2022	March 2018–September 2023 (Extended)
Package-3	March 2018 – September 2021	March 2018 – March 2023 (Extended)
Package-4	October 2020 – September 2022	June 2022 – August 2023
5) Defect Liability Period		
Package-1 and Package-2	October 2022 – September 2024	October 2023 – September 2025
Package-3	October 2021 – September 2023	April 2023 – March 2025
Package-4	October 2022 – September 2024	Sept 2023 – August 2025
6) Commencement of Toll Collection	September 2022	October 2023
7) Selection of O&M Organization	October 2020 – September 2021	October 2022 – September 2023

Attachment 6, 7 & 8: Package wise construction schedules (progress) updated at the end of 1st Quarter (April – May - June 2022).

2.2.2 Reasons for changes of the schedule and their effects to the Project

(P/R and PCR)
No change in the Implementation Schedule except the selection of O&M Organization timeline.

2.3 Project Cost

2.3.1.a Comparison of Originally Planned and Actually Incurred Cost BY ITEM

Table 2.3.1.a.(i) Originally Planned Cost BY ITEM

Cost Breakdown	Foreign Currency Portion			Local Currency Portion			Total		
	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)	Total (Rs. mil)	JICA Portion (Rs. mil)	Others (Rs. mil)	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)
Package-1	34,398	34,398	0	45,376	45,376	0	105,713	105,713	0
Package-2	26,513	26,513	0	32,617	32,617	0	77,774	77,774	0
Package-3	759	759	0	8,276	8,276	0	13,766	13,766	0
Package-4 (ITS)	0	0	0	1,444	1,444	0	2,269	2,269	0
Package-5 (Geotechnical Investigation)	0	0	0	166	0	166	260	0	260
Dispute Boards (Package-1, 2, 3 & 4)	63	63	0	45	45	0	134	134	0
Price Escalation	2,251	2,251	0	7,133	7,133	0	13,460	13,460	0
Physical Contingency	6,398	6,398	0	9,506	9,489	17	21,338	21,312	26
Consulting Services	1,650	1,650	0	1,587	1,587	0	4,145	4,145	0
Land Acquisition*	0	0	0	11,293	0	11,293	17,748	0	17,748
Administration Cost	0	0	0	4,898	0	4,898	7,698	0	7,698
GST	0	0	0	18,238	0	18,238	28,663	0	28,663
Import Tax	0	0	0	13,435	0	13,435	21,114	0	21,114
Interest during construction	2,942	0	2,942	0	0	0	2,942	0	2,942
Front End Fee	477	0	477	0	0	0	477	0	477
Total	**75,451**	**72,032**	**3,419**	**154,013**	**105,967**	**48,046**	**317,501**	**238,572**	**78,929**

(Note) 1. Exchange Rate: US$1=Rs. 71.9, US$1=JPY 113.0, Rs.1 = JPY 1.57
2. Price Escalation (a) Foreign Currency Portion: 1.83% p.a.
(b) Local Currency Portion: 4.13% p.a.
3. Physical Contingency: 10%
4. Base Year for Cost Estimation: December 2018
* Base Cost for Land Acquisition considered in the year 2016 was INR 9,062,669,696. The base cost has been revised to INR 11,293 million considering Price Escalation and 10% Physical Contingency.

Table 2.3.1.a.(ii) Actually Incurred Cost BY ITEM

Cost Breakdown	Foreign Currency Portion			Local Currency Portion			Total		
	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)	Total (Rs. mil)	JICA Portion (Rs. mil)	Others (Rs. mil)	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)
Package-1	21,828	21,828	-	33,680	33,680		73,196	73,196	
Package-2	22,472	22,472	-	22,759	22,759		56,847	56,847	
Package-3	633	633	-	6,721	6,721		10,664	10,664	
Package-4 (ITS)	-		-	-			-		
Package-5 (Geotechnical Investigation)	-			196		196	308		308
Dispute Boards (Package-1, 2, 3 & 4)	-			-			-		-
Price Escalation	-			4	4		6	6	-
Physical Contingency	-			-			-		-
Consulting Services	253	253		362	362		1,108	1,108	
Land Acquisition*	-			7,601		7,601	11,933		11,933
Administration Cost	-			4,936		4,936	7,749		7,749
GST	-			14,014		14,014	22,002		22,002
Import Tax	-			-			-		-
Interest during construction	-			-			-		-
Front End Fee	-			-			-		-
Total	**45,186**	**45,186**	**-**	**90,273**	**63,524**	**26,747**	**183,813**	**141,821**	**41,992**

(Note) 1. Exchange Rate: Rs.1 = JPY 1.57 for MMRDA Portion only
2. Price Escalation (a) Foreign Currency Portion: 1.83% p.a.
(b) Local Currency Portion: 4.13% p.a.
3. Physical Contingency: 10%
4. Base Year for Cost Estimation: December 2018
* Base Cost for Land Acquisition considered in the year 2016 was INR 9,062,669,696. The base cost has been revised to INR 11,293 million considering Price Escalation and 10% Physical Contingency.

2.3.1.b Comparison of Originally Planned and Actually Incurred Cost BY YEAR

Table 2.3.1.b.(i) Originally Planned Cost BY YEAR

(All Figures are in JPY mil)

Cost Breakdown	Total	JICA Portion				Others (MMRDA Portion)
		Tranche I	Tranche II	Tranche III	Sub Total	
FY 2017	12,679	10,134	0	0	10,134	2,545
FY 2018	30,771	22,707	0	0	22,707	8,064
FY 2019	72,379	56,816	0	0	56,816	15,563
FY 2020	92,944	55,138	16,040	0	71,178	21,765
FY 2021	66,397	0	50,869	0	50,869	15,527
FY 2022	27,683	0	0	20,113	20,113	7,570
FY 2023	3,723	0	0	565	565	3,158
FY 2024	10,925	0	0	6,189	6,189	4,735
Total	**317,501**	**144,795**	**66,909**	**26,868**	**238,571**	**78,929**

Table 2.3.1.b.(ii) Actually Incurred Cost BY YEAR

(All Figures are in JPY mil)

Cost Breakdown	Total	JICA Portion				Others (MMRDA Portion)
		Tranche I	Tranche II	Tranche III	Sub Total	
FY 2017	13,738	9,232	-	-	9,232	4,506
FY 2018	26,813	21,695	-	-	21,695	5,118
FY 2019	40,410	31,014	-	-	31,014	9,396
FY 2020	31,859	23,922	-	-	23,922	7,937
FY 2021	54,021	43,248	-	-	43,248	10,773
FY 2022	16972	12,710	-	-	12,710	4,262
FY 2023						
FY 2024						
Total	**183,813**	**141,821**	**-**	**-**	**141,821**	**41,992**

(Note) 1. Exchange Rate used: Rs.1 = JPY 1.57 for MMRDA Portion only

2. Fiscal Year starting from 1st April and ending on 31st March.

2.3.2 Reason(s) for the wide gap between the original and actual, if there have been any, the remedies you have taken, and their results.

(P/R and PCR)

There is no major gap between the original and actual cost.

2.4 Organization for Implementation

2.4.1 Executing Agency

Original:

Executing Agency

Mumbai Metropolitan Region Development Authority (MMRDA) was established on 26thJanuary 1975 in accordance with the Mumbai Metropolitan Development Act, 1974 to make Mumbai Metropolitan Region (MMR) a destination for economic activity by promoting infrastructure and regional planning. MMRDA takes all the necessary measures, required from time to time, in an effective manner and be fully responsible for the Project implementation. After completion of the Project, MMRDA continues to be responsible for the efficient operation and maintenance of the Project.

The GoM appointed MMRDA as the implementing/ executing agency of MTHL vide Government Resolution dated 4th February 2009 and further the ownership of MTHL would be with MMRDA vide Government Resolution dated 8th June 2011.

Organization's Role

To construct, execute, carryout, improve, work, develop, administer, manage, control or maintain in MMR all types of roads, highways, express routes, paths, streets, bridges, sideways, tunnels and other infrastructure, works and conveniences, approach road, etc. Under the Project, MMRDA is responsible for all the tendering process including employment of consultants, as well as for the construction process.

Project Implementation Unit (PIU)

The PIU is in charge of the Projects. The PIU is headed by Chief Engineer, comprising of 6 Divisions/Cells (Finance Division, Social Development Cell, Engineering Division, Land Cell, Administrative Division and Environmental Cell), Supervision/ ITS Consultant and supporting staff.

Procurement

MMRDA shall have to adopt the JICA's Standard Biding Documents of the latest version, as stipulated in Section 4.01 (2) of "Guidelines for Procurement under Japanese ODA Loans.

Procurement of goods and services, except for consulting services, converted by the Japanese ODA Loan should be implemented in accordance with "Guidelines for Procurement under Japanese ODA Loans", dated in April 2012. Employment of consultants should be implemented in accordance with "Guidelines of Employment of Consultant under Japanese ODA Loans", dated in April 2012. "Principles of Procurement under the Project" is attached for brief explanation of the above Guidelines.

Actual, if changed: (*P/R and PCR*)

There is no change made in the original Organisation Set-up & Implementation methods. Refer Annexure III Organisation Chart.

2.4.2 Contractor(s)/ Supplier(s), and Consultant(s) and their Performance:

2.4.2.1 Procurement & Consultant

Table 2.4.2 Procurement of Contractor(s)/ Supplier(s) and Consultant(s)

Contract Package	Selection Method		
	Original: *(P/M)*		**Actual:** *(P/R and PCR)*
Construction Works			
1	Package-1: From CH 0+000 - To CH 10+380 (10.38 km)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	No Change
2	Package-2: From CH 10+380 - To CH 18+187 (7.80 km)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	No Change
3	Package-3: From CH 18+187 - To CH 21+800 (3.61 km)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	No Change
4	Package-4: To install ITS (Toll Management System and Highway Traffic Management System)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	International Competitive Direct Bidding Process without Pre-Qualification
5	Package-5: To conduct the geotechnical investigation	Local Competitive Bidding Process	No Change
Consulting Services			
1	Consulting Service for Supervision	Short List Method (QCBS)	No Change

2.4.2.2 Performance

Consultant's Progress:

April 2022:

1 GC scrutinized & certified the following invoices claimed by the Contractors:

i) Package-1: IPC-49 20% Detailed Verification and IPC-51 80% Ad-hoc.

ii) Package-2: IPC-47 20% Detailed Verification and IPC-48 80% Ad-hoc.

iii) Package-3: IPC-43 20% Detailed Verification and IPC-44 80% Ad-hoc.

2 GC has prepared and submitted a total reimbursement claim of 10387.79 million JPY to MMRDA / JICA in April 2022.

May 2022:

1 GC scrutinized & certified the following invoices claimed by the Contractors:

i) Package-1: IPC-50 20% Detailed Verification and IPC-52 80% Ad-hoc.

ii) Package-2: IPC-48 20% Detailed Verification and IPC-49 80% Ad-hoc.

iii) Package-3: IPC-44 20% Detailed Verification and IPC-45 80% Ad-hoc.

2 GC has prepared and submitted a total reimbursement claim of 991.05 million JPY to MMRDA / JICA in May 2022.

June 2022:

1 GC scrutinized & certified the following invoices claimed by the Contractors:

i) Package-1: IPC-51 20% Detailed Verification and IPC-53 80% Ad-hoc.

ii) Package-2: IPC-49 20% Detailed Verification and IPC-50 80% Ad-hoc.

iii) Package-3: IPC-45 20% Detailed Verification and IPC-46 80% Ad-hoc.

2 GC has prepared and submitted a total reimbursement claim of 1412.15 million JPY to MMRDA / JICA in June 2022.

3 100% of the Technical Design Modules across all the 3 Packages have been given "NONO" by the GC.

4 Approximately 99% of the Construction (GFC – Good For Construction) Design Modules across all the 3 Packages have been given "NONO" by the GC.

Package-1 – 100%, Package-2 – 99%, Package-3 -100%

5 Package-4 (ITS) - Letter of Acceptance (LOA) was issued to Strabag GmbH and Strabag AG JV on 5th May 2022.

Contractor's Progress:

Package-1 Physical Progress till 30th June 2022

S. No	Activity	Total Scope	Unit	Cumulative Achieved Works	% of Work done Against the Total Scope	Remarks
1	**Permanent Bridge Works - Land/ Interchange Zone**					
1.1	Piles	523	No.	523	100%	
1.2	Pile Caps	158	No.	125	79.11%	
1.3	Piers	228	No.	187	82.02%	
1.4	Pier Caps	228	No.	178	78.07%	
2	**Permanent Bridge Works - Intertidal Zone**					
2.1	Piles	312	No.	312	100%	
2.2	Pile Caps	75	No.	75	100%	
2.3	Piers	146	No.	146	100%	
2.4	Pier Caps	146	No.	146	100%	
3	**Permanent Bridge Works - Marine Zone**					
3.1	Piles	403	No.	403	100%	
3.2	Pile Caps	80	No.	80	100%	
3.3	Piers	162	No.	128	79.01%	
3.4	Pier Caps	162	No.	125	77.16%	
4	**Permanent Bridge Works - Total**					
4.1	**Piles**	**1238**	**No.**	**1238**	**100%**	
4.2	**Pile Caps**	**313**	**No.**	**280**	**89.46%**	
4.3	**Piers**	**536**	**No.**	**461**	**86.01%**	
4.4	**Pier Caps**	**536**	**No.**	**449**	**83.77%**	
5	**Precast Segments**					
5.1	**Segment Casting**	**6713**	**No.**	**4972**	**74.07%**	
5.2	**Segment (Span) Erection+ Cast-in-Situ Slab**	**478**	**No.**	**268**	**56.07%**	
6	**OSD Structural Steel**					
6.1	**Fabrication**	**52726**	**MT**	**53703**	**100%**	
6.2	**Assembly (Large Blocks)**	**52726**	**MT**	**19957**	**37.16%**	
6.3	**OSD Span Erection**	**38**	**No.**	**9**	**23.68%**	

Package-2 Physical Progress till 30th June 2022

S. No	Activity	Total Scope	Unit	Cumulative Achieved Works	% of Work done Against the Total Scope	Remarks
1	**Permanent Bridge Works - Land/ Interchange Zone**					
1.1	Open Foundation	113	No.	113	100%	
1.2	Piers	119	No.	119	100%	
1.3	Pier Caps	105	No.	99	94%	
1.4	Portal Beams- Land	6	No.	6	100%	
1.5	Pier Head Segments -Land	42	No.	42	100%	
2	**Permanent Bridge Works - Intertidal & CRZ Zone**					
2.1	Piles	280	No.	280	100%	
2.2	Pile Caps	72	No.	72	100%	
2.3	Piers	72	No.	72	100%	
2.4	Pier Caps	18	No.	18	100%	
2.5	Pier Head Segments	54	No.	54	100%	
3	**Permanent Bridge Works - Marine Zone**					
3.1	Piles	504	No.	504	100%	
3.2	Pile Caps	120	No.	117	98%	
3.3	Piers	120	No.	110.6	92%	
3.4	Pier Caps	48	No.	33	69%	
3.5	Pier Head Segments	74	No.	37	50%	
4	**Permanent Bridge Works - Total**					
4.1	**Open Foundation**	**113**	**No.**	**113**	**100%**	
4.2	**Piles**	**784**	**No.**	**784**	**100%**	
4.3	**Pile Caps**	**192**	**No.**	**189**	**98%**	
4.4	**Piers**	**311**	**No.**	**301.6**	**97%**	
4.5	**Pier Caps/ Portal Beams**	**177**	**No.**	**156**	**88%**	
4.6	**Pier Head Segments**	**170**	**No.**	**133**	**78%**	
5	**Precast Segments**					
5.1	**Segment Casting**	**3142**	**No.**	**2227**	**71%**	
5.2	**Segment (Span) Erection + Cast-in-Situ Slabs**	**272**	**No.**	**152**	**56%**	
6	**OSD Structural Steel**					
6.1	**Fabrication**	**34726**	**MT**	**34,726**	**100%**	
6.2	**Assembly (for Large Block)**	**34726**	**MT**	**9863**	**28.40%**	
6.3	**OSD Span Erection**	**32**	**No.**	**6**	**18.75%**	

Package-3 Physical Progress till 30th June 2022

S. No	Activity	Total Scope	Unit	Cumulative Achieved Works	% of Work done Against the Total Scope	Remarks
1	**Permanent Bridge Works**					
1.1	Open Foundations	221	No.	221	100%	
1.2	Piles	24	No.	2	100%	
1.3	Pile Caps	4	No.	4	100%	
1.4	Piers	242	No.	231	95.45%	
1.5	Pier Caps	189	No.	178	94.18%	
1.6	Segment Casting	834	No.	834	100%	
1.7	Segment (Span) Erection	59	No.	44	74.58%	
1.8	Cast in-situ Slab	108	No.	82	75.93%	
1.9	ROB Span	20	No.	4	20%	

Package-4 (ITS) Progress till 30th June 2022

1. As recommended by the GC, JICA accorded concurrence for Single Stage Bidding (without Pre-Qualification) on 9th October 2020 and asked to submit draft Bid Document for review and approval.
2. The GC submitted first draft Bid Document to the Employer on 2nd November 2020 for review.
3. After reviewing the draft, MMRDA issued the observations on 29th December 2020 for further correction & amendments, etc. The GC is in the process of preparing the revised draft Bid Document.
4. The GC submitted the revised draft Bid Document to the Employer on 14th June 2021 for a review and further concurrence with JICA.
5. The Employer received JICA concurrence for the revised Bid Documents on 24th August 2021.
6. The Tender has been floated (published) on 3rd September 2021. A Pre-bid Meeting was arranged on 27th September 2021.
7. JICA concurrence for the Technical Evaluation Report received on 15th Feb 2022. The Financial Bid opened on 16th Feb 2022.
8. GC evaluated the Financial Bid, and the report was sent to the Employer on 28th March 2022 which they further sent to JICA. JICA concurrence for the Financial Evaluation Report is awaited.
9. JICA concurrence for the Financial Evaluation Report received on 21st April 2022.
10. Letter of Acceptance (LOA) was issued to Strabag GmbH and Strabag AG JV on 5th May 2022.

Please refer **Attachment 9 - Site Progress Photos** showing the development of the project.

Health & Safety and Environment (HSE)

The HSE Plans have been submitted by the respective construction agencies for the Packages which are being monitored by the GC on a regular basis.

Package-1 Safety Report

Sr. No	Description	From April to June 2022	Cumulative
1	Total Man Hours Since Inception	4,456,369	51,475,264
2	Number of Man-Hours (Accident-Free Man-Hours)	2,999,916	11,560,260
3	Number of Man-Days	557,046	6,434,407
4	Number of Reportable Fatal Accidents	0	6
5	Number of Non-Fatal Accidents	4	12
6	Number of Near Miss Incidents	9	126
7	Number of First Aid Cases	32	324
8	Number of Dangerous Occurrences	1	4
9	Number of Reportable Sick Cases	0	0
10	Number of Man-Hours Lost	3,240	297,544
11	Number of Man-Days Lost	433	37,221
12	Number of Reportable Accidents per 100,000 Man-Hours Worked	3	3
13	Number of Inspections done for Offices & Sites	90	4,003
14	Number of Training/ Induction done for Offices & Sites	410	3,059
15	Daily Average Manpower (Including all Workmen & Staff) for the Month	12,823	16,042
16	Details of Safety Committee meetings	3	46
17	No. of toolbox talks	13,460	138,407
18	No. of critical excavations.	3	81
19	Pre-employment Medical check-up	3,227	43,544
20	No. of Safety Walk down	22	284
21	No. of Safety Inductions completed	3,227	43,544

Package-2 Safety Report

Sr. No	Description	From April to June 2022	Cumulative
1	Total Man Hours Since Inception	2,857,910	27,569,190
2	Number of Man-Hours (Accident-Free Man-Hours)	2,597,848	3,288,725
3	Number of Man-Days	259,810	2,507,637
4	Number of Reportable Fatal Accidents	0	0
5	Number of Non-Fatal Accidents	1	10
6	Number of Near Miss Incidents	41	323
7	Number of First Aid Cases	11	179
8	Number of Dangerous Occurrences	3	18
9	Number of Reportable Sick Cases	0	2
10	Number of Man-Hours Lost	1,056	5,716
11	Number of Man-Days Lost	132	696
12	Number of Reportable Accidents per 100,000 Man-Hours Worked	1	1
13	Number of Inspections done for Offices & Sites	7,255	8,455
14	Number of Training/ Induction done for Offices & Sites	124	1,122
15	Daily Average Manpower (Including all Workmen & Staff) for the Month	10,278	12,650
16	Details of Safety Committee meetings	3	50
17	No. of toolbox talks	1,166	11,878
18	No. of critical excavations.	0	0
19	Pre-employment Medical check-up	851	16,599
20	No. of Safety Walk down	12	173
21	No. of Safety Inductions completed	960	17,007

Package-3 Safety Report

Sr. No	Description	From April to June 2022	Cumulative
1	Total Man Hours Since Inception	581,262	6,200,401
2	Number of Man-Hours (Accident-Free Man-Hours)	581,262	4,100,052
3	Number of Man-Days	72,658	775,051
4	Number of Reportable Fatal Accidents	0	0
5	Number of Non-Fatal Accidents	0	2
6	Number of Near Miss Incidents	4	28
7	Number of First Aid Cases	6	120
8	Number of Dangerous Occurrences	0	1
9	Number of Reportable Sick Cases	0	0
10	Number of Man-Hours Lost	0	2,312
11	Number of Man-Days Lost	0	289
12	Number of Reportable Accidents per 100,000 Man-Hours Worked	0	0
13	Number of Inspections done for Offices & Sites	59	897
14	Number of Training/ Induction done for Offices & Sites	32	298
15	Daily Average Manpower (Including all Workmen & Staff) for the Month	1,739	2,214
16	Details of Safety Committee meetings	4	47
17	No. of toolbox talks	598	7,942
18	No. of critical excavations.	3	12
19	Pre-employment Medical check-up	631	10,254
20	No. of Safety Walk down	12	177
21	No. of Safety Inductions completed	631	10,254

3.0 BENEFITS DERIVED FROM THE PROJECT (EFFECTIVENESS)

3.1 Operational and Physical Condition

(This section will be developed when the operational plan is available)

Facilities	Description of condition	Problems, its Background and Remedial Action Plan
(P/R and PCR)	*(P/R and PCR)*	*(P/R and PCR)*

3.2 Precautions (Measures To Be Adopted/ Points Which Require Special Attention)

Original Issues and Countermeasure(s)	Actual Issues and Countermeasure(s)
3.2.1 General Issues **1. Toll Arrangement/ Toll Rate** Fixed toll rate as per the type of vehicle will be levied for the road users after the completion of the Project. An appropriate tolling policy/ rates will be finalized in consultation with the state government prior to the completion of Civil works. **2. Operation and Maintenance** MMRDA proposes to appoint separate agencies for Operation & Maintenance of the bridge and for Toll Management System. Both the agencies for O & M and Toll Management System may be appointed through open tendering process. Overall monitoring of the two agencies would be done by MMRDA in-house through a separate cell which could be constituted for the purpose. MMRDA has confirmed to allocate an adequate budget for engaging the Contractors.	*(P/R and PCR)* Appropriate Tolling Policy/ Rates will be finalized by December 2021. A single Operation and Maintenance Contractor will be appointed by December 2021.
3.2.2 Environmental and Social Consideration **a. CRZ Clearance** i. Supplemental EIA has been approved by MMRDA and disclosed on the website of JICA. A supplemental EIA report has been disclosed also on the website of MMRDA. ii. Furthermore, renewed CRZ Clearance has been obtained in January 2016. iii. In accordance with the conditions for	*(P/R and PCR)* • MMRDA has disclosed Supplemental EIA & SIA on MMRDA website. • The renewed CRZ clearance was granted on 25/1/2016 from MoEF&CC and the approval conditions have been imposed on the Contractors as the Employer's requirements. MMRDA has actively monitored the compliances of the approval conditions and maintained them throughout the construction phase.

CRZ Clearance, appropriate measures shall be taken, and necessary budget shall be secured by MMRDA.	• MMRDA appointed Mangroves & Marine Biodiversity Foundation for bird monitoring and implementation of Flamingos and bird monitoring program for the MTHL project during the construction as well as the long-term monitoring after the construction. • Rs 91.42 Crore has been transferred to Mangroves & Marine Biodiversity Foundation, Mumbai for the development & conservation of mangrove area and its afforestation. Such funds will be managed by the Mangrove Foundation of Maharashtra State. • As per the renewed CRZ clearance condition, IIT Mumbai has been appointed for the DPR study to develop a Mahul creek Effluent Treatment Plant (ETP). Rs 4.98 Crore was secured for IIT services. The Draft DPR has been reviewed and approved.

b. Required Permits

The Permits to be obtained by MMRDA/ Contractors and the present status is given in the following Table.

Table 3.2.2 Present Status of some Important Permits

Clearance Required	Approving Authority	Responsible Organization	Obtained by when	Remark /Status
Mangrove Cutting	Hon. Bombay High Court	MMRDA/ Contractor	Approval received from Hon. Bombay High Court on 28th November 2016	Mangrove cutting operation was completed with full compliance and as of now, no further follow up work is required.
Tree Cutting /Transplantation	Respective Tree Authorities	Contractor for respective Packages	-	**Pkg-1:** Tree Cutting/ Transplantation permission from the Garden Dept., MCGM obtained on 24th December 2020. **Pkg-2:** Tree Cutting/ Transplantation permission obtained & completed. **Pkg-3:** Forest Department issued a concurrence on 19/05/2019. CIDCO's permission for Tree Cutting/ Transplantation obtained on 25th November 2019.
Consent to Establish	Maharashtra Pollution Control Board	Contractor for respective Packages	Pkg-1-18.07.2018 Pkg-2-16.08.2018 Pkg-3-29.05.2019	

3.3 Environmental and Social Impacts

Major environmental and social impacts have occurred during project implementation (e.g. involuntary resettlement, poverty reduction, impacts on the natural environment).

Issue(s)	Action or countermeasure(s) taken and remaining problem(s)
1. Establishment of Effective Environmental and Social Cell in PIU MMRDA confirmed that Social Development Cell (2 Officers), Land Cell (3 Officers), and Environmental Cell (2 Officers) had been set up.	Cell is established by MMRDA (Annexure III, Organization chart)
2. Rehabilitation and Land Acquisition Issues **a. Affected Area and Population** Due to the Project, 1282 non-titleholders will be involuntary resettled, and 108.09 ha of land will be handed over by CIDCO.	**Sewri:** Involuntary resettlement in Sewri section has been further validated by Social Development Cell of MMRDA. Out of 297 Project Affected Households (PAHs) have given consents as follows: • 164 PAHs Kanjurmarg for residential • 25 PAHs Kanjurmarg for commercial • 7 PAHs (Satsangi Plot) Kanjurmarg for Commercial • 1 PAHs (commercial to residential) for Bhakti Park • 100 PAHs HDIL Kurla for residential **Navi Mumbai:** CIDCO has been finalizing the land acquisition closely monitored by Land Cell of MMRDA. Except private land and forest, CIDCO has possessed all required land of 108.09 ha. Out of the 108.09 ha, 106.345 ha has been handed over by CIDCO to MMRDA. CIDCO is going to acquire the balance 1.745 ha with the help of Collector, Raigad.
b. Entitlement Policy MMRDA prepared the entitlement matrix for resettlement of non-title holders in Sewri, which meets the Resettlement and Rehabilitation Policy for Mumbai Urban Transportation Project (1997, amended in 2000) and JICA guidelines for Environmental and social considerations (2010)	There have been no changes during the enforcement. As per the **Attachment 2-5** of JICA MoD, MMRDA has committed to enforce the agreed/ approved policy.

Issue(s)	Action or countermeasure(s) taken and remaining problem(s)
("Guidelines") **(Attachment 2-5)**.	
c. Compensation to Project affected Fishermen Detailed baseline survey will be undertaken by MMRDA in order to identify fishermen who are affected by the Project. Based on the result of the baseline survey, MMRDA will compensate them in accordance with compensation policy prior to the construction. Monitoring will be conducted by MMRDA with assistance of the Consultant to gasp the exact impact during construction and operation phase.	Updated **Attachments 2-8 and 2-10** are enclosed in the report.
d. Implementation Schedule The Implementation schedule for land acquisition, resettlement and rehabilitation is attached as per **Attachment 2-10.**	Updated **Attachment 2-10** is enclosed in the report.
e. Grievance Redressal Mechanism Grievance Redressal Committee ("GRC") set under MMRDA will deal with grievances raised by PAPs in Sewri and fishermen to be affected by the Project. Any grievances raised by PAPs whose land is acquired by CIDCO shall be resolved by CIDCO.	**Sewri:** FLGRC (Field Level Grievance Redressal Committee) and SLGRC (Senior Level Grievance Redressal Committee) were set as per the RAP and in operation. Compensation Committee has been constituted to address the issues of Compensation to Lease Holders at Sewri. **Fishermen:** GRC for resolving grievances of the fisherfolk was set up as per the compensation policy and is in operation.
f. Internal Monitoring Internal Monitoring of the Resettlement Action Plan (RAP) implementation will be conducted by MMRDA in accordance with the RAP with necessary assistance of the consultant. RAP Internal Monitoring Form **(Attachment 2-8)** will be submitted to JICA on a quarterly basis as a part of PSR during the RAP implementation.	Internal Monitoring updates are mentioned in **Attachment 2-8.**

Issue(s)	Action or countermeasure(s) taken and remaining problem(s)
g. Qualitative Independent Evaluation An Independent Evaluation Agency will be hired by MMRDA for evaluation of RAP implementation. An external evaluation report will be submitted to MMRDA at mid-term and end-term. MMRDA would submit the evaluation report to JICA in a timely manner.	Updated **Attachment 2-10** is enclosed in the report.
h. RAP Implementation Budget The amount of estimated resettlement and compensation budget is Rs.906.26 Cr MMRDA informed to the JICA Mission that RAP implementation cost would be borne by MMRDA and ensured sufficient and timely allocation of funds for smooth implementation.	As updated in MOD dated 03/09/2019 for MTHL- II, the base cost Budget towards RAP Implementation is updated as Rs 1129.3 Cr.
i. Environmental Management Plan ("EMP") The mitigation measures against air pollution, waste, noise, and water pollution etc. shall be taken during construction and operation phase. Mitigation measures such as installation of noise barrier, appropriate waste management, etc. have been prepared by MMRDA. The mitigation measures are listed in the EMP matrix. **(Attachment 2-1).** During the detailed design stage, MMRDA, with assistance of the Consultant, will update the EMP, as necessary.	EMP will be updated, if required, in due course of construction activities/progress.
j. Environmental Monitoring Plan ("EMoP") MMRDA takes overall responsibility for implementation of EMoP. During construction, environmental monitoring will be carried out by contractors under supervision by Construction Supervision consultant. The result shall be reported to the JICA India Office on a quarterly basis as a part of Progress	Environmental Monitoring Plan with the package wise budgeted cost is reported in **Attachment 2-3.** Environmental Monitoring Results during the construction phase are reported in **Attachment 2-4.**

Issue(s)	Action or countermeasure(s) taken and remaining problem(s)
Status Report (PSR) by filling in the Reporting Form of Environmental Monitoring Result. **(Attachment 2-4).** After completion of the construction, EMoP shall be implemented by MMRDA, and the results shall be submitted to the JICA India Office semi-annually until two years after complementation of construction. The required amount of estimated environmental monitoring budget is borne by MMRDA.	
k. Long Term Bird Monitoring MMRDA committed to conduct the long-term monitoring of birds and its habitat in Sewri mudflats with the assistance of hired bird expert. During the long-term monitoring, MMRDA will share information and receive advice from external experts including the one from NGOs and civil society.	• MMRDA has entrusted the work of bird monitoring and implementation of Flamingos and birds related mitigation measures & bird monitoring program to Mangrove and Marine Biodiversity Foundation. • Rs. 31.92 Crore deposited to Mangrove foundation, Mumbai for periodical disbursement to BNHS.

3.4 Qualitative and Quantitative Data of Monitoring Indicators

Operation and Effect Indicator EIRR and/ or FIRR

Supporting data for Computing EIRR and/ or FIRR

Indicators	Original (Year 2015)	Target (Year 2024) 2 Years After Commercial Operation
Average Annual Daily Traffic (PCU/ day)	-	47,400
Daily Average Travel Time (min) * 1	61 min	15.8 min
Number of Users (Persons/ year) * 2	-	46,077,504
Cargo Volume (tons/ year) * 3	-	13,511,759

*1 Section on Sewri – Chirle
*2 Assumptions: average passengers of car and taxi (2.6 persons), bus (37.2 persons) based on JICA study. Number of passengers of LCV, HCV and MAV is assumed as 1 person each.
*3 Assumptions: the maximum capacity of respective vehicle (LCV: 1 ton, HCV and MAV: 15 tons) is used for estimation.

EIRR	**Original:** 15.4% Cost: Project cost (excluding Price Escalation, Tax and Duties and Administration cost) O&M cost, Land Acquisition Benefit: Travel Time cost and Vehicle Operation cost Project Life: 32 Years	**Actual:** *(PCR)* ____% Cost: Benefit: Project Life: **Attachment(s):** **Supporting data for computing EIRR**
FIRR	**Original:** 1.5% Cost: Project Cost, O&M cost, Land Acquisition cost Benefit: Toll Revenue Project Life: 32 Years	**Actual:** *(PCR)* ____%

3.5 Monitoring Plan for the indicators

Monitoring Methods, Section(s)/ department(s) in charge of monitoring, frequency, the term and so forth are given below:

Original: *(P/M and PCR)*

Monitoring Organization

PIU shall be In-Charge of Monitoring activities for the Project.

Submission of QPR and PCR

The timely submission of the following documents is required by MMRDA.

a. **Quarterly Progress Report (QPR):** The progress report for the Project should be submitted by MMRDA to JICA on quarterly basis, not later than 30 days after the concerned quarter, in the form of Project Status Report (PSR) attached hereto as per **Annex I**; Updated status land Acquisition, milestone achieved with respect to Action Plan with Timetable, the monitoring form for environmental and social consideration should also be appended to the PSR. In addition, MMRDA shall also forward the Monthly & Quarterly Progress Reports (including S-Curve Chart) prepared by the Consultant to JICA India Office on regular basis till project completion.

b. **Project Completion Report (PCR):** A project completion report should be submitted by MMRDA to JICA promptly, but in any event not later than six months after completion of the Project, in the form of Project Status Report (PSR) attached hereto as per **Annex I**.

Actual: *(P/R and PCR)*

Monitoring Organization

PIU for MTHL has been established for monitoring the Project.

Submission of QPR and PCR

This QPR No. 21 is submitted for the period of 1st April to 30th June 2022.

3.6 Achievement of the Project Objective

(PCR)

4.0 OPERATION AND MAINTENANCE (O&M) (SUSTAINABILITY)

4.1 O&M and Management

- Organization Chart of O&M
- Operational and maintenance system (structure and the number, qualification and skill of staff or other conditions necessary to maintain the outputs and benefits of the project soundly, such as manuals, facilities and equipment for maintenance, and spare part stocks etc.)

Original: *(P/M)*

Operation & Maintenance, Toll Management and ITS

MMRDA proposes to engage two separate agencies for O&M and Toll Management System. Though MMRDA will not directly carry out O&M, the overall monitoring over the O&M agency will be the responsibility of MMRDA. O&M Budget will be allocated by MMRDA. O&M and increase in toll rate will be done in accordance with the NHAI's manuals such as "NHAI Works manuals".

Actual: *(PCR)*

4.2 O&M Cost and Budget

- The actual annual O&M cost for the duration of the project, as well as the annual O&M budget.

(PCR) This will be reported when the outcome of the above work-study is available.

5.0 EVALUATION

5.1 JICA and Borrower / Executing Agency performance

JICA:

(PCR)

Borrower/ Executing Agency:

(PCR)

5.2 Overall Evaluation

Please describe your evaluation on the overall outcome of the project.

(PCR)

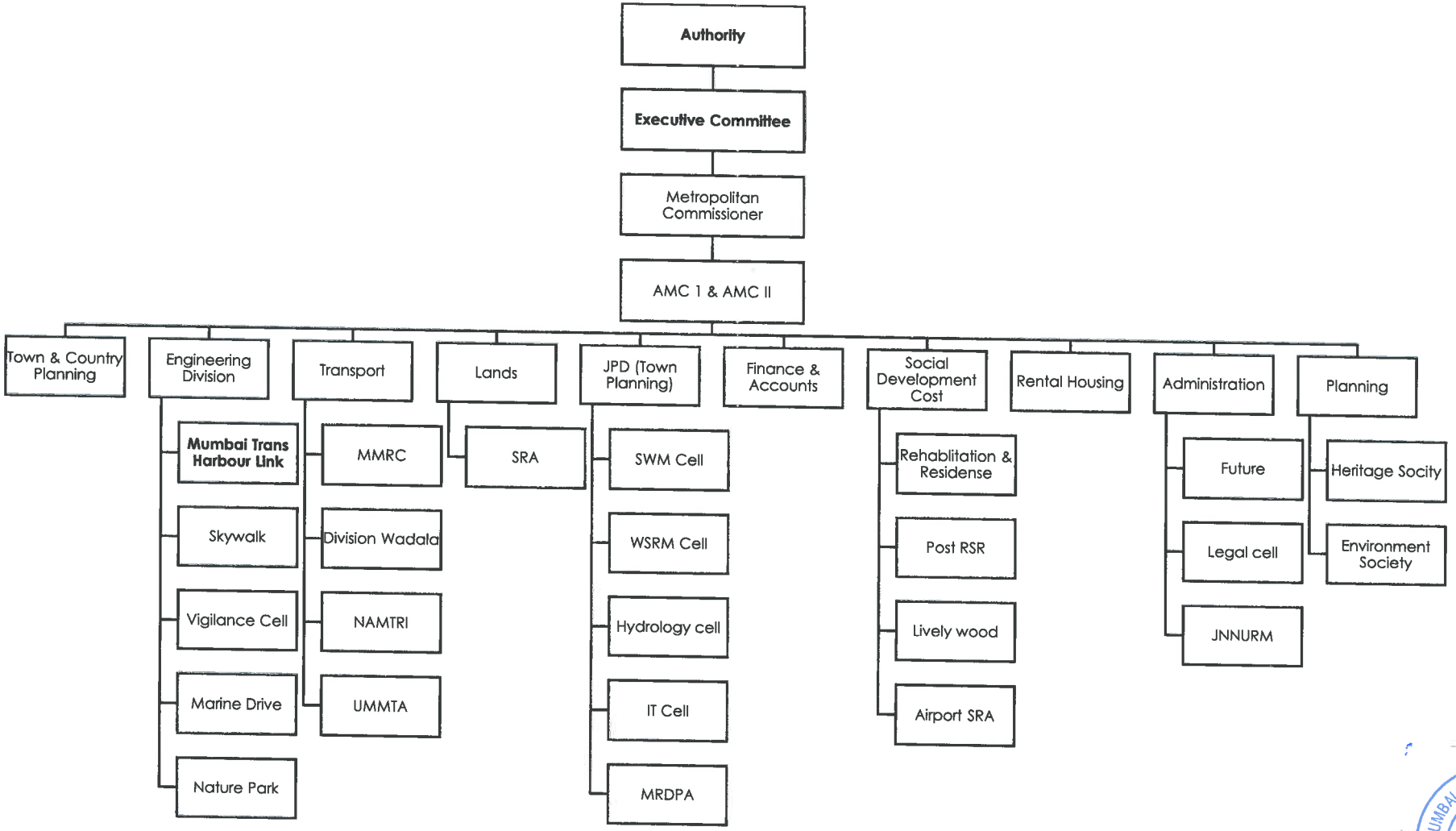
5.3 Lessons Learnt and Recommendations

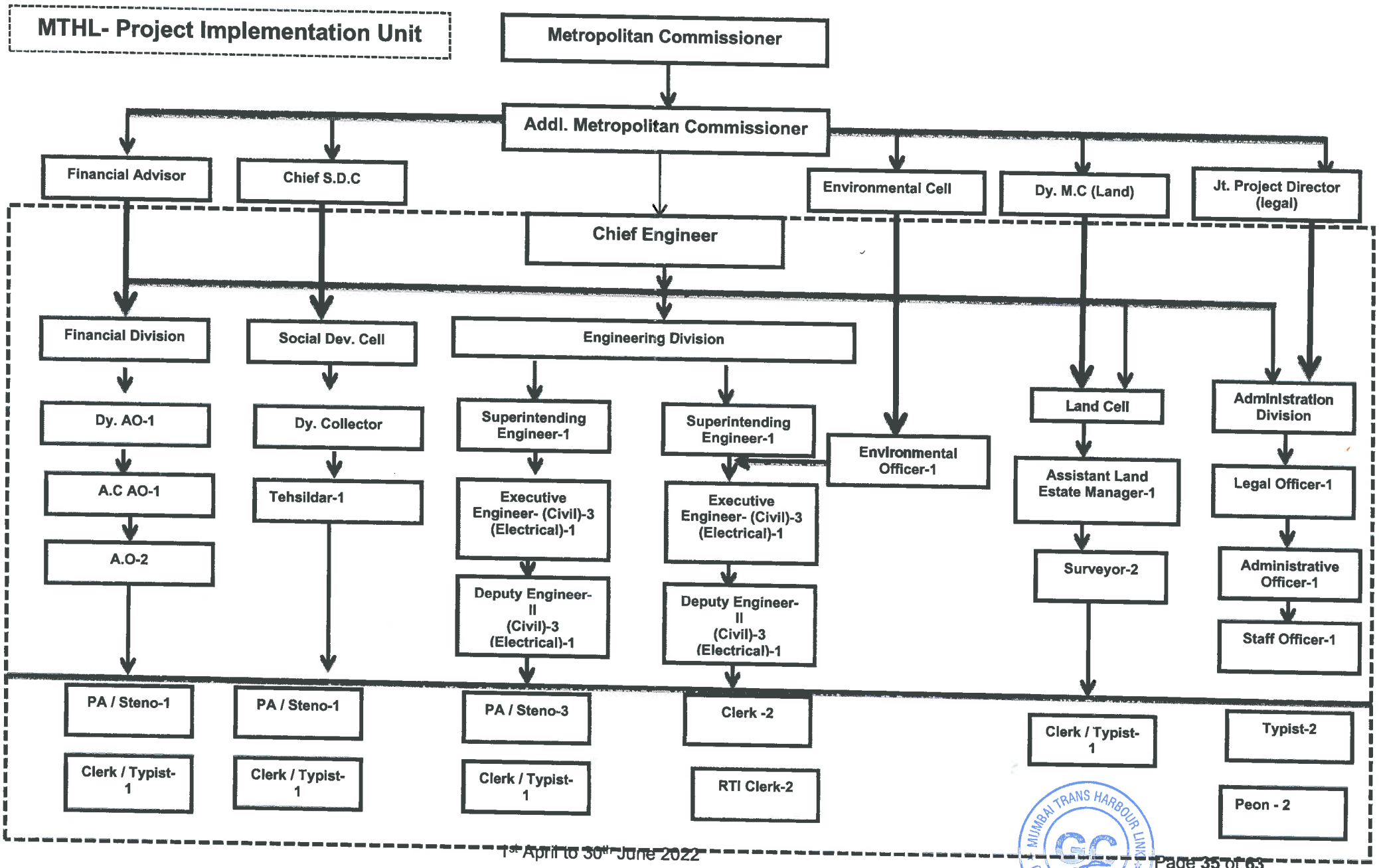
Please raise any lessons learned from the project experience, which might be valuable for the future JICA assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

(PCR)

Attachment 1- MMRDA & PIU Organization Chart

MMRDA Organization chart




MTHL- Project Implementation Unit
Metropolitan Commissioner
Addl. Metropolitan Commissioner
Financial Advisor
Chief S.D.C
Chief Engineer
Environmental Cell
Dy. M.C (Land)
Jt. Project Director (legal)
Financial Division
Social Dev. Cell
Engineering Division
Land Cell
Administration Division
Dy. AO-1
A.C AO-1
A.O-2
Dy. Collector
Tehsildar-1
Superintending Engineer-1
Executive Engineer- (Civil)-3 (Electrical)-1
Deputy Engineer-II (Civil)-3 (Electrical)-1
Superintending Engineer-1
Executive Engineer- (Civil)-3 (Electrical)-1
Deputy Engineer-II (Civil)-3 (Electrical)-1
Environmental Officer-1
Assistant Land Estate Manager-1
Surveyor-2
Legal Officer-1
Administrative Officer-1
Staff Officer-1
PA / Steno-1
Clerk / Typist-1
PA / Steno-1
Clerk / Typist-1
PA / Steno-3
Clerk / Typist-1
Clerk -2
RTI Clerk-2
Clerk / Typist-1
Typist-2
Peon - 2

Attachment 2- Environmental & Social Impacts Attachments

Attachment 2-3 – Envi. Monitoring Plan with Package-wise Estimated Cost
Attachment 2-4 – Environmental Monitoring Result Reporting Form
Attachment 2-6 – MTHL Land Acquisition Status
Attachment 2-8 – RAP Internal Monitoring Form
Attachment 2-10 – Schedule of the RAP Implementation

Attachmemt 2-3

Environmental Monitoring Plan with Packagewise Estimated Cost

Category	No.	Impacted Item on JICA Guidelines	Parameter	Method	Location	Frequency a year	Cost (INR)	Cost Pkg.1 (INR)	Cost Pkg.2 (INR)	Cost Pkg.3 (INR)	Total Cost (INR)	Standard Central Pollution Control Board (CPCB) – Ministry of Environment & Forest (MoEF)	Remarks
Pollution	1	Air pollution	SO_2, NO_2, PM_{10}, $PM_{2.5}$, O_3, CO, (6 Items)	National Ambient Air Quality Standards, 2009	1. Sewri & Sewri bay area for package I	Fortnightly at all locations except 2 locations each near Batching plants	1,800,000	15,000,000	1,800,000	742,500	17,542,500	National Ambient Air Quality Standards (NAAQS) by Central Pollution Control Board (CPCB)	P1 contractor team is conducting Ambient air quality monitoring with reference to National Standards and clause 1.2 of Employer's requirement.
					2. Nhava temporary bridge & casting yard in Gavhan for package II	4 Times / Year						(Standard for 24hrs: Industrial and Residential/ Ecological Sensitive area)	P 2 contractor Monitoring plan has been designed as per EIA of 2015
					3. Gavhan & Chirle for package III	Fortnightly only for 3 months (jan-2019 to Mar-2019). Then quarterly monitoring as per MOEF and CPCB norms						· SO_2: 80 / 80µg/m^3	P3 contractor team is conducting Ambient air quality monitoring with reference to National Standards and clause 1.2 of Employer's requirement.
												· NO_2: 80 / 80µg/m^3	P 1 received Consents CTE & CTO from MPCB and they are following MPCB frequency in addition to frequency set by Environment Expert from GC. The NAAQ standards are showing High rate as that is the usual procedure. The frequency of monitoring is set by us which varies for different parameters as either Statutory requirements or as required by us to ensure we have sufficient data in hands if there are additional claims for Compensation in C5 category. Summary : Although the contract conditions for all packages were same at the time of biding. Later modifications suggested by GC were not accepted by P 2. P1 and P3 accepted the modifications and hence the difference. Second point is P 1 carrying out monitoring as per the obatiend CTE and CTO. Both other packages have applied for CTE but haven't obtained it yet. So we expect the monitoring frequecy would change after obtaining CTE.
												· PM_{10}: 100 / 100µg/m^3	
												· $PM_{2.5}$: 60 / 60µg/m^3	
												· O_3: 180 / 180µg/m^3	
												· CO: 0.4 / 0.4mg/m^3	
	2	Water pollution	pH, BOD, DO, Turbidity and O&G	IS / AWWA	1. Sewri & Sewri bay area for package I	Quarterly	810,000	2,400,000	810,000	0	3,210,000	Marine water quality Standards – Class SW-IV Harbour Waters (MPCB)	Water Pollution not applicable for Pkg. 3
					2. Nhava temporary bridge & casting yard in Gavhan for package II	4 Times / Year						· pH : 6.5-9	
					3. Gavhan & Chirle for package III	Not applicable						· DO: 3 mg/l	
												· Turbidity: 30 NTU	
												· BOD: 5 mg/l	
												· O & G: 10 mg/l	
	3	Waste	Volume of waste soil, cutting tree and domestic garbage	Volumetric	1. Sewri & Sewri bay area for package I	Daily	500,000	299,200,000	500,000	600,000	300,300,000		The cost of waste disposal for P1 includes C&D waste, Pile muck etc. from all areas like, interchange, intertidal and marine. The disposal location is at MCGM approved location Bhayandarpada, Thane.

Category	No.	Impacted Item on JICA Guidelines	Parameter	Method	Location	Frequency a year	Cost (INR)	Cost Pkg.1 (INR)	Cost Pkg.2 (INR)	Cost Pkg.3 (INR)	Total Cost (INR)	Standard Central Pollution Control Board (CPCB) – Ministry of Environment & Forest (MoEF)	Remarks
					2. Nhava temporary bridge & casting yard in Gavhan for package II	4 Times / Year						**Municipal Soild Waste Management Rules, 2013** Generated waste shall be reused or disposed at designated site. Sites have been identified and the location for **Pkg. 1** is at Bhayandar Pada in Thane. For **Pkg. 2 & 3** is in Navi Mumbai at Pushpak Node nera "Teen Taki Junction" along the Amar Marg.	P2 contractor has considered only Domestic garbage with respect to CIDCO. Other wastes are not considered. Construction wastes will be
					3. Gavhan & Chirle for package III	Once site clearing work/execution part of work start.							
	4 and 8	Soil Contamination/ sedimentation	Heavy Metals & Oil & Grease (5-10 items shall be selected from Soil pollution standards)	IS / Methods Manual Soil Testing in India by Department of Agriculture and Cooperation, January 2011	1. Sewri & Sewri bay area for package I 2. Nhava temporary bridge & casting yard in Gavhan for package II 3. Gavhan & Chirle for package III	1. Muck: 1 Time / Year 2. Sediments: 4 Times / Year *If any spillage/ leakage take place from chemical, fuel storage area. *One time grab sample to be collected during Bridge Construction *Pre & Post Monsoon at Storage area only	150,000	1,500,000	150,000	100,000	1,750,000	Soil Pollution Standard in India (MOEF) · Cd: 0.01mg/l · Lead: 0.01mg/l · Chromium (VI): 0.05mg/l · Arsenic: 0.01mg/l · T-Mercury: 0.0005mg/l · Copper: 125mg/kg (some items shall be selected from totally 25 standards items)	
	5	Noise and vibration	Ambient and road side noise ($dB(A)L_{Aeq}$)	· IS Standard	1. Sewri & Sewri bay area for package I 2. Nhava temporary bridge & casting yard in Gavhan for package II 3. Gavhan & Chirle for package III	Fortnightly 2 Times / Year Fortnightly	150,000	54,000	150,000	369,000	573,000	**-Construction Noise; 85dB(A)** **-Ambient Noise Standards in India (dB (A) $_{Leq}$)** 1.Industrial Area Day Time: 75 (6-22hr) Night Time: 70 (22-6hr) 2.Commercial Area: Day Time: 65 (6-22hr) Night Time: 55 (22-6hr) 3.Residential Area: Day Time: 55 (6-22hr) Night Time: 45 (22-6hr) 4.Silence Zone Day Time: 50 (6-22hr) Night Time: 40 (22-6hr)	
			Vibration (dB L10 or mm/sec)		1 Location Gavan area for package III	Half yearly	75,000	0	75,000	400,000	475,000	**- Construction vibration 75dB** **-Vibration Standards roadside** 1. Commercial /Industrial Area Day Time: 70 (7-20hr) Night Time: 65 (20-7hr) 2. Residential Area: Day Time: 65 (7-20hr) Night Time: 60 (20-7hr)	Not applicable for Pkg. 1
	9 and 10	Protected Area /Ecosystem	1.Monitoring of mudflat conditions including fauna-flora	Ocular inspection and quantitative survey	Along MTHL alignment and mangrove replant area for Package I	Quarterly during the construction Period	6,500,000	7,200,000	6,500,000	0	13,700,000		Not applicable for Pkg. 3
			2. Monitoring of Cutting Tree and replantation/		Along MTHL alignment and mangrove replant area for package II	4 Times / Year						Significant impacts are not caused by the project	
			transplanting area	1-1. Fauna-Flora	Not applicable for Package III								
			3.Monitoring of Mangrove Plantation area appointed by MoEF	Line-Point census and record number and appeared species								**Note)**	

Category	No.	Impacted Item on JICA Guidelines	Parameter	Method	Location	Frequency a year	Cost (INR)	Cost Pkg.1 (INR)	Cost Pkg.2 (INR)	Cost Pkg.3 (INR)	Total Cost (INR)	Standard Central Pollution Control Board (CPCB) – Ministry of Environment & Forest (MoEF)	Remarks
Natural environment			4. Monitoring of sedimentation soil and ecological parameter (18items on Supplemental EIA Table 6.1.15 for soil and 7 items such as 1)Netprimary productivitye, 2)Chlorophyll-a, 3)Phosphate, 4)Nitrate, 5)Nitrite, 6)Particulate Organic Carbon, 7) SiO_2)	1-2: Mangrove density and community survey								**Detailed monitoring plan will be setup during basic design stage**	
				1-3: Benthos Survey									
				2-1: Cutting trees confirmation								Standard for Soil; Supplemental EIA Table 6.1.15	
				3-1: Mangrove survey in the replanted area								Standard for Ecological Parameter:	
												· Netprimary Productivity	
												<1,500 mgC/m3/day at surface	
												· Chlorophyll-a	
												<4mg/m3	
												· Phosphate: 0.1-90µg/l	
												· Nitrate: 1.0-500µg/l	
												· Nitrite: <125µg/l	
												· Particulate Organic Carbon: 10-100mg/m^3	
												· SiO2: 10-5,000µg/l	
	11	Hydrology	Flooding situation	Flood level measurement during high precipitation periods	Not applicable for Package I		350,000	0	350,000	0	350,000	Project activities and structures does not cause flooding and impacts on tidal conditions	Not applicable for Pkg. 1 & 3
					2 Locations (CRZ at Sewri and Shivaji Nagar) for Package II	4 Times / Year							
					Not applicable for Package III								
	12	Topography and Geology	Conditions in embankment area	Visual survey about Stability of embankment	Not applicable for Package I		115,000	0	115,000	0	115,000	Embankment shall be stabilized without any landslide and cracks	Not applicable for Pkg. 1 & 3
					Interchange in Shivaji Nagar for Package II	4 Times / Year							
					Not applicable for Package								
Social environment	13	Local economy such as employment and livelihood			Affected area		As per Actuals						
	14	Local conflict of interests	Construction worker's township	Confirmation of workers list from contractor	2 Locations (camp site in Sewri and Shivaji Nagar) for Package II	2 Times / Year	125,000	0	125,000	0	125,000	Employment opportunity shall be provided fairly	
	15	Infectious diseases such as HIV/AIDS	Number of infected patient	Confirmation of health check list from contractor	2 Locations	4 times / year x 4.5 years	525,000	0	525,000	0	525,000	Infection disease rate shall not be caused by the project	
	16	Labour Environment	Construction worker's condition	Confirmation of safety devices and conditions via interviews	2 Location (camp site in Sewri and Shivaji Nagar) for Package II	2 times / year	500,000	0	500,000	0	500,000	"Building And Other Construction Workers (Regulation of Emloyment and Conditions of Service) Act,1996", "The building and other construction worker's welfare cess Act, 1996" and international standards such as "IFC Performance Standard 2 Labor and Working Conditions"	
Other	17	Accidents	Number of accidents	Confirmation of accidents list from local government and State Traffic Police Department	2 Locations (camp site in Sewri and Shivaji Nagar) for Package II	4 Times / Year	400,000	0	400,000	0	400,000	Any accidents are not caused by construction	
		Total					**8140500**	**325,354,000**	**12,000,000**	**2,211,500**	**339,565,500**		

The Project for Construction of Mumbai Trans Harbour Link

Reporting Form of Environmental Monitoring during Construction

Attachment 2-4

Attachment 2-4

This form is prepared for reporting the monitoring results to JICA India Office. Only minimum required parameters are included in this form, and not all perameters in EMoP are covered.

Monitoring Period - April 2022 to June 2022

1. Environmental Monitoring during Construction for 4.5 years

Area	No.	Item	Parameter	Location	Frequency a year	Item and Stanadard	Monitoring Result				Remark - reasons why the data is exceeding standard - counter measures when the data is exceeding
							Location 1- Pkg 1	Location 2- Pkg 2	Location 3- Pkg 3	Location 4	
				1. Sewri & Sewri bay area for package I	Quarterly monitoring ia conducted at all locations.	**National Ambient Air Quality Standards (NAAQS)**	**Sewri**	**Shivaji Nagar**	**Chirle**		
				2. Nhava temporary bridge & casting yard in Gavhan for package II	4 Times / Year	**(Standard for 24hrs: Industrial and Residential)**					
	1	Air pollution	SO_2, NO_2, PM_{10}, $PM_{2.5}$	3. Gavhan & Chirle for package III	From march -2019 onwards monitoring is conducted quarterly as per MOEF and CPCB norms	1. SO_2: 80µg/m^3	10.94	BDL	9		
						2. NO_2: 80µg/m^3	30.42	21	24		
						3. PM_{10}: 100µg/m^3	246.33	76	58		Average is above permissble limit with OCP / Water sprinkling 3 times a day.
						4. $PM_{2.5}$: 60µg/m^3	51.50	27	26		Average is above permissble limit with OCP / Water sprinkling 3 times a day.
						5.CO:02mg/m3	1.42	1.3	0.55		
						6.VOCs	1.73	4.2	0.3		Benzene is analysed in ambient air
				1. Sewri & Sewri bay area for package I	Quarterly	**Marine water quality Standards – Class SW-IV Harbour Waters (MPCB)**	**Zone I**	**Zone II**	**Zone III**		
	2	Water pollution	pH, BOD, DO, Turbidity and O&G	2. Nhava temporary bridge & casting yard in Gavhan for package II	4 Times / Year	1. pH : 6.5-9	7.7	8.3	Not applicable		
				3. Gavhan & Chirle for package III	Not applicable	2. DO: 3 mg/l	5.2	6	Not applicable		
						3. Turbidity: 30 NTU	5.6	7.6	Not applicable		
						4. BOD: 5 mg/l	BDL[DL=2]	BDL	Not applicable		
						5. O & G: 10 mg/l	BDL[DL=2]		Not applicable		
						6.COD	16	16	Not applicable		
				1. Sewri & Sewri bay area for package I	Daily	**Municipal Soild Waste Management Rules, 2016**	**Sewri Camp Site**	**Shivaji Nagar Camp Site**	**Chirle Camp Site**		**Comprehensive waste management plan is implemented with prior approvals of MCGM, PCB and Debris Disposed as autorized for MTHL-1**
						Generated Concrete and Debris from Construction		App. 2000 Cum collected in jumbo bags and Disposed off in FEB Location			
	3	Waste	Volume of waste soil, cutting tree and domestic garbage	2. Nhava temporary bridge & casting yard in Gavhan for package II	4 Times / Year	Generated waste soil (t) total	Tree cutting proposal has been submitted and approval from MCGM is awaited. Tree cutting far NIL		NA		
				3. Gavhan & Chirle for package III	Once site clearing work/execution part of work start.	Generated cutting tree (ha) total			Tree cutting work completed and Half yearly report submitted to Client (April, 2022)		
						Generated domestic waste (t/month) total	10.5 Tonnes for 3 months.	3.5/quarter. It is disposed through CIDCO daily.	2.5 T for the quarter		
						Confirmation of adequate disposal (visualt survey)	Schedule Audited by EMS				
				1. Sewri & Sewri bay area for package I	1. Muck: 1 Time / Year	**Soil Pollution Standard in India (MOEF)**	Sediment sample at Sewri	Muck Testing Done on September 2021 and Reports submitted to GC	NA		

The Project for Construction of Mumbai Trans Harbour Link

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Attachment 2-4

Monitoring Period - April 2022 to June 2022

1. Environmental Monitoring during Construction for 4.5 years

Area	No.	Item	Parameter	Location	Frequency a year	Item and Stanadard	Monitoring Result				Remark - reasons why the data is exceeding standard - counter measures when the data is exceeding
							Location 1- Pkg 1	Location 2- Pkg 2	Location 3- Pkg 3	Location 4	
Pollution	4	Soil Contamination /sedimentation	Heavy Metals & Oil & Grease	2. Nhava temporary bridge & casting yard in Gavhan for package II	2. Sediments: 4 Times / Year	1. Cadmium: 0.01mg/l	BDL[DL=2]	BDL			
				3. Gavhan & Chirle for package III	*If any spillage/ leakage take place from chemical, fuel storage area. *One time grab sample to be collected during Bridge Construction *Pre & Post Monsoon at Storage area only	2. total cyanide : not detected		<0.005			
						3. Organic Carbon	0.9	8.5			
						4. lead: 0.01mg/l	15	0.17	Not applicable for Pkg 3		Hazardous Storeage is situated in low laying area at Gavan area. Due to this reason complete ground area is covered by boulders to avoid further water logging in rainy season. Therefore soil sample is impossible to taken out from in and around the Oil & chemical storage area. Same has witnessed by GC during Febrary-2020 monitoring.
						5. chromium (VI): 0.05mg/l		BDL			
						6. arsenic: 0.01mg/l or 15mg/kg (agri-land soil)	BDL[DL=1]	BDL			
						7. total mercury: 0.005mg/l	BDL[DL=2]	BDL			
						8. alkyl mercury: not detected	Not detected				
						9. PCBs: not detected	Not detected	BDL			
						10. copper: 125mg/kg (only paddy field soil)	147				
						11. dichloromethane: 0.02mg/l	Not detected	BDL			
						12. carbon tetrachloride: 0.002mg/l	Not detected	BDL			
						13. 1,2-dichloroethane: 0.004mg/l	Not detected	BDL			
						14. 1,1-dichloroethylene: 0.02mg/l	Not detected	BDL			
						15. cis-1,2-dichloroethylene: 0.04mg/l	Not detected	BDL			
						16. 1,1,1-trichloroethane: 1mg/l	Not detected	BDL			
						17. 1,1,2-trichloroethane: 0.006 mg/l	Not detected	BDL			
						18. trichloroethylene: 0.03mg/l	Not detected	BDL			
						19. tetrachloroethylene: 0.01mg/l	Not detected	BDL			
						20. 1,3-dichloropropene: 0.002mg/l	Not detected	BDL			
						21. thiuram: 0.006mg/l	Not detected	BDL			
						22. simazine: 0.003mg/l	Not detected	BDL			
						23. thiobencarb: 0.02mg/l	Not detected	BDL			
						24. benzene: 0.01mg/l	Not detected	BDL			
						25. selenium: 0.01mg/l	Not detected	BDL			
	5	Noise and vibration	Ambient and road side noise (dB(A)LAeq)	1. Sewri & Sewri bay area for package I	Fortnightly - Noise levels	**Construction area Standard 85 dB(A) daytime (Japan standard) Not constuction area : Ambient Noise Standard in India (dB(A) Laeq) 75 Max.**	**Sewri (ST 200-500) (Industrial area)**	**Sea Section (ST5000-5500) Migratory Bird Area (no standard on sea section)**	**Shivaji Nagar (Commercial area)**		
						Day time : 6-22 hr (continious) dB(A) - 75 DB	73.3		**63.35**		
					Noise levels - Night time	Night time: 22-6 hr (continious) dB(A) - 55 DB	67.46		**52.69**		
				2. Nhava temporary bridge & casting yard in Gavhan for package II	2 Times / Year						
				3. Gavhan & Chirle for package III	Fortnightly	(only sea section)					
						Day time : 6-22 hr (10 min during 9-17 hrs)		68.2			
						Night time: 22-6 hr (10 min 22-24 hr)		65.6			
						Note (standard values in Not construction area)					
						1.Industrial Area					
						Day Time: 75 (6-22hr)					
						Night Time: 70 (22-6hr)					
						2.Commercial Area:					
						Day Time: 65 (6-22hr)					

Regarding soil contamination/sedimentation, some items shall be selected from the total 25 standards items during the Detailed Design. Only the selected items shall be reported to JICA, and the rest of items shall be deleted from this form.

The Project for Construction of Mumbai Trans Harbour Link

Reporting Form of Environmental Monitoring during Construction

Attachment 2-4

Attachment 2-4

This form is prepared for reporting the monitoring results to JICA India Office. Only minimum required parameters are included in this form, and not all perameters in EMoP are covered.

Monitoring Period - April 2022 to June 2022

1. Environmental Monitoring during Construction for 4.5 years

Area	No.	Item	Parameter	Location	Frequency a year	Item and Stanadard	Monitoring Result				Remark - reasons why the data is exceeding standard - counter measures when the data is exceeding
							Location 1- Pkg 1	Location 2- Pkg 2	Location 3- Pkg 3	Location 4	
						Night Time: 55 (22-6hr)					
			Vibration (dB) shall be converted from mm/s to dB	1 Location Gavan area for package III	Half yearly	**Construction area Standard 75 dB daytime (Japan standard)** **Not constuction area : Vibration Standard (Japan Standard along the road)**	**Sewri (ST 200-500) (Industrial area)**	**Shivaji Nagar (Commercial area)**	**Chirle**		
						Day time : 6-22 hr (continious)		Not Applicable			There is no reference standard in India for Vibration monitoring in marine area. GC has confirmed that vibration monitoring is not required for the project.
						Night time: 22-6 hr (continious)					
						Note (standard values in Not construction area)					ndly check the letter No.Ref No. Mthl/ 3/L&T/GC/LT/HSE-2226/2020 dated on 2.12.2020
						1. Commercial /Industrial Area					
						Day Time: 70 (7-20hr)					
						Night Time: 65 (20-7hr)					
Natural Environment	6	Protected Area Ecosystem	1.Monitoring of mudflat conditions including fauna-flora 2. Monitoring of Cutting Tree and replantation/transplation area 3.Monitoring of Mangrove Plantation area appointed by MoEF 4. Monitoring of sedimentation soil and ecological parameter (25 items on EIA main text Table 6.1.15 for soil and 7 items such as 1)Net primary productivity, 2)Chlorophyll-a, 3)Phosphate, 4)Nitrate, 5)Nitrite, 6)Particulate Organic Carbon, 7) SiO2)	Along MTHL alignment and mangrove replant area for Package I	Quarterly during the construction Period	**Standard is not existing, but quantity and quality should not be worsen**	**Sewri side (ST500-5500)**	**Sea Section (ST5500-16000)**	**Shivaji Nagar side (app. ST16000-19000)**	**Mangorove Replantation area appointed by State Government**	
				Along MTHL alignment and mangrove replant area for package II	4 Times / Year	1-1. Fauna-Flora (number of species and quantity	Flora/Fauna list maintained for Referal		N/A	N/A	Biodiversity list in CEMp/ EMP 2022 updates
						(1) Number of species of bird	52-28				The bird species vary from 52 to 30 at SEWRI Mudglats. Dominant species is the lesser flamingo and greater flamingo. Cout of LF was aprpoximately 10000 to 20000 at peak. Towards June the numbers start to decrease as they migrate. Egrets increase , painted stork, black headed ibis and pacific reef egrets are observed too.
						(2) Number of species of fish	30				
						(3) Estimated number of Flamingo	April -20000 +				
						1-2: Mangrove density and community survey	Avicennia marina	not required			
						(1) Number of species of mangorve	Dominant - Avicennia sp.	not required			
						(2) Density of mangrove (xx trees/10m x 10m)	EIA - Not distrubed.	not required			
						1-3: Benthos Survey	MEIO, Flora, fauna, phytoplankton,zooplankton	not required			
						(1) Number of species and quantity by species	130 Species and 145 No/m2	not required			
						2-1: Cutting tree confirmation	1. Tree Cutting: 413 trees (Till June 2022) 2. Transplanting : 483 Trees (Till June 2022)	not required			
						(1) Number of cutting tree and species	CRZ- Cost assigned to FD	not required			
						3-1: Mangrove survey in the replant area	GC to integrate FD and environmentalist	not required			
						(1) Number of species of mangorve	3	not required			
						(2) Density of mangrove (xx trees/10m x 10m)		not required			
						4. Ecologial Parameter					
						(1) Net primary Productivity : <1,500 mgC/m3/day at surface	500				
						(2) Chlorophyll-a: <4mg/m3	4				
						(3) Phosphate: 0.1-90µg/l	3				
						(4) Nitrate: 1.0-500µg/l	6				
						(5) Nitrite: <125µg/l	BDL[DL=2]				
						(6) Particulate Organic Carbon: 10-100mg/m^3	0.9				
						(7) SiO2: 10-5,000µg/l	34.6				
	7	Hydrology	Flooding situation	Not applicable for Package I		**Criteria for evaluation** **Project activities and structures does not cause flooding and impacts on tidal conditions**	**Sewri**	**Shivaji Nagar**			
				2 Locations (CRZ at Sewri and Shivaji Nagar) for Package II	4 Times / Year	Monitoring of flooding situation	No Flooding	No Flooding			

Regarding protected area (CRZ and Important Bird Area) and ecosystem, detailed long-term monitoring plan will be extablished during baseline survay of birds. This tentative monitoring form shall be updated based on the detailed long-term monitoring plan.

The Project for Construction of Mumbai Trans Harbour Link

Attachment 2-4

This form is prepared for reporting the monitoring results to JICA India Office. Only minimum required parameters are included in this form, and not all perameters in EMoP are covered.

Reporting Form of Environmental Monitoring during Construction

Attachment 2-4

Monitoring Period - April 2022 to June 2022

1. Environmental Monitoring during Construction for 4.5 years

Area	No.	Item	Parameter	Location	Frequency a year	Item and Stanadard	Monitoring Result				Remark - reasons why the data is exceeding standard - counter measures when the data is exceeding
							Location 1- Pkg 1	Location 2- Pkg 2	Location 3- Pkg 3	Location 4	
				Not applicable for Package III							
	8	Topography and Geology	Conditions in embankment area	2 Locations (1. Embankment of Inter Change in Shivaji Nagar and 2 Cutting area at toll gate in Chirle)	4 times / year x 4.5 years	**Criteria for evaluation** **Embankment shall be stabilized without any landslide and cracks**	**Shivaji Nagar**	**Shivaji Nagar Camp Site**	**Chirle**		
						Monitoring of embankment	In progress				
	9	Local conflict of interests	Construction worker's township	2 Locations (major camp site in Sewri and Shivaji Nagar)	4 times / year x 4.5 years	**Criteria for evaluation** **Employment opportunity shall be provided fairly**	**Sewri Camp Site**	**Shivaji Nagar Camp Site**	**Chirle**		
						Number of hired workers by community	628 workmen	125-150			
	10	Infectious diseases such as HIV/AIDS	Number of infected patient	2 Locations (major camp site in Sewri and Shivaji Nagar)	4 times / year x 4.5 years	**Criteria for evaluation** **Infection disease rate shall not be caused by the project**	**Sewri Camp Site**	**Shivaji Nagar Camp Site**			**Functional first aid center within MTHL -1 campus. Induction, medical check up and authroization required to begin work for Labor.**
						Confirmation of health check record and inspect project site . PPE provisions for work, social distancing for covid protocol at work in TBT training. Posters for awarenss at Kitchen and Labor camp. Medical camp : 220 Labor Covid Precautions : 1. L&T office and camps : Thermal screening / Sanitation. 2. Fogging : 2 times in a week 3. Pest control : 2 times in a week	Doctor on call checks site specific infections., minor and major incidents . 24x7 ambulance service , ERT team with trained first aiders available	Health Checks carried out but HIV/AIDS parameter is not there.			
	11	Labour Environment	Construction worker's condition	2 Locations (major camp site in Sewri and Shivaji Nagar)	2 times / year x 4.5 years	**Criteria for evaluation** **"Building And Other Construction Workers (Regulation of Employment and Conditions of Service) Act,1996", "The building and other construction worker's welfare cess Act, 1996" and international standards such as "IFC Performance Standard 2 Labor and Working Conditions"** **BOCW Registeration of Labor-** 943 Labour **BOCW kit distribution:** 496 Labour	* 4014 labor for 3 months at 11 functional camps. *Entertainment (Movie) arranged for 1600 labour on Sundays * Cricket match conducted for workmen & staff: - Staff participation: 350 - Workmen participation: 800 * Covid booster dose:75 staff	**Shivaji Nagar Camp Site**			**Biotoilets used for labor camps with biodigestors. A DRDO patented technology used for Solid waste. The bathing and kitchen water was directed to a reed bed for treatment.**
						Site Visual Inspection	Weekly site inspection	Conforming with BOCW Act 1996			
Other	12	Accident	Number of accidents	2 Locations (major camp site in Sewri and Shivaji Nagar)	4 times / year x 4.5 years	**Criteria for evaluation** **Any accidents are not caused by construction**	**1 RLTI reported**	**Shivaji Nagar Camp Site**	**Other area**		**While cutting the bracing secondary beam tilted towards IP and resulted cut injury of little, ring and middle finger**
						Number of recorded accident	2	NIL			

MTHL Land Acquisition Status (Attachment 2-6):

The total land required on Navi Mumbai side- 108.09 ha
Land in possession in MMRDA – 106.345 ha
Balance land acquisition- 1.745 ha

Note: The acquisition of 1.745 ha is in progress by CIDCO. The balance acquisition would be likely completed by the end of September 2022.

Land Required in ha		Land Acquired in ha		Balance Land to be acquired in ha	Anticipated date for Land Acquisition	Payment status (Payment made to Land Owners by CIDCO)	Remarks
Govt.	Private	Govt.	Private	Private*			
98.75	9.34	98.75	7.595	1.745	30-09-2022	--	The payment status to the land owners is awaited from CIDCO. The same would be communicated to JICA on receipt of the same.
Total 108.09		98.75	7.595	1.745			

***Portions of Private Land**

Sr. No.	Name of Village	Area (Hectare)	Acquired	Non-acquired
1	Gavhan	0.15	0.15	0.00
2	Jasai	8.72	7.306	1.414
3	Chirle	0.47	0.139	0.331
Total Area		**9.34**	**7.595**	**1.745**

Attachment 2-8

RAP Implementation Monitoring Form
For Mumbai Trans Harbour Link Project (MTHL)

1. General Information

a.	RAP Implementation Monitoring Results:	Progress Status Report (PSR) for the 2st quarter of 2022
b.	Date of Preparing This form	30-06-2022
c.	Person Preparing This form	Name: Robin Sham Position: Engineer and Team Leader Department/Organizations: General Consultants

2. Scale of Impact

2.1 Project Affected Households (PAHs) and Project Affected Persons (PAPs) for Sewri side

Total Project Affected Households (PAHs)	231 Hhs	Titleholders: 0 Hhs Non-titleholders: 231 Hhs
Total PAPs	1,282 persons*	Titleholders: 0 persons Non-titleholders: 1,282 persons*
PAHs who need relocation (as residents)	231 Hhs	Titleholders: 0 persons Non-titleholders: 231 (1,088 persons) *
PAPs who do not need relocation (as residents)	0 persons	Titleholders: 0 persons Non-titleholders: 0 persons
Commercial PAPs who need relocation	66 (194 persons) *	Titleholders: 0 persons Non-titleholders: 66 (194 persons) *
Commercial PAPs who do not need relocation	0 persons	Titleholders: 0 persons Non-titleholders: 0 persons

* - Figures for number of persons do not include no. of family members of few additional PAPs.

2.2 Structures

Structures	Residential: 231 Commercial: 65 Residential + Commercial: 1 (counted in Commercial) Community: 9 (Religious Properties 6, Public Toilets 3) Government: 16 (MbPT Structures 9, Occupants of Leased Plots 6 & Police Chowki 1) Total: 322

2.3 Fishery

Categories of Fisher-folks	Identified Number		Total	Remarks
	Mumbai side	Navi Mumbai side		
C1: Fishing stakes and nets in RoW (250 m.)	178	54	232	Funds for 230 nos C1 category fishermen are transferred to the Commissioner of Fisheries on 17.03.2020 for payment to the beneficiaries. 2. The list of balance 2 Nos. of C1 category fishermen are in process of fund transfer to the

				Commissioner of Fisheries.
C2: Fishing Stakes and Nets within 500 m. of RoW (Southern side)	296	567	863	1. Funds for 496 nos C2 category fishermen are transferred to the Commissioner of Fisheries in 2017-18. 2. The list of balance 367 Nos. of C2 category fishermen are under verification of validity.
C3: Hand Pickers	1498	4051	5549	Funds for 4141 nos of C3 category fishermen are already transferred to the Commissioner of Fisheries and the balance of 1408 Nos. of C3 category fishermen are in process of fund transfer to the Commissioner of Fisheries.
C4: Commercial and Artisanal Fisher-folks (Loss of Time and Increased Operating Costs)	Will be observed during the construction period	Will be observed during the construction period	---	Nil
C5: Fisher-folks with Loss due to Turbidity	Will be observed during the construction period	Will be observed during the construction period	----	Nil
C6: Fisher-folks with Damages due to Accidents	Will be observed during the construction period	Will be observed during the construction period	----	Nil

2.4 Land Acquisition / Transfer

Location	Land Required in Ha.		Land Acquired in Ha.		Balance Land to be acquired in Ha	Remarks
	Govt.	Private	Govt.	Private		
Sewri	10.089	0	10.089	0	0	
Navi Mumbai	98.75	9.34	98.75	7.595	1.745	
Total	**118.179**		**108.839**	**7.595**	**1.745**	

3. Monitoring Results

3.1 Sewri Section

Activity	Indicator	Total Target	Progress till Last Quarter	Progress during reporting Quarter	Cumulative Progress till Current Quarter	Cumulative Achievement of Total Target (%)	Remarks, If Any
Resettlement	No. of Residential PAHs provided with Allotment Letters of Alternate Tenements	231	226	0	226	97%	
	No. of Residential PAHs given possession of Alternate Tenements	231	226	0	226	97%	
	No. of Commercial/R+C PAPs provided with Allotment Letters of Alternate Shops/Tenements	66	62	0	62	92%	
	No. of Commercial R+C PAPs given possession of Alternate Shops/Tenements	66	62	0	62	92%	
	No. of Occupants of MbPT Leased Plots provided Compensation	6	6	0	6	100%	
	No. of Religious properties Relocated / Removed	6	6	0	6	100%	
	No. of Other Community properties Relocated / Removed	4	4	0	4	100%	
	No. of Structures in possession of MbPT Dismantled / Cleared	9	9	0	9	100%	
	No. of PAHs/PAPs provided Shifting Charges / Arrangement	297	0	0	0	0%	
Rehabilitation	No. of PAHs / PAPs identified for Livelihood Support in Post Resettlement Assessment						
	No. of PAHs / PAPs provided Livelihood Support under Program-I (to be identified)						
	No. of PAHs / PAPs provided Livelihood Support under Program-II (to be identified)						
	No. of PAHs / PAPs provided Livelihood Support under Program-III (to be identified)						
	No. of new enterprises started						

Activity	Indicator	Total Target	Progress till Last Quarter	Progress during reporting Quarter	Cumulative Progress till Current Quarter	Cumulative Achievement of Total Target (%)	Remarks, If Any
Grievance Redress	No. of Grievances Received by FLGRC	4					
	No. of Grievances Disposed by FLGRC	3	1	0	1	100%	
	No. of Grievances Received by SLGRC	1	0	0	0		
	No. of Grievances Disposed by SLGRC	0					
Post Resettlement Assistance	No. of CHSs Registration helped						
	No. of CHSs provided Tenements for Social Amenities						
	No. of CHSs' Maintenance Fund Invested						
	No. of CHSs' Office Bearers provided training						

SUMMARY OF FISHER FOLKS OF MTHL PROJECT (Influence Zone of 24 villages) Up to 30-06-2022						
Sr. No.	Village Name	Total number of forms Received	Total approved eligible family units			
			C1	C2	C3	Total
1	Bamandongri	273	1	1	28	**30**
2	Belapur	110	0	5	15	**20**
3	Belpada	1185	0	7	478	**485**
4	Diwale	455	12	201	52	**265**
5	Ganeshpuri	276	0	37	35	**72**
6	Gavhan	2162	0	14	1317	**1331**
7	Jasai	926	0	0	18	**18**
8	Jawale	51	0	1	0	**1**
9	Kombadbhuja	413	1	23	134	**158**
10	Kopar	994	2	5	228	**235**
11	Karave	178	0	44	67	**111**
12	Mahul	1062	129	77	604	**809**
13	Moha	475	22	25	134	**181**
14	Mora	818	0	102	375	**477**
15	Morave	539	14	21	88	**123**
16	Nhava	1646	0	32	307	**339**
17	Sarsole	266	0	30	83	**113**
18	Sewri	305	0	1	72	**73**
19	Shelghar	241	0	0	15	**15**
20	Shivajinagar	202	1	4	61	**66**
21	Trombay	1208	49	219	823	**1091**
22	Ulwe	218	1	3	14	**18**
23	Uran & Hanuman Koliwada	683	0	11	600	**611**
24	Vahal	411	0	2	1	**3**
Total		**15097**	**232**	**865**	**5548**	**6645**

	Total applications		15097
	Duplicate/Repeated Application		2428
	Net Applications		12669
	Approved applications		6645

Grievance Redressal Committee (GRC) for Fisher-folk Compensation

No. of Cases referred to GRC	No. of Cases		No. of Cases Rejected	No. of Cases under Consideration
	Allowed	Compensation Paid		
Nil	Nil	Nil	Nil	Nil

Implementation Schedule for Fisher-folks Compensation & Land Acquisition in Navi Mumbai

A. Implementation Schedule for Fisher-folks Compensation: -

Sr. No.	Task Designation	Approving authority	Start Date	Completion Date
1	Approval of fisherfolk's compensation Policy	Fisher-folks Compensation Committee (FCC)	08-10-2015	23-12-2015
2	Approval by MMRDA	MMRDA	10-12-2015	23-12-2015
3	Submission to JICA	MMRDA	--	04-01-2016
4	A detailed list of PAP and compensation plan	1. Detailed list of Fisher-folk PAP up to list 1 (1165 Nos) & 2 (1399 Nos) are finalized by the Fisheries Department. 2. From 2018, FEVC committee is the approval authority of PAF and approved C1- 232 Nos. C2 - 368 Nos and C3- 3481 Nos are approved.	23-12-2015	**Up to 30-06-2022** 1. Total up to date applications scrutinized = 12669 Nos. 2. Eligible = 6645 Nos. 3. Rejected = 6024 Nos.
	Validation of compensation plan	Fisher-folks Compensation Committee (FCC)	23-12-2015	1. Approval to the Fisher-folk PAP list obtained from Fisheries Department for Fisherfolk from Sewri, Mahul & Trombay (Mumbai side) – 12th September 2017 and 20th November 2018 for C-2 & C3 Category only.

Sr. No.	Task Designation	Approving authority	Start Date	Completion Date
			23-12-2015	2. Approval to the Fisher-folk PAP list obtained from Fisheries Department for Fisherfolk of Navi Mumbai of C2 & C3 on 25th April 2018. 3. Validation of compensation is in progress and would be completed in phases.
6	Approval of compensation plan	FCC	23-11-2015	28-12-2017
7	Approval by MMRDA	MMRDA	23-11-2015	09-03-2021

B. Implementation Schedule for Land Acquisition in Navi Mumbai: -

Land Required in Ha.		Land Acquired in Ha.		Balance Land to be acquired in Ha	The anticipated date for Land Acquisition	Payment status (Payment made to Landowners by CIDCO)	Remarks
Govt.	Private	Govt.	Private	Private			
98.75	9.34	98.75	7.595	1.745	30-09-2022	--	1. CIDCO is the land acquisition authority for land acquisition for Navi Mumbai 2. MMRDA has paid an amount of INR 59.16 Cr to CIDCO as per their demand. 3. The payment status to the landowners is awaited from CIDCO. The same would be communicated to JICA on receipt of the same.
Total	**108.09**	**106.345**		**1.745**			

Implementation Schedule for SIA (Sewri Section)

Task No.	Task Designation	Start Date	Completion / Forecast Date
1	**Preparation of Final SIA**		
1.1	MMRDA Approval	October 2015	January 2016
1.2	JICA Approval	November 2015	January 2016
1.3	Posting of project Information on MMRDA		
1.4	Translation and disclosure of entitlement policy in local language to all PAP's	December 2015	January 2016
2	**LARP Implementation**		
2.1	Grievance redress mechanism established	August 2016	August 2016
2.2	Staff deployment SIA implementation	June 2016	Dec. 2021
2.3	Staff Deployment Public Relation	June 2016	June 2016
2.4	Hiring of Independent Evaluation Agency	November 2018	November 2020
2.5	Preparation and issue of allotment letters to PAPs	June 2018	September 2022
2.6	Notice of PAPs for shifting (Sewri Section)	December 2018	Nov. 2021
2.7	Allotment of dwelling units to PAPs	September 2016	September 2022
2.8	Shifting of PAPs to resettlement Colony	December 2018	Nov. 2021
2.9	Transfer of compensation/allowance/ assistance to PAPs	December 2018	September 2022
2.10	Creation of Community Revolving fund (within 3 months post handing over)	April 2019	September 2022
2.11	Assessment of economic rehabilitation needs by individual household (within 6 months after handing over	September 2019	September 2022
2.12	Registration of Co-operative housing societies transfer of maintenance funds. (6 months period)	December 2019	September 2022
2.13	Signing of Civil Contract		January 2018
2.14	Notice of Civil works to proceed		March 2018
3	**Monitoring & Evaluation**		
3.1	Internal Monitoring- Monthly/ Quarterly	June 2016	July 2020
3.2	Independent Evaluation Mid-term and End term evaluation Mid Term End Term	May 2019 November 2019	June 2020 November 2022

Attachment 3- JICA's Concurrence Status

Status of JICA'S Concurrence

Sl. No.	Brief description	Procurement procedure	Bid Cost		JICA's Concurrence on					
			Local Currency (Cr Rs.)	Total (Cr Rs)	PQ Documents	PQ Evaluation	Bid Documents	Technical Evaluation	Financial Evaluation	Contract
1.	Package-1 (CH 0+000 km to CH10+380 km)	ICB with PQ (2P)	7637.30	7637.30	JICA's Concurrence - 9th May 2016	JICA's Concurrence - 22nd Dec 2016	JICA's Concurrence - 4th Jan 2017	JICA's Concurrence - 12th Sep 2017	JICA's Concurrence - 12th Oct 2017	JICA's Concurrence – 15th Feb 2018
2.	Package-2 (CH 10+380 km to CH18+187 km)	ICB with PQ (2P)	5612.61	5612.61	JICA's Concurrence - 9th May 2016	JICA's Concurrence - 22nd Dec 2016	JICA's Concurrence - 4th Jan 2017	JICA's Concurrence - 12th Sep 2017	JICA's Concurrence - 12th Oct 2017	JICA's Concurrence – 15th Feb 2018
3.	Package-3 (CH18+187 to CH21+800)	ICB with PQ (2P)	1013.79	1013.79	JICA's Concurrence - 9th May 2016	JICA's Concurrence - 4th Jan 2017	JICA's Concurrence - 4th Jan 2017	JICA's Concurrence - 15th Sep 2017	JICA's Concurrence - 12th Oct 2017	JICA's Concurrence – 15th Feb 2018
4.	Package-4 Intelligent Transport System	ICB with PQ (2P)	427.00	427.00	JICA's Concurrence - 23rd Aug 2019	NA	JICA's Concurrence - 24th Aug 2021	JICA's Concurrence - 15th Feb 2022	JICA's Concurrence - 21st April 2022	-

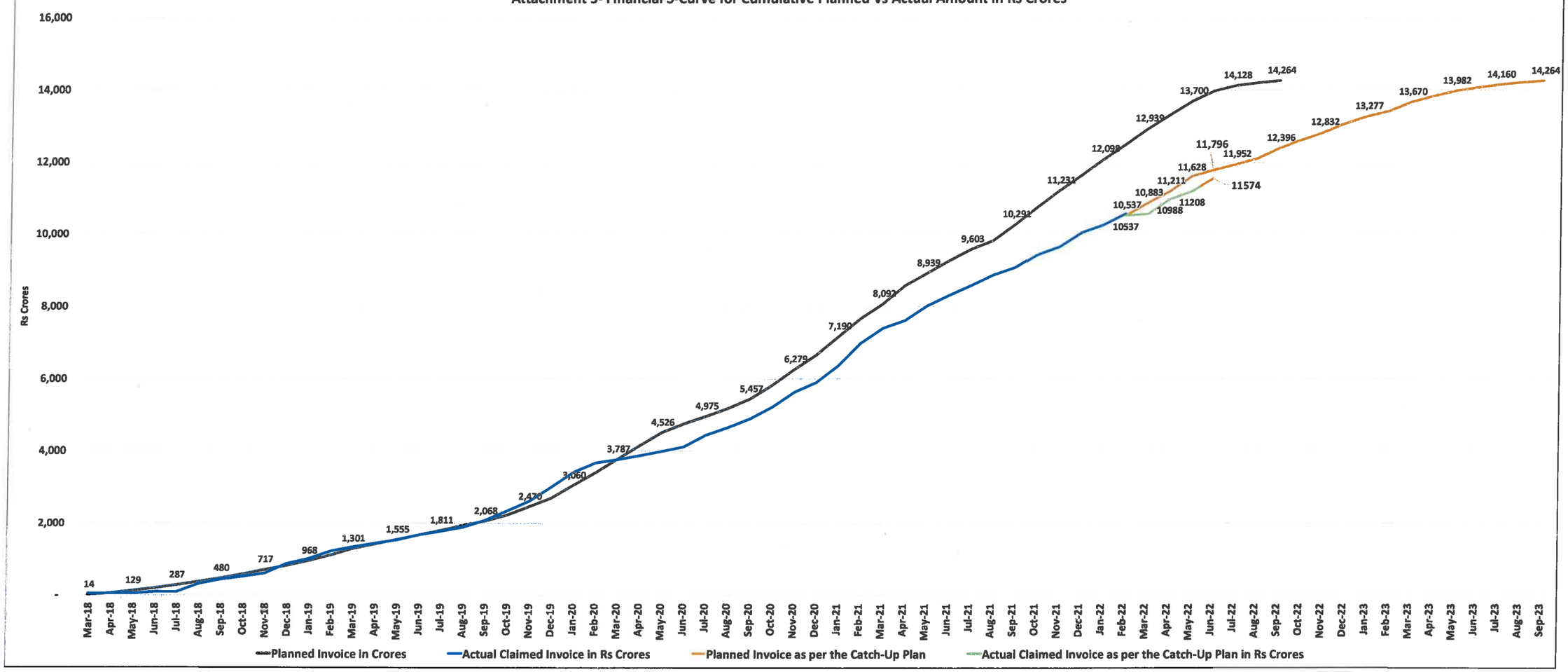
Attachment 4- Project Procurement and Financial Status till 30th June 2022

PROJECT PROCUREMENT AND FINANCIAL STATUS TILL 30th JUNE 2022

Type	Contract	Awarded or Estimated Value (in Rs. Crore)	Current Status	Contractors	Project Commencement Date	Stipulated Project Completion Date	Revised Project Completion Date After granting the Extension of Time (EOT)	% Of Overall Works Progress (Design, Material Procurement and Construction) as per the Primavera Baseline Schedule Updated as of 25th June 2022	% Of Financial Progress till 30th June 2022 (GC Certified) (Excluding Mobilization Advance, Price Adjustment and Work Variation)
CIVIL	Package-1 (CH 0+000 km to CH 10+380 km)	7637.30	Awarded	L&T-IHI Consortium	March 2018	21-Sep-2022	30-Sept-2023	82.07%	76.49%
	Package-2 (CH 10+380 km to CH18+187 km)	5612.61	Awarded	DAEWOO-TPL JV	March 2018	21-Sep-2022	27-Sept-2023	81.86%	77.56%
	Package-3 (CH18+187 to CH21+800)	1013.79	Awarded	L&T	March 2018	21-Sep-2021	03-Mar-2023	90.35%	85.68%
ITS	Package-4 Intelligent Transport System (ITS)	427.00	Awarded	Strabag GmbH JV	June 2022	Aug 2023	NA	NA	NA

Attachment 5- Financial S-Curve for Cumulative Planned Vs Actual Amount in Rs Crores

Attachment 5- Financial S-Curve for Cumulative Planned Vs Actual Amount in Rs Crores



MUMBAI TRANS HARBOUR LINK
GC
GENERAL CONSULTANT

Attachment 6- Package-1's Construction Programme Updated as of 25th June 2022

L&T - IHI

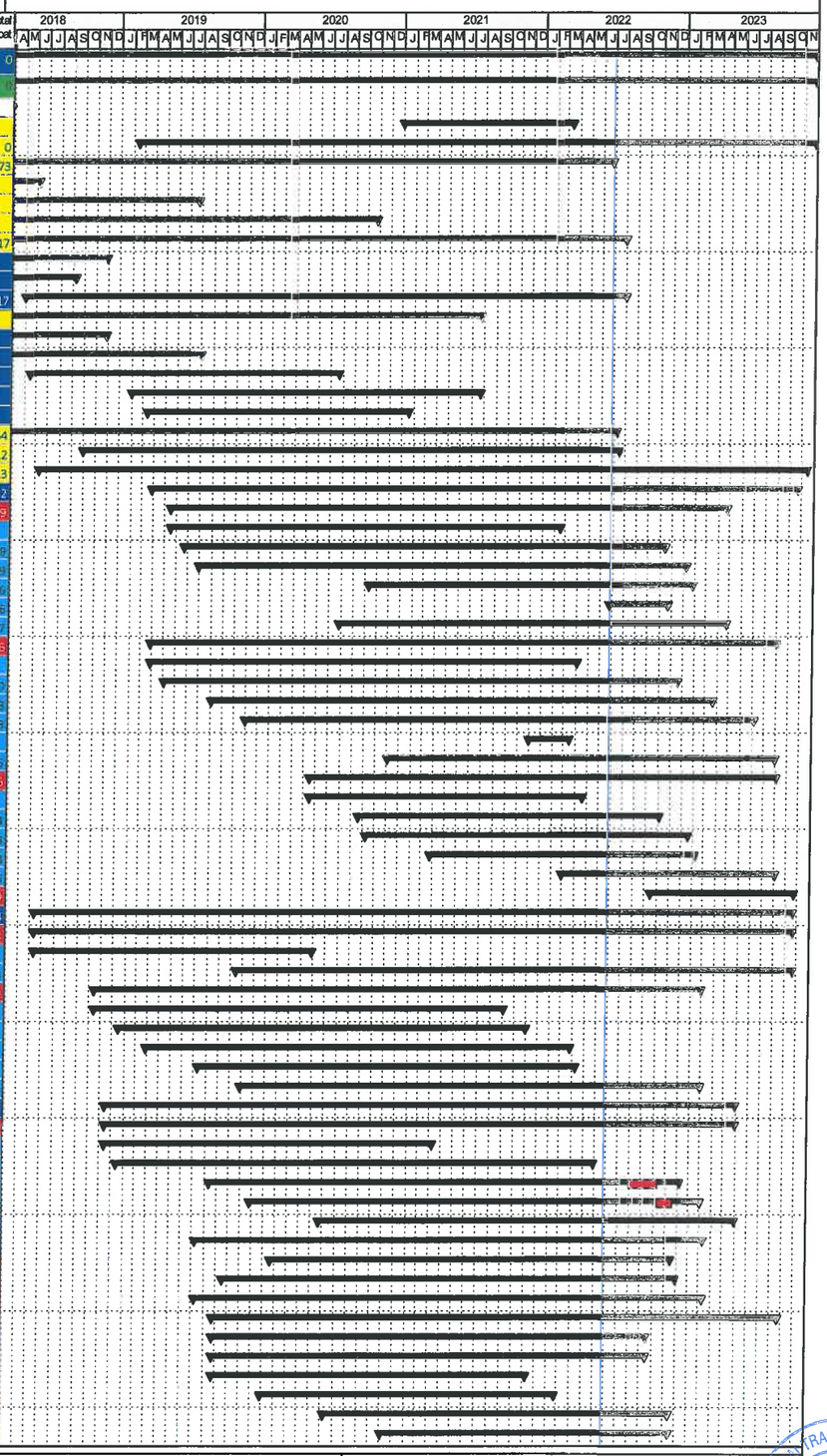
MUMBAI TRANS HARBOUR LINK PACKAGE 1, UPDATED REVISED WORK PROGRAMME FOR JUNE 2022

MMRDA

AECOM | PADECO | dar al-handasah shair and partners | TYLIN INTERNATIONAL

General Consultant for Mumbai Trans Harbour Link Project

Activity ID	Activity Name	BL1 Duration	BL1 Start	BL1 Finish	Original Duration	Start	Finish	Schedule % Complete	Performance % Complete	Variance - BL1 Start Date	Variance - BL1 Finish Date	Total Float
MPR51_MTHL_P1	-Jun-22 Month Progress	1294	23-Mar-18	30-Sep-23	1344	23-Mar-18 A	27-Nov-23	82.17%	82.07%	0	-50	0
MPR51.1	Mumbai Trans Harbour Link - Package 1	1294	23-Mar-18	30-Sep-23	1344	23-Mar-18 A	27-Nov-23	82.17%	82.07%	0	-50	0
M10000	Commencement Date	0	23-Mar-18		0	23-Mar-18 A		100%	100%	0	0	
MPR51.1.0	Delay Events	305	31-Dec-20	14-Mar-22	588	31-Dec-20 A	14-Mar-22 A	0%	0%	0	0	
MPR51.1.2	Key Milestones	1688	15-Feb-19	30-Sep-23	1609	15-Feb-19 A	27-Nov-23	0%	0%	0	-58	0
MPR51.1.3	Access to Site	1439	23-Mar-18	01-Mar-22	1066	23-Mar-18 A	26-Jun-22	0%	0%	0	-117	73
MPR51.1.5	Survey	73	23-Mar-18	03-Jun-18	73	23-Mar-18 A	03-Jun-18 A	0%	0%	0	0	
MPR51.1.6	Geotechnical Investigation	420	23-Mar-18	23-Jul-19	420	23-Mar-18 A	23-Jul-19 A	0%	0%	0	0	
MPR51.1.7	Infrastructure Facilties	592	23-Mar-18	26-Oct-20	593	23-Mar-18 A	26-Oct-20 A	0%	0%	0	0	
MPR51.1.9	Design & Engineering (Civil)	955	23-Mar-18	12-Mar-22	927	23-Mar-18 A	01-Aug-22	0%	0%	0	-72	317
MPR51.1.9.1	Initial Design (General & Preliminary Design, DBR)	228	23-Mar-18	29-Nov-18	229	23-Mar-18 A	29-Nov-18 A	0%	0%	0	0	
MPR51.1.9.2	Finalization of Alignment	155	23-Mar-18	10-Sep-18	169	23-Mar-18 A	10-Sep-18 A	0%	0%	0	0	
MPR51.1.9.3	Detailed Design and Construction Design	920	01-May-18	12-Mar-22	891	01-May-18 A	01-Aug-22	0%	0%	0	-72	317
MPR51.1.10	Design, Engineering & Material Procurement (OSD)	922	23-Mar-18	22-Jul-21	946	23-Mar-18 A	22-Jul-21 A	0%	0%	0	0	
MPR51.1.10.1	Initial Design	228	23-Mar-18	29-Nov-18	229	23-Mar-18 A	29-Nov-18 A	0%	0%	0	0	
MPR51.1.10.3	Aerodynamic Analysis	422	23-Mar-18	30-Jul-19	422	23-Mar-18 A	30-Jul-19 A	0%	0%	0	0	
MPR51.1.10.4	Technical Design	647	15-May-18	22-Jul-20	647	15-May-18 A	22-Jul-20 A	0%	0%	0	0	
MPR51.1.10.5	Construction Design	635	02-Feb-19	22-Jul-21	659	02-Feb-19 A	22-Jul-21 A	0%	0%	0	0	
MPR51.1.10.6	Material Procurement (1st Lot)	498	15-Mar-19	19-Jan-21	554	15-Mar-19 A	19-Jan-21 A	0%	0%	0	0	
MPR51.1.11	Tree Cutting and Transplantation	1457	23-Mar-18	18-Mar-22	1229	23-Mar-18 A	10-Jul-22	0%	0%	0	-114	-54
MPR51.1.12	Utility Diversion	924	01-Oct-18	07-Mar-22	758	01-Oct-18 A	14-Jul-22	0%	0%	0	-90	12
MPR51.1.13	Construction	1221	11-Jun-18	29-Sep-23	1259	11-Jun-18 A	12-Nov-23	36.75%	36.39%	0	-38	13
MPR51.1.13.1	Sewri Interchange Section	1023	29-Mar-19	20-Jul-23	1066	29-Mar-19 A	21-Oct-23	41.8%	41.24%	0	-44	32
MPR51.1.13.1.1	Sewri Interchnage - Work Front - 1	919	16-May-19	25-Mar-23	946	16-May-19 A	24-Apr-23	41.48%	47.4%	0	-27	109
MPR51.1.13.1.1.1	Sewri Interchange - Work Front - 1 - Piling	614	16-May-19	18-Feb-22	658	16-May-19 A	18-Feb-22 A	0%	0%	0	0	
MPR51.1.13.1.1.2	Sewri Interchange - Work Front - 1 -Pile Cap	748	21-Jun-19	14-Nov-22	821	21-Jun-19 A	14-Nov-22	68.28%	74.6%	0	0	149
MPR51.1.13.1.1.3	Sewri Interchange - Work Front - 1 - Pier	877	30-Jul-19	23-Dec-22	901	30-Jul-19 A	08-Jan-23	32.68%	56.90%	0	-14	119
MPR51.1.13.1.1.4	Sewri Interchange - Work Front - 1 - Pier Cap	581	12-Oct-20	09-Jan-23	595	12-Oct-20 A	25-Jan-23	35.48%	47.58%	0	14	216
MPR51.1.13.1.1.5	Sewri Interchange - Embankment Works - Ramp F	90	06-May-22	20-Oct-22	90	27-Jun-22	23-Nov-22	0%	0%	30	-38	46
MPR51.1.13.1.1.6	Sewri Interchange - Work Front - 1 - Super Structure Ere	685	29-Jul-20	25-Mar-23	712	29-Jul-20 A	24-Apr-23	47.27%	46.4%	0	-27	137
MPR51.1.13.1.2	Sewri Interchange - Work Front - 2	992	29-Mar-19	27-Apr-23	1023	29-Mar-19 A	31-Aug-23	45.57%	40.06%	0	-30	76
MPR51.1.13.1.2.1	Sewri Interchange - Work Front - 2 - Piling	715	29-Mar-19	25-Apr-22	778	29-Mar-19 A	05-Apr-22 A	100%	100%	0	18	
MPR51.1.13.1.2.2	Sewri Interchange - Work Front - 2 - Pile Cap	775	05-May-19	06-Nov-22	812	05-May-19 A	20-Dec-22	54.93%	44.17%	0	-39	120
MPR51.1.13.1.2.3	Sewri Interchange - Work Front - 2 - Pier	884	04-Sep-19	10-Jan-23	946	04-Sep-19 A	22-Mar-23	44.78%	39.19%	0	-62	58
MPR51.1.13.1.2.4	Sewri Interchange - Work Front - 2 - Pier Cap	885	02-Dec-19	04-Apr-23	946	02-Dec-19 A	06-Jul-23	35.2%	31.77%	0	-61	93
MPR51.1.13.1.2.5	Sewri Interchange - Embankment Works - Ramp C2	60	28-Feb-21	06-May-22	60	01-Dec-21 A	15-Mar-22 A	100%	100%	79	-47	
MPR51.1.13.1.2.6	Sewri Interchange - Work Front - 2 - Super Structure ere	628	05-Dec-20	27-Apr-23	685	05-Dec-20 A	31-Aug-23	10.19%	3.77%	0	-57	15
MPR51.1.13.1.3	Sewri Interchange - Work Front - 3 (Cast in situ Spans)	705	16-May-20	26-Apr-23	739	16-May-20 A	02-Sep-23	34.81%	23.74%	0	-33	6
MPR51.1.13.1.3.1	Sewri Interchange - Work Front - 3 - Piling	396	16-May-20	18-Mar-22	427	16-May-20 A	20-Apr-22 A	100%	100%	0	-30	
MPR51.1.13.1.3.2	Sewri Interchange - Work Front - 3 - Pile Cap	468	21-Sep-20	11-Oct-22	531	21-Sep-20 A	05-Nov-22	46.15%	31.67%	0	-22	124
MPR51.1.13.1.3.3	Sewri Interchange - Work Front - 3 - Pier	534	10-Oct-20	16-Nov-22	591	10-Oct-20 A	18-Jan-23	46.15%	18.46%	0	-57	73
MPR51.1.13.1.3.4	Sewri Interchange - Work Front - 3 - Pier Cap	401	27-Mar-21	03-Dec-22	486	27-Mar-21 A	04-Feb-23	47.35%	26.67%	0	-57	78
MPR51.1.13.1.3.5	Sewri Interchange - Work Front - 3 - Super Structure	317	28-Feb-22	26-Apr-23	287	01-Mar-22 A	02-Sep-23	15.24%	16.43%	-1	-60	6
MPR51.1.13.1.4	Sewri Interchange - Merging with Eastern freeway after Sup	226	05-Oct-22	20-Jul-23	274	16-Oct-22	21-Oct-23	0%	0%	-9	-57	19
MPR51.1.13.2	Intertidal Section	1221	11-Jun-18	29-Sep-23	1239	11-Jun-18 A	19-Oct-23	45.86%	40.33%	0	-18	34
MPR51.1.13.2.1	Intertidal - Temporary Access Bridge Work	1221	11-Jun-18	29-Sep-23	1239	11-Jun-18 A	19-Oct-23	0%	0%	0	-18	34
MPR51.1.13.2.1.1	Access Bridge	471	11-Jun-18	27-May-20	471	11-Jun-18 A	27-May-20 A	0%	0%	0	0	
MPR51.1.13.2.1.11	Temporary Access Bridge Work -2 (MP70 to MP51- 21 S)	926	14-Nov-19	29-Sep-23	943	14-Nov-19 A	19-Oct-23	0%	0%	0	-18	34
MPR51.1.13.2.2	Intertidal - Main Bridge Work	1047	14-Nov-18	14-Feb-23	1060	14-Nov-18 A	27-Feb-23	51.46%	45.25%	0	-12	159
MPR51.1.13.2.2.1	Intertidal - Main Bridge Work - Piling	749	14-Nov-18	05-Oct-21	740	14-Nov-18 A	05-Oct-21 A	0%	0%	0	0	
MPR51.1.13.2.2.2	Intertidal - Main Bridge Work - Pile Cap	741	17-Jan-19	01-Dec-21	713	17-Jan-19 A	01-Dec-21 A	0%	0%	0	0	
MPR51.1.13.2.2.3	Intertidal - Main Bridge Work - Pier	805	29-Mar-19	24-Apr-22	794	29-Mar-19 A	26-Mar-22 A	100%	100%	0	27	
MPR51.1.13.2.2.4	Intertidal - Main Bridge Work - Pier Cap	727	10-Aug-19	05-May-22	788	10-Aug-19 A	11-Apr-22 A	100%	100%	0	23	
MPR51.1.13.2.2.5	Intertidal - Main Bridge Work - Super Structure Erection	792	28-Nov-19	14-Feb-23	805	29-Nov-19 A	27-Feb-23	43.88%	36.7%	0	-12	85
MPR51.1.13.3	Marine Section	1096	14-Dec-18	10-May-23	1113	14-Dec-18 A	30-May-23	31.56%	27.23%	0	-18	7
MPR51.1.13.3.2	Marine - Main Bridge	1096	14-Dec-18	10-May-23	1113	14-Dec-18 A	30-May-23	31.56%	27.23%	0	-18	7
MPR51.1.13.3.2.1	Marine - Piling	578	14-Dec-18	10-Apr-21	596	14-Dec-18 A	10-Apr-21 A	0%	0%	0	0	
MPR51.1.13.3.2.3	Marine - Pile Cap	595	14-Jan-19	10-May-22	828	14-Jan-19 A	30-May-22 A	100%	100%	0	-17	
MPR51.1.13.3.2.4	Marine - Pier	745	12-Sep-19	17-Nov-22	790	12-Sep-19 A	06-Jan-23	66%	44.06%	0	-46	127
MPR51.1.13.3.2.2	Marine - Pier Cap	737	26-Dec-19	10-Jan-23	783	26-Dec-19 A	09-Mar-23	39.45%	38.37%	0	-46	79
MPR51.1.13.3.2.5	Marine - Super Structure Erection	691	25-Jun-20	10-May-23	709	25-Jun-20 A	30-May-23	18.01%	16.91%	0	-18	7
MPR51.1.13.4	Precast Segments	866	07-Aug-19	23-Feb-23	879	07-Aug-19 A	11-Mar-23	41.53%	36.35%	0	-13	73
MPR51.1.13.4.1	Precast Segement - Sewri Interchange	809	20-Feb-20	18-Dec-22	808	20-Feb-20 A	16-Dec-22	54.86%	47.8%	0	2	187
MPR51.1.13.4.2	Precast Segement - Intertidal	931	18-Oct-19	30-Dec-22	975	18-Oct-19 A	29-Dec-22	47.67%	59.98%	0	1	162
MPR51.1.13.4.3	Precast Segement - Marine	866	07-Aug-19	23-Feb-23	879	07-Aug-19 A	11-Mar-23	35.58%	25.12%	0	-13	69
MPR51.1.13.5	Orthotropic Steel Deck (OSD) - Fabrication, Shipping, Assembly	939	23-Sep-19	23-May-23	966	23-Sep-19 A	23-Sep-23	43.61%	49.27%	0	-27	56
MPR51.1.13.5.1	OSD - Fabrication	746	23-Sep-19	17-Oct-22	838	23-Sep-19 A	17-Oct-22	100%	100%	0	0	276
MPR51.1.13.5.1.1	Fabrication - Factory A	746	23-Sep-19	17-Oct-22	838	23-Sep-19 A	17-Oct-22	100%	100%	0	0	276
MPR51.1.13.5.1.2	Fabrication - Factory B	709	23-Sep-19	11-Dec-21	709	23-Sep-19 A	11-Dec-21 A	0%	0%	0	0	
MPR51.1.13.5.1.3	Fabrication - Factory C	688	27-Jan-20	23-Feb-22	688	27-Jan-20 A	23-Feb-22 A	0%	0%	0	0	
MPR51.1.13.5.2	OSD - Shipping	883	09-Jul-20	16-Dec-22	889	09-Jul-20 A	16-Dec-22	0%	0%	0	0	129
MPR51.1.13.5.2.1	Shipping - Factory A	735	04-Dec-20	16-Dec-22	735	04-Dec-20 A	16-Dec-22	0%	0%	0	0	129



Actual Level of Effort | Actual Work | Remaining Work | Critical Remaining Work | Milestone | summary

MUMBAI TRANS HARBOUR LINK * GENERAL CONSULTANT *

L&T - IHI

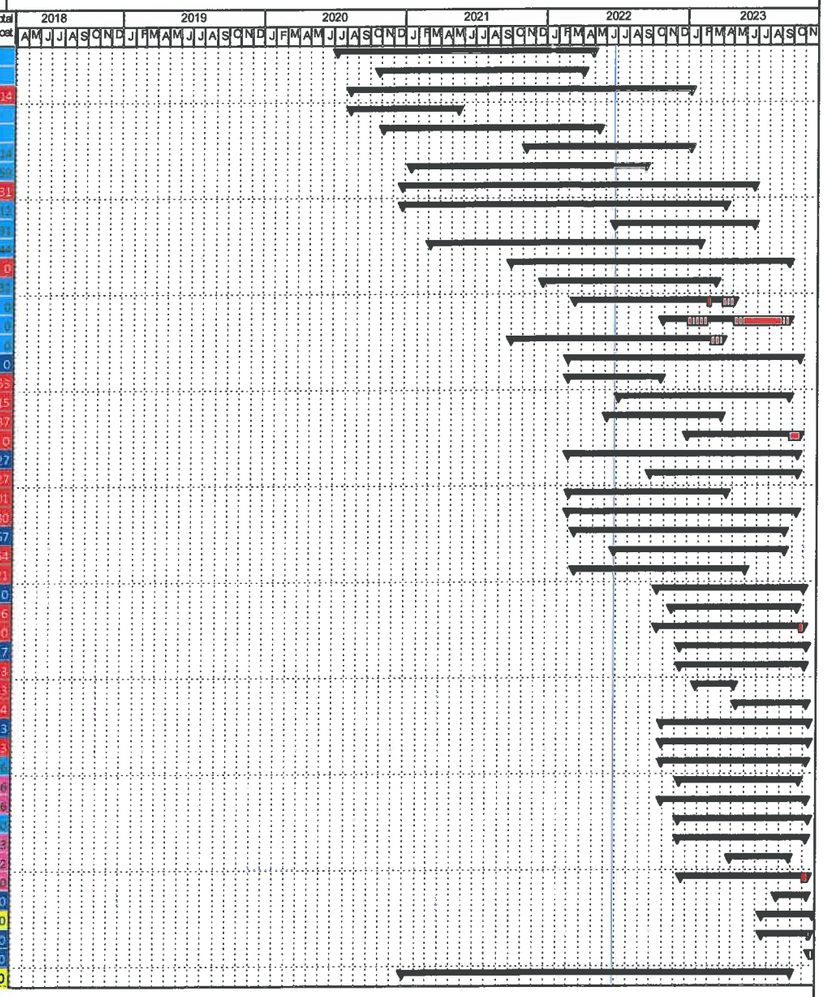
MUMBAI TRANS HARBOUR LINK PACKAGE 1, UPDATED REVISED WORK PROGRAMME FOR JUNE 2022

MMRDA

AECOM | PADECO | TYLIN INTERNATIONAL

General Consultant for Mumbai Trans Harbour Link Project

Activity ID	Activity Name	BL1 Duration	BL1 Start	BL1 Finish	Original Duration	Start	Finish	Schedule % Complete	Performance % Complete	Variance - BL1 Start Date	Variance - BL1 Finish Date	Total Float
	MPR51.1.13.5.2.2 Shipping - Factory B	772	09-Jul-20	26-Aug-22	889	09-Jul-20 A	28-Apr-22 A	0%	0%	0	120	
	MPR51.1.13.5.2.3 Shipping - Factory C	544	25-Oct-20	28-Apr-22	661	25-Oct-20 A	04-Apr-22 A	0%	0%	0	28	
	MPR51.1.13.5.3 OSD - Custom Clearance and Inland Transport (Last Module	614	13-Aug-20	09-Jan-23	614	13-Aug-20 A	09-Jan-23	46.79%	56.25%	0	0	114
	MPR51.1.13.5.3.1 OSD 1 - MP50 to MP53 (320m)	202	13-Aug-20	19-May-21	223	13-Aug-20 A	19-May-21 A	0%	0%	0	0	
	MPR51.1.13.5.3.2 OSD 2 - MP69 to MP75 (683m)	468	07-Nov-20	30-Sep-22	467	07-Nov-20 A	15-May-22 A	34.13%	100%	0	46	
	MPR51.1.13.5.3.3 OSD 3 - MP75 to MP81 (770m)	320	10-Nov-21	09-Jan-23	320	10-Nov-21 A	09-Jan-23	45.81%	45.81%	0	0	114
	MPR51.1.13.5.3.4 OSD 4 - MP124 to MP128 (560m)	345	18-Jan-21	21-May-22	391	18-Jan-21 A	14-Sep-22	100%	0%	0	-48	160
	MPR51.1.13.5.4 OSD - Assembly	619	25-Dec-20	09-May-23	646	25-Dec-20 A	22-Jun-23	0%	0%	0	-27	31
	MPR51.1.13.5.4.2 OSD 2 - MP69 to MP75 (683m)	551	25-Dec-20	21-Feb-23	568	25-Dec-20 A	06-Apr-23	0%	0%	0	-42	12
	MPR51.1.13.5.4.3 OSD 3 - MP75 to MP81 (770m)	328	28-Feb-22	09-May-23	265	27-Jun-22	22-Jun-23	0%	0%	90	-27	31
	MPR51.1.13.5.4.4 OSD 4 - MP124 to MP128 (560m)	481	06-Mar-21	11-Feb-23	525	06-Mar-21 A	02-Feb-23	0%	0%	0	8	44
	MPR51.1.13.5.5 OSD - Erection	449	01-Oct-21	23-May-23	476	01-Oct-21 A	23-Sep-23	18.37%	18.47%	0	-27	0
	MPR51.1.13.5.5.1 OSD 1 - MP50 to MP53 (320m)	286	25-Dec-21	14-Feb-23	312	25-Dec-21 A	16-Mar-23	34.61%	35.31%	0	-28	31
	MPR51.1.13.5.5.2 OSD 2 - MP69 to MP75 (683m)	238	07-Apr-22	09-Apr-23	215	15-Mar-22 A	03-May-23	7.85%	7.85%	23	-27	0
	MPR51.1.13.5.5.3 OSD 3 - MP75 to MP81 (770m)	219	16-Sep-22	23-May-23	209	31-Oct-22	23-Sep-23	0%	0%	-37	-27	0
	MPR51.1.13.5.5.4 OSD 4 - MP124 to MP128 (560m)	377	01-Oct-21	04-Mar-23	404	01-Oct-21 A	03-Apr-23	50%	0%	0	-27	0
	MPR51.1.13.6 Crash Barrier Works	324	28-Feb-22	08-Jul-23	284	28-Feb-22 A	21-Oct-23	0%	0.15%	0	-43	0
	MPR51.1.13.6.0 Crash Barrier - Design	171	28-Feb-22	17-Aug-22	135	28-Feb-22 A	24-Oct-22	0%	0%	0	-67	95
	MPR51.1.13.6.1 Crash Barrier - Sewri Interchange	241	14-Jul-22	18-May-23	319	07-Jul-22	22-Sep-23	0%	0%	2	-75	15
	MPR51.1.13.6.2 Crash Barrier - Intertidal	173	14-Jul-22	03-Mar-23	201	06-Jun-22 A	31-Mar-23	0%	0.54%	11	-26	37
	MPR51.1.13.6.3 Crash Barrier - Marine	167	15-Dec-22	08-Jul-23	223	31-Dec-22	21-Oct-23	0%	0%	-15	-71	0
	MPR51.1.13.7 Painting	230	30-Sep-22	29-Jun-23	290	01-Mar-22 A	14-Oct-23	0%	0%	110	-58	27
	MPR51.1.13.7.1 Sewri Interchange	226	30-Sep-22	15-Jun-23	290	28-Sep-22	14-Oct-23	0%	0%	2	-62	27
	MPR51.1.13.7.2 Intertidal	140	19-Oct-22	22-Mar-23	163	02-Mar-22 A	14-Apr-23	0%	0%	127	-21	101
	MPR51.1.13.7.3 Main bridge	109	10-Feb-23	29-Jun-23	157	01-Mar-22 A	10-Oct-23	0%	0%	231	-54	30
	MPR51.1.13.8 Drainage Works	356	28-Feb-22	14-Jun-23	314	15-Mar-22 A	12-Sep-23	0%	0%	-13	-48	67
	MPR51.1.13.8.1 Sewri Interchange	300	02-May-22	14-Jun-23	314	27-Jun-22	12-Sep-23	0%	0%	-34	-48	54
	MPR51.1.13.8.2 Main bridge	310	28-Feb-22	18-Apr-23	259	15-Mar-22 A	01-Jun-23	0%	0%	-13	-40	121
	MPR51.1.13.9 Waterproofing and Stone Mastic Asphalt Pavement	235	19-Oct-22	05-Sep-23	288	17-Oct-22	31-Oct-23	0%	0%	2	-51	0
	MPR51.1.13.9.1 Sewri Interchange	215	20-Oct-22	10-Jul-23	237	24-Nov-22	13-Oct-23	0%	0%	-31	-54	6
	MPR51.1.13.9.2 Main Bridge	235	19-Oct-22	05-Sep-23	288	17-Oct-22	31-Oct-23	0%	0%	2	-51	0
	MPR51.1.13.10 Expansion Joint	222	10-Nov-22	12-Sep-23	242	14-Dec-22	08-Nov-23	0%	0%	-31	-51	17
	MPR51.1.13.10.1 Sewri Interchange	218	10-Nov-22	08-Sep-23	236	14-Dec-22	01-Nov-23	0%	0%	-31	-50	23
	MPR51.1.13.10.2 Intertidal	84	18-Jan-23	20-Apr-23	92	25-Jan-23	06-May-23	0%	0%	-7	-15	53
	MPR51.1.13.10.3 Marine	80	14-Apr-23	12-Sep-23	109	10-May-23	08-Nov-23	0%	0%	-23	-51	4
	MPR51.1.13.11 Bridge Ancillaries and Misc. Works	229	01-Nov-22	15-Sep-23	280	29-Oct-22	12-Nov-23	0%	0%	2	-50	13
	MPR51.1.13.11.1 Bridge Ancillaries	229	01-Nov-22	15-Sep-23	280	29-Oct-22	12-Nov-23	0%	0%	2	-50	13
	MPR51.1.13.11.1.2 Traffic Signages and Marking	226	01-Nov-22	12-Sep-23	277	29-Oct-22	09-Nov-23	0%	0%	2	-50	16
	MPR51.1.13.11.1.2.1 Traffic Signages and Marking - Sewri Interchange	199	10-Nov-22	03-Aug-23	220	14-Dec-22	21-Oct-23	0%	0%	31	-52	6
	MPR51.1.13.11.1.2.2 Traffic Signages and Marking - Main Bridge	226	01-Nov-22	12-Sep-23	277	29-Oct-22	09-Nov-23	0%	0%	2	-50	18
	MPR51.1.13.11.1.1 Noise Barrier, View Barrier and Safety Fence	214	18-Nov-22	15-Sep-23	241	13-Dec-22	12-Nov-23	0%	0%	-23	-50	0
	MPR51.1.13.11.1.1.1 Noise Barrier	187	15-Dec-22	12-Sep-23	238	13-Dec-22	09-Nov-23	0%	0%	2	-50	3
	MPR51.1.13.11.1.1.2 View Barrier	84	31-Mar-23	04-Sep-23	80	25-Apr-23	25-Sep-23	0%	0%	-23	-19	42
	MPR51.1.13.11.1.1.3 Safety Fence & Top rail	214	18-Nov-22	15-Sep-23	233	22-Dec-22	12-Nov-23	0%	0%	-31	-50	0
	MPR51.1.13.12 Navigational aids	32	14-Aug-23	15-Sep-23	77	25-Aug-23	10-Nov-23	0%	0%	-10	-56	10
	MPR51.1.14 Handing Over	26	26-Jun-23	30-Sep-23	76	17-Jul-23	27-Nov-23	0%	0%	0	-50	0
	MPR51.1.14.1 Testing and Handing Over	40	26-Jun-23	23-Sep-23	86	17-Jul-23	20-Nov-23	0%	0%	-7	-52	0
	MPR51.1.14.2 Final Handing Over	7	23-Sep-23	30-Sep-23	7	20-Nov-23	27-Nov-23	0%	0%	-58	-58	0
	MPR51.1.15 Price Schedule	641	02-Jan-21	30-Sep-23	978	02-Jan-21 A	30-Sep-23	96.7%	96.69%	0	0	50



Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
summary

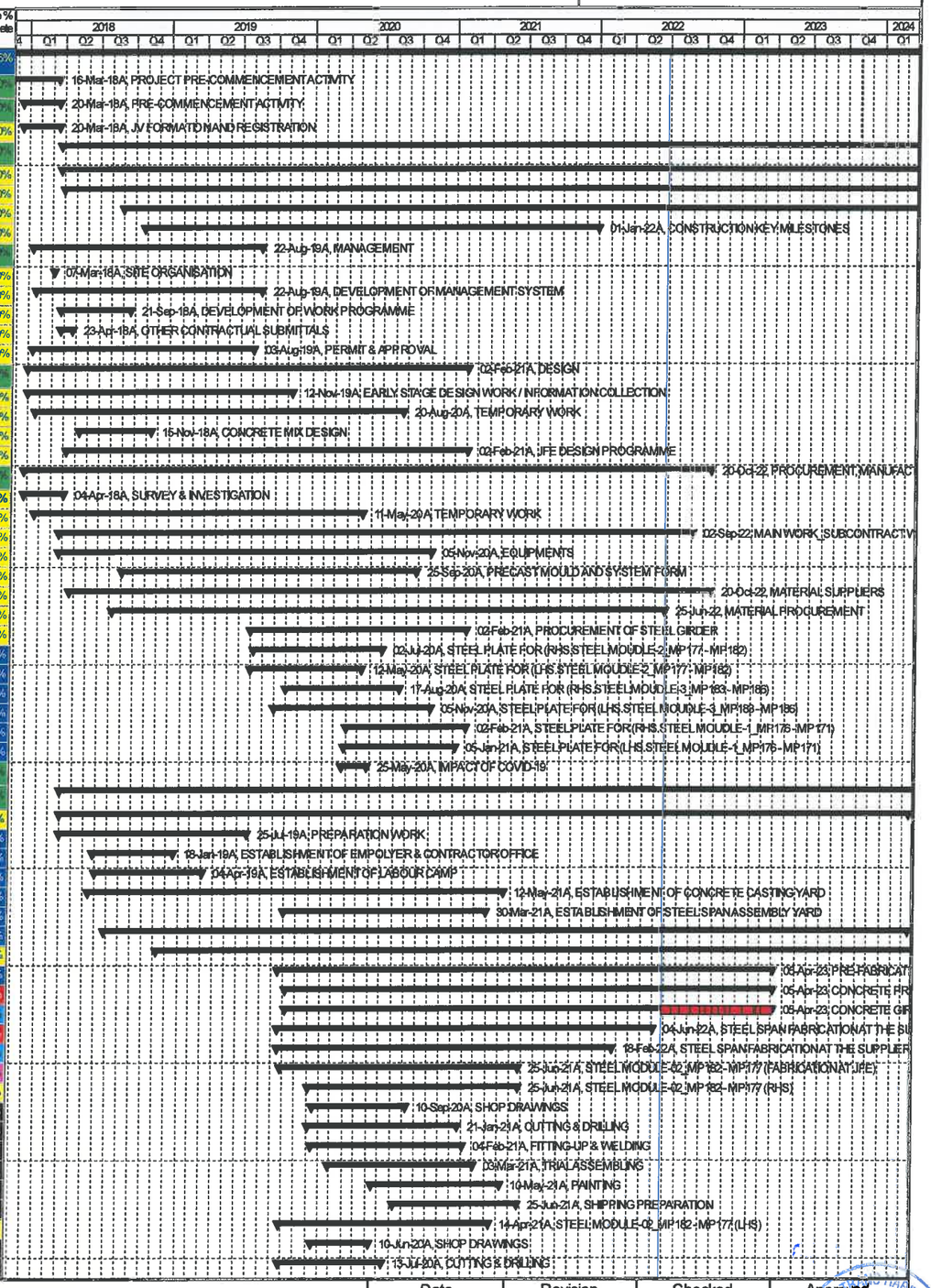
MUMBAI TRANS HARBOUR LINK * GENERAL CONSULTANT *

Attachment 7- Package-2's Construction Programme Updated as of 25th June 2022

MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807KM LONG BRIDGE SECTION (CH 10 380 - CH 18 187) ACCROSS THE MUMBAI BAY INCL SHIVAJNAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

#	Activity ID	Activity Name	Original Duration	BLP Project Start	BLP Project Finish	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete
1		MTHL-PKG2-DETAILED WORK PROGRAMME_25062022_APPROVED_MPR.51	3251	17-Nov-17	21-Sep-24	17-Nov-17		99.71%	81.86%
2		PROJECT PRE-COMMENCEMENT ACTIVITY	126	17-Nov-17	22-Mar-18	17-Nov-17	16-Mar-18	0%	0%
3		PRE-COMMENCEMENT ACTIVITY	85	15-Dec-17	07-Feb-18	15-Dec-17	20-Mar-18	0%	0%
4		JV FORMATION AND REGISTRATION	55	15-Dec-17	07-Feb-18	15-Dec-17	20-Mar-18	0%	0%
5		PROJECT EVENT MILESTONE	2562	23-Mar-18	21-Mar-23	23-Mar-18		0%	0%
6		PROJECT KEY MILESTONE	2405	23-Mar-18	22-Sep-22	23-Mar-18		0%	0%
7		INTERFACE MILESTONE_ERG19	2554	19-Apr-18	21-Mar-23	03-Apr-18		0%	0%
8		PHYSICAL PROGRESS AND INTERFACE DATE_ADD2-ATTACHMENT 25	2093	18-Sep-18	22-Jun-22	31-Aug-18		0%	0%
9		CONSTRUCTION KEY MILESTONES	1308	03-Sep-18	06-Jul-21	25-Oct-18	01-Jan-22	0%	0%
10		MANAGEMENT	613	20-Jan-18	18-Aug-18	12-Jan-18	22-Aug-19	0%	0%
11		SITE ORGANISATION	35	20-Jan-18	23-Feb-18	07-Mar-18	07-Mar-18	0%	0%
12		DEVELOPMENT OF MANAGEMENT SYSTEM	613	20-Jan-18	27-May-18	20-Jan-18	22-Aug-19	0%	0%
13		DEVELOPMENT OF WORK PROGRAMME	63	23-Mar-18	24-May-18	23-Mar-18	21-Sep-18	0%	0%
14		OTHER CONTRACTUAL SUBMITTALS	28	24-Mar-18	20-Apr-18	24-Mar-18	23-Apr-18	0%	0%
15		PERMIT & APPROVAL	389	20-Jan-18	18-Aug-18	12-Jan-18	03-Aug-19	0%	0%
16		DESIGN	1321	20-Jan-18	04-Sep-19	01-Jan-18	02-Feb-21	100%	100%
17		EARLY STAGE DESIGN WORK / INFORMATION COLLECTION	678	20-Jan-18	17-Jul-18	01-Jan-18	12-Nov-19	100%	100%
18		TEMPORARY WORK	1037	22-Jan-18	01-Nov-18	20-Jan-18	20-Aug-20	100%	100%
19		CONCRETE MIX DESIGN	274	23-Mar-18	31-Aug-18	12-May-18	15-Nov-18	0%	0%
20		JFE DESIGN PROGRAMME	1220	01-May-18	04-Sep-19	09-Apr-18	02-Feb-21	100%	100%
21		PROCUREMENT, MANUFACTURING AND LOGISTICS	1734	20-Jan-18	23-Aug-20	22-Dec-17		100%	100%
22		SURVEY & INVESTIGATION	72	20-Jan-18	02-Apr-18	22-Dec-17	04-Apr-18	0%	0%
23		TEMPORARY WORK	964	20-Jan-18	20-Oct-18	20-Jan-18	11-May-20	0%	0%
24		MAIN WORK_SUBCONTRACT WORK	1393	23-Mar-18	20-Jul-19	23-Mar-18		0%	0%
25		EQUIPMENTS	1097	23-Mar-18	12-Sep-19	23-Mar-18	05-Nov-20	100%	100%
26		PRECAST MOULD AND SYSTEM FORM	715	07-Aug-18	24-Mar-19	04-Sep-18	25-Sep-20	100%	100%
27		MATERIAL SUPPLIERS	1601	02-Jun-18	15-Oct-19	20-Apr-18		0%	0%
28		MATERIAL PROCUREMENT	0			08-Aug-18		0%	0%
29		PROCUREMENT OF STEEL GIRDER	673	07-May-19	23-Aug-20	01-Aug-19	02-Feb-21	0%	0%
30		STEEL PLATE FOR (RHS.STEEL MOUDLE-2_MP177 - MP182)	513	04-Jun-19	13-Jul-20	08-Aug-19	02-Jul-20	0%	0%
31		STEEL PLATE FOR (RHS.STEEL MOUDLE-2_MP177 - MP182)	438	07-May-19	16-Apr-20	01-Aug-19	12-May-20	0%	0%
32		STEEL PLATE FOR (RHS.STEEL MOUDLE-3_MP183 - MP186)	315	01-Jul-19	10-May-20	01-Nov-19	17-Aug-20	0%	0%
33		STEEL PLATE FOR (LHS.STEEL MOUDLE-3_MP183 - MP186)	315	04-Jun-19	14-Apr-20	01-Oct-19	05-Nov-20	0%	0%
34		STEEL PLATE FOR (RHS.STEEL MOUDLE-1_MP176 - MP171)	286	30-Jul-19	23-Aug-20	01-Apr-20	02-Feb-21	0%	0%
35		STEEL PLATE FOR (LHS.STEEL MOUDLE-1_MP176 - MP171)	327	02-Jul-19	26-Jul-20	29-Mar-20	05-Jan-21	0%	0%
36		IMPACT OF COVID-19	51			22-Mar-20	25-May-20	0%	0%
37		CONSTRUCTION	2275	02-Apr-18	21-Jun-22	02-Apr-18		100%	83.53%
38		TEMPORARY WORK	2174	02-Apr-18	21-Jun-22	02-Apr-18		100%	97.95%
39		PREPARATION WORK	368	02-Apr-18	16-Jan-19	02-Apr-18	25-Jul-19	0%	0%
40		ESTABLISHMENT OF EMPOLYER & CONTRACTOR OFFICE	194	20-Jun-18	27-Nov-18	27-Jun-18	18-Jan-19	100%	100%
41		ESTABLISHMENT OF LABOUR CAMP	464	20-Jun-18	05-Apr-19	03-Jul-18	04-Apr-19	0%	0%
42		ESTABLISHMENT OF CONCRETE CASTING YARD	1095	04-May-18	25-Apr-19	14-Jun-18	12-May-21	100%	100%
43		ESTABLISHMENT OF STEEL SPAN ASSEMBLY YARD	584	02-Nov-18	05-Mar-20	01-Nov-19	30-Mar-21	0%	0%
44		TEMPORARY BRIDGE	2122	20-May-18	21-Jun-22	27-Jul-18		100%	96.49%
45		PERMANENT WORK	2008	03-Sep-18	24-May-22	08-Dec-18		100%	81.64%
46		PRE-FABRICATION AND ASSEMBLY	1146	18-Apr-19	19-Feb-22	16-Oct-19		100%	92.47%
47		CONCRETE PRE-FABRICATION AT THE CASTING YARD	681	18-Apr-19	15-Sep-21	06-Nov-19		100%	68.9%
48		CONCRETE GIRDER PRE-CASTING	681	18-Apr-19	15-Sep-21	06-Nov-19		100%	68.9%
49		STEEL SPAN FABRICATION AT THE SUPPLIER'S WORK SHOP INCLUDING LOGISTIC	951	02-Jun-19	24-Jan-22	16-Oct-19	04-Jun-22	100%	100%
50		STEEL SPAN FABRICATION AT THE SUPPLIER'S WORK SHOP	952	02-Jun-19	29-Nov-21	16-Oct-19	18-Feb-22	100%	100%
51		STEEL MODULE-02_MP182 - MP177 (FABRICATION AT JFE)	625	02-Jun-19	29-Jun-21	24-Oct-19	25-Jun-21	100%	100%
52		STEEL MODULE-02_MP182 - MP177 (RHS)	626	29-Jun-19	29-Jun-21	06-Jan-20	25-Jun-21	100%	100%
53		SHOP DRAWINGS	375	29-Jun-19	06-Jul-20	17-Jan-20	10-Sep-20	0%	0%
54		CUTTING & DRILLING	297	02-Oct-19	27-Aug-20	06-Jan-20	21-Jan-21	0%	0%
55		FITTING-UP & WELDING	357	17-Oct-19	10-Nov-20	12-Jan-20	04-Feb-21	0%	0%
56		TRIAL ASSEMBLING	386	30-Jan-20	03-Jan-21	27-Feb-20	03-Mar-21	100%	100%
57		PAINTING	413	19-Apr-20	09-May-21	16-Jun-20	10-May-21	0%	0%
58		SHIPPING PREPARATION	413	03-Jul-20	29-Jun-21	10-Aug-20	25-Jun-21	0%	0%
59		STEEL MODULE-02_MP182 - MP177 (LHS)	561	02-Jun-19	07-May-21	24-Oct-19	14-Apr-21	100%	100%
60		SHOP DRAWINGS	300	02-Jun-19	27-Mar-20	17-Jan-20	10-Jun-20	0%	0%
61		CUTTING & DRILLING	140	04-Sep-19	31-May-20	24-Oct-19	13-Jul-20	0%	0%



Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone
% Complete
summary

EMPLOYER:
MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY (MMRDA)

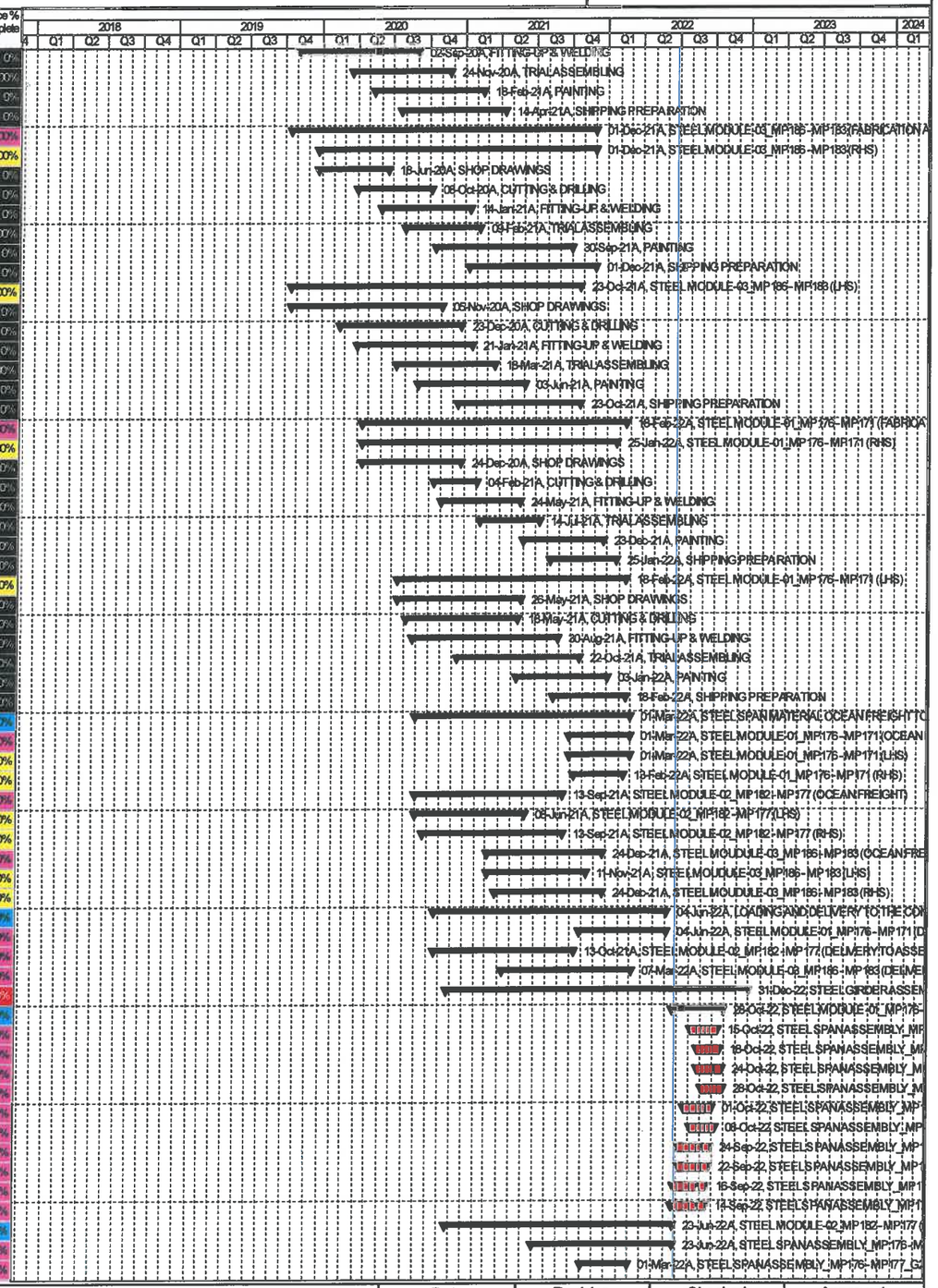
CONTRACTOR:
DAEWOO-TPL JV

Date	Revision	Checked	Approved
25-Jun-22	R0		

MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807KM LONG BRIDGE SECTION (CH 10 380 - CH 18 187) ACCROSS THE MUMBAI BAY INCL SHIVAJNAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

#	Activity ID	Activity Name	Original Duration	BLP roject Start	BLP roject Finish	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete
62		FITTING-UP & WELDING	214	19-Sep-19	14-Aug-20	06-Nov-19	02-Sep-20	0%	0%
63		TRIAL ASSEMBLING	228	02-Jan-20	28-Sep-20	20-Mar-20	24-Nov-20	100%	100%
64		PAINTING	300	07-Mar-20	25-Jan-21	15-May-20	18-Feb-21	0%	0%
65		SHIPPING PREPARATION	345	21-May-20	07-May-21	21-Jul-20	14-Apr-21	0%	0%
66		STEEL MODULE-03_MP186 - MP183 (FABRICATION AT JFE)	734	29-Jun-19	25-Sep-21	16-Oct-19	01-Dec-21	100%	100%
67		STEEL MODULE-03_MP186 - MP183 (RHS)	659	25-Jul-19	25-Sep-21	26-Dec-19	01-Dec-21	100%	100%
68		SHOP DRAWINGS	295	25-Jul-19	15-May-20	26-Dec-19	18-Jun-20	0%	0%
69		CUTTING & DRILLING	181	07-Nov-19	19-Jul-20	01-Apr-20	06-Oct-20	0%	0%
70		FITTING-UP & WELDING	258	22-Nov-19	17-Oct-20	01-Jun-20	14-Jan-21	0%	0%
71		TRIAL ASSEMBLING	284	05-Apr-20	16-Dec-20	03-Aug-20	09-Feb-21	100%	100%
72		PAINTING	348	24-Jun-20	10-May-21	19-Oct-20	30-Sep-21	0%	0%
73		SHIPPING PREPARATION	386	02-Oct-20	25-Sep-21	11-Jan-21	01-Dec-21	0%	0%
74		STEEL MODULE-03_MP186 - MP183 (LHS)	653	29-Jun-19	29-Aug-21	16-Oct-19	23-Oct-21	100%	100%
75		SHOP DRAWINGS	325	29-Jun-19	19-Apr-20	16-Oct-19	05-Nov-20	0%	0%
76		CUTTING & DRILLING	304	12-Oct-19	23-Jun-20	17-Feb-20	23-Dec-20	0%	0%
77		FITTING-UP & WELDING	329	27-Oct-19	21-Sep-20	03-Apr-20	21-Jan-21	0%	0%
78		TRIAL ASSEMBLING	298	10-Mar-20	26-Nov-20	10-Jul-20	18-Mar-21	100%	100%
79		PAINTING	391	29-May-20	14-Apr-21	04-Sep-20	03-Jun-21	0%	0%
80		SHIPPING PREPARATION	366	09-Sep-20	29-Aug-21	14-Dec-20	23-Oct-21	0%	0%
81		STEEL MODULE-01_MP176 - MP171 (FABRICATION AT JFE)	728	25-Jul-19	29-Nov-21	16-Apr-20	18-Feb-22	100%	100%
82		STEEL MODULE-01_MP176 - MP171 (RHS)	728	25-Jul-19	29-Nov-21	16-Apr-20	25-Jan-22	100%	100%
83		SHOP DRAWINGS	250	25-Jul-19	15-Jul-20	16-Apr-20	24-Dec-20	0%	0%
84		CUTTING & DRILLING	195	27-Nov-19	12-Oct-20	15-Oct-20	04-Feb-21	0%	0%
85		FITTING-UP & WELDING	235	12-Dec-19	31-Dec-20	05-Nov-20	24-May-21	0%	0%
86		TRIAL ASSEMBLING	210	05-Apr-20	19-Feb-21	16-Feb-21	14-Jul-21	100%	100%
87		PAINTING	238	14-Jun-20	25-Jun-21	02-Jun-21	23-Dec-21	0%	0%
88		SHIPPING PREPARATION	394	07-Sep-20	25-Nov-21	10-Aug-21	25-Jan-22	0%	0%
89		STEEL MODULE-01_MP176 - MP171 (LHS)	699	24-Aug-19	01-Nov-21	17-Jul-20	18-Feb-22	100%	100%
90		SHOP DRAWINGS	355	24-Aug-19	13-Aug-20	17-Jul-20	26-May-21	0%	0%
91		CUTTING & DRILLING	199	22-Nov-19	07-Oct-20	06-Aug-20	18-May-21	0%	0%
92		FITTING-UP & WELDING	294	07-Dec-19	25-Dec-20	24-Aug-20	30-Aug-21	0%	0%
93		TRIAL ASSEMBLING	240	31-Mar-20	14-Feb-21	15-Dec-20	22-Oct-21	100%	100%
94		PAINTING	336	09-Jun-20	24-Jun-21	17-May-21	03-Jan-22	0%	0%
95		SHIPPING PREPARATION	345	02-Sep-20	01-Nov-21	18-Aug-21	18-Feb-22	0%	0%
96		STEEL SPAN MATERIAL OCEAN FREIGHT TO THE MUMBAI PORT INCLUDING CUSTOM CLEARANCE	641	10-Jul-20	09-Jan-22	01-Sep-20	01-Mar-22	100%	100%
97		STEEL MODULE-01_MP176 - MP171 (OCEAN FREIGHT)	235	23-Nov-20	09-Jan-22	28-Sep-21	01-Mar-22	100%	100%
98		STEEL MODULE-01_MP176 - MP171 (LHS)	143	23-Nov-20	12-Dec-21	28-Sep-21	01-Mar-22	100%	100%
99		STEEL MODULE-01_MP176 - MP171 (RHS)	192	29-Nov-20	09-Jan-22	10-Oct-21	13-Feb-22	100%	100%
100		STEEL MODULE-02_MP182 - MP177 (OCEAN FREIGHT)	417	10-Jul-20	09-Aug-21	01-Sep-20	13-Sep-21	100%	100%
101		STEEL MODULE-02_MP182 - MP177 (LHS)	294	10-Jul-20	17-Jun-21	01-Sep-20	08-Jun-21	100%	100%
102		STEEL MODULE-02_MP182 - MP177 (RHS)	371	27-Aug-20	09-Aug-21	21-Sep-20	13-Sep-21	100%	100%
103		STEEL MOUDULE-03_MP186 - MP183 (OCEAN FREIGHT)	347	25-Nov-20	05-Nov-21	06-Mar-21	24-Dec-21	100%	100%
104		STEEL MOUDULE-03_MP186 - MP183 (LHS)	285	29-Nov-20	08-Oct-21	06-Mar-21	11-Nov-21	100%	100%
105		STEEL MOUDULE-03_MP186 - MP183 (RHS)	316	25-Dec-20	05-Nov-21	25-Mar-21	24-Dec-21	100%	100%
106		LOADING AND DELIVERY TO THE CONTRACTOR'S ASSEMBLY YARD	555	20-Aug-20	24-Jan-22	21-Oct-20	04-Jun-22	100%	100%
107		STEEL MODULE-01_MP176 - MP171 (DELIVERY TO ASSEMBLY YARD)	156	02-Jan-21	24-Jan-22	26-Oct-21	04-Jun-22	100%	100%
108		STEEL MODULE-02_MP182 - MP177 (DELIVERY TO ASSEMBLY YARD)	343	20-Aug-20	19-Aug-21	21-Oct-20	13-Oct-21	100%	100%
109		STEEL MODULE-03_MP186 - MP183 (DELIVERY TO ASSEMBLY YARD)	308	09-Jan-21	20-Nov-21	14-Apr-21	07-Mar-22	100%	100%
110		STEEL GIRDER ASSEMBLY AT THE CONTRACTOR'S ASSEMBLY YARD	449	05-Sep-20	17-Feb-22	23-Nov-20		100%	40%
111		STEEL MODULE-01_MP176 - MP171 (ASSEMBLY WORKS)	84	13-Oct-21	17-Feb-22	21-Jun-22		100%	0%
112		STEEL SPAN ASSEMBLY_MP171 -MP172_G1	50	20-Nov-21	06-Jan-22			100%	0%
113		STEEL SPAN ASSEMBLY_MP171 -MP172_G2	44	20-Nov-21	06-Jan-22			100%	0%
114		STEEL SPAN ASSEMBLY_MP172 -MP173_G1	48	28-Dec-21	19-Jan-22			100%	0%
115		STEEL SPAN ASSEMBLY_MP172 -MP173_G2	44	25-Jan-22	17-Feb-22			100%	0%
116		STEEL SPAN ASSEMBLY_MP173 -MP174_G1	46	29-Nov-21	21-Dec-21			100%	0%
117		STEEL SPAN ASSEMBLY_MP173 -MP174_G2	44	11-Nov-21	30-Dec-21			100%	0%
118		STEEL SPAN ASSEMBLY_MP174 -MP175_G1	48	23-Oct-21	11-Dec-21			100%	0%
119		STEEL SPAN ASSEMBLY_MP174 -MP175_G2	46	02-Nov-21	11-Dec-21			100%	0%
120		STEEL SPAN ASSEMBLY_MP175 -MP176_G1	50	13-Oct-21	02-Dec-21			100%	0%
121		STEEL SPAN ASSEMBLY_MP175 -MP176_G2	40	23-Oct-21	02-Dec-21	21-Jun-22		100%	0%
122		STEEL MODULE-02_MP182 - MP177 (ASSEMBLY WORKS)	381	05-Sep-20	18-Sep-21	23-Nov-20	23-Jun-22	100%	100%
123		STEEL SPAN ASSEMBLY_MP176 -MP177_G1	220	03-May-21	26-May-21	03-Jul-21	23-Jun-22	100%	100%
124		STEEL SPAN ASSEMBLY_MP176 -MP177_G2	120	25-Jun-21	28-Jul-21	02-Nov-21	01-Mar-22	100%	100%



Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
summary
Milestone
% Complete

EMPLOYER:
MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY (MMRDA)

CONTRACTOR:
DAEWOO-TPL JV

Date	Revision	Checked	Approved
25-Jun-22	R0		

MUMBAI TRANS HARBOUR LINK PROJECT GENERAL CONSULTANT

MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807KM LONG BRIDGE SECTION (CH 10 380 - CH 18 187) ACCROSS THE MUMBAI BAY INCL SHIVAJNAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

#	Activity ID	Activity Name	Original Duration	BLProject Start	BLProject Finish	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete
125		STEEL SPAN ASSEMBLY_MP177 -MP178_G1	68	28-Jun-21	09-Aug-21	05-May-21	28-Oct-21	100%	100%
126		STEEL SPAN ASSEMBLY_MP177 -MP178_G2	75	20-Aug-21	18-Sep-21	18-Oct-21	04-Jan-22	100%	100%
127		STEEL SPAN ASSEMBLY_MP178 -MP179_G1	71	05-Mar-21	27-Mar-21	09-Mar-21	29-Jun-21	100%	100%
128		STEEL SPAN ASSEMBLY_MP178 -MP179_G2	74	25-Apr-21	19-May-21	17-Apr-21	30-Aug-21	100%	100%
129		STEEL SPAN ASSEMBLY_MP179 -MP180_G1	77	02-Jan-21	25-Jan-21	19-Jan-21	28-May-21	100%	100%
130		STEEL SPAN ASSEMBLY_MP179 -MP180_G2	184	25-Feb-21	20-Mar-21	08-Feb-21	27-Oct-21	100%	100%
131		STEEL SPAN ASSEMBLY_MP180 -MP181_G1	73	02-Nov-20	25-Nov-20	15-Jan-21	03-May-21	100%	100%
132		STEEL SPAN ASSEMBLY_MP180 -MP181_G2	55	19-Dec-20	11-Jan-21	28-Dec-20	04-Jun-21	100%	100%
133		STEEL SPAN ASSEMBLY_MP181 -MP182_G1	72	05-Sep-20	29-Sep-20	23-Nov-20	23-Mar-21	100%	100%
134		STEEL SPAN ASSEMBLY_MP181 -MP182_G2	76	22-Oct-20	14-Nov-20	09-Dec-20	31-Mar-21	100%	100%
135		STEEL MODULE-03_MP186 - MP183 (ASSEMBLY WORKS)	266	06-Jul-21	23-Nov-21	25-May-21		100%	0%
136		STEEL SPAN ASSEMBLY_MP182 -MP183_G1	36	09-Aug-21	18-Oct-21	26-May-22		100%	0%
137		STEEL SPAN ASSEMBLY_MP182 -MP183_G2	85	24-Aug-21	28-Oct-21	24-Mar-22		100%	0%
138		STEEL SPAN ASSEMBLY_MP183 -MP184_G1	36	04-Oct-21	28-Oct-21	24-Jan-22		100%	0%
139		STEEL SPAN ASSEMBLY_MP183 -MP184_G2	53	01-Nov-21	23-Nov-21	22-Feb-22		100%	0%
140		STEEL SPAN ASSEMBLY_MP184 -MP185_G1	240	24-Jul-21	08-Oct-21	10-Jul-21		100%	0%
141		STEEL SPAN ASSEMBLY_MP184 -MP185_G2	81	05-Aug-21	08-Oct-21	02-Dec-21		100%	0%
142		STEEL SPAN ASSEMBLY_MP185 -MP186_G1	244	06-Jul-21	16-Aug-21	25-May-21		100%	0%
143		STEEL SPAN ASSEMBLY_MP185 -MP186_G2	242	10-Jul-21	28-Sep-21	29-May-21		100%	0%
144		STEEL SPAN LOADING AND TRANSPORTING TO THE ERECTION AREA	107	30-Sep-20	19-Feb-22	30-Dec-21		100%	20%
145		STEEL MODULE-01_MP176 - MP171 (LOAD OUT AND TRANSPORT)	38	03-Dec-21	19-Feb-22			100%	0%
146		STEEL MODULE-02_MP182 - MP177 (LOAD OUT AND TRANSPORT)	55	30-Sep-20	21-Sep-21	30-Dec-21		100%	50%
147		STEEL MODULE-03_MP186 - MP183 (LOAD OUT AND TRANSPORT)	9	01-Sep-21	25-Nov-21			100%	0%
148		MAIN BRIDGE	1892	03-Sep-18	24-May-22	08-Dec-18		100%	73.26%
149		MAIN BRIDGE FOUNDATION	1381	03-Sep-18	23-Mar-21	08-Dec-18		100%	99.72%
150		MAIN BRIDGE PILE FOUNDATION	1198	03-Sep-18	23-Jan-21	08-Dec-18	21-Feb-22	100%	100%
151		PILE LOAD TEST	259	03-Sep-18	19-Nov-18	08-Dec-18	11-Nov-19	100%	100%
152		MAIN BRIDGE PILE FOUNDATION_LAND 17+414~18+187 FROM MP250 TO MP266	323	30-Nov-18	15-May-19	17-Jan-19	11-Jun-20	100%	100%
153		MODULE-21_MP261 - MP257	126	30-Nov-18	06-Mar-19	23-Aug-19	05-Mar-20	100%	100%
154		MODULE-22_MP266 - MP262	167	05-Mar-19	15-May-19	17-Jan-19	28-Jan-20	100%	100%
155		MODULE-20_MP256 - MP255	32	05-Dec-18	10-Jan-19	25-Sep-19	19-Mar-20	100%	100%
156		MODULE-19_MP254 - MP250	199	11-Jan-19	16-Apr-19	05-Oct-19	11-Jun-20	100%	100%
157		MAIN BRIDGE PILE FOUNDATION_CRZ 15+890~17+414 FROM MP226 TO MP250	268	20-Dec-18	27-Nov-19	12-Jun-19	21-Feb-20	100%	100%
158		MODULE-14_MP231 - MP227	48	17-Aug-19	27-Nov-19	08-Nov-19	21-Feb-20	100%	100%
159		MODULE-15_MP236 - MP232	77	09-Mar-19	26-Aug-19	06-Aug-19	25-Dec-19	100%	100%
160		MODULE-16_MP240 - MP237	113	20-Dec-18	09-Mar-19	12-Jun-19	11-Nov-19	100%	100%
161		MODULE-17_MP245 - MP241	94	20-Mar-19	17-Jun-19	09-Oct-19	04-Jan-20	100%	100%
162		MODULE-18_MP249 - MP246	74	21-Jan-19	26-Mar-19	15-Oct-19	09-Feb-20	100%	100%
163		MAIN BRIDGE PILE FOUNDATION_INTERTIDAL 14+800~15+890 FROM MP206 TO MP225	417	27-Feb-19	05-Jun-20	15-Oct-19	25-Aug-20	100%	100%
164		MODULE-10_MP211 - MP207	243	12-Mar-20	05-Jun-20	01-Nov-19	18-Feb-20	100%	100%
165		MODULE-11_MP216 - MP212	277	27-Feb-19	03-Apr-20	15-Oct-19	24-Feb-20	100%	100%
166		MODULE-12_MP221 - MP217	225	05-Apr-19	30-Oct-19	25-Feb-20	26-Aug-20	100%	100%
167		MODULE-13_MP226 - MP222	313	30-Oct-19	05-Feb-20	24-Jan-20	16-Jun-20	100%	100%
168		MAIN BRIDGE PILE FOUNDATION_MARINE 13+610~14+800 FROM MP187 TO MP205	531	12-Dec-19	28-Nov-20	01-Oct-19	07-Feb-22	100%	100%
169		MODULE-09_MP206 - MP202	340	12-Dec-19	06-Mar-20	01-Oct-19	13-Oct-20	100%	100%
170		MODULE-08_MP201 - MP197	262	22-Feb-20	19-May-20	19-Feb-20	25-Dec-20	100%	100%
171		MODULE-07_MP196 - MP192	146	02-May-20	08-Sep-20	12-Oct-20	07-Feb-22	100%	100%
172		MODULE-06_MP191 - MP187	82	21-Aug-20	26-Nov-20	31-Aug-20	10-Dec-20	100%	100%
173		MAIN BRIDGE PILE FOUNDATION_MARINE (STEEL) 11+880~13+610 FROM MP171 TO MP186	678	27-Nov-19	23-Jan-21	17-Mar-20	21-Feb-22	100%	100%
174		STEEL MODULE-03_MP186 - MP183	80	30-May-20	21-Nov-20	08-Oct-20	15-Feb-21	100%	100%
175		STEEL MODULE-02_MP182 - MP177	336	27-Nov-19	10-Sep-20	17-Mar-20	25-Jan-21	100%	100%
176		STEEL MODULE-01_MP176 - MP171	185	30-Jul-20	23-Jan-21	19-Apr-21	21-Feb-22	100%	100%
177		MAIN BRIDGE PILE FOUNDATION_MARINE 10+380~11+880 FROM MP146 TO MP170	723	24-Nov-18	28-Dec-19	19-Feb-19	21-Dec-21	100%	100%
178		MODULE-05_MP171 - MP167	193	19-Jun-19	16-Oct-19	24-Feb-21	21-Dec-21	100%	100%
179		MODULE-04_MP166 - MP162	507	24-Nov-18	16-Feb-19	19-Feb-19	20-Feb-21	100%	100%
180		MODULE-03_MP161 - MP157	399	22-Jan-19	16-Apr-19	03-Apr-19	25-Mar-21	100%	100%
181		MODULE-02_MP156 - MP152	94	16-Apr-19	27-Jul-19	21-Dec-20	27-Mar-21	100%	100%
182		MODULE-01_MP151 - MP146	197	04-Oct-19	28-Dec-19	23-Dec-20	03-Apr-21	100%	100%
183		MAIN BRIDGE PILE CAP INSTALLATION	1114	22-Dec-18	23-Mar-21	01-May-19		100%	99.43%
184		MAIN BRIDGE PILE CAP BOTTOM SLAB INSTALLATION	1005	22-Dec-18	17-Feb-21	19-Aug-19		0%	0%
185		MAIN BRIDGE PILE CAP BOTTOM SLAB_CRZ 15+890~17+414 FROM MP226 TO MP250	356	17-Jan-19	12-Dec-19	19-Aug-19	28-May-20	0%	0%
186		MODULE-14_MP231 - MP227	168	28-Sep-19	12-Dec-19	24-Dec-19	28-May-20	0%	0%
187		MODULE-15_MP236 - MP232	71	05-Apr-19	11-Sep-19	02-Nov-19	21-Feb-20	0%	0%

Primary Baseline | Critical Remaining Work | summary
Actual Work | Milestone
Remaining Work | % Complete

EMPLOYER:
MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY (MMRDA)

CONTRACTOR:
DAEWOO-TPL JV

Date	Revision	Checked	Approved
25-Jun-22	R0		

MUMBAI TRANS HARBOUR LINK GENERAL CONSULTANT

MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807KM LONG BRIDGE SECTION (CH 10 380 - CH 18 187) ACCROSS THE MUMBAI BAY INCL SHIVAJNAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

#	Activity ID	Activity Name	Original Duration	BLP roject Start	BLP roject Finish	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete
188		MODULE-16_MP240 - MP237	142	17-Jan-19	29-Mar-19	19-Aug-19	23-Feb-20	0%	0%
189		MODULE-17_MP245 - MP241	44	17-Apr-19	03-Jul-19	22-Oct-19	04-Jan-20	0%	0%
190		MODULE-18_MP249 - MP246	63	15-Feb-19	12-Apr-19	08-Nov-19	13-Feb-20	0%	0%
191		MAIN BRIDGE PILE CAP BOTTOM SLAB_INTERTIDAL 14+800~15+890 FROM MP206 TO MP225	186	06-Apr-19	18-Jul-20	30-Dec-19	30-Nov-20	0%	0%
192		MODULE-10_MP211 - MP207	99	15-Apr-20	18-Jul-20	30-Dec-19	30-Sep-20	0%	0%
193		MODULE-11_MP216 - MP212	128	06-Apr-19	15-Apr-20	09-Mar-20	19-Oct-20	0%	0%
194		MODULE-12_MP221 - MP217	74	16-May-19	12-Nov-19	11-Sep-20	30-Nov-20	0%	0%
195		MODULE-13_MP226 - MP222	55	03-Dec-19	18-Feb-20	27-Apr-20	26-Oct-20	0%	0%
196		MAIN BRIDGE PILE CAP BOTTOM SLAB_MARINE 13+610~14+800 FROM MP 187 TO MP205	420	21-Jan-20	10-Dec-20	16-Nov-19	09-May-22	0%	0%
197		MODULE-09_MP206 - MP202	285	21-Jan-20	20-Mar-20	16-Nov-19	11-Nov-20	0%	0%
198		MODULE-08_MP201 - MP197	50	23-Mar-20	30-May-20	11-Nov-20	25-Feb-21	0%	0%
199		MODULE-07_MP196 - MP192	153	30-May-20	08-Oct-20	15-Oct-20	09-May-22	0%	0%
200		MODULE-06_MP191 - MP187	77	08-Oct-20	10-Dec-20	20-Nov-20	26-Jan-21	0%	0%
201		MAIN BRIDGE PILE CAP PRECAST SHELL_MARINE (STEEL) 11+880~13+610 FROM MP171 TO MP186	422	08-Jan-20	17-Feb-21	11-Oct-20		0%	0%
202		STEEL MODULE-01_MP176 - MP171	167	02-Nov-20	17-Feb-21	05-Nov-21		0%	0%
203		STEEL MODULE-02_MP182 - MP177	118	08-Jan-20	26-Sep-20	11-Oct-20	26-Feb-21	0%	0%
204		STEEL MODULE-03_MP186 - MP183	194	07-Aug-20	03-Dec-20	19-Jan-21	20-May-22	0%	0%
205		MAIN BRIDGE PILE CAP BOTTOM SLAB_MARINE 10+380~11+880 FROM MP146 TO MP170	300	22-Dec-18	21-Jan-20	28-Jan-21	22-Jan-22	0%	0%
206		MODULE-05_MP171 - MP167	105	24-Aug-19	28-Oct-19	29-Mar-21	05-Jan-22	0%	0%
207		MODULE-04_MP166 - MP162	199	22-Dec-18	01-Mar-19	15-Feb-21	22-Jan-22	0%	0%
208		MODULE-03_MP161 - MP157	111	01-Mar-19	10-May-19	28-Jan-21	20-Oct-21	0%	0%
209		MODULE-02_MP156 - MP152	53	15-May-19	16-Aug-19	15-Feb-21	17-May-21	0%	0%
210		MODULE-01_MP151 - MP146	168	01-Nov-19	21-Jan-20	11-Feb-21	24-Oct-21	0%	0%
211		MAIN BRIDGE PILE CAP INSTALLATION	1096	27-Dec-18	23-Mar-21	01-May-19		100%	99.43%
212		MAIN BRIDGE PILE CAP_LAND 17+414~18+188 FROM MP251 TO MP266	377	27-Dec-18	13-Jun-19	01-May-19	27-Jun-20	100%	100%
213		MODULE-21_MP261 - MP257	248	27-Dec-18	30-Mar-19	15-Oct-19	27-Jun-20	100%	100%
214		MODULE-22_MP266 - MP262	207	02-Apr-19	13-Jun-19	01-May-19	16-May-20	100%	100%
215		MODULE-20_MP256 - MP255	54	01-Jan-19	01-Feb-19	29-Nov-19	23-May-20	100%	100%
216		MODULE-19_MP254 - MP250	218	08-Feb-19	13-May-19	23-Nov-19	25-Jun-20	100%	100%
217		MAIN BRIDGE PILE CAP_CRZ 15+890~17+414 FROM MP226 TO MP250	328	04-Mar-19	08-Jan-20	28-Aug-19	19-Sep-20	100%	100%
218		MODULE-14_MP231 - MP227	230	24-Oct-19	08-Jan-20	11-Jan-20	13-Sep-20	100%	100%
219		MODULE-15_MP236 - MP232	201	02-Sep-19	22-Nov-19	16-Nov-19	18-Sep-20	100%	100%
220		MODULE-16_MP240 - MP237	142	02-Jul-19	29-Sep-19	28-Aug-19	06-Mar-20	100%	100%
221		MODULE-17_MP245 - MP241	95	29-Apr-19	16-Aug-19	17-Nov-19	24-Jan-20	100%	100%
222		MODULE-18_MP249 - MP246	84	04-Mar-19	10-May-19	13-Nov-19	14-Feb-20	100%	100%
223		MAIN BRIDGE PILE CAP_INTERTIDAL 14+800~15+890 FROM MP206 TO MP225	199	18-Apr-19	05-Sep-20	29-Jan-20	07-Dec-20	100%	100%
224		MODULE-10_MP211 - MP207	96	27-Apr-20	05-Sep-20	29-Jan-20	07-Oct-20	100%	100%
225		MODULE-11_MP216 - MP212	157	18-Apr-19	13-May-20	31-Aug-20	24-Oct-20	100%	100%
226		MODULE-12_MP221 - MP217	111	22-May-19	05-Dec-19	17-Sep-20	07-Dec-20	100%	100%
227		MODULE-13_MP226 - MP222	54	14-Dec-19	17-Mar-20	16-Sep-20	19-Nov-20	100%	100%
228		MAIN BRIDGE PILE CAP_MARINE 13+610~14+800 FROM MP187 TO MP205	413	01-Feb-20	06-Jan-21	13-Jan-20	23-May-22	100%	100%
229		MODULE-09_MP206 - MP202	286	01-Feb-20	16-Apr-20	13-Jan-20	20-Nov-20	100%	100%
230		MODULE-08_MP201 - MP197	63	03-Apr-20	06-Jul-20	23-Nov-20	04-Mar-21	100%	100%
231		MODULE-07_MP196 - MP192	97	15-Jun-20	11-Nov-20	01-Dec-20	23-May-22	100%	100%
232		MODULE-06_MP191 - MP187	90	21-Oct-20	06-Jan-21	14-Dec-20	30-Jan-21	100%	100%
233		MAIN BRIDGE PILE CAP_MARINE (STEEL) 11+880~13+610 FROM MP171 TO MP186	468	20-Jan-20	23-Mar-21	18-Nov-20		100%	98.6%
234		STEEL MODULE-01_MP176 - MP171	137	21-Nov-20	23-Mar-21	13-Dec-21		100%	83.33%
235		STEEL MODULE-02_MP182 - MP177	156	20-Jan-20	02-Nov-20	18-Nov-20	06-Mar-21	100%	100%
236		STEEL MODULE-03_MP186 - MP183	330	27-Aug-20	07-Jan-21	28-Jan-21	23-May-22	100%	100%
237		MAIN BRIDGE PILE CAP_MARINE 10+380~11+880 FROM MP146 TO MP170	323	03-Jan-19	17-Feb-20	08-Feb-21	23-Mar-22	100%	100%
238		MODULE-05_MP171 - MP167	119	10-Sep-19	25-Nov-19	13-Apr-21	22-Jan-22	100%	100%
239		MODULE-04_MP166 - MP162	283	03-Jan-19	24-Mar-19	01-Mar-21	23-Mar-22	100%	100%
240		MODULE-03_MP161 - MP157	141	14-Mar-19	08-Jun-19	08-Feb-21	28-Oct-21	100%	100%
241		MODULE-02_MP156 - MP152	54	27-May-19	29-Sep-19	05-Mar-21	27-May-21	100%	100%
242		MODULE-01_MP151 - MP146	192	14-Nov-19	17-Feb-20	22-Feb-21	03-Nov-21	100%	100%
243		MAIN BRIDGE SUB-STRUCTURE	1242	09-Jan-19	24-Sep-21	04-Nov-19		100%	88.00%
244		MAIN BRIDGE PIER INSTALLATION	1242	09-Jan-19	28-Jul-21	04-Nov-19		100%	96.3%
245		MAIN BRIDGE PIER_LAND 17+414~18+188 FROM MB251 TO MB266	681	09-Jan-19	08-Nov-19	06-Nov-19	27-Aug-21	100%	100%
246		MODULE-21_MP261 - MP257	301	14-Jan-19	12-Jul-19	27-May-20	03-May-21	100%	100%
247		MODULE-22_MP266 - MP262	315	04-May-19	08-Nov-19	06-Nov-19	02-Feb-21	100%	100%
248		MODULE-20_MP256 - MP255	225	09-Jan-19	17-May-19	11-May-20	21-Jun-21	100%	100%
249		MODULE-19_MP254 - MP250	396	28-Feb-19	20-Sep-19	15-Jun-20	27-Aug-21	100%	100%
250		MAIN BRIDGE PIER_CRZ 15+890~17+414 FROM MB226 TO MB250	393	25-Mar-19	06-Feb-20	04-Nov-19	11-Aug-21	100%	100%

Primary Baseline | Actual Work | Remaining Work | Critical Remaining Work | Milestone | % Complete | summary

EMPLOYER:
MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY (MMRDA)

CONTRACTOR:
DAEWOO-TPL JV

Date	Revision	Checked	Approved
25-Jun-22	R0		

MUMBAI TRANS HARBOUR LINK PROJECT GC GENERAL CONSULTANT

MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807KM LONG BRIDGE SECTION (CH 10 380 - CH 18 187) ACCROSS THE MUMBAI BAY INCL SHIVAJNAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

#	Activity ID	Activity Name	Original Duration	BLProject Start	BLProject Finish	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete
251		MODULE-14_MP231 - MP227	228	05-Dec-19	06-Feb-20	02-Feb-20	22-Jan-21	100%	100%
252		MODULE-15_MP236 - MP232	134	16-Oct-19	19-Dec-19	05-Jan-20	03-Nov-20	100%	100%
253		MODULE-16_MP240 - MP237	85	13-Aug-19	30-Oct-19	04-Nov-19	27-Jun-20	100%	100%
254		MODULE-17_MP245 - MP241	171	22-May-19	25-Sep-19	24-Dec-19	23-Jun-20	100%	100%
255		MODULE-18_MP249 - MP246	238	26-Mar-19	05-Jun-19	02-Mar-20	11-Aug-21	100%	100%
256		MAIN BRIDGE PIER_INTERTIDAL 14+800~15+890 FROM MB206 TO MB225	417	11-May-19	15-Oct-20	10-Feb-20	08-Jun-21	100%	100%
257		MODULE-10_MP211 - MP207	338	24-Feb-20	16-Oct-20	10-Feb-20	03-Feb-21	100%	100%
258		MODULE-11_MP216 - MP212	386	11-May-19	17-Jul-20	13-Nov-20	22-Mar-21	100%	100%
259		MODULE-12_MP221 - MP217	97	17-Jun-19	09-Jan-20	30-Nov-20	08-Jun-21	100%	100%
260		MODULE-13_MP226 - MP222	235	08-Jan-20	15-May-20	29-Oct-20	20-Feb-21	100%	100%
261		MAIN BRIDGE PIER_MARINE 13+610~14+800 FROM MB187 TO MB205	316	19-Mar-20	18-Feb-21	04-Jan-21		100%	94%
262		MODULE-06_MP191 - MP187	173	13-Nov-20	18-Feb-21	19-Oct-21	24-Jan-22	100%	100%
263		MODULE-07_MP196 - MP192	152	17-Jul-20	19-Dec-20	28-Apr-21		100%	81.31%
264		MODULE-08_MP201 - MP197	162	25-Apr-20	03-Sep-20	04-Jan-21	16-Oct-21	100%	100%
265		MODULE-09_MP206 - MP202	66	19-Mar-20	23-May-20	18-Jan-21	18-Mar-21	100%	100%
266		MAIN BRIDGE PIER_MARINE (STEEL) 11+880~13+610 FROM MB171 TO MB186	495	17-Feb-20	28-Jul-21	08-Feb-21		100%	71.88%
267		STEEL MODULE-01_MP176 - MP171	188	23-Dec-20	28-Jul-21	21-Jan-22		100%	50%
268		STEEL MODULE-02_MP182 - MP177	170	17-Feb-20	15-Jan-21	08-Feb-21	18-Jan-22	100%	100%
269		STEEL MODULE-03_MP186 - MP183	247	05-Oct-20	03-Apr-21	12-Oct-21		100%	62.5%
270		MAIN BRIDGE PIER_MARINE 10+380~11+880 FROM MB146 TO MB170	187	07-Feb-19	13-Mar-20	20-Sep-21	17-May-22	100%	100%
271		MODULE-01_MP151 - MP146	129	10-Dec-19	13-Mar-20	20-Sep-21	07-Jan-22	100%	100%
272		MODULE-02_MP156 - MP152	77	11-Jul-19	04-Nov-19	25-Oct-21	29-Jan-22	100%	100%
273		MODULE-03_MP161 - MP157	61	22-Apr-19	01-Aug-19	31-Dec-21	12-Mar-22	100%	100%
274		MODULE-04_MP166 - MP162	84	07-Feb-19	06-May-19	24-Jan-22	28-Apr-22	100%	100%
275		MODULE-05_MP171 - MP167	69	10-Oct-19	31-Dec-19	18-Feb-22	17-May-22	100%	100%
276		MAIN BRIDGE PIER CAP INSTALLATION	922	08-Feb-19	27-Aug-21	25-Feb-20		100%	77.79%
277		MAIN BRIDGE PIER CAP_LAND 17+414~18+188 FROM MB251 TO MB266	313	08-Feb-19	23-Nov-19	13-Nov-20	17-Jan-22	100%	100%
278		MODULE-21_MP261 - MP257	159	13-Feb-19	05-Aug-19	11-Feb-21	14-Oct-21	100%	100%
279		MODULE-22_MP266 - MP262	114	03-Jun-19	23-Nov-19	13-Nov-20	13-Mar-21	100%	100%
280		MODULE-20_MP256 - MP255	182	06-Feb-19	01-Jun-19	07-Jan-21	22-Nov-21	100%	100%
281		MODULE-19_MP254 - MP250	212	30-Mar-19	09-Oct-19	01-Mar-21	17-Jan-22	100%	100%
282		MAIN BRIDGE PIER CAP_CRZ 15+890~17+414 FROM MB226 TO MB250	405	19-Apr-19	25-Feb-20	25-Feb-20	24-Sep-21	100%	100%
283		MODULE-14_MP231 - MP227	83	30-Dec-19	25-Feb-20	27-Dec-20	28-May-21	100%	100%
284		MODULE-15_MP236 - MP232	64	11-Nov-19	07-Jan-20	12-Oct-20	22-Feb-21	100%	100%
285		MODULE-16_MP240 - MP237	132	21-Sep-19	19-Nov-19	14-May-20	23-Dec-20	100%	100%
286		MODULE-17_MP245 - MP241	163	05-Jul-19	16-Oct-19	25-Feb-20	22-Dec-20	100%	100%
287		MODULE-18_MP249 - MP246	201	19-Apr-19	02-Jul-19	22-Oct-20	24-Sep-21	100%	100%
288		MAIN BRIDGE PIER CAP_INTERTIDAL 14+800~15+890 FROM MB206 TO MB225	277	05-Jun-19	05-Nov-20	04-Feb-21	14-Jan-22	100%	100%
289		MODULE-10_MP211 - MP207	174	20-Mar-20	05-Nov-20	02-Aug-21	14-Jan-22	100%	100%
290		MODULE-11_MP216 - MP212	209	05-Jun-19	18-Aug-20	21-Jun-21	26-Nov-21	100%	100%
291		MODULE-12_MP221 - MP217	100	24-Jul-19	22-Jan-20	01-Mar-21	24-Sep-21	100%	100%
292		MODULE-13_MP226 - MP222	187	30-Jan-20	04-Jun-20	04-Feb-21	07-Jul-21	100%	100%
293		MAIN BRIDGE PIER CAP_MARINE 13+610~14+800 FROM MB187 TO MB205	152	23-Apr-20	10-Mar-21	03-May-21		100%	72.11%
294		MODULE-06_MP191 - MP187	124	18-Dec-20	10-Mar-21	20-Jan-22		100%	22.5%
295		MODULE-07_MP196 - MP192	131	10-Sep-20	07-Jan-21	18-Nov-21		100%	76.18%
296		MODULE-08_MP201 - MP197	114	01-Jun-20	29-Sep-20	03-May-21	08-Mar-22	100%	100%
297		MODULE-09_MP206 - MP202	46	23-Apr-20	15-Jun-20	09-Dec-21	09-Feb-22	100%	100%
298		MAIN BRIDGE PIER CAP_MARINE (STEEL) 11+880~13+610 FROM MB171 TO MB186	404	30-Apr-20	27-Aug-21	23-Aug-21		100%	56.25%
299		STEEL MODULE-01_MP176 - MP171	249	08-Mar-21	27-Aug-21	17-Mar-22		100%	25%
300		STEEL MODULE-02_MP182 - MP177	148	30-Apr-20	04-Feb-21	23-Aug-21	04-Apr-22	100%	100%
301		STEEL MODULE-03_MP186 - MP183	156	19-Dec-20	22-Apr-21	24-Feb-22		100%	37.5%
302		MAIN BRIDGE PIER CAP_MARINE 10+380~11+880 FROM MB146 TO MB170	150	15-Mar-19	01-Apr-20	17-Dec-21		100%	40.21%
303		MODULE-01_MP151 - MP146	121	14-Jan-20	01-Apr-20	17-Dec-21	26-May-22	100%	100%
304		MODULE-02_MP156 - MP152	115	05-Sep-19	23-Nov-19	17-Feb-22		100%	53%
305		MODULE-03_MP161 - MP157	94	28-May-19	31-Aug-19	22-Mar-22		100%	20%
306		MODULE-04_MP166 - MP162	68	15-Mar-19	24-May-19	21-Apr-22		100%	20%
307		MODULE-05_MP171 - MP167	84	15-Nov-19	18-Jan-20			100%	0%
308		MAIN BRIDGE BEARING PAD AND BEARING INSALLATION	792	22-Feb-19	24-Sep-21	14-Sep-20		100%	89.86%
309		MAIN BRIDGE BEARING_LAND 17+414~18+188 FROM MB251 TO MB266	393	22-Feb-19	22-Aug-19	11-Feb-21	04-Jun-22	100%	100%
310		MAIN BRIDGE BEARING_CRZ 15+890~17+414 FROM MB226 TO MB250	392	08-May-19	20-Feb-20	14-Sep-20	09-Sep-21	100%	100%
311		MAIN BRIDGE BEARING_INTERTIDAL 14+800~15+890 FROM MB206 TO MB225	28	29-Jun-19	14-Sep-20	01-Oct-21	08-Feb-22	100%	100%
312		MAIN BRIDGE BEARING_MARINE 13+610~14+800 FROM MB187 TO MB205	216	07-Apr-20	09-Feb-21	22-Feb-22		100%	40%
313		MAIN BRIDGE BEARING_MARINE (STEEL) 11+880~13+610 FROM MB171 TO MB186	397	19-May-20	24-Sep-21	22-Dec-21		100%	92.74%

Primary Baseline | Critical Remaining Work | summary
Actual Work | Milestone
Remaining Work | % Complete

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CONTRACTOR:
DAEWOO-TPL JV

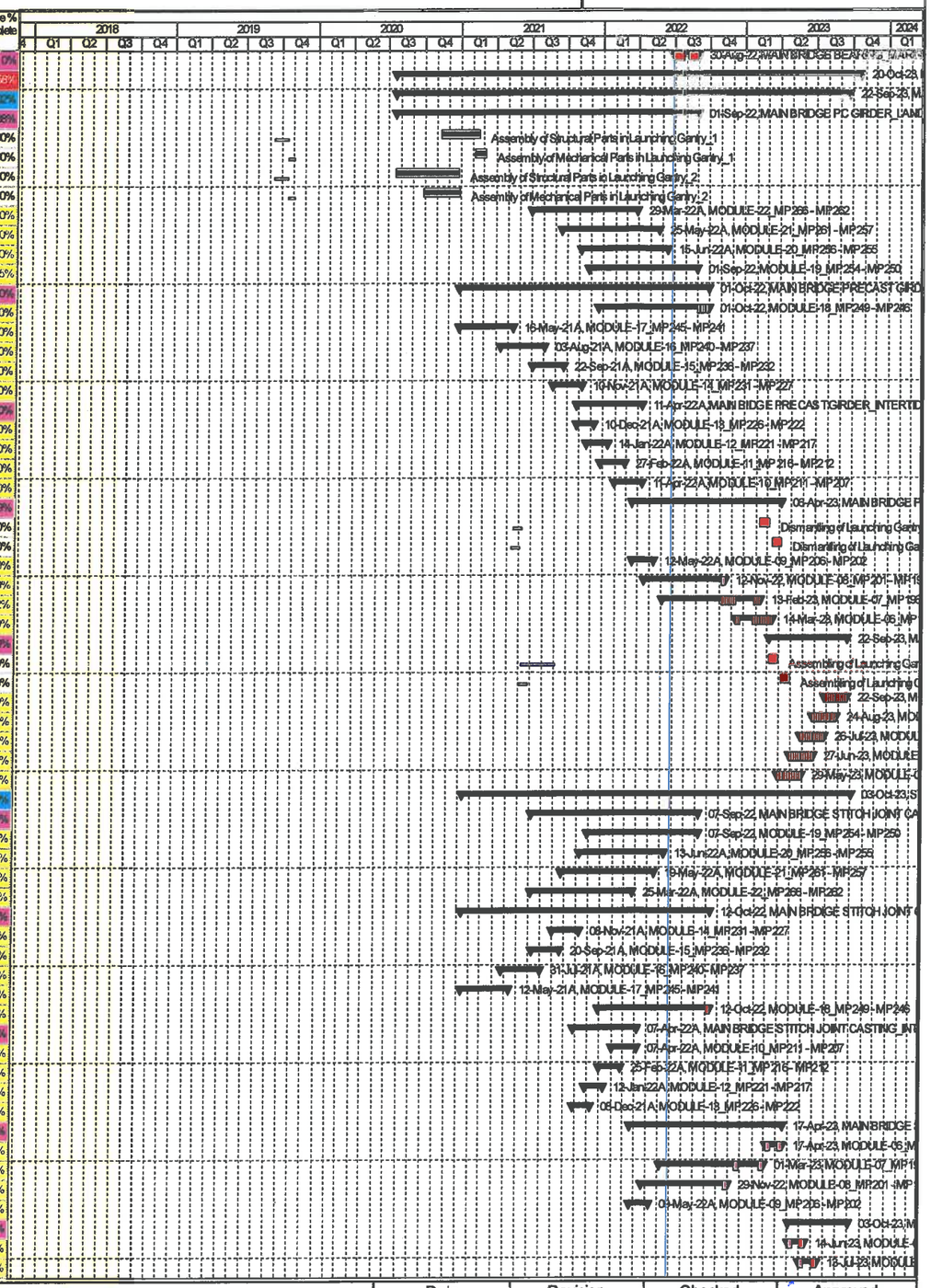
Date	Revision	Checked	Approved
25-Jun-22	R0		

MUMBAI TRANS HARBOUR LINK PROJECT GC GENERAL CONSULTANT

MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807KM LONG BRIDGE SECTION (CH 10 380 - CH 18 187) ACCROSS THE MUMBAI BAY INCL SHIVAJNAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

#	Activity ID	Activity Name	Original Duration	BLP roject Start	BLP roject Finish	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete
314		MAIN BRIDGE BEARING_MARINE 10+380~11+880 FROM MB146 TO MB170	67	25-Apr-19	18-Apr-20			100%	0%
315		MAIN BRIDGE SUPER STRUCTURE BOX GIRDER INSTALLATION	1141	12-Sep-19	01-Mar-22	20-Jul-20		100%	57.58%
316		MAIN BRIDGE CONCRETE GIRDER INSTALLATION	1116	12-Sep-19	02-Feb-22	20-Jul-20		100%	64.02%
317		MAIN BRIDGE PC GIRDER_LAND 15+880~17+414 FROM MP251 TO MP266	786	12-Sep-19	27-Feb-20	20-Jul-20		100%	90.88%
318	CN.LGA.100(	Assembly of Structural Parts in Launching Gantry_1	35	12-Sep-19	17-Oct-19	12-Nov-20	17-Feb-21	100%	100%
319	CN.LGA.100(	Assembly of Mechanical Parts in Launching Gantry_1	15	17-Oct-19	01-Nov-19	05-Feb-21	06-Mar-21	100%	100%
320	CN.LGA.101(	Assembly of Structural Parts in Launching Gantry_2	35	12-Sep-19	17-Oct-19	20-Jul-20	25-Dec-20	100%	100%
321	CN.LGA.101(	Assembly of Mechanical Parts in Launching Gantry_2	15	17-Oct-19	01-Nov-19	28-Sep-20	30-Dec-20	100%	100%
322		MODULE-22_MP266 - MP262	191	01-Nov-19	25-Dec-19	02-Jul-21	28-Mar-22	100%	100%
323		MODULE-21_MP261 - MP257	192	02-Dec-19	23-Jan-20	18-Sep-21	25-May-22	100%	100%
324		MODULE-20_MP256 - MP255	162	31-Dec-19	04-Feb-20	06-Nov-21	15-Jun-22	100%	100%
325		MODULE-19_MP254 - MP250	161	11-Jan-20	27-Feb-20	26-Nov-21		100%	87.5%
326		MAIN BRIDGE PRECAST GIRDER_CRZ 15+880~17+414 FROM MP226 TO MP250	218	04-Feb-20	25-Sep-20	30-Dec-20		100%	90%
327		MODULE-18_MP249 - MP246	109	04-Feb-20	28-Mar-20	20-Dec-21		100%	50%
328		MODULE-17_MP245 - MP241	74	05-Mar-20	27-Apr-20	30-Dec-20	16-May-21	100%	100%
329		MODULE-16_MP240 - MP237	37	03-Apr-20	21-May-20	13-Apr-21	03-Aug-21	100%	100%
330		MODULE-15_MP236 - MP232	31	27-Apr-20	19-Jun-20	06-Jul-21	22-Sep-21	100%	100%
331		MODULE-14_MP231 - MP227	42	27-May-20	25-Sep-20	27-Aug-21	10-Nov-21	100%	100%
332		MAIN BIDGE PRECAST GIRDER_INTERTIDAL 14+800~15+880 FROM MP206 TO MP225	94	12-Sep-20	23-Jan-21	25-Oct-21	11-Apr-22	100%	100%
333		MODULE-13_MP226 - MP222	39	12-Sep-20	21-Oct-20	25-Oct-21	10-Dec-21	100%	100%
334		MODULE-12_MP221 - MP217	65	08-Oct-20	20-Nov-20	20-Nov-21	14-Jan-22	100%	100%
335		MODULE-11_MP216 - MP212	85	09-Nov-20	19-Dec-20	27-Dec-21	27-Feb-22	100%	100%
336		MODULE-10_MP211 - MP207	84	06-Dec-20	23-Jan-21	31-Jan-22	11-Apr-22	100%	100%
337		MAIN BRIDGE PRECAST GIRDER_MARINE 13+610~14+800 FROM MP187 TO MP205	144	12-Jan-21	10-Jun-21	19-Mar-22		100%	48.9%
338	CN.LGD.100(	Dismantling of Launching Gantry_1	20	18-May-21	10-Jun-21			100%	0%
339	CN.LGD.101(	Dismantling of Launching Gantry_2	20	12-May-21	03-Jun-21			100%	0%
340		MODULE-09_MP206 - MP202	47	12-Jan-21	17-Feb-21	19-Mar-22	12-May-22	100%	100%
341		MODULE-08_MP201 - MP197	26	05-Feb-21	19-Mar-21	17-Apr-22		100%	90%
342		MODULE-07_MP196 - MP192	84	08-Mar-21	17-Apr-21	03-Jun-22		100%	18.42%
343		MODULE-06_MP191 - MP187	79	12-Apr-21	18-May-21			100%	0%
344		MAIN BRIDGE PRECAST GIRDER_MARINE 10+380~11+880 FROM MP146 TO MP170	172	04-Jun-21	02-Feb-22			100%	0%
345	CN.LGA.102(	Assembling of Launching Gantry_1	20	10-Jun-21	03-Sep-21			100%	0%
346	CN.LGA.103(	Assembling of Launching Gantry_2	20	04-Jun-21	26-Jun-21			100%	0%
347		MODULE-05_MP171 - MP167	52	28-Dec-21	02-Feb-22			100%	0%
348		MODULE-04_MP166 - MP162	52	29-Nov-21	03-Jan-22			100%	0%
349		MODULE-03_MP161 - MP157	52	30-Oct-21	04-Dec-21			100%	0%
350		MODULE-02_MP156 - MP152	52	29-Sep-21	05-Nov-21			100%	0%
351		MODULE-01_MP151 - MP146	52	28-Jun-21	06-Oct-21			100%	0%
352		STITCH JOINT CASTING	591	07-Dec-19	12-Feb-22	12-Jan-21		0%	0%
353		MAIN BRIDGE STITCH JOINT CASTING_LAND 15+880~17+414 FROM MP251 TO MP266	263	07-Dec-19	16-Mar-20	06-Jul-21		0%	0%
354		MODULE-19_MP254 - MP250	105	10-Feb-20	16-Mar-20	29-Nov-21		0%	0%
355		MODULE-20_MP256 - MP255	156	17-Jan-20	20-Feb-20	10-Nov-21	13-Jun-22	0%	0%
356		MODULE-21_MP261 - MP257	209	06-Jan-20	08-Feb-20	23-Sep-21	19-May-22	0%	0%
357		MODULE-22_MP266 - MP262	175	07-Dec-19	10-Jan-20	06-Jul-21	25-Mar-22	0%	0%
358		MAIN BRIDGE STITCH JOINT CASTING_CRZ 15+880~17+414 FROM MP226 TO MP250	205	11-Mar-20	13-Oct-20	12-Jan-21		0%	0%
359		MODULE-14_MP231 - MP227	29	19-Sep-20	13-Oct-20	02-Sep-21	08-Nov-21	0%	0%
360		MODULE-15_MP236 - MP232	19	02-Jun-20	06-Jul-20	10-Jul-21	20-Sep-21	0%	0%
361		MODULE-16_MP240 - MP237	19	04-May-20	05-Jun-20	23-Apr-21	31-Jul-21	0%	0%
362		MODULE-17_MP245 - MP241	41	09-Apr-20	14-May-20	12-Jan-21	12-May-21	0%	0%
363		MODULE-18_MP249 - MP246	142	11-Mar-20	14-Apr-20	29-Dec-21		0%	0%
364		MAIN BRIDGE STITCH JOINT CASTING_INTERTIDAL 14+800~15+880 FROM MP206 TO MP225	155	14-Oct-20	10-Feb-21	27-Oct-21	07-Apr-22	0%	0%
365		MODULE-10_MP211 - MP207	43	18-Jan-21	10-Feb-21	03-Feb-22	07-Apr-22	0%	0%
366		MODULE-11_MP216 - MP212	112	14-Dec-20	05-Jan-21	30-Dec-21	25-Feb-22	0%	0%
367		MODULE-12_MP221 - MP217	97	14-Nov-20	07-Dec-20	24-Nov-21	12-Jan-22	0%	0%
368		MODULE-13_MP226 - MP222	28	14-Oct-20	06-Nov-20	27-Oct-21	06-Dec-21	0%	0%
369		MAIN BRIDGE STITCH JOINT CASTING_MARINE 13+610~14+800 FROM MP187 TO MP205	138	11-Feb-21	21-Jun-21	21-Mar-22		0%	0%
370		MODULE-06_MP191 - MP187	36	04-Jun-21	21-Jun-21			0%	0%
371		MODULE-07_MP196 - MP192	63	17-Apr-21	05-May-21	07-Jun-22		0%	0%
372		MODULE-08_MP201 - MP197	59	13-Mar-21	05-Apr-21	20-Apr-22		0%	0%
373		MODULE-09_MP206 - MP202	34	11-Feb-21	06-Mar-21	21-Mar-22	09-May-22	0%	0%
374		MAIN BRIDGE STITCH JOINT CASTING_MARINE 10+380~11+880 FROM MP146 TO MP170	131	05-Oct-21	12-Feb-22			0%	0%
375		MODULE-01_MP151 - MP146	36	05-Oct-21	23-Oct-21			0%	0%
376		MODULE-02_MP156 - MP152	36	05-Nov-21	22-Nov-21			0%	0%



Primary Baseline | Critical Remaining Work | summary
Actual Work | Milestone
Remaining Work | % Complete

EMPLOYER:
MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY (MMRDA)

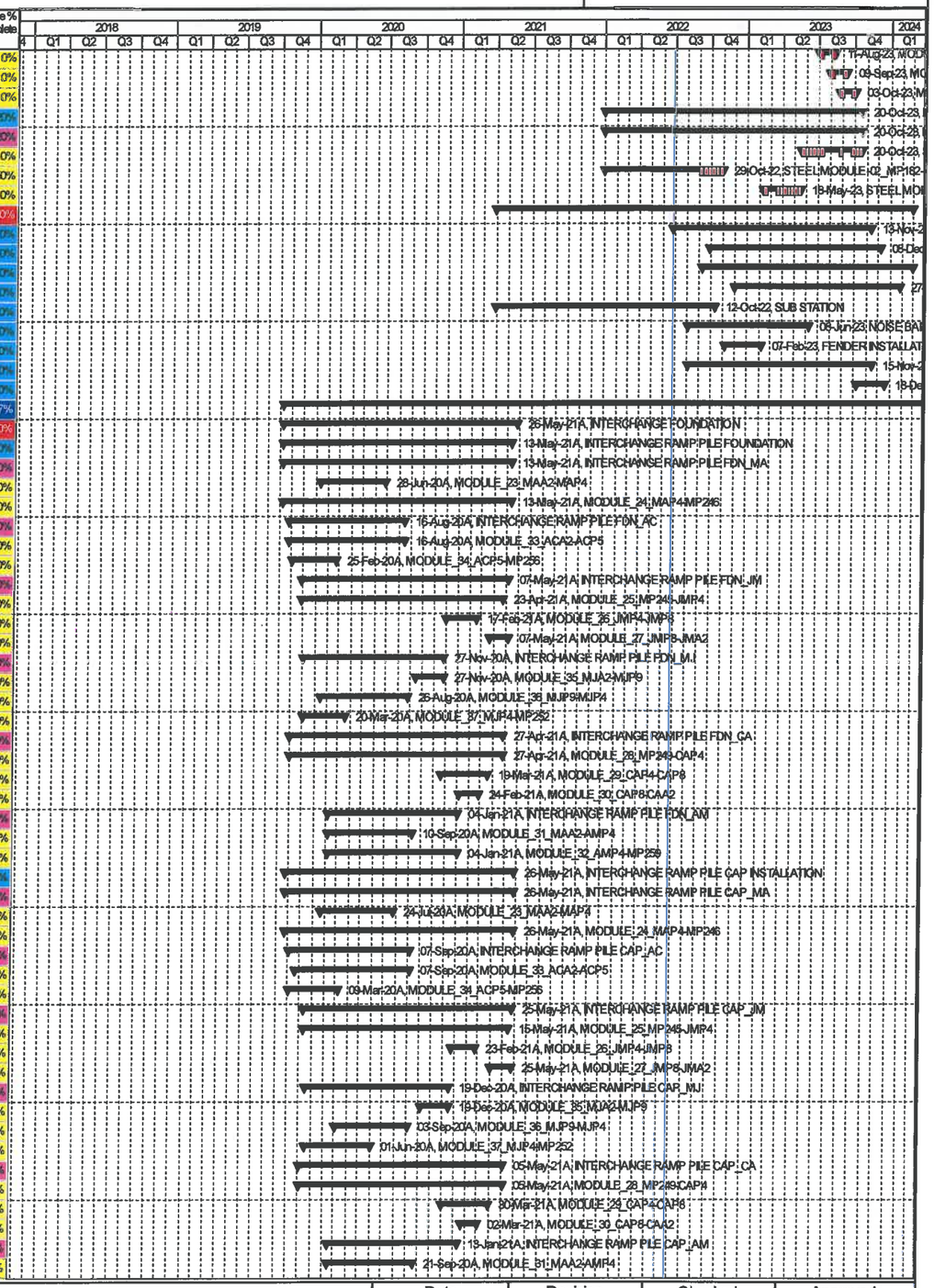
CONTRACTOR:
DAEWOO-TPL JV

Date	Revision	Checked	Approved
25-Jun-22	R0		

MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807KM LONG BRIDGE SECTION (CH 10 380 - CH 18 187) ACCROSS THE MUMBAI BAY INCL SHIVAJNAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

#	Activity ID	Activity Name	Original Duration	BLP roject Start	BLP roject Finish	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete
377		MODULE-03_MP161 - MP157	36	04-Dec-21	21-Dec-21			0%	0%
378		MODULE-04_MP166 - MP162	36	03-Jan-22	19-Jan-22			0%	0%
379		MODULE-05_MP171 - MP167	36	27-Jan-22	12-Feb-22			0%	0%
380		MAIN BRIDGE STEEL GIRDER INSTALLATION	408	03-Oct-20	01-Mar-22	01-Jan-22		100%	20%
381		MAIN BRIDGE STEEL GIRDER INSTALLATION_MARINE 11+880~13+610 FROM MP171 TO MP186	408	03-Oct-20	01-Mar-22	01-Jan-22		100%	20%
382		STEEL MODULE-01_MP176 - MP171 (INSTALLATION)	133	07-Dec-21	01-Mar-22			100%	0%
383		STEEL MODULE-02_MP182 - MP177 (INSTALLATION)	104	03-Oct-20	30-Sep-21	01-Jan-22		100%	50%
384		STEEL MODULE-03_MP186 - MP183 (INSTALLATION)	83	30-Sep-21	07-Dec-21			100%	0%
385		MISCELLANEOUS & FINISHING WORKS	655	16-May-19	24-May-22	30-Mar-21		100%	0%
386		CRASH BARRIER & GURARD RAILS	398	20-Feb-20	07-Mar-22			100%	0%
387		WATER P ROOFING	371	26-Mar-20	17-Mar-22			100%	0%
388		PAVEMENT	451	16-Mar-20	24-May-22			100%	0%
389		EXPANSION JOINT	365	27-May-20	21-Apr-22			100%	0%
390		SUB STATION	223	16-May-19	15-Apr-21	30-Mar-21		100%	0%
391		NOISE BARRIER	243	16-Mar-20	14-Sep-21			100%	0%
392		FENDER INSTALLATION	80	24-Jul-21	24-Nov-21			100%	0%
393		DRAINAGE WORKS	380	16-Mar-20	09-Mar-22			100%	0%
394		SIGN BOARDS	60	12-Feb-22	23-Apr-22			100%	0%
395		INTERCHANGE	1521	24-Dec-18	28-Apr-22	09-Oct-19		100%	64.47%
396		INTERCHANGE FOUNDATION	590	24-Dec-18	22-Oct-20	09-Oct-19	26-May-21	100%	100%
397		INTERCHANGE RAMP PILE FOUNDATION	475	24-Dec-18	05-Mar-20	09-Oct-19	13-May-21	100%	100%
398		INTERCHANGE RAMP PILE FDN_MA	182	05-Aug-19	03-Jan-20	09-Oct-19	13-May-21	100%	100%
399		MODULE_23_MAA2-MAP4	75	05-Aug-19	02-Nov-19	13-Jan-20	28-Jun-20	100%	100%
400		MODULE_24_MAP4-MP246	137	02-Nov-19	03-Jan-20	09-Oct-19	13-May-21	100%	100%
401		INTERCHANGE RAMP PILE FDN_AC	107	01-Oct-19	05-Mar-20	25-Oct-19	16-Aug-20	100%	100%
402		MODULE_33_ACA2-ACP5	60	01-Oct-19	19-Dec-19	25-Oct-19	16-Aug-20	100%	100%
403		MODULE_34_ACP5-MP256	62	19-Dec-19	05-Mar-20	02-Nov-19	25-Feb-20	100%	100%
404		INTERCHANGE RAMP PILE FDN_JM	178	03-Jan-19	05-Aug-19	25-Nov-19	07-May-21	100%	100%
405		MODULE_25_MP245-JMP4	178	22-Apr-19	05-Aug-19	26-Nov-19	23-Apr-21	100%	100%
406		MODULE_26_JMP4-JMP8	88	19-Feb-19	20-Apr-19	01-Dec-20	17-Feb-21	100%	100%
407		MODULE_27_JMP8-JMA2	64	03-Jan-19	18-Feb-19	23-Mar-21	07-May-21	100%	100%
408		INTERCHANGE RAMP PILE FDN_MJ	79	03-Jan-19	01-Oct-19	04-Dec-19	27-Nov-20	100%	100%
409		MODULE_35_MJA2-MJP9	45	03-Jan-19	21-Mar-19	16-Sep-20	27-Nov-20	100%	100%
410		MODULE_36_MJP9-MJP4	63	22-Mar-19	10-Jun-19	15-Jan-20	26-Aug-20	100%	100%
411		MODULE_37_MJP4-MP252	52	11-Jun-19	01-Oct-19	04-Dec-19	20-Mar-20	100%	100%
412		INTERCHANGE RAMP PILE FDN_CA	100	28-May-19	23-Jan-20	01-Nov-19	27-Apr-21	100%	100%
413		MODULE_28_MP249-CAP4	64	08-Nov-19	23-Jan-20	01-Nov-19	27-Apr-21	100%	100%
414		MODULE_29_CAP4-CAP8	62	14-Aug-19	08-Nov-19	21-Nov-20	19-Mar-21	100%	100%
415		MODULE_30_CAP8-CAA2	48	28-May-19	14-Aug-19	05-Jan-21	24-Feb-21	100%	100%
416		INTERCHANGE RAMP PILE FDN_AM	290	24-Dec-18	27-May-19	05-Feb-20	04-Jan-21	100%	100%
417		MODULE_31_MAA2-AMP4	187	24-Dec-18	26-Mar-19	07-Feb-20	10-Sep-20	100%	100%
418		MODULE_32_AMP4-MP259	237	27-Mar-19	27-May-19	06-Feb-20	04-Jan-21	100%	100%
419		INTERCHANGE RAMP PILE CAP INSTALLATION	526	08-Jan-19	22-Oct-20	22-Oct-19	26-May-21	100%	100%
420		INTERCHANGE RAMP PILE CAP_MA	182	05-Dec-19	15-May-20	22-Oct-19	26-May-21	100%	100%
421		MODULE_23_MAA2-MAP4	95	05-Dec-19	24-Feb-20	22-Jan-20	24-Jul-20	100%	100%
422		MODULE_24_MAP4-MP246	86	24-Feb-20	15-May-20	22-Oct-19	26-May-21	100%	100%
423		INTERCHANGE RAMP PILE CAP_AC	183	15-Jan-20	22-Oct-20	02-Nov-19	07-Sep-20	100%	100%
424		MODULE_33_ACA2-ACP5	132	15-Jan-20	24-Apr-20	18-Nov-19	07-Sep-20	100%	100%
425		MODULE_34_ACP5-MP256	114	24-Apr-20	22-Oct-20	02-Nov-19	09-Mar-20	100%	100%
426		INTERCHANGE RAMP PILE CAP_JM	136	18-Jan-19	05-Dec-19	11-Dec-19	25-May-21	100%	100%
427		MODULE_25_MP245-JMP4	135	18-Jun-19	05-Dec-19	11-Dec-19	15-May-21	100%	100%
428		MODULE_26_JMP4-JMP8	92	21-Mar-19	17-Jun-19	23-Dec-20	23-Feb-21	100%	100%
429		MODULE_27_JMP8-JMA2	40	18-Jan-19	20-Mar-19	02-Apr-21	25-May-21	100%	100%
430		INTERCHANGE RAMP PILE CAP_MJ	145	18-Jan-19	15-Jan-20	16-Dec-19	19-Dec-20	100%	100%
431		MODULE_35_MJA2-MJP9	123	18-Jan-19	29-Apr-19	08-Oct-20	19-Dec-20	100%	100%
432		MODULE_36_MJP9-MJP4	62	30-Apr-19	26-Oct-19	03-Mar-20	03-Sep-20	100%	100%
433		MODULE_37_MJP4-MP252	58	26-Oct-19	15-Jan-20	16-Dec-19	01-Jun-20	100%	100%
434		INTERCHANGE RAMP PILE CAP_CA	158	15-Oct-19	27-Jun-20	02-Dec-19	05-May-21	100%	100%
435		MODULE_28_MP249-CAP4	87	05-Mar-20	27-Jun-20	02-Dec-19	05-May-21	100%	100%
436		MODULE_29_CAP4-CAP8	70	16-Dec-19	05-Mar-20	30-Nov-20	30-Mar-21	100%	100%
437		MODULE_30_CAP8-CAA2	53	15-Oct-19	16-Dec-19	19-Jan-21	02-Mar-21	100%	100%
438		INTERCHANGE RAMP PILE CAP_AM	245	08-Jan-19	15-Oct-19	15-Feb-20	13-Jan-21	100%	100%
439		MODULE_31_MAA2-AMP4	176	08-Jan-19	09-May-19	15-Feb-20	21-Sep-20	100%	100%



Primary Baseline | Critical Remaining Work | summary
Actual Work | Milestone
Remaining Work | % Complete

EMPLOYER:
MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY (MMRDA)

CONTRACTOR:
DAEWOO-TPL JV

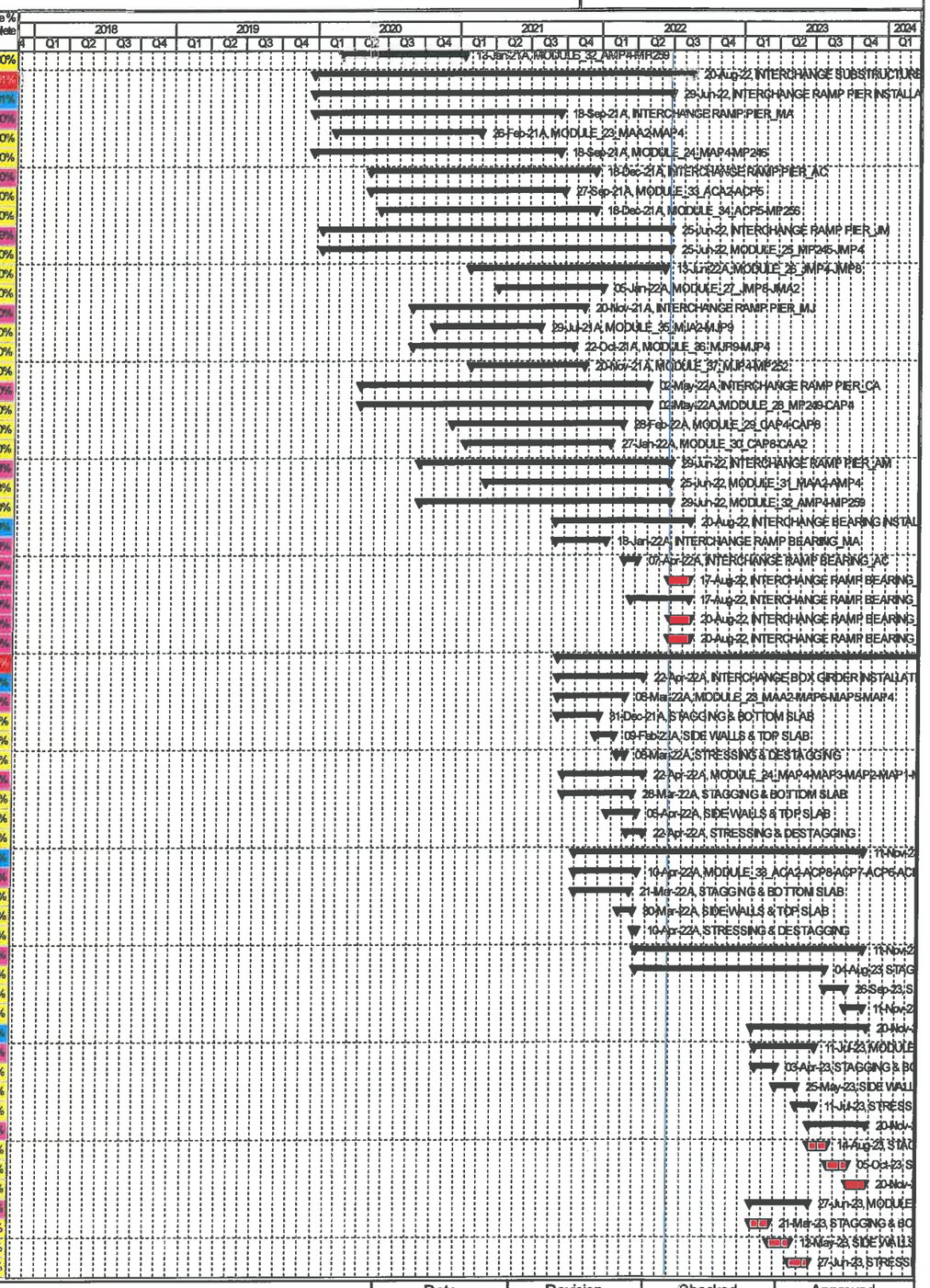
Date	Revision	Checked	Approved
25-Jun-22	R0		

MUMBAI TRANS HARBOUR LINK * GENERAL CONSULTANT *

MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807KM LONG BRIDGE SECTION (CH 10 380 - CH 18 187) ACCROSS THE MUMBAI BAY INCL SHIVAJNAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

#	Activity ID	Activity Name	Original Duration	BLP roject Start	BLP roject Finish	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete
440		MODULE_32_AMP4-MP259	89	10-May-19	15-Oct-19	07-Mar-20	13-Jan-21	100%	100%
441		INTERCHANGE SUBSTRUCTURE & BEARING	596	29-Jan-19	31-May-21	24-Dec-19		100%	95.01%
442		INTERCHANGE RAMP PIER INSTALLATION	596	29-Jan-19	27-Apr-21	24-Dec-19		100%	95.01%
443		INTERCHANGE RAMP PIER_MA	169	18-Mar-20	29-Dec-20	24-Dec-19	18-Sep-21	100%	100%
444		MODULE_23_MAA2-MAP4	118	18-Mar-20	10-Aug-20	19-Feb-20	26-Feb-21	100%	100%
445		MODULE_24_MAP4-MP246	150	10-Aug-20	29-Dec-20	24-Dec-19	18-Sep-21	100%	100%
446		INTERCHANGE RAMP PIER_AC	249	16-May-20	27-Apr-21	19-May-20	18-Dec-21	100%	100%
447		MODULE_33_ACA2-ACP5	96	16-May-20	30-Nov-20	19-May-20	27-Sep-21	100%	100%
448		MODULE_34_ACP5-MP256	249	30-Nov-20	27-Apr-21	17-Jun-20	18-Dec-21	100%	100%
449		INTERCHANGE RAMP PIER_JM	138	08-Feb-19	18-Mar-20	15-Jan-20		100%	95.59%
450		MODULE_25_MP245-JMP4	122	22-Oct-19	18-Mar-20	15-Jan-20		100%	90%
451		MODULE_26_JMP4-JMP8	100	09-May-19	22-Oct-19	01-Feb-21	13-Jun-22	100%	100%
452		MODULE_27_JMP8-JMA2	63	08-Feb-19	08-May-19	12-Apr-21	05-Jan-22	100%	100%
453		INTERCHANGE RAMP PIER_MJ	234	08-Feb-19	16-May-20	07-Sep-20	20-Nov-21	100%	100%
454		MODULE_35_MJA2-MJP9	134	08-Feb-19	26-Jul-19	02-Nov-20	29-Jul-21	100%	100%
455		MODULE_36_MJP9-MJP4	145	27-Jul-19	18-Jan-20	07-Sep-20	22-Oct-21	100%	100%
456		MODULE_37_MJP4-MP252	100	18-Jan-20	16-May-20	02-Feb-21	20-Nov-21	100%	100%
457		INTERCHANGE RAMP PIER_CA	230	06-Jan-20	16-Feb-21	27-Apr-20	02-May-22	100%	100%
458		MODULE_28_MP249-CAP4	159	10-Sep-20	16-Feb-21	27-Apr-20	02-May-22	100%	100%
459		MODULE_29_CAP4-CAP8	91	06-Apr-20	10-Sep-20	19-Dec-20	28-Feb-22	100%	100%
460		MODULE_30_CAP8-CAA2	54	08-Jan-20	06-Apr-20	19-Jan-21	27-Jan-22	100%	100%
461		INTERCHANGE RAMP PIER_AM	268	29-Jan-19	08-Jan-20	26-Sep-20		100%	72.18%
462		MODULE_31_MAA2-AMP4	177	29-Jan-19	27-Aug-19	14-Mar-21		100%	81.3%
463		MODULE_32_AMP4-MP259	187	27-Aug-19	08-Jan-20	26-Sep-20		100%	60%
464		INTERCHANGE BEARING INSTALLATION	250	27-Feb-19	31-May-21	08-Sep-21		0%	0%
465		INTERCHANGE RAMP BEARING_MA	229	16-Apr-20	01-Feb-21	08-Sep-21	18-Jan-22	0%	0%
466		INTERCHANGE RAMP BEARING_AC	28	24-Jun-20	31-May-21	04-Mar-22	07-Apr-22	0%	0%
467		INTERCHANGE RAMP BEARING_JM	28	11-Mar-19	20-Apr-20			0%	0%
468		INTERCHANGE RAMP BEARING_MJ	47	11-Mar-19	30-Jun-20	22-Mar-22		0%	0%
469		INTERCHANGE RAMP BEARING_CA	28	06-Feb-20	22-Mar-21			0%	0%
470		INTERCHANGE RAMP BEARING_AM	30	27-Feb-19	10-Feb-20			0%	0%
471		INTERCHANGE SUPERSTRUCTURE INSTALLATION	555	20-Sep-19	15-Feb-22	18-Sep-21		100%	30.25%
472		INTERCHANGE BOX GIRDER INSTALLATION_MA	180	09-Jan-21	03-Jan-22	18-Sep-21	22-Apr-22	100%	100%
473		MODULE_23_MAA3-MAP6-MAP5-MAP4	134	09-Jan-21	21-Jun-21	18-Sep-21	08-Mar-22	100%	100%
474		STAGGING & BOTTOM SLAB	35	09-Jan-21	04-Mar-21	18-Sep-21	31-Dec-21	100%	100%
475		SIDE WALLS & TOP SLAB	57	05-Mar-21	26-Apr-21	22-Dec-21	09-Feb-22	100%	100%
476		STRESSING & DESTAGGING	40	27-Apr-21	21-Jun-21	15-Feb-22	08-Mar-22	100%	100%
477		MODULE_24_MAP4-MAP3-MAP2-MAP1-MP246	61	21-Jun-21	03-Jan-22	01-Oct-21	22-Apr-22	100%	100%
478		STAGGING & BOTTOM SLAB	28	21-Jun-21	20-Sep-21	01-Oct-21	28-Mar-22	100%	100%
479		SIDE WALLS & TOP SLAB	45	20-Sep-21	18-Nov-21	22-Jan-22	06-Apr-22	100%	100%
480		STRESSING & DESTAGGING	61	18-Nov-21	03-Jan-22	12-Mar-22	22-Apr-22	100%	100%
481		INTERCHANGE BOX GIRDER INSTALLATION_AC	140	27-Feb-21	27-Dec-21	01-Nov-21		100%	44.44%
482		MODULE_33_ACA2-ACP8-ACP7-ACP6-ACP5	140	27-Feb-21	08-Sep-21	01-Nov-21	10-Apr-22	100%	100%
483		STAGGING & BOTTOM SLAB	73	27-Feb-21	16-Apr-21	01-Nov-21	21-Mar-22	100%	100%
484		SIDE WALLS & TOP SLAB	57	17-Apr-21	15-Jun-21	23-Feb-22	30-Mar-22	100%	100%
485		STRESSING & DESTAGGING	39	15-Jun-21	08-Sep-21	31-Mar-22	10-Apr-22	100%	100%
486		MODULE_34_ACP5-ACP4-ACP3-ACP2-ACP1-MP256	122	31-May-21	27-Dec-21	07-Apr-22		100%	0%
487		STAGGING & BOTTOM SLAB	36	31-May-21	03-Sep-21	07-Apr-22		100%	0%
488		SIDE WALLS & TOP SLAB	45	03-Sep-21	10-Nov-21			100%	0%
489		STRESSING & DESTAGGING	40	10-Nov-21	27-Dec-21			100%	0%
490		INTERCHANGE BOX GIRDER INSTALLATION_JM	250	11-Mar-20	26-Feb-21			100%	0%
491		MODULE_25_MP245-JMP1-JMP2-JMP3-JMP4	130	19-Aug-20	09-Feb-21			100%	0%
492		STAGGING & BOTTOM SLAB	45	19-Aug-20	30-Oct-20			100%	0%
493		SIDE WALLS & TOP SLAB	45	31-Oct-20	23-Dec-20			100%	0%
494		STRESSING & DESTAGGING	40	24-Dec-20	09-Feb-21			100%	0%
495		MODULE_26_JMP4-JMP5-JMP6-JMP7-JMP8	125	29-Sep-20	26-Feb-21			100%	0%
496		STAGGING & BOTTOM SLAB	41	29-Sep-20	19-Nov-20			100%	0%
497		SIDE WALLS & TOP SLAB	45	20-Nov-20	11-Jan-21			100%	0%
498		STRESSING & DESTAGGING	39	12-Jan-21	26-Feb-21			100%	0%
499		MODULE_27_JMP8-JMP9-JMP10-JMA2	125	11-Mar-20	29-Sep-20			100%	0%
500		STAGGING & BOTTOM SLAB	41	11-Mar-20	28-Apr-20			100%	0%
501		SIDE WALLS & TOP SLAB	45	28-Apr-20	04-Jul-20			100%	0%
502		STRESSING & DESTAGGING	39	04-Jul-20	29-Sep-20			100%	0%



Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone
% Complete
summary

EMPLOYER:
MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY (MMRDA)

CONTRACTOR:
DAEWOO-TPL JV

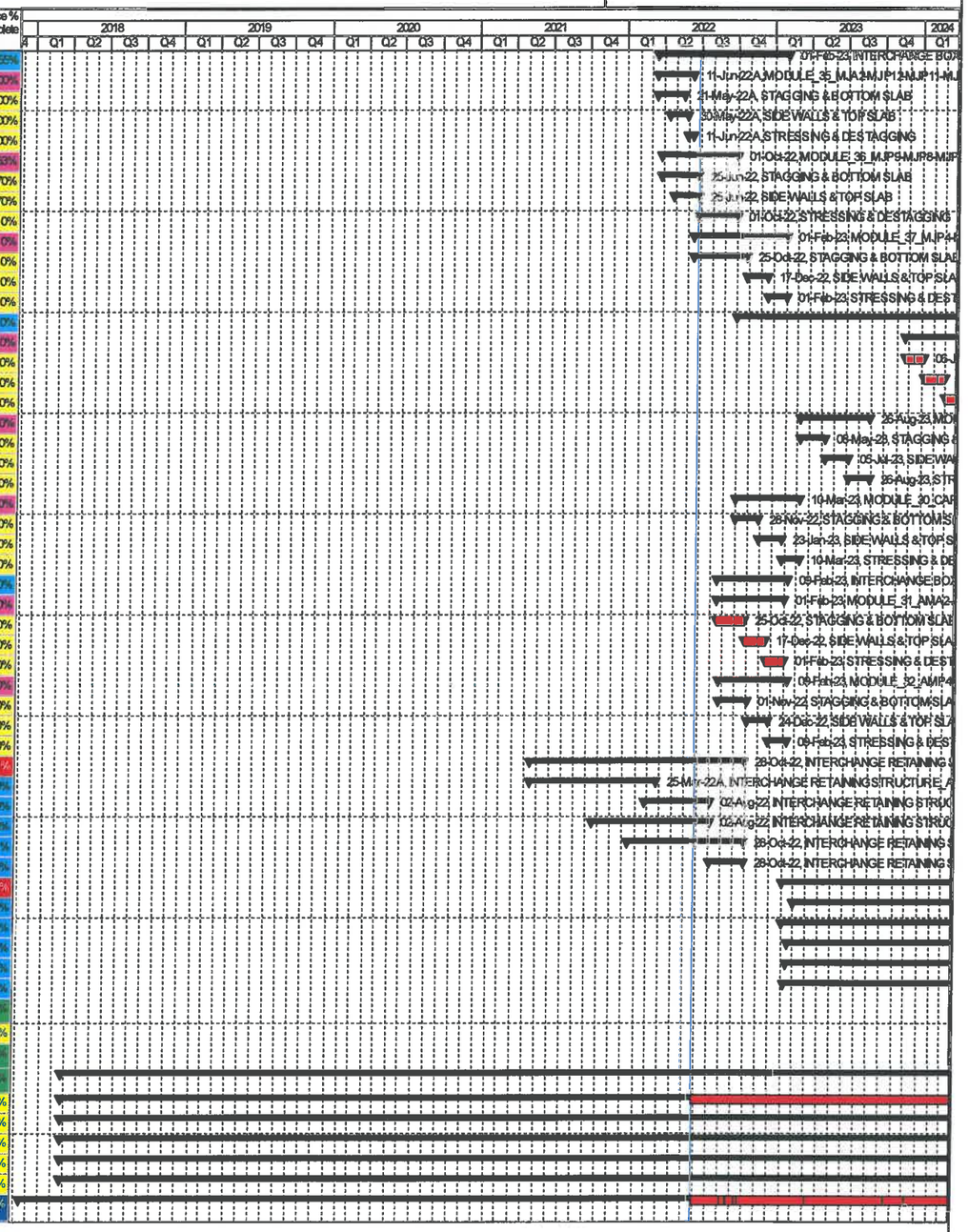
Date	Revision	Checked	Approved
25-Jun-22	R0		

MUMBAI TRANS HARBOUR LINK PROJECT GC GENERAL CONSULTANT

MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807KM LONG BRIDGE SECTION (CH 10 380 - CH 18 187) ACCROSS THE MUMBAI BAY INCL SHIVAJNAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

#	Activity ID	Activity Name	Original Duration	BLProject Start	BLProject Finish	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete
503		INTERCHANGE BOX GIRDER INSTALLATION_MJ	189	20-Sep-19	08-Jan-21	17-Mar-22		100%	55%
504		MODULE_35_MJA2-MJP12-MJP11-MJP10-MJP9	100	20-Sep-19	16-Mar-20	17-Mar-22	11-Jun-22	100%	100%
505		STAGGING & BOTTOM SLAB	50	20-Sep-19	25-Nov-19	17-Mar-22	21-May-22	100%	100%
506		SIDE WALLS & TOP SLAB	50	25-Nov-19	22-Jan-20	16-Apr-22	30-May-22	100%	100%
507		STRESSING & DESTAGGING	45	22-Jan-20	16-Mar-20	30-May-22	11-Jun-22	100%	100%
508		MODULE_36_MJP9-MJP8-MJP7-MJP6-MJP5-MJP4	171	16-Mar-20	29-Oct-20	29-Mar-22		100%	63%
509		STAGGING & BOTTOM SLAB	50	16-Mar-20	14-May-20	28-Mar-22		100%	70%
510		SIDE WALLS & TOP SLAB	50	14-May-20	17-Aug-20	27-Apr-22		100%	70%
511		STRESSING & DESTAGGING	45	17-Aug-20	29-Oct-20			100%	0%
512		MODULE_37_MJP4-MJP3-MJP2-MJP1-MP252	125	30-Jun-20	08-Jan-21	16-Jun-22		100%	0%
513		STAGGING & BOTTOM SLAB	41	30-Jun-20	29-Sep-20	16-Jun-22		100%	0%
514		SIDE WALLS & TOP SLAB	45	29-Sep-20	24-Nov-20			100%	0%
515		STRESSING & DESTAGGING	39	25-Nov-20	08-Jan-21			100%	0%
516		INTERCHANGE BOX GIRDER INSTALLATION_CA	478	30-Oct-20	15-Feb-22			100%	0%
517		MODULE_28_MP249-CAP1-CAP2-CAP3-CAP4	125	08-Sep-21	15-Feb-22			100%	0%
518		STAGGING & BOTTOM SLAB	41	08-Sep-21	08-Nov-21			100%	0%
519		SIDE WALLS & TOP SLAB	45	08-Nov-21	30-Dec-21			100%	0%
520		STRESSING & DESTAGGING	39	30-Dec-21	15-Feb-22			100%	0%
521		MODULE_29_CAP4-CAP5-CAP6-CAP7-CAP8	145	09-Apr-21	23-Nov-21			100%	0%
522		STAGGING & BOTTOM SLAB	50	09-Apr-21	11-Jun-21			100%	0%
523		SIDE WALLS & TOP SLAB	50	11-Jun-21	28-Sep-21			100%	0%
524		STRESSING & DESTAGGING	45	28-Sep-21	23-Nov-21			100%	0%
525		MODULE_30_CAP8-CAP9-CAP10-CAA2	135	30-Oct-20	08-Apr-21			100%	0%
526		STAGGING & BOTTOM SLAB	47	30-Oct-20	24-Dec-20			100%	0%
527		SIDE WALLS & TOP SLAB	48	25-Dec-20	19-Feb-21			100%	0%
528		STRESSING & DESTAGGING	40	20-Feb-21	08-Apr-21			100%	0%
529		INTERCHANGE BOX GIRDER INSTALLATION_AM	132	14-Oct-19	19-Aug-20			100%	0%
530		MODULE_31_AMA2-AMP8-AMP7-AMP6-AMP5-AMP4	125	14-Oct-19	11-Mar-20			100%	0%
531		STAGGING & BOTTOM SLAB	41	14-Oct-19	03-Dec-19			100%	0%
532		SIDE WALLS & TOP SLAB	45	03-Dec-19	24-Jan-20			100%	0%
533		STRESSING & DESTAGGING	39	24-Jan-20	11-Mar-20			100%	0%
534		MODULE_32_AMP4-AMP3-AMP2-AMP1-MP258	130	10-Feb-20	19-Aug-20			100%	0%
535		STAGGING & BOTTOM SLAB	45	10-Feb-20	03-Apr-20			100%	0%
536		SIDE WALLS & TOP SLAB	45	03-Apr-20	27-May-20			100%	0%
537		STRESSING & DESTAGGING	40	27-May-20	19-Aug-20			100%	0%
538		INTERCHANGE RETAINING STRUCTURE	174	11-Mar-19	05-Nov-20	15-May-21		100%	54.91%
539		INTERCHANGE RETAINING STRUCTURE_AC	69	24-Jun-20	05-Nov-20	15-May-21	25-Mar-22	100%	100%
540		INTERCHANGE RETAINING STRUCTURE_JM	76	11-Mar-19	08-May-19	24-Feb-22		100%	37.9%
541		INTERCHANGE RETAINING STRUCTURE_MJ	103	09-May-19	11-Jul-19	16-Oct-21		100%	57.13%
542		INTERCHANGE RETAINING STRUCTURE_CA	36	05-Feb-20	24-Mar-20	15-Jan-22		100%	79.51%
543		INTERCHANGE RETAINING STRUCTURE_AM	41	12-Jul-19	24-Oct-19			100%	0%
544		MISCELLANEOUS & FINISHING WORKS	436	19-Aug-20	28-Apr-22			100%	0%
545		EXPANSION JOINT	408	01-Oct-20	23-Apr-22			0%	0%
546		CRASH BARRIER & GURARD RAILS	380	19-Aug-20	21-Feb-22			100%	0%
547		WATER PROOFING	360	10-Sep-20	08-Mar-22			100%	0%
548		PAVEMENT	425	07-Sep-20	28-Apr-22			100%	0%
549		DRAINAGE WORKS	390	28-Aug-20	25-Feb-22			100%	0%
550		PROJECT HANDINGOVER	65	24-May-22	22-Sep-22			29.47%	0%
551		CHECKLIST	65	24-May-22	22-Sep-22			29.47%	0%
552		DEFECT LIABILITY PERIOD (DLP)	730	22-Sep-22	21-Sep-24			0%	0%
553		PRICE SCHEDULE	2585	23-Mar-18	21-Mar-23	23-Mar-18		94.41%	44.7%
554		SCHEDULE-1	2585	23-Mar-18	21-Mar-23	23-Mar-18		94.15%	90.19%
555		SCHEDULE-2	1644	23-Mar-18	22-Sep-22	23-Mar-18		94.55%	89%
556		SCHEDULE-3	1644	23-Mar-18	22-Sep-22	23-Mar-18		94.55%	89%
557		SCHEDULE-12	1644	23-Mar-18	22-Sep-22	23-Mar-18		94.55%	89%
558		SCHEDULE-13	1644	23-Mar-18	22-Sep-22	23-Mar-18		94.55%	0.28%
559		MTHL-PKG2-RAMBOLL DESIGN PROGRAMME_25062022_APPROVED_MPR.5	1523	15-Jan-18	17-Jun-22	15-Dec-17		100%	86.25%



Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone
% Complete
summary

EMPLOYER:
MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY (MMRDA)

CONTRACTOR:
DAEWOO-TPL JV

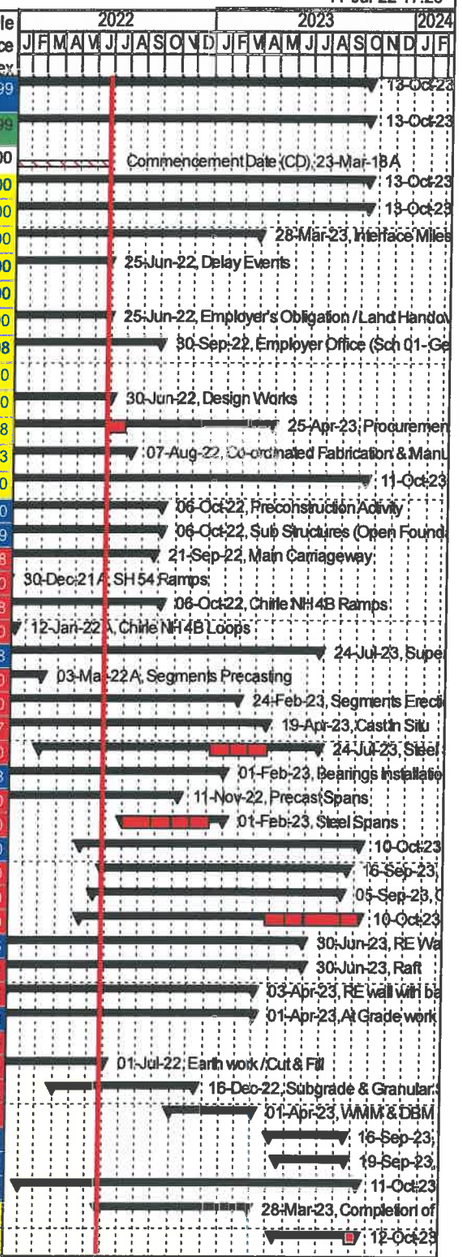
Date	Revision	Checked	Approved
25-Jun-22	R0		

MUMBAI TRANS HARBOUR LINK GENERAL CONSULTANT

Attachment 8- Package-3's Construction Programme Updated as of 25th June 2022

Project : MTHL 3- Revised Construction Schedule — Classic Schedule Layout — 11-Jul-22 17:26

Activity ID	Activity Name	Original Duration	BL1 Start	BL1 Finish	Start	Finish	Activity % Complete	Schedule % Complete	Performance % Complete	Budgeted Total Cost	Earned Value Cost	Schedule Performance Index
MTHL Pkg 3_Revised Construction Schedule Jun'22		1551	23-Mar-18	03-Mar-23	23-Mar-18A	13-Oct-23		91.6%	90.35%	Rs10,107,290,846	Rs7,242,778,275	0.99
Procurement of Mumbai Trans Harbour Link Project		1551	23-Mar-18	03-Mar-23	23-Mar-18A	13-Oct-23		91.6%	90.35%	Rs10,107,290,846	Rs7,242,778,275	0.99
t	Commencement Date (CD)	0	23-Mar-18		23-Mar-18A		100%	100%	100%	Rs0	Rs0	0.00
Milestones (As level of effort)		911	15-Apr-21	03-Mar-23	23-Mar-18A	13-Oct-23		0%	0%	Rs0	Rs0	0.00
Financial Milestone		1510	25-Aug-19	03-Mar-23	23-Mar-18A	13-Oct-23		0%	0%	Rs0	Rs0	0.00
Interface Milestone		792	25-Jan-21	16-Aug-22	17-Sep-18A	28-Mar-23		0%	0%	Rs0	Rs0	0.00
Delay Events		1178	19-Apr-18	31-Mar-21	19-Apr-18A	25-Jun-22		0%	0%	Rs0	Rs0	0.00
Document Submittals		45	25-Dec-18	07-Feb-19	06-Apr-18A	30-Sep-19A		100%	100%	Rs74,992,895	Rs74,992,895	1.00
Employer's Obligation / Land Handover		1153	23-Mar-18	05-Jul-21	23-Mar-18A	25-Jun-22		0%	0%	Rs0	Rs0	0.00
Employer Office (Sch 01- General Item)		797	25-May-19	01-Apr-22	25-Jan-19A	30-Sep-22		100%	97.92%	Rs142,351,965	Rs139,395,965	0.98
Survey & Geotechnical Investigation Works		346	19-Apr-18	12-Jul-19	19-Apr-18A	30-Sep-19A		100%	100%	Rs242,300,773	Rs242,300,773	1.00
Design Works		983	15-Jan-19	30-Nov-21	25-Apr-18A	30-Jun-22		100%	100%	Rs159,122,500	Rs159,122,500	1.00
Procurement Works		1120	02-May-19	13-Sep-22	15-Feb-19A	25-Apr-23		96.36%	94.54%	Rs1,387,160,467	Rs1,433,359,943	0.98
Co-ordinated Fabrication & Manufracturing Works		883	03-Jun-19	10-Feb-22	21-Feb-19A	07-Aug-22		100%	83.19%	Rs390,605,953	Rs239,159,344	0.83
Construction Works		1343	25-Dec-18	22-Feb-23	26-Sep-18A	11-Oct-23		88.95%	88.56%	Rs7,032,855,269	Rs4,954,446,854	1.00
Preconstruction Activity		1031	25-Dec-18	10-May-22	26-Sep-18A	06-Oct-22		0%	0%	Rs0	Rs0	0.00
Sub Structures (Open Foundation, Pier ,Pier Cap)		968	12-Apr-19	01-Aug-22	14-Nov-18A	06-Oct-22		99.9%	98.47%	Rs3,362,196,772	Rs3,044,589,344	0.99
Main Carriageway		968	12-Apr-19	16-Apr-22	14-Nov-18A	21-Sep-22		100%	98.13%	Rs1,978,291,498	Rs1,669,615,333	0.98
SH 54 Ramps		454	07-Aug-20	15-Mar-22	25-Apr-19A	30-Dec-21A		100%	100%	Rs225,759,949	Rs232,139,423	1.00
Chirle NH 4B Ramps		487	30-Dec-20	01-Aug-22	03-May-19A	06-Oct-22		99.6%	97.95%	Rs747,437,115	Rs732,126,378	0.98
Chirle NH 4B Loops		310	31-Mar-21	08-Mar-22	21-Aug-19A	12-Jan-22A		100%	100%	Rs410,708,210	Rs410,708,210	1.00
Super Structures		654	25-Mar-21	23-Jan-23	11-Sep-19A	24-Jul-23		75.83%	58.81%	Rs1,408,927,166	Rs270,076,840	0.78
Segments Precasting		533	25-Mar-21	21-Sep-22	11-Sep-19A	03-Mar-22A		0%	0%	Rs760,156,098	Rs0	0.00
Segments Erection		536	25-Mar-21	14-Dec-22	03-Mar-20A	24-Feb-23		0%	0%	Rs70,699,416	Rs0	0.00
Cast In Situ		593	31-Mar-21	23-Jan-23	25-Sep-20A	19-Apr-23		77.22%	67.25%	Rs464,334,350	Rs252,532,419	0.87
Steel Structure		260	10-Mar-22	07-Jan-23	01-Mar-22A	24-Jul-23		69.6%	20.96%	Rs113,737,302	Rs17,544,422	0.30
Bearings Installation		160	15-Oct-21	09-Nov-22	04-Nov-20A	01-Feb-23		72.73%	27.27%	Rs10,454,695	Rs1,844,947	0.38
Precast Spans		90	08-Jan-22	09-Nov-22	04-Nov-20A	11-Nov-22		50%	50%	Rs7,379,784	Rs1,844,947	1.00
Steel Spans		142	15-Oct-21	04-Apr-22	01-Aug-22	01-Feb-23		100%	0%	Rs3,074,911	Rs0	0.00
Bridge Ancillaries & Miscellaneous Item		348	03-Dec-21	11-Feb-23	17-May-22A	10-Oct-23		14.9%	0%	Rs78,136,643	Rs0	0.00
Expansion Joints		328	12-Dec-22	11-Feb-23	25-Jun-22	16-Sep-23		0%	0%	Rs0	Rs0	0.00
Crash Barrier & Safety fence		318	03-Dec-21	03-Feb-23	10-Jun-22A	05-Sep-23		30.84%	0%	Rs38,328,588	Rs0	0.00
Painting works		293	23-May-22	09-Feb-23	17-May-22A	10-Oct-23		0%	0%	Rs39,808,055	Rs0	0.00
RE Wall		148	11-Jun-22	18-Jan-23	01-Dec-21A	30-Jun-23		1.87%	37.3%	Rs450,167,295	Rs161,428,483	19.96
Raft		80	11-Jun-22	15-Oct-22	01-Dec-21A	30-Jun-23		14.91%	53.33%	Rs71,575,695	Rs28,921,423	3.58
RE wall with backfill		108	26-Aug-22	18-Jan-23	03-Jan-22A	03-Apr-23		0%	35%	Rs378,591,600	Rs132,507,060	0.00
At Grade work		985	17-Oct-19	06-Dec-22	16-Feb-19A	01-Apr-23		100%	97.5%	Rs1,514,366,401	Rs1,476,507,241	0.98
Area for toll plaza		334	31-Mar-21	04-Jun-22	16-Feb-19A	28-Oct-20A		0%	0%	Rs0	Rs0	0.00
Earth work / Cut & Fill		910	17-Oct-19	02-Mar-22	16-Feb-19A	01-Jul-22		100%	97.5%	Rs1,514,366,401	Rs1,476,507,241	0.98
Subgrade & Granular Sub Base		140	30-Oct-21	13-Sep-22	01-Apr-22A	16-Dec-22		0%	0%	Rs0	Rs0	0.00
WMM & DBM		130	16-Feb-22	06-Dec-22	02-Nov-22	01-Apr-23		0%	0%	Rs0	Rs0	0.00
Water Proofing		88	20-Jan-23	15-Feb-23	06-May-23	16-Sep-23		0%	0%	Rs6,259,406	Rs0	0.00
Asphalt Pavement, Kerb , traffic sign		80	28-Jan-23	21-Feb-23	18-May-23	19-Sep-23		0%	0%	Rs154,449,156	Rs0	0.00
Compound wall with safety fence		252	11-Jun-22	22-Feb-23	01-Feb-22A	11-Oct-23		0%	0%	Rs47,897,735	Rs0	0.00
Completion of Interface Activity		206	31-Mar-21	17-Aug-22	25-Jun-22	28-Mar-23		0%	0%	Rs677,901,024	Rs0	0.00
Testing & Commissioning Works		104	07-Jan-23	02-Mar-23	13-May-23	12-Oct-23		0%	0%	Rs0	Rs0	0.00



Actual Work | Remaining Work | Critical Remaining Work | Milestone | summary

Baseline Schedule

MUMBAI TRANS HARBOUR LINK GENERAL CONSULTANT

Attachment 9- Project Progress Photos for June 2022

Package 1- Site Progress Photos

Photo No. 1: LG- 3 Span Erection at Marine Location looking towards Navi Mumbai

Photo No. 2: OSD 2 Span Erection looking towards Navi Mumbai

Photo No. 3: MP 72 Pier Head Shutter Checking in progress

Photo No. 4: MP 71 OSD -2 Span towards Navi Mumbai

Photo No. 5: OSD-1 Span Erection in Progress

Photo No. 6: Ch. 1270 to 1290 Crash barrier Concrete Casting

Photo No. 7: EP 15 Segments shifting for Erection in progress

Photo No.8: AP 16 Pier Reinforcement in progress

Photo No. 9: EP 15-16 Span Erection using Under Slung in progress

Photo No. 10: LG 1 Pier Head Lifting in progress

Photo No. 11: Median Crash Barrier Reinforcement in progress

Photo No. 12: LG-06 AP 08-09 Span Erection in progress

Package 2 – Site Progress Photos

Photo No. 1: LG-3 Wet joint formwork fixing at Span MP 253-255 RHS in progress

Photo No. 2: Pier cap concrete at MP 173ARHS in progress

Photo No. 3: Integral pier head segment scaffolding at MP 188 RHS and LHS in progress

Photo No. 4: Pier reinforcement tying at MP 184 RHS in progress

Photo No. 5: Pier final lift concreting at MP 184 RHS in progress

Photo No. 6: Pier cap concreting at MP 175 RHS in progress

Photo No. 7: Cast in situ slab concreting at Interchange Area in progress

Photo No. 8: Retaining wall backfilling works at ramp Area in progress

Photo No. 9: Segment concrete at Bay-1 in progress

Photo No. 10: Cast in situ slab works at Interchange Area in progress

Photo No. 11: OSD works at Karanja Port in progress

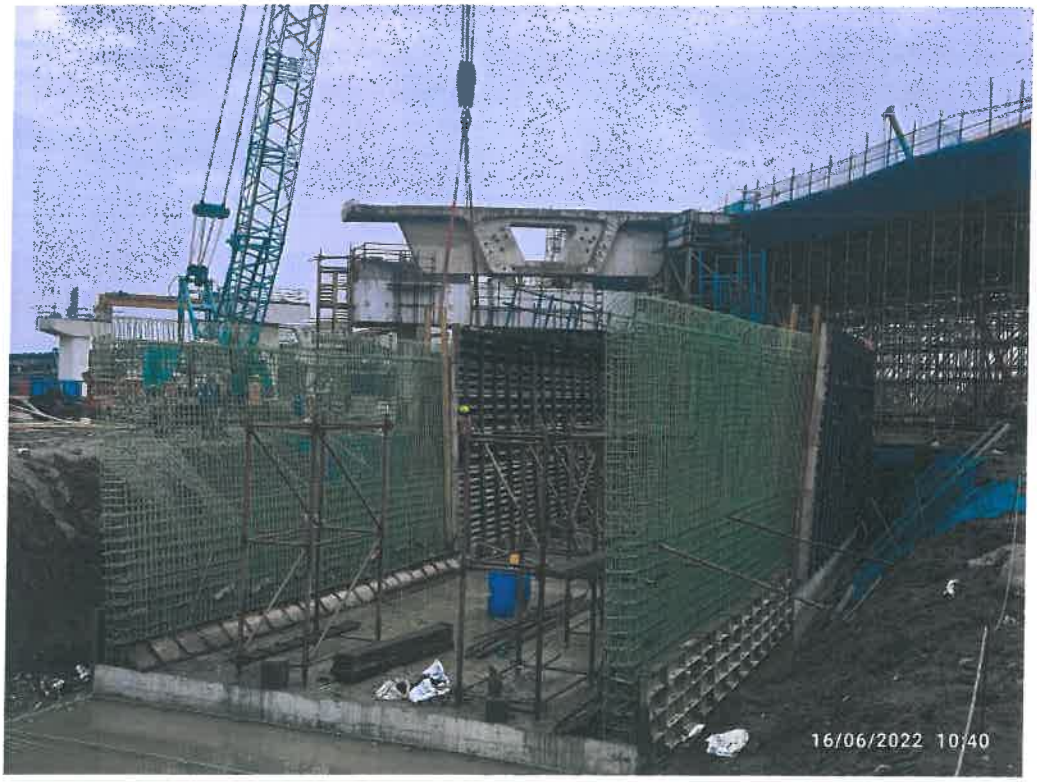


Photo No. 12: Retaining wall formwork fixing at Ramp CA in progress

Package 3 – Site Progress Photos

Photo No. 1: Gavan Span RMP 275-276 ROB structural steel Girder erection completed

Photo No. 2: Chirle span RP33-34 Deck slab concrete casting completed

Photo No. 3: Chirle interchange ramp MJP1-2 voided slab concrete casting completed

Photo No. 4: Jasai span JMP 04-05 reinforcement and profile work

Photo No. 5: Pier LMP 273 Bearing Installation survey Inspection work

Photo No. 6: Jasai span LA01-LP01 deck slab concrete pouring work

Photo No. 7: Gavan Span RMP 272-273, Soffit concrete casting completed

Photo No. 8: Chirle RP-35 Bearing installation survey work

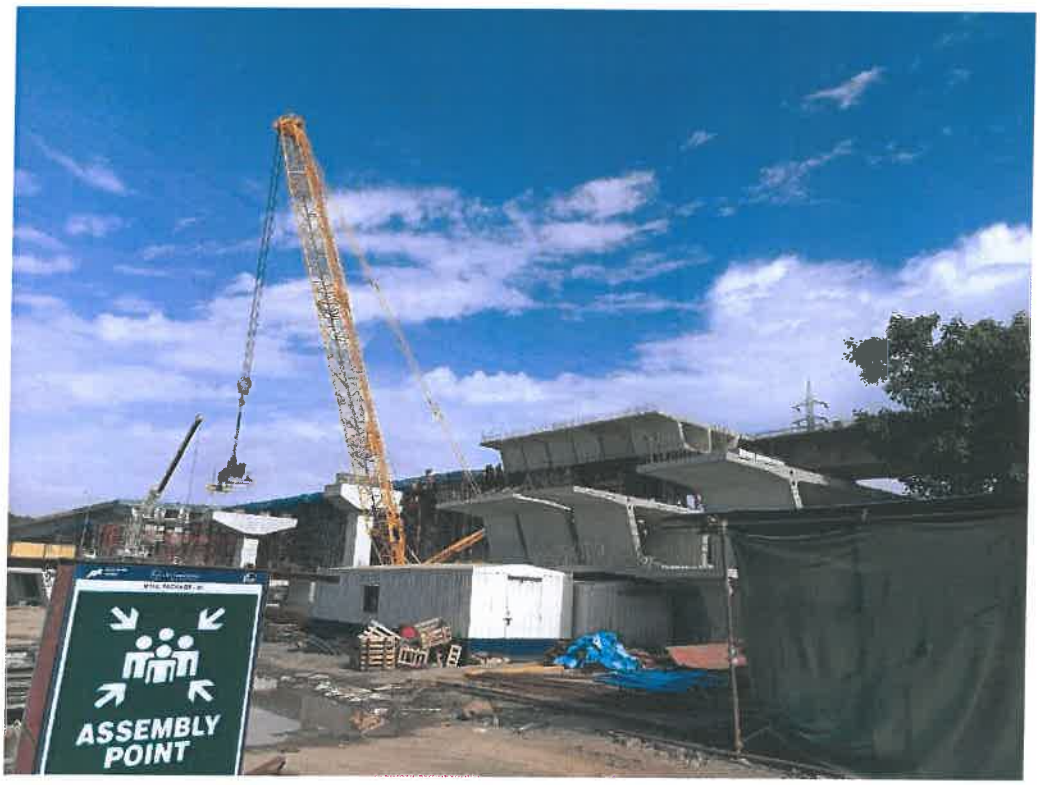


Photo No. 9: Chirle span LP32-33 segment erection work

Photo No. 10: Gavan CIS span RMP 271-272 prestressing work

Photo No. 11: Jasai LP-20, Pier 3rd lift concrete work

Photo No. 12: Chirle MJP Loop 2nd layer Geogrid work at CH 0+370 – CH 0+400