

CHENNAI PORT AUTHORITY



LAND USE PLAN 2022

December 2022

CHIEF ENGINEER

CHENNAI PORT AUTHORITY No.1 Rajaji Salai Chennai 600 001

LAND USE PLAN – 2022 PREFACE

Chennai Port is a 141-year-old Port situated in a strategic location close to the International sea route, in the Coromandel Coast in Southeast India and is fast emerging as a hub port of the Indian Subcontinent.

The Port is venturing into various short and long term developmental plans to handle the projected volume of project, container, steel, agricultural products, cars and other cargoes. The storage area of the Port is managed by the Land Policy issued by the Ministry of Ports, Shipping and Waterways (MoPSW). MoPSW amended the Land Policy framed during 2004 and a Draft Policy for Land Management by Major Ports, 2012 was prepared by the MoPSW and circulated to various stakeholders for comments and was also uploaded on the website of the MoPSW inviting comments and suggestions. Simultaneously, Inter-Ministerial consultations were also done. Based on the inputs received, the "Policy Guidelines for Land Management (PGLM)by Major Ports, 2014" was finalised. The said PGLM Guidelines have been approved by the Union Cabinet on 02/01/2014 and this PGLM was amended during 2015. The Revised 2014 Land Policy has urged the Major Ports to draw a Land Use Plan covering the entire land owned and / or managed by the Port. Land use plan of Major Ports shall be reviewed by the Board at least once in every five years.

The Land Use Plan is the guideline which projects the manner of licensing/leasing of the land, building and the water front area available in Major Ports. A draft Land Use Plan was prepared in 2016 and uploaded in Port website. In pursuance to Ministry's guidelines and Master Plan 2022 of Chennai Port Authority, a new Draft Land Use Plan 2022 was prepared. This updated Land Use Plan gives a clear picture of present scenario and will be helpful in utilizing the land resources optimally for Port related activities, increasing the throughput of Chennai Port and also to achieve excellence in Port operations with state-of-the-art technologies and high level of automation.

An In-principle approval of Board of Chennai Port Authority was obtained for this Draft Land Use Plan 2022 and Board directed to host this Draft Land use Plan 2022 in Chennai Port Authority's web site for obtaining remarks from various stakeholders/Port Users and submit the same to Board again for Final approval.

Accordingly, draft Land Use Plan 2022 was uploaded in ChPA website on 13.10.2022 by giving one month time for viewing by the stakeholders /Port Users to submit their remarks so as to update the Land Use Plan and the time period ended on 12.11.2022. However, ChPA has not received any remarks from any of the stakeholders/Port Users. Hence, the Draft Land Use Plan 2022 was finalized and the same was approved by the Board vide B.R No.139 of the Board Meeting No. 6 of 2022-23 held on 16th December 2022.

N.SRI RAMA CHANDRA MURTHY,

Chief Engineer
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1.0 INTRODUCTION

Chennai Port Location

The location of Chennai Port is shown below:



Figure 1-1

Chennai Port is the third oldest and about 141 years old among the twelve major Ports of India. Chennai Port Authority is an all weather Port situated in a strategic location close to the International sea route, in the Coromandel Coast in Southeast India and is fast emerging as a hub Port of the Indian Subcontinent. The Port serves the geographical regions of Tamil Nadu, Pondicherry, South Andhra Pradesh and parts of Karnataka and has now emerged as major hub on the East Coast of India. Major commodities being handled at the Port are Containers, Automobiles Exports, POL, Fertilizers (products and raw materials), and general cargo items.

Chennai Port Authority foreshore limit extends from 'S' Point – Latitude 13^003 ' 59.07" N / Longitude 80^017 ' 09.50" E south of Coovum River to 'G' Point Latitude - 13^012 ' 43.00" N / Longitude - 80^019 ' 40.00" E on the North coincide with Southern limit of Ennore Port.

The Port comprises of three dock systems viz.

Dr.Ambedkar Dock, Jawahar Dock and Bharathi Dock. It has a total of 27

berths including 1 under-construction Bunker Berth with a total quay length of around 6 km. The maximum draft available is 17.4 m at some of these berths. The Port is approached through a 7.0 km channel with water depths in the outer channel being 19.2 m at chart datum and that of the inner channel being 18.6 m at chart datum. The Port has a total land area of approx. 330 ha. (approx. 284 ha. inside custom-bonded area and approx. 46 ha. outside custom-bonded area) and water spread area of 159 ha. These landed assets are specifically developed for the operations, leasing to Port Users and Port based industries after the needs of the Port itself are satisfied.

The Management and Administration of the Port Authority Estates involves development of estate to ensure maximum returns to the owner, valuation of land and buildings, fixation and recovery of rent and all other matters in connection with ownership, letting, etc. of estates, obtaining of additional land by way of options viz. lease, acquisition, etc. it also involves in addition regulation of land utilization so as to offer maximum facility to the Port users and port based industries.

For the purpose of administration convenience, the administration and management of the operational areas, berths, stack yards, tank farms, warehouse, storage sheds, within the Custom Bondary wall and certain other areas is entrusted to the Traffic department.

The administration and management of the entire estate excluding the areas mentioned in above is entrusted to the Civil Engineering department. Civil Engineering Department is only concerned with the engineering advice to the Traffic Dept., General Administration Dept., Marine Dept., M&EE Dept., with regard to administration and management of the areas under their charge and preparation of Land Use Plan and carrying out engineering works for development, utilization of estate and landed properties etc.,

2. Land Policy Guidelines for Major Ports - 2014

The Land Policy Guidelines for Major Ports - 2014 and amended during 2015 has urged the Major Ports to draw a Land Use Plan covering the entire land owned and/or managed by the Port and obtain the Board's approval for the same. The Land Use Plan / revision shall be finalized after considering the objections and suggestions received from the various stakeholders. Land Use Plan of Major Port shall be reviewed by the Board at least once in every five years. In exercise of the Powers conferred by Section 123(b) read with Section 34(2) of the Major Port Trusts Act, 1963 (38 of 1963), the Board of Chennai Port framed the initial Land Use Plan 2012 and now the same is updated.

Unlike other Major Ports, the land resource in Chennai Port is very limited. The land area available with Chennai Port administration was originally 586 acres. This area was along the North of Cooum river along the Foreshore. This includes originally the breakwaters, shoreline, railway tracks, back up area, etc. The total land presently available is within the Custom Bond operational area of 714.54 acres and outside the Custom Bond area 112.67 acres. The total land belonging to the Port is 827.21 acres. The land demand for further development still remains unsatisfied.

The Land Use Plan is the guideline which projects the manner of licensing / lease of the land, building and the water front area available in Chennai Port. The various developmental activities and the future / ongoing projects have to be systematically framed in the plan for effective and optimum utilization of the scarce land resource.

3.0 Notified Port Limits of the Chennai Port

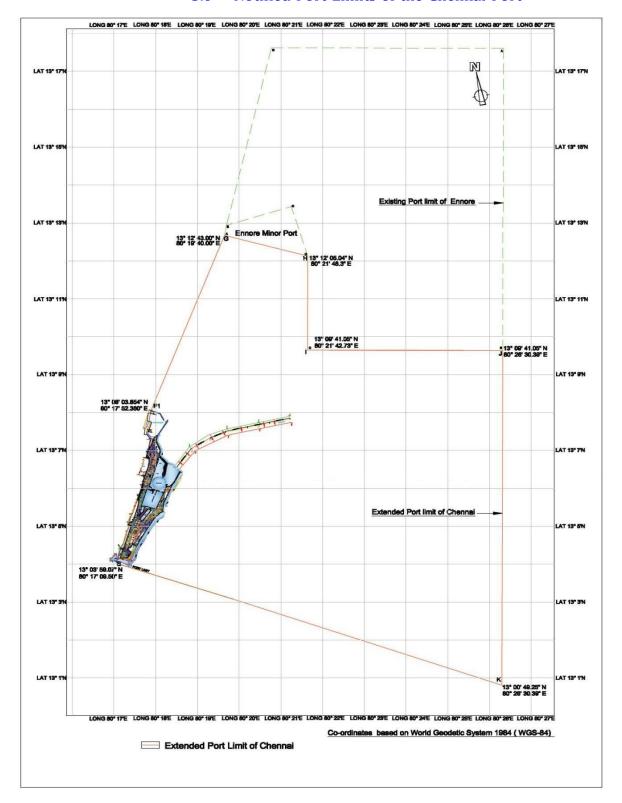


Figure 3.1 Port Limit of the Chennai Port

4.0 LAND USE PLAN

Status of the land use plan is

- Land Allotment Committee Meeting held on 28.01.2014 and recommended Civil Engineering Dept. to prepare the Land use plan with latest updation. This Plan shall be approved by the Board and copy forwarded to the Government.
- Accordingly, a draft Land use plan was prepared and hosted in the Port's website during June 2016 for comments / suggestions of Port users & stake holders.
- During finalization, there have been substantial changes in the Land Use requirements due to the changes in requirements of the Trade, cargo profile and marketing strategy.
- Hence, a fresh Land use plan was prepared and hosted in the Port's website during Nov 2017 for comments / suggestions of Port users & stake holders.
- However, no comments were received from the Port users and Stakeholders.
- Meanwhile, the Land which was exchanged between Southern Railway and Chennai Port was proposed to be leased on long term basis. Accordingly, the said proposal was placed before the Board during the year 2019 for 99 years lease and after Board's recommendation, the same was sent to the MoS for approval and it was directed by MoS to include the above proposal in the Land use Plan.

Accordingly, the Land use Plan is updated based on the current scenario.

Norms for allotment of land in Custom Bond area and outside Custom Bond area, fresh allotment, renewal of existing land leases, fresh leases, fixing of market value of land / reserve price, right of way permissions and broad terms and conditions for issuance for right of way permission for laying pipelines / conveyors etc., are detailed described in the Land Policy Guidelines for Major Ports, 2014 and in the clarifications issued thereon.

As far as inside Custom Bond area is concerned, the allotments are given on licence basis (i) for immediate cargo storage on vessel to vessel basis,

(ii) on Nomination basis for a period upto 11 months, (iii) on e-tender-cumauction basis upto 5 years. There is no renewal option for allotments made inside Custom bound area and allotments are treated as fresh allotments.

5.0 CATEGORIZATION OF THE LAND AREA

The total area of Chennai Port is divided into Inner Harbour Area and Outer Harbour Area. The water Spread area is 193.65 acres and Land area is 455.17 acres in the Inner Harbour and 199.83 acres and 246.74 acres in the Outer Harbour respectively.

The sprawling storage area is classified into Land inside Custom bound and Land outside Custom Bond. The storage area is well connected with road and rail network. The activity mix model and the land use policy served as an important input for the preparation of Land Use Plan. Based on the evaluation the conceptual layout was prepared and evaluated against the following criteria and labelled:

Development in phases

- Efficiency in operation
- Segregation of cargo based on its nature
- Clean harbour and operational area
- Flexibility to respond to changes in future cargo mix
- Commercial Lands / Buildings at Rajaji Salai, Ibrahim Salai (Near Royapuram Bridge) & G.M.Pettai Road Royapuram.

Table 5.1 Statistics of Port Land

Sl. No.	Category	Area (in acres)
1	Total land belonging to Port (Inside Custom Bond)	714.54
2	Total land belonging to Port (outside Custom Bond)	112.67
3	Usable Land under physical control of the Port (714.54+112.67=827.21 Acres) which includes Land under encroachment (T.H.Colony & Tirusulam – 3.88 acres)	827.21
	Land acquired on lease basis	
4	Land acquired on lease basis at Mappedu near Sriperumbudur for 99 years from SIPCOT	121.74
5	Land acquired on lease basis at Tiruvottiyur for 30 years from Greater Chennai Corporation	8.54

5.1 CUSTOM BOND AREA

The Custom Bond area is classified based on the allotment / purpose of use as specified below:

Table 5.2 INSIDE CUSTOM BOND AREA

S. No.	Description	Land area in acres	
1	Dry / Break Bulk cargo	126.47	
2	POL / Liquid bulk (Existing)	27.07	
3	POL / Liquid bulk (Proposal)	15.62	
4	Covered storage (Existing)	17.95	
4a	Covered storage (Proposal)	16.59	
5	Container Terminal I & II	130.19	
6	Concor	3.40	
7	Roads & Railways	145.37	
8	For future proposals	13.19	
9	Customs & Container Scanner	5.69	
10	For Port use & Misc	64.21	
11	Green Belt (Existing & proposed)	30.25	
12	Buffer Parking Yard @BDII	20.50	
13	Breakwater, outer arm, Revetments	32.99	
14	Berth area	25.03	
15	Common User Terminal @ Western Rail Yard	6.80	
16	CFS @ Gate No.10	2.90	
17	Earmarking area for future car storage	18.36	
18	Land handed over to ICG	11.96	
	Total area inside Custom Bond	714.54	

Table 5.3 OUTSIDE CUSTOM BOND AREA

Sl. No.	Description	Land area in acres
	a) HOD's Qtrs. area at Kamarajar Salai	5.45
i.	Admin bldg. /Hospital / Guest house area between Gate No.7and Gate No.9	13.44
	c) Land Area in Rajaji salai	5.49
	1.Land area in Rajaji salai near Gate No.5 =5.12 Acres.	
	2. Land area ear marked for Tank Farm in	6
	Rajaji salai near Royapuram bridge =0.37Acres.	8
	Total =5.49 Acres	
	d) Trust Villa area	1.21
	e) Land area at GM Pettai Road Royapuram	0.35
ii.	Tondiarpet Housing Colony	79.39
	Encroachment at Tondiarpet Hou <mark>sing</mark> Colony	2.25
iii.	Tirusulam (Partially encroachment)	1.63
iv.	Land obtained from Railways for 3& 4 line	3.46
	Exchange of Land at Ibrahim Salai	
	Total area of outside Custom Bond area	112.67

3rd AND 4th RAILWAY LINE BETWEEN CHENNAI BEACH AND ROYAPURAM

- To augment the projected Rail borne traffic, apart from the two existing Railway lines, two additional lines from Royapuram to Chennai Beach was laid by Southern Railway for which a stretch of land measuring 4.21 acres from gate No.4 to Gate No.6 was acquired by Southern Railway, in turn Southern Railway exchanged an equivalent value of land measuring 3.46 acres at Ibrahim salai. The above transaction was done after getting approved from MoPSW.
- As the above exchanged Land from Southern Railway is having proximity with Bus Route, Suburban Train and also Metro Rail, the same can be used for Construction of Tank farms and other allied activities relating to Port operations.

Table 5.4 Detailed Land Use pattern in Chennai Port includes inside and outside Custom Bond area

Sl.N	DECEMPTION	AREA IN
o	DESCRIPTION	M^2
1.	Operational space within Custom Bond area	8
a)	Tank Farms and allied activities (Existing)	18
	Indian Oil Corporation Ltd.	53195
	Kaleesuwari Refinery Pvt. Ltd.	5121
	Integrated Service Point (P) Ltd.	4427
	Indian Molasses Corpn. Ltd.	10218
	AVR Storage Tank Termin <mark>al</mark> s (P) Ltd.	8 1650
	JRE Tank Terminals (P) Ltd.	752
	Oswal Oils & Vanaspati Industries.	1370
	Suraj Agro Infrastructure (India) Pvt. Ltd.	10000
	Madras fertilizer Ltd.	4222
	M/s Rajpetro specialities Pvt Ltd.	15120
	CPCL at 0 yard	3480
	Total	109555
		(27.07 acres)
	Proposed tank Farms	
	South of Rajpetro	13021
	North of INS Adyar	50182
	Total	63203
		(15.62 acres)

b)	STORAGE AREA (EXISTING):	
	M1 Warehouse	7703
	M2 Warehouse	5558
	E1 Warehouse	5752
	E4 Warehouse	5777
	JD Shed I	4133
	JD Shed III (including Verandah)	5458
	JD V Shed North (incl.Verandah)	5457
	JD V Shed South	
	West Quay IV Passenger Station	5166
	West Quay III Shed	3436
	EXIM Godown - East and West	6058
	Hazardous Cargo	9000
	Centre berth shed Chokkani shed	866
	Spare parts ward 1	4080
	Spare parts ward 2	1171
	Old MSD at gate No.10	925
	old Mob at gate 10.10	928
	g	<u>1156</u>
	STORAGE AREA (PROPOSED):	72624
	- East and south of Exim Godown	(17.95 acres)
	- Western Shed	61829
	8/0	5322
	8	67151
	8	(16.59 acres)
c)	OPEN SPACE	
	Dry / Break Bulk cargo	511821 (126.47 acres)
	Roads & Railways	588292 (145.37acres)
	Container Terminal I &II	526860 (130.19 acres)
	CONCOR allotted Yard	13760 (3.40 acres)
	For Port use & Miscellaneous	259855 (64.21 acres)
	Future proposals	53396 (13.19 acres)
	Buffer Parking Yard @ BD II	83000 (20.50 acres)
	Common user terminal @ Western Rail Yard	27500 (6.80 acres)
	CFS @ Gate No.10	11702 (2.90 acres)
	Breakwater, outer arms, Revetments	133515 (32.99 acres)
	breakwater, outer arms, hevetments	
	Berth area	101291 (25.03 acres)
	Earmarking area for future Car storage	74305 (18.36 acres)
	Land handed over to ICG	48400 (11.96 acres)
d)	Customs & Container scanner	23046 (5.69 acres)

e)	Green belt (Existing & Proposal)	122418 (30.25 acres)
f)	Admin bldg. /Hospital / Guest House area	54400 (13.44 acres)
	between Gate No.7and Gate No.9	
g)	Operational area outside Custom Bond	
	area	
	Parking yard and Seal Verification facility	
	by M/s.CWC at Tiruvottiyur	34560 (8.54 acres)
	Commercial area at Mappedu	492665 (121.74 acres)

Sl.	DESCRIPTION	AREA IN M ²
No.	8	
2.	Residential area	- 8
a)	HODs' Qtrs. area at Kamarajar Salai	22055 (5.45 acres)
b)	Trust Villa area	4897 (1.21 acres)
c)	Tondiarpet Housing Colony	321280 (79.39 acres)
	Encroachment at Tondiarpet Housing	9105 (2.25 acres)
	Colony) 8
d)	Tirusulam (with Partially encroachment)	6596 (1.63 acres)

Sl. No.	DESCRIPTION	AREA IN M ²
3.	Commercial area	
a)	Land Area in Rajaji salai near Gate No.5	22217 (5.49 acres)
b)	Land area at GM Pettai Road Royapuram	
c)	Land acquired from Southern	14012 (3.46 acres)
	Railway at Ibrahim Salai for	
	3& 4 line	

Table 5.5 Detailed service area in Chennai Port inside and outside Custom Bond area

Sl.No	Description					
1	Service Area - Water tanks, ground storage reservoirs, elevated					
	storage:					
	Ground Storage water tanks					
	Near Timber Pond Near Marshalling Yard					
	Near Gate No.10					
	Elevated Storage water tanks					
	At Gate No.10					
	At Marshalling Yard					
	Paved Storage Yard.					
	Timber Pond Centre Berth					
	Trust Villa Quarters					
2	Fire Stations at					
	Ore Berth					
	Centre Berth Gate No.5					
3.	Industrial canteens					
	Gate No.10					
	Administrative Office					
4.	Training Centre					
	Basic Training Centre at Gate No.10					
	Human Resource Development Office at Admn. Building					
5	Community / Welfare / Administration					
	Hospital complex at Spring Haven Road					
	Guest House Complex and Residential Complex					
	Quarters at Spring Haven Road					
	School at Tondiarpet Housing Colony					
	Hospital at Tondiarpet Housing Colony					
	Administrative Office Complex					
	Community Centre at Tondiarpet Housing Colony					
	Religious Institutions at Tondiarpet Housing colony					
	(Hindu temples, Churches, Mosque etc)					
6	Residential Areas					
	Officers Quarters at Napier Bridge					
	Quarters at Spring Haven Road Quarters at Clive Battery					
	Quarters at Crive Battery Quarters at Trust villa Royapuram					
	Tondiarpet Housing Colony					
	Barracks/CISF Quarters/Guest House inside Harbour					
	Zarracia, sicr Quarters, duest froute finite fur bour					

Recreational areas Play ground & Stadium at Tondiarpet Housing Colony Tennis Court at Napier Quarters Officers Club / Badminton Court 8. **Commercial areas** Rajaji Salai Buildings **User office Complex Building** Erstwhile DLB Building Building Adjacent to Jawahar Building (Erstwhile B5 Police Station) Jawahar Building **Central Documentation Complex Anchor Gate Building** Admin Annex Building (near Exit gate) Erstwhile Pass Section building 9. **Green Belt** Open area at Tondiarpet Housing Colony Garden at Administrative Complex Garden at Napier Bridge Quarters 10. Lands & Buildings inside Custom Bond area are allotted for the purpose of Cargo storage, Dock Office, Ship Repair and Tank Farm activities. The land is allotted on the following methodology: on vessel to vessel basis, (i) (ii) on nomination basis and on e-tender-cum-auction basis. (iii) Further, the land inside Custom Bond area, other than under

allotments are utilized for transit cargo storage purpose.

(i) Land Inside Custom Bond Operational Area:

This area has been ear-marked for storage of cargoes, Railway Yard, Workshops, office and for parking on license basis (Fig 5.1) (Also enclosed Drawing in A2 sheet in last Page)

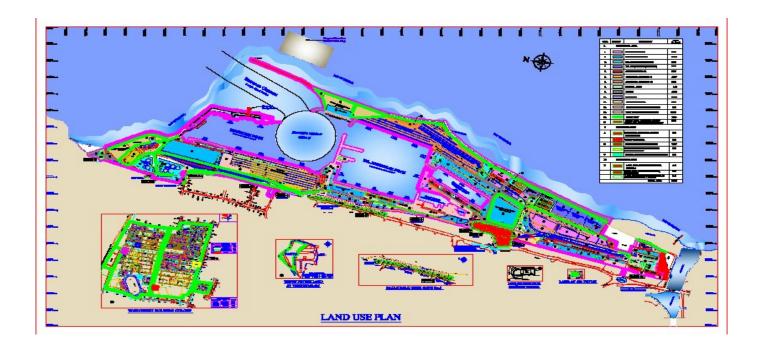


Fig 5.1

(ii) Land Outside Custom Bond Area:

This area has been ear-marked for both Port related and non-Port related activities and also for Residential and recreational facilities for the employees of the Port. **(Figure 5.2)**

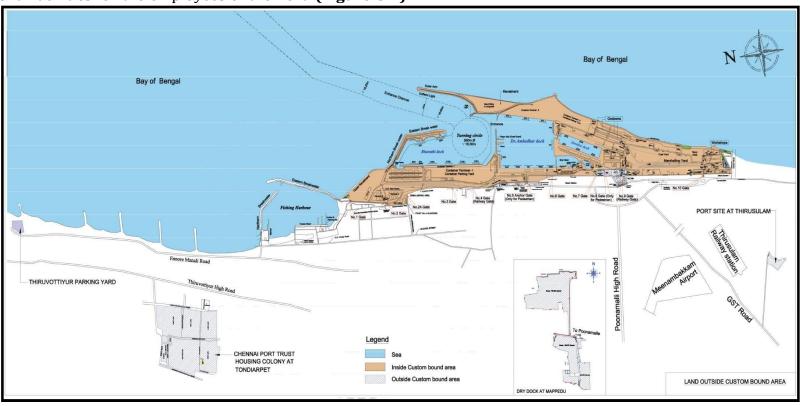


Figure 5.2 Land Outside Custom Bond Area

6.0 DETAILS OF PORT OPERATIONAL AREA 6.1 General

Chennai Port has three Docks - Bharathi Dock, Dr.Ambedkar Dock and Jawahar Dock. The existing Container Terminal is situated in Bharathi Dock and Dr.Ambedkar Dock. Bharathi Dock contains 10 berths (including one underconstruction Bunker Berth); Ambedkar Dock contains 11 berths and Jawahar Dock contains 6 berths, all totalling to 27 berths. The major commodities handled in the Port are Crude oil & POL products, Containers, Automobiles, Edible oil, and general cargo. The location of these docks is shown in the following Figure 6.1.



Figure 6.1 Locations of the Three Docks

Entrance Channel

Length of Channel - About 7 km

Depth of Inner Channel - (-) 18.6 m below CD

Depth of Outer Channel - (-)19.2 m below CD

Width of Channel - The width of channel gradually increases from

244m to 410 m at the bend portion, then maintains a

constant width of 305m

	Outer Harbour		
Eastern Breakwater	590 m	Northern Breakwater	460 m
Outer Arm	1000 m	Upper Pitch Revetment	950 m

The details of these Docks along with their berths are brought out hereunder:

Table 6.1 Details of Docks/Berths

	Table 6.1 Details of Docks/Berths							
S.l No	Berth Name	Scheduled Depth (from CD) in Mtrs	Quay Length in Mtrs	Commodities handled				
	BHARATHI DOCK (BD)							
1	Bharathi Dock – I (26B)	(-)16.00	356	POL				
2	Bharathi Dock – II (24B)	(-)17.40	382	Multi Cargo/Edible Oil				
3	Bharathi Dock – III (27B)	(-)17.40	325	POL -Crude				
4	Container berth– I (20B)	(-)13.90	200					
5	Container berth– II (21B)	(-)13.90	200	Containers				
6	Container berth- III (22B)	(-)13.90	200	200				
7	Container berth- IV (23B)	(-)15.50	285	8				
	NEW BERTHS AT	BHARATHI	DOCK (BD					
1	Coastal Berth –I (1B)	(-)11.90	130	Multi Cargo / Coastal				
2	Coastal Berth –II (2B)	(-)11.90	130	Z 8				
3	Bunker Berth (25B) - Under Construction	(-)9.00	182	Bunkering Fuel and Edible oil				
	Dr. AMBEDKAR I	OOCK (AD)		7/8				
1	NQ (19A)	(-) 8.50	198	General/Liquid Bulk				
2	West Quay -1 (18A)	(-)11.00	171	General/RO-RO/other liquids				
3	West Quay – 2 (17A)	(-)12.00	171	General/RO-RO				
4	Centre Berth (16A)	(-)12.00	171	General/Food Grains				
5	West Quay – III (15A)	(-)12.00	171	General/Food Grains/Project Cargo.				
6	West Quay – IV (14A)	(-)11.00	171	General/passenger				
7	South Quay – 1(13A)	(-) 9.50	246	GC/Break Bulk/ Dry Bulk				
8	South Quay – II (6A)	(-) 9.50	179	GC/Break Bulk/Dry Bulk/Liquid Bulk				

9	Second Container	(-)15.50	287	
	Berth-I(5A)			Containers
10	Second Container	(-)15.50	270	
	Berth- II (4A)			
11	Second Container	(-)15.50	275	
	Berth- III (3A)			
	JAWAHAR DOCK	(JD)		
1	J.D-1 (12J)	(-)13.00	218	Break Bulk/ Dry Bulk
2	J.D-3 (11J)	(-)13.00	218	Break Bulk/ Dry Bulk
3	J.D-5 (10J)	(-)13.00	218	Dry Bulk
4	J.D-2 (7J)	(-)14.00	218	Dry Bulk/Edible Oil/Other
				Liquid Bulk
5	J.D-4 (8J)	(-)14.00	218	Dry Bulk/Edible Oil
6	J.D-6 (9J)	(-)14.00	218	Dry Bulk

6.2 Bharathi Dock (BD)

Bharathi Dock (Figure 6.2) is a relatively new addition to the Port having been constructed during the late sixties and early seventies. It provides handling facilities for POL, edible oil and containers. The entrance to the Dock is 350 m wide. Particulars of berths at Bharathi Dock is presented in **Table 6.2**.

Table 6.2 Details of berths at Bharathi Dock

Name		Length (m)	Scheduled Depth (from CD) (m)
26B (BD I)	POL	356	(-)16.0
24B (BD II)	Multi Cargo/Edible Oil	382	(-)17.4
27B (BD III)	POL - Crude	325	(-)17.4
20B (CTB I)	Containers	200	(-)13.9
21B (CTB II)	Containers	200	(-)13.9
22B (CTB III)	Containers	200	(-)13.9
23B (CTB IV)	Containers	285	(-)15.5
1B (Coastal Berth)	Multi - Coastal	130	(-)11.9
2B (Coastal Berth)	Multi - Coastal	130	(-)11.9
25B Bunker Berth (Under Construction)	Bunkering Fuel and Edible Oil	182	(-)9.0



Figure 6.2 Bharathi Dock

6.2.1 POL Berths - BD I and BD III

The POL berths are shown in Figure 6.3. 26B - BD I (commissioned in 1972) has been designed to handle tankers up to 100,000 DWT while 27B - BD III (commissioned in 1986) has been designed for 140,000 DWT tankers. BD I berth has been provided with 5×12 " Marine Loading Arms while BD III has been provided with 4×16 " + 2×12 " Marine Loading Arms. Both the berths are served by 1×42 " pipeline for crude oil; 1×20 " pipeline for white oil and 2×14 " pipeline for black oils. There are separate service lines for LDO/FO/LO bunkers. These berths are provided with firefighting facilities including tower monitors served by a separate firefighting pump house with requisite pumps and connecting pipelines. The reception facilities are in accordance with MARPOL convention, have been provided for receiving waste oil, sludge and slop.



Figure 6.3 POL Berths - 26B and 27B (BD I & BD III)

6.2.2 Multi-Cargo Berth - 24B (BD II)

The berth 24B (BD II) with the backup area is shown in Figure 6.4. This berth was originally commissioned in 1977 to handle iron ore carriers up to 150,000 DWT. It was designed for receiving, stockpiling, reclaiming, weighing, sampling and ship loading with the facilities consisting of two rotary wagon tipplers, two lines of conveyors, two rail-mounted stackers, two rail-mounted bucket-wheel reclaimers and two rail-mounted ship loaders. Due to the ban on iron ore exports, the iron ore loading and unloading facilities have been dismantled. The berth is presently used for handling edible oil imports.



Figure 6.4 Berth 24B (BD II)

6.2.3 Land Leased to PPP Operators

Chennai Container Terminal Pvt Ltd. (CCTPL)

Chennai Port was the first Port to start container handling operations in 1983. This was later handed over to Chennai Container Terminal Private Limited (CCTPL), a Special Purpose Vehicle, formed by the consortium of M/s P&O Australia Ports Pvt. Limited, and three others in 2001 for development, operation and management of the container terminal on a Build, Operate and Transfer (BOT) basis for 30 years. In 2006, DP World, one of the world's largest container terminal operators, acquired P&O Steamship Navigation Company, UK thereby acquiring the 75% stake held by it. In 2008, DP World acquired the balance stake held by other consortium members effectively controlling 100% stake in CCTPL.

The Container Terminal with four berths CTB 1 to 4, renamed as 20B to 23B, has a quay length of 885 m. It can accommodate container vessels up to 6,400 TEU capacity. The total yard area is 17.5 ha and accommodates 3,960 ground slots with a holding capacity of 19,800 TEUs. It has 330 reefer plugs. The yard also houses a Container Freight Station of 6,500 m2 area. The

terminal is served by 7 Quay cranes and 22 RTGs. Its capacity is 1.6 MTEU per annum.

The berths with the backup area are shown in the below figure:



Figure 6.5 Chennai Container Terminal (CCTPL)

6.2.4 Coastal Berths - (1B and 2B)

Taking into account the increasing demand for coastal shipping, and the strategic location of Chennai Port on the maritime map of the country, the port in 2019 commissioned a coastal terminal, a set of two berths, near the northern sheltering arm of Dr. Ambedkar Dock. This terminal will be outside the Custom Bonded area of the port and have a capacity of 1 MTPA.

The Coastal Terminal has a wharf structure of 260 m × 16 m to 19.5 m constructed with piled structure with a water depth of (-)11.88m to accommodate vessels up to 30,000 DWT. The adjacent reclaimed area of about 16,000 Sqm has been developed as a backup area for the storage of cargo. A dedicated road is provided with a width of 9.0 m from the coastal road along the shore. The Coastal terminal was inaugurated by the Hon'ble Shipping Minister in November 2019.



Figure 6.6 Coastal Berths (1B and 2B)

6.2.5 Bunker Berth - (25B)

The bunker berth is under construction phase at present. The designed length of the berth is 180 meters. It is situated at the northern arm of the northern breakwater. It is developed for aiding bunker operation at Chennai Port.

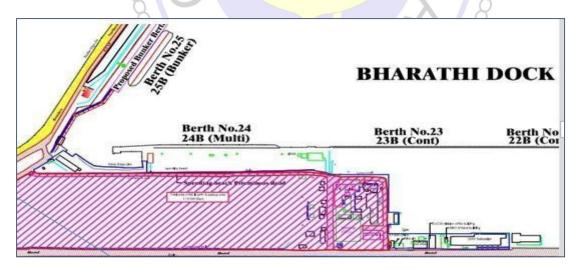


Figure 6.7 Bunker Berth at Bharathi Dock (Under Construction)

6.3 Dr. Ambedkar Dock (AD)

Dr. Ambedkar Dock is the oldest original dock, more than 125 years old. It has 11 berths, with a total quay length of around 2,310 m. The entrance width of the dock is 125 m. The components are North Quay, West Quay, South Quay and East Quay, where the second container terminal is located. It also has two finger jetties which are presently used by the Navy and Coast Guard. These berths cater to automobiles, passengers, general cargo, fertilizers and containers. Berth particulars and the commodities handled are presented in the below Table:

Table 6.3: Dr. Ambedkar Dock Berths

Name	Commodity	Length (m)	Scheduled Depth (from CD) (m)
19A (North Quay)	GC/Liquid Bulk	198	(-) 8.5
18A (West Quay I)	GC/Ro-Ro/Other Liquids	171	(-)11.0
17A (West Quay II)	GC/Ro-Ro/Other Liquids	171	(-)12.0
16A (Centre Quay)	GC/Food grains	171	(-)12.0
15A (West Quay III)	GC/Food grains / Passenger/Cruise	171	(-)12.0
14A (West Quay IV)	GC/Passenger	171	(-) 11.0
13A (South Quay I)	Fertilizer / GC/Dry Bulk	246	(-) 9.5
6A (South Quay II)	Fertilizer / GC/Dry Bulk/Liquid Bulk	179	(-) 9.5
5A (Second Container Berth – I)	Containers	287	(-) 15.5
4A (Second Container Berth – II)	Containers	270	(-) 15.5
3A (Second Container Berth – III)	Containers	275	(-)15.5



Figure 6.8 Ambedkar Dock

6.3.1 North Quay and West Quay Berths - 14A, 15A, 16A, 17A, 18A, 19A (WQ4, WQ3, CB, WQ2, WQ1 and NQ)

The berths with their backup area /sheds are shown in the below figure:



Figure 6.9: North Quay and West Quay Berths

The 19A (NQ) berth is used for handling general cargo and edible oil. 18A (WQ 1) & 17A (WQ 2) berths are used for handling car carriers for automobile exports. These berths have a backup area of over 54,400 m2 (WQ 1 and WQ 2 = 32,992 m2 + car yard = 21,402 m2). 16A (CB) and 15A (WQ 3) are used for handling general cargo, passenger and food grains. The berths have transit sheds behind. 14A (WQ 4) handles general cargo as well as passenger / cruise vessels. For this purpose, it is provided with a state of art cruise terminal with all infrastructures facilities.

6.3.2 South Quay Berths - 6A and 13A (SQ2 and SQ1)

13A (SQ 1) handles general cargo, dry bulk and fertilizers while 6A (SQ 2) handles fertilizers and edible oil/Phosphoric acid. The phosphoric acid tanks of Madras Fertilizers Ltd. and edible oil tanks of IMC are located just behind this berth.

The berths with their backup area are shown are shown in the Figure 6.10:



Figure 6.10 South Quay Berths

6.3.3 Land Leased to PPP Operators

Chennai International Container Terminal Pvt. Ltd. (CITPL) – 3A, 4A and 5A (SCB3, SCB2, SCB1)

Chennai Port awarded the Second Container Terminal to Chennai International Container Terminal Private Limited (CITPL), a Special Purpose Vehicle, formed by the consortium of M/s Singapore Port Authority and SICAL Logistics Pvt Limited in 2007 for development, operation and management of the container terminal on a Build, Operate and Transfer (BOT) basis for a period of 30 years. It was commissioned in 2009.

The Container Terminal with three berths SCB 1 to 3, renamed as 3A, 4A & 5A, has a total quay length of 832 m. The total yard area is 27.2 ha including 7.8 ha of the reclaimed area. It accommodates 3,440 ground slots with a holding capacity of 17,200 TEUs. It has 304 reefer plugs. The terminal is served by 7 Quay cranes and 18 RTGs. Its capacity is 1.5 MTEU per annum.

The berths with the backup yard are shown below:



Figure 6.11: Container Terminal in Dr. Ambedkar Dock

6.4 Jawahar Dock (JD)

Jawahar Dock was created during the early sixties. The basin dimension is $655 \text{ m} \times 152 \text{ m}$. The total quay length is around $2 \times 650 \text{ m}$ with 3 berths each on either side. The entrance width of the dock is narrow and can permit only Panamax carriers. The particulars of the berths are presented in Table 3.3. The design dredge depth of the dock is - 14.0 m CD.

Table	6.4:	Berths	at i	lawahai	Dock
-------	------	---------------	------	---------	------

Name	Commodity	Length (m)	Scheduled Depth(from CD) (m)
12J (JD I)	Fertilizer/Dry Bulk	218	(-) 13.0
7J (JD II)	Fertilizer/Dry Bulk/ Edible Oil /OtherLiquid bulk	218	(-) 14.0
11J (JD III)	Fertilizer/Dry Bulk	218	(-) 13.0
8J (JD IV)	Dry Bulk/Edible Oil	218	(-) 14.0
10J (JD V)	Fertilizer/Dry Bulk	218	(-) 13.0
9J (JD VI)	Dry Bulk	218	(-)14.0



Figure 6.12 Jawahar Dock

6.4.1 JD East Berths - 7J, 8J and 9J (JD2, JD4 and JD6)

The existing berth structures are of varying types along the length. Initial 518 m from the basin entrance was constructed in 1964 with monoliths. Thereafter, the berth length was increased by another 137 m with a combination of diaphragm wall and piles in 1981. During 2006-07 additional structures supported on piles were constructed for strengthening of apron behind both the berths.

The land width between the JD east quay and the western boundary of CITPL along the JD East back-up area is about 140 m. These berths were used to handle coal, but with the ban on handling coal, the yard area is used as Transit area and for vessel to vessel allotments. This area is occupied by a tank farm and small buildings. There are, however, vacant space and unused buildings on the southwest and southeast direction of the existing yard. 8J (JD II) & 9J (JD VI) are presently used for handling fertilizers and edible oils. Phosphoric tankers are also handled here and the cargo is stored into the nearby tank farms.

6.4.2 JD West Berths - 10J, 11J and 12J (JD5, JD3 and JD1)

Similar to JD East Berths, the existing berth structures on the JD West are of varying types along its length. Initial 518 m from the basin entrance was constructed in 1964 with monoliths. Thereafter, the berth length was increased by another 137 m with a combination of diaphragm wall and piles in 1981. During 2006-07 additional structures supported on piles were constructed for strengthening of apron behind both the berths. These berths are used for handling general cargo, fertilisers and dry bulk cargo. These berths have transit sheds behind them.

The berths with their respective backup area are shown below:



Figure 6.13: Jawahar Dock Berths

6.4.3 Timber Pond and Boat Basin

A dry dock on a PPP basis was envisaged at the Timber Pond and Boat Basin as one of the measures to optimize the use of port infrastructure to generate additional revenue. Accordingly, tenders were invited through PPP Mode but failed to yield a satisfactory response. Though Cochin Shipyard Limited (CSL) was offered to take up the project on a nomination basis, they communicated their inability to take up the project.

During 2015, the Indian Coast Guard (ICG), evinced interest to develop Dry-Dock facility through their funds on a long-term lease basis, and later in 2019 ICG informed that the Ministry of Defence (MoD) has sanctioned the project of leasing of Timber Pond for a period of 99 years from Chennai Port.

Subsequently, ChPA approved the leasing of Boat Basin and Timber Pond for a period of 99 years to the Indian Coast Guard for Development of Dry Dock/Ship repair facility subject to the approval of the Ministry of Ports, Shipping and waterways.

Currently, ChPA is pursuing with the ICG for completion of mandatory formalities and handing over of the area to ICG.

6.4.4 Other facilities at the Port

The cargo handling and storage equipment's available at the Port are indicated below:

Table 6.5: Cargo Handling Equipment at Chennai Port

S. No.	Equipment	Numbers	Capacity
1.	Diesel Electric Locomotive	7	700 HP
2.	Harbour Mo <mark>bile Crane</mark>	2	100 T lifting capacity

Table 6.6: Cargo Storage Facilities at Chennai Port

Transit Shed / Over Flow shed	4 no. – 14,468 m ²
Warehouse	13 no. – 48,328 m ²
Exim Godown	2 no. – 9,256 m ²
Open Space	13,43,069 m ²

6.5 Bulk Liquid Storage & Linkages

In Chennai Port, the liquid bulk traffic is almost 25 % of the total traffic. The traffic comprises mainly crude oil for the Manali Refinery of Chennai Petroleum Corporation Ltd., POL product exports, Edible oil/Molasses and chemicals. While crude oil and POL products are handled at 26B (BD I) & 27B (BD III), Molasses/Edible oil are handled at 24B (BD II), 19A (NQ), 18A (WQ 1), 17A (WQ 2), 6A (SQ II), 7J (JD II) & 8J (JD IV). Firms / Agencies have setup their own tankage facilities within Custom Bond area and outside Custom Bond area of the Port.

6.5.1 Tankage & Linkage on the Northern Side

On the Northern side of the port, near Gate 2 and at Biden Place, the following agencies have their tank farms viz.

- Indian Oil Corporation Foreshore Tank
- Terminal farm IMC Ltd.
- Kaleesuwari Refinery Pvt. Ltd.
- Integrated Service Point Pvt. Ltd.

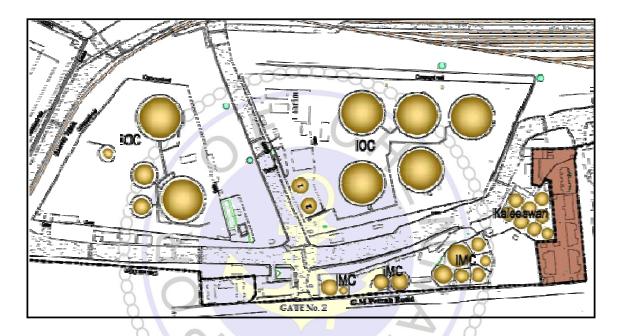


Figure 6.14Tank Farms of IOC, IMC & Kaleesuwari - Near Gate No. 2

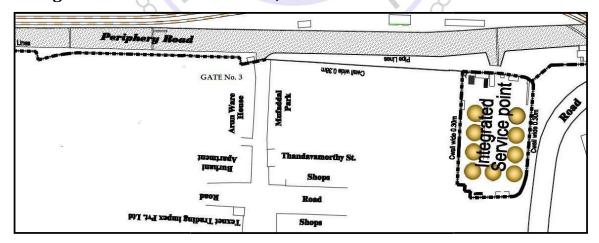


Figure 6.15Tank Farm of Integrated Service Point - Near Gate No. 3

6.6 Cargo Storage Facilities at the Port - Tank farm within Port Custom Bond Area

Table 6.7: Cargo Storage Facilities at Chennai Port

	Details of Tank farm within Port Custom Bond Area							
	Northern side near GATE No. 2							
S.No.	Name of Licensee	Product	No. of	No. of Total		nkage		
3.110.	Name of Licensee	Froduct	Tanks	Capacity (kL)	Berth	Connection		
1	Indian Oil				BD I	1 x 20" + 1		
	Corporation Ltd.		~			x 16" + 3 x		
		COOLLE	moo-	_		14"		
	-0-	POL		9		1 x 20" + 2		
		Products	10	1,28,494	BD III	x 14"		
2	IMC Ltd			10		1 x 12" +		
	8/6	Molasses		V 1 9	BDI	1 x 8"		
	8				8	1 x 12" + 2		
	8/2	Edbile Oil	11	33,402	BD II	x 8"		
3	Kaleesuwari Refinery	Edible Oil	8	24,803	BD II	1 x 12"		
	Pvt Ltd.				18			
	Integrated Service				8	1 x 14" +		
4	Point Pvt.Ltd.	Edible Oil	9	18,430	NQ -WQ	1 x 10"		
	8		/		1			

Table 6.8 Liquid Bulk storage facilities at Chennai Port

	8	4	J I	inkage
S.No.	Name of Licensee	Product	Berth	Connection
1	Chennai Petroleum)00000000	BD I	1 x 30"
	Corporation Ltd.	Crude Oil	BD III	1 x 30"
2	Hindustan Petroleum	LSHS	BD III	1 x 16"
	Corporation Ltd.	Bitumen	BD II	1 x 12"
3	TCL	Chemical	BD III	1 x 8"
4	Ruchi	Edible Oil	BD II	1 x 12"+ 1x 8"
			NQ - WQ 2	1 x 8"
5	KTV	Edible Oil	BD II	1 x 10"

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6.7 Tankage and Linkage on the Southern Side

On the Southern side of the Port, near SQ II & JD II, the following agencies have their tank farms:

- IMC Ltd.
- JRE Tanks Terminals Pvt. Ltd.
- AVR Storage Tank Terminals Pvt. Ltd.
- Kaleesuwari Refinery Pvt. Ltd.
- Madras Fertilizers Ltd.
- Oswal Oil & Vanaspati Industries
- Suraj Agro Infrastructure (India) Pvt. Ltd.
- Raj Petro Specialities Pvt.Ltd.

The locations of these tank farms are shown below:

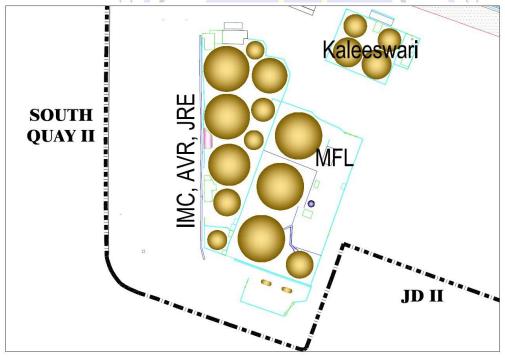


Figure 6.16: Tank Farms of MFL, IMC, JRI, AVR & KRL near SQ II and JD II

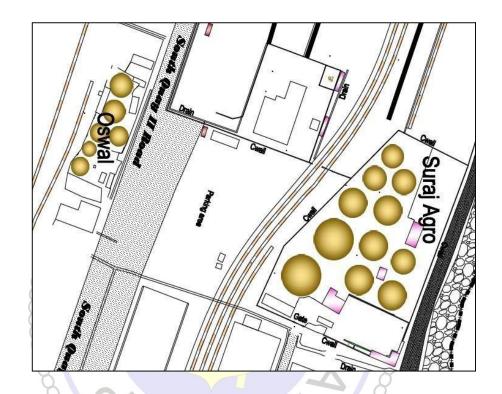


Figure 6.17: Tank Farms of Suraj Agro & Oswal at JD East

The details of tankages and the linkages are shown in the following table:

Table 6.9: Details of Tank Farms within Custom Bonded area on the Southern Side

					Linl	kages
S. No.	Name of Licensee	Product	No. of Tanks	Total Capacity (kL)	Berth	Pipelines
1	Madras Fertilisers Ltd.	Phosphoric Acid	4	20,770	JD IV	1 x 12"
2	IMC Ltd.	Molasses	5	15,035	SQ II - JD II	1 x 18" + 1 x 10"
		Edible Oil			SQ II	1 x 6"
3	AVR Storage Tank Terminals Pvt Ltd	Edible Oil	3	6549		

4	JRE Tank Terminals Pvt. Ltd.	Molasses	1	4310		
5	Rajpetro Specialities Pvt. Ltd.	Base oil	12	21091	JD II - JD VI	
6	Kaleesuwari Refinery Pvt. Ltd.	Edible oil	4	11,796	SQ II	1 x 8"
7	Suraj Agro Infrastructure (I) Pvt. Ltd.	Non- Hazardous Edible Oil	11	45,700	JD II - JD IV SQ II	1 x 18" + 1 x 8" 1 x 8"
8	Oswal Oils & Vanaspati	Edible Oil	6	9,966	JD II - JD IV	2 x 8"
	Industries	0000000	LUCO C	200	JD II - JD VI	1 x 8"

6.8 LEASE PARTICULARS OF CHENNAI PORT AUTHORITY (OUTSIDE CUSTOM BOND AREA)

Lease Period more than 30 years

	<u>Lease Period more than 30 years</u>							
Sl.	Name of the	Location	Area in S	q. Mts	eriod of			
No.	Allottee / Lessee		Lease					
	8		Building	Land	8			
1	Indian Meteorological	Centenary	480.08	54	(Initially from			
	Department	Building		(100)	9 1972)			
	F 8				03.05.2015 to			
	8		5 1		02.05.2045			
2	TANGEDCO	Royapuram	202	843	* 29.08.1980 to			
	8			(900)	23.12.2012			
	8		2.3		10000 1000			
3	Greater Chennai	Housing Colony	3464	2886	*08.07.1963			
	Corporation School	A		0	to			
	8			8	07.07.2018			
4	The Tamil Nadu Co-	Housing Colony	-0	99				
	operative Milk	200	-00	(100)	13.03.1982			
	Producers	Commo			to			
	Federation Ltd.,				31.12.2011			
	(AAVIN)							
5	The Department of	Housing	135.68	_	1982			
	Post Office	Colony			to			
	1 ost office	Gololly			31.12.2044			
6	Shipping Corporation	Jawahar	785	-	(Initially 1988 -			
	of India.	Building			2017)			
	or maia.	(Carriage & F.F)			01.01.2018			
					to 30.11.2032.			

Note: * Lease will be Renewed after remittance of dues **Table 6.10 Leases for a period more than 30 years**

Leases for period upto 30 years

Sl.	Name of the	Logation	Area in	Sq. Mts	Period of
No.	Allottee / Lessee	Location	Building	Land	Lease
		User Complex			
1	Indian Coast Guard	Basement, 2 nd to 5 th Floor	2716	-	10.10.2016 - 09.10.2046
		Jawahar Building			
2	Andaman & Nicobar Administration	2 nd floor South wing	343.90	-	01.04.2004 - 31.03.2034
3	Kamarajar Port Limited	2 nd floor North wing	300	-	05.10.2015 - 04.10.2045
4	Kamarajar Port Limited	3 rd Floor	650	_	
5	Kamarajar Port Limited	Ground Floor North Wing	267	8	18.08.2021 to 31.08.2045
	8 1	Central Documentation Building			
6	Kamarajar Port Limited	Basemen <mark>t (S</mark> outh wing)	34	- 8	05.10.2015 - 04.10.2045
7	Kamarajar Port Limited	Car Park	94	8	
8	Kamarajar Port Limited	Ground Floor	377.15	3	
9	Food Safety and Standards Authority of India (FSSAI)	Second floor North Wing	481	<u>, 0</u>	29.01.2020 - 28.01.2050
10	Food Safety and	Third Floor	825	-	
	Standards Authority of India (FSSAI)	000000000	000		
11	Food Safety and Standards Authority of India (FSSAI)	Ground Floor Northern side	21	53	01.11.2021 to 31.01.2050
		Anchor Gate Building			
12	Mercantile Marine Department	Third Floor	70	-	01.09.2003 to 31.08.2033
13	Mercantile Marine Department	Third Floor	144 (72+72)	-	09.03.2006 to 08.03.2036
14	Mercantile Marine Department	Third Floor	19	-	

	Old Administrative Building			
Bharat Sanchar Nigam Limited (BSNL)	First Floor	11	-	(Initially 01.07.2007 to
Bharat Sanchar Nigam Limited (BSNL)	Terrace	33	-	2014) Proposal (2014
Bharat Sanchar Nigam Limited (BSNL)	Opp Land	-	4 (100)	to 2037)*

Note: * Lease will be Renewed after remittance of dues

Table 6.11 Leases for period upto 30 years

Leases for a period from 25 to 29 years

Sl. No.	Name of the Allottee / Lessee	Location	Area in Sq. Mts Building Land	Period of Lease
		A 1 0 .		
	1	Anchor Gate	72.00	(Initially from
	Safety	Building (Third		1988)
	8	Floor)		01.02.2004 to
	Q,			31.01.2017*
2	CCTPL	Old	13.00 -	01.09.2006
	8	Administrative	-71	То
	810	Building		31.08.2031
3	TANGEDCO	Housing Colony	- 634	06.06.1988
	0			to
	8			05.06.2017*

Table 6.12 Leases for a period from 25 to 29 years

Leases for a period of 15 to 19 years

		A		N	
Sl.	Name of the	Location	Area in S	q. Mts	eriod of
No.	Allottee / Lessee		Building	Land	Lease
		Anchor Gate Building	000		
1	Seamen's Employment Office	Third Floor	20	-	01.12.2014 to
2	Seamen's Employment Office	Third Floor	72	-	28.02.2033
3	Seamen's Employment Office	Third Floor	144	-	01.01.2015 to 28.02.2033
4	Mercantile Marine Department	First Floor (South wing)	496	-	Upto 08.03.2036 (17 years)

Table 6.13 Leases for a period of 15 to 19 years

Leases a for period of 10 years

Sl.	Name of the	Logation	Area in So	q. Mts	Period of
No.	Allottee / Lessee	Location	Building	Land	Lease
1	Food Safety &	Central	307	-	01.09.2014 -
	Standards Authority	Documentation			31.08.2024
	of India (FSSAI)	Building (Second			
		floor South Wing)			
2	Total care Services	Annexe Building	22	-	17.02.2018
	Ltd.	Adjacent to old			to
		Admn Building			16.02.2028
		(Shop No.2)			
3	State Bank of India	Anchor Gate	112	-	01.04.2015
		Building	9		to
	0	(Basement)	8		31.03.2025
4	State Bank of India	Anchor Gate	742	5 -	
	0	Building (Ground		0	
	- 8	Floor)		8	0.1.0=00.1=
5		Annexe <mark>B</mark> uildi <mark>n</mark> g	13.71	Q	01.07.2015
	8	Adj. to ol <mark>d Adm</mark> n		18	to
	8	Buildin <mark>g (Shop.</mark> 4)		8	30.06.2025

Note: * Lease will be Renewed after remittance of dues

Table 6.14 Building Lease for a period up to 10 years

Leases for a period of 5 years

Sl.	Name of the	Location	Area in Sq. Mts		Period of
No.	Allottee / Lessee		Building	Land	Lease
1	Reliance Jio Infocomm Ltd	Terrace (Mobile Tower) (i) At Central Documentation Complex	47	100	17.05.2016- 16.05.2021
3		(ii) At Gate No.10 (iii) At Guest House	- 18	81 (100) 100	
4	Indus Towers	Terrace (Mobile Tower) (i) At User Complex building	19	100	
5		(ii) At Central Documentation Complex	43	100	
6 7	8/4	(iii) At Gate No.10 (iv) At Guest House		81 (100) 100	<u> </u>
8	AMET University	EDLB Building North Annex	765		Selection letter given on 27.09.2019 for operating the Multi Skill Development Centre (MSDC) as a Revenue share partner for 5 Years.
9	FHMC	3 rd Floor of Old Administrative Building	370) -	03.02.2018- 02.02.2023
10	Sethusamudram Corporation Ltd.	1st Floor of North Wing of Anchor Gate Building	380	-	01.01.2016- 31.02.2021

Table 6.15 Leases for a period of 5 years

Leases for Religious Institutions (Allotments made by General Adminstration Department (Welfare Section)

Sl. No.	Name of the Allottee / Lessee	Location	Area in Sq. Mts	Period of Lease
	Muthumariamman Temple*	Tondiarpet Housing Colony	1278	30 Years
2	Bhoomeeswara Temple	Tondiarpet Housing Colony	639	Ancient Temple about 300 Years
		Tondiarpet Housing Colony	1125	30 Years
	Holy Trinity Church - Protestant #	Tondiarpet Housing Colony	400	30 Years
5		Tondiarpet Housing Colony	1017	30 Years

Table 6.16 Leases for Religious Institutions

LEASE PARTICULARS AT INSIDE CUSTOM BOND AREA IN CHENNAI PORT

Sl. No.	Name of the Allottee / Lessee	Location	Area in Sq. Mts	Remarks
1	Indian Coast Guard	Madhusudan jetty	1734.00	License
2	Concor	Near Am <mark>bedka</mark> r Dock		
3	Indian Navy	Chokani finger jetty	3253.60	Lease
	Customs (Container Scanner)	Near BD	20000.00	Lease
5	CCTPL	Near Ambedkar Dock	250700.00	PPP
6	CITPL	Near East Quay 2'		PPP
	Total area		565602.60	

Table 6.17

6.9 Details of Traffic operational Area I to V

- Area-I Gate No.1 to Gate No.2A
- Area-II Gate.No.2A to Main Entrance
- Area-III Main Entrance to Boat Basin
- Area-IV Boat Basin to Marshalling Yard
- Area-V/ SECTION-III Marshalling Yard to Type-V Quarters



Figure 6.18 Area-I - Gate No.1 to Gate No.2A

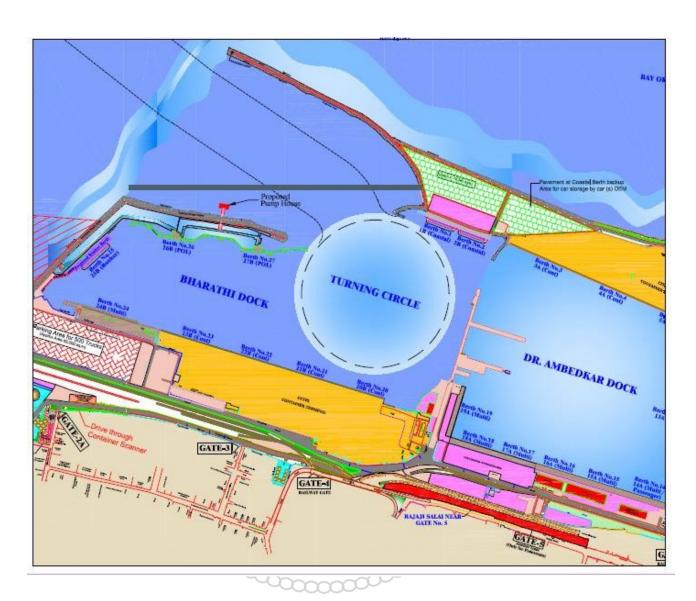


Figure 6.19 Area-II - Gate.No.2A to Gate No.5

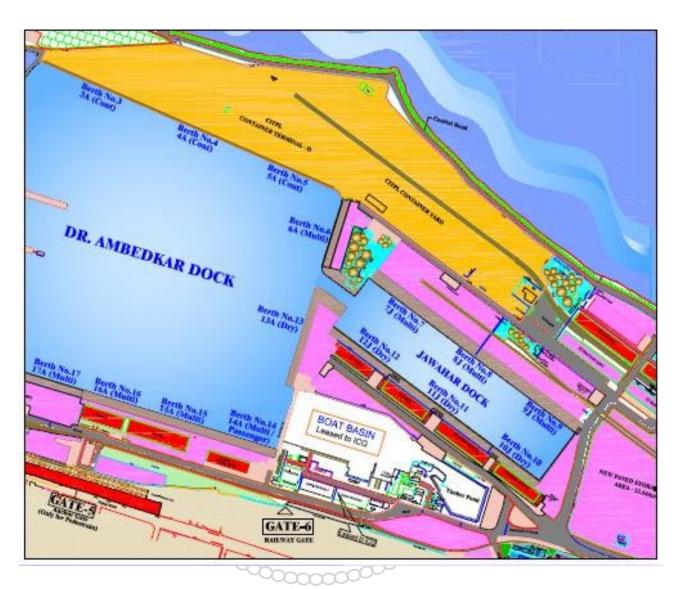


Figure 6.20 Area-III - Gate No.5 to Boat Basin

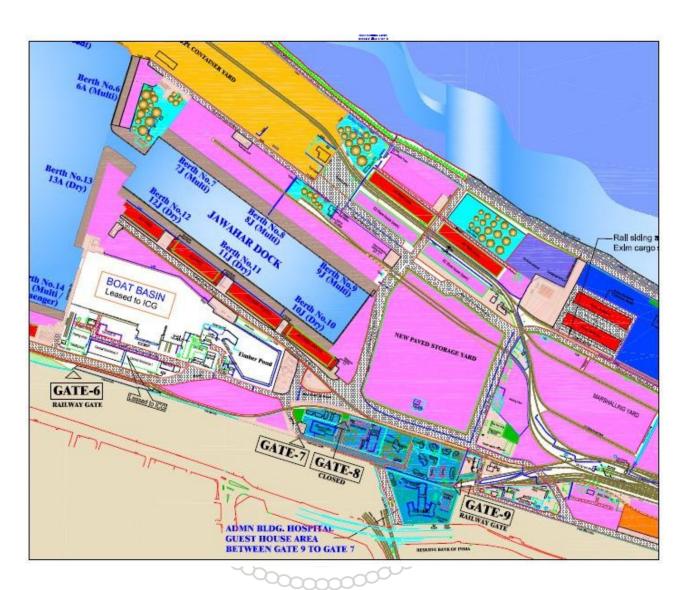


Figure 6.21 Area-IV - Boat Basin to Marshalling Yard

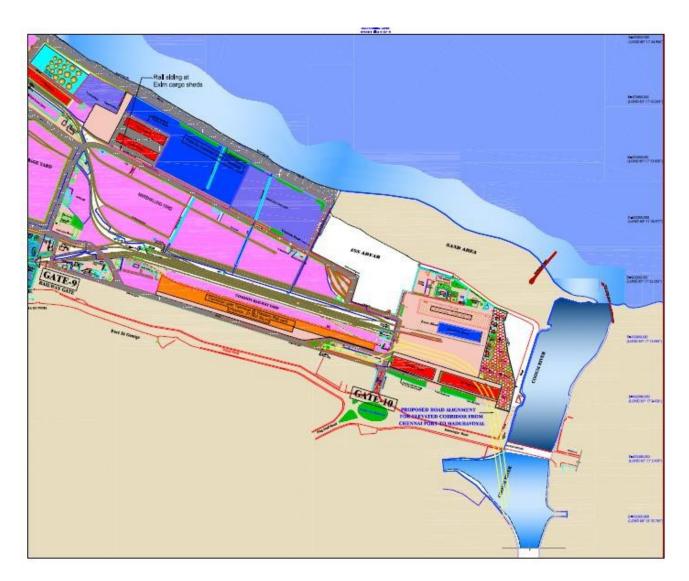


Figure 6.22 Area-V/Section-III - Marshalling Yard to Type-V Quarters

LAND AT RAJAJI SALAI

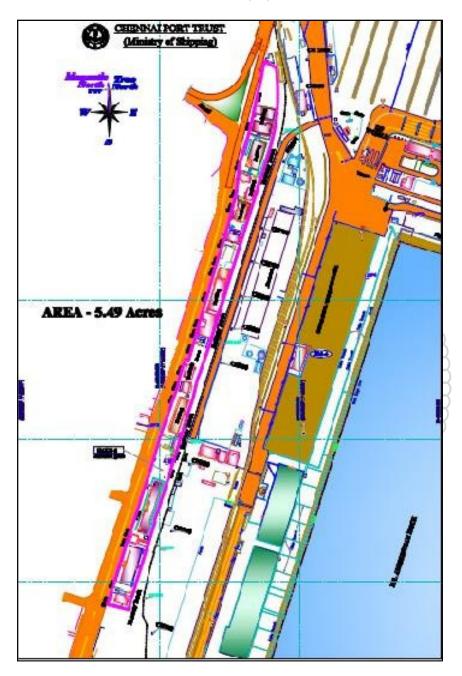


Figure 6.23

Chennai Port Authority Land Use Plan 2022

Land at Administrative office Complex Guest House, Officer's Quarters, Hospital, etc.

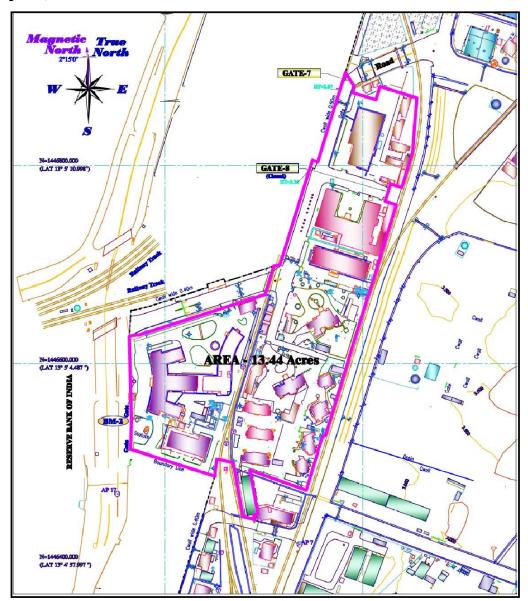


Figure 6.24

Land at Trust Villa Quarters and CISF Quarters

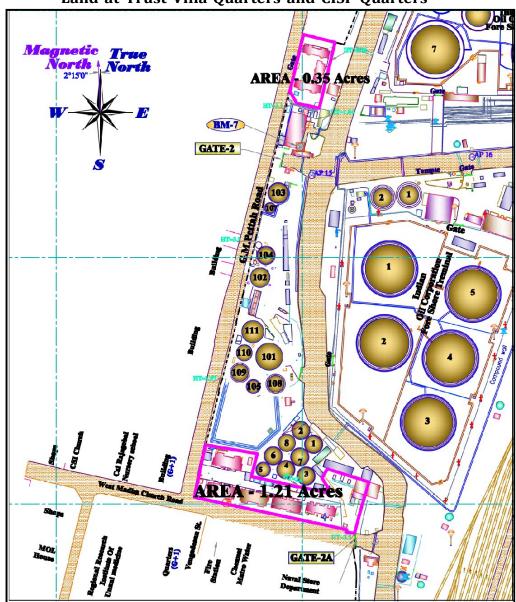


Figure 6.25

LAND AT TONDIARPET HOUSING COLONY

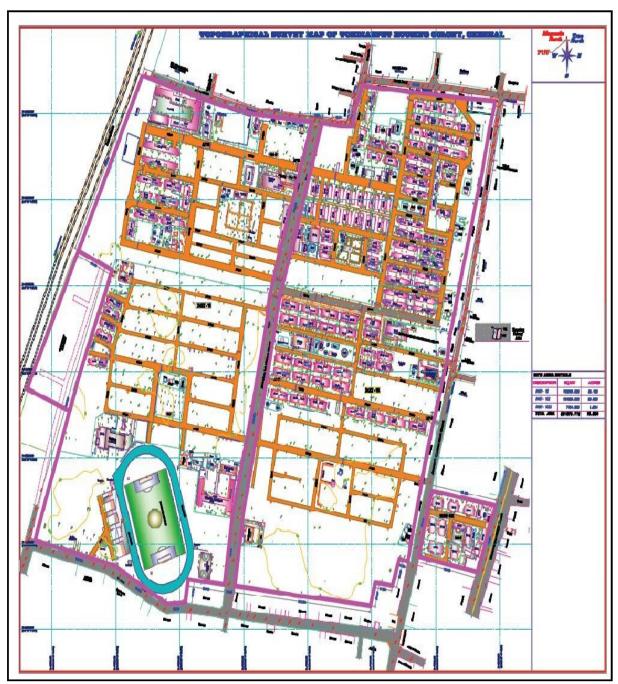


Figure 6.26

PATTA LAND AT TIRUSULAM VILLAGE

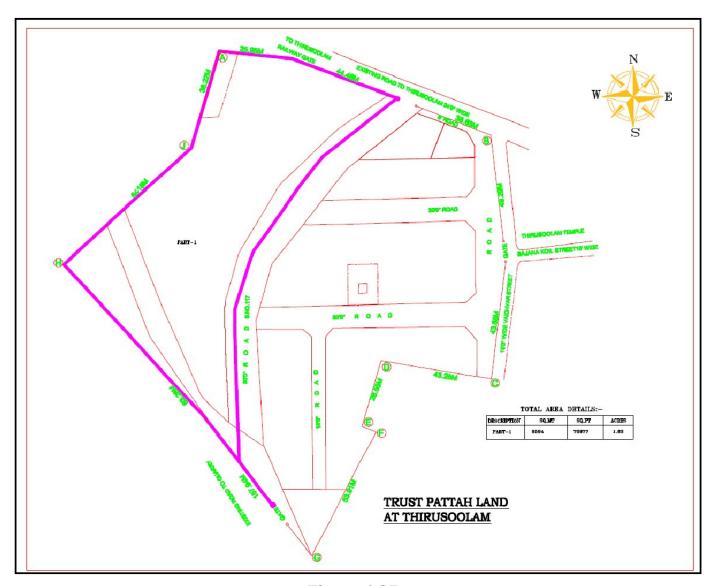
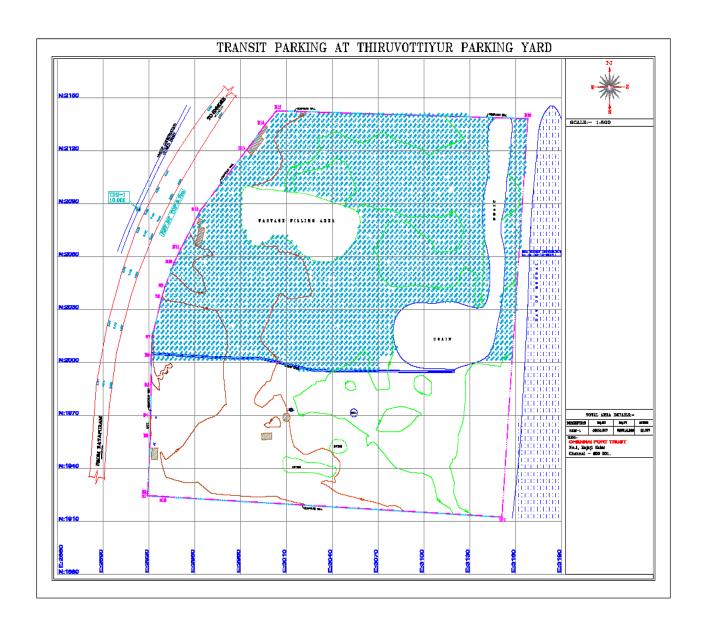


Figure 6.27

LEASED LAND AT TIRUVOTTIYUR PARKING YARD



LAND AT IBRAHIM SALAI

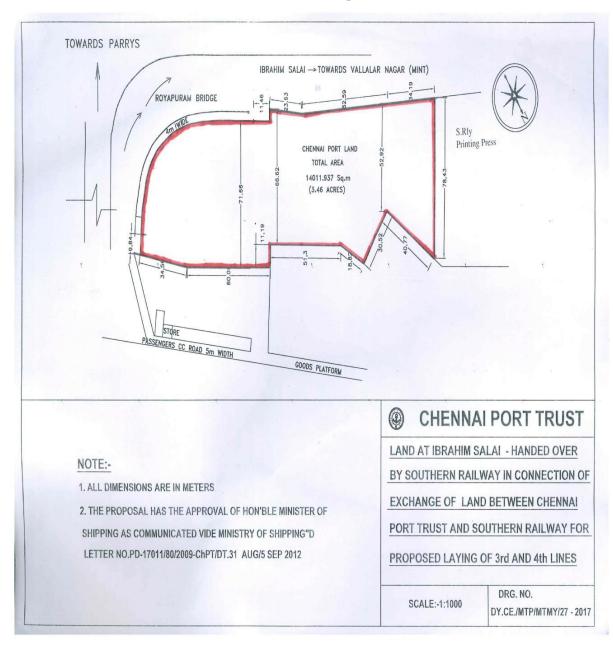


Figure 6.29

LEASED LAND AT MAPPEDU FROM SIPCOT

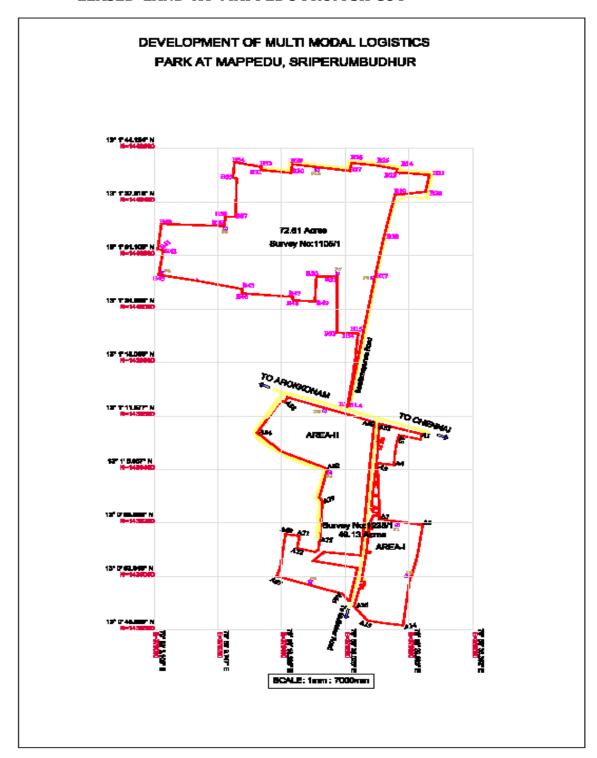


Figure 6.30

7.0 FUTURE PROJECTS

7.1 DETAILS OF ONGOING DEVELOPMENTS

General

Recognizing the long-term vision of migrating to a Landlord Port Model and understanding the evolving traffic demands, Chennai Port has initiated action for creating additional infrastructure facilities and to identify projects to be given on a PPP basis. The ongoing projects are:

- i. Development of Bunker Berth
- ii. Goods Shed at Jolarpet
- iii. Multi-Modal Logistics Park (MMLP) at Mappedu
- iv. Development of Buffer Parking yard for Container Trailers at 24B (BD II) backup area
- v. Prive-through Container scanner
- vi. Development of Dry Dock at Timber Pond and Boat Basin by Indian Coast Guard.
- vii. Privatization of Oil Docks and Bunker Berth
- viii. New Four-lane Elevated Road from Chennai Port to Maduravoyal

7.2 Development of Bunker Berth

Based on the recommendation of M/s AECOM India Private Limited which prepared "Technical note on Setting up of Bunkering Terminal at Chennai Port", an exclusive and integrated Bunker Terminal project with reserved land area for bunker storage tanks has been taken up by the Chennai Port at Bharathi Dock. Currently, the Bunker Berth is under construction and is designed to accommodate Bunker Tankers upto 10000 DWT and LOA up to 150m. The designed length of the bunker berth is 180m and the width is 18m wide. An approach trestle which could accommodate three-tier pipe racks capable of carrying up to 4 Nos. x 300 mm dia. pipelines in each tier is also planned.

The Bunker Berth has a capacity of 1 MTPA and an area of about 2.5 Ha. of land is earmarked for locating the Bunker tank farms which can be set up by the prospective agencies. This area will accommodate about 25,000KL to 30,000KL tankage structures with associated infrastructure. This area will encourage interested agencies to set up their tankage and use the berthing facility, thereby enhancing the bunker traffic at Chennai Port. The Port shall provide right-of-way for pipelines from the storage tanks to bunker berth. The expected completion of the berth is by October 2022. Currently, Chennai Port is in talks with Indian Oil, which currently carries out bunkering at Chennai Port, to provide bunker berth on a PPP basis.

The location of the berthing facility and the area for the tank farm are shown in the following Figure:



Figure 7-1: Development of Bunker Berth

7.2.1 Bunker Traffic Potential

During 2009 -10 Chennai Port handled the maximum bunker traffic of about 1.75 lakhs. This was even without the basic infrastructure required. Subsequently, though, the volumes gradually dropped down, because of the permission for OPL bunkering and an exclusive bunker terminal, there are good prospects of bunker traffic picking up. The category wise vessel traffic at Chennai Port for the past 5 years is presented in the following Table 7.1 Taking the average and applying the stem volumes, the potential is established.

Table 7.1: Chennai Port Vessel Traffic and Bunker Requirements

Vessel Category	2015-16 (#Vesse ls)	2016 - 17 (#Vesse ls)	2017 - 18 (#Vessel s)	2018 - 19 (#Vessel s)	2019 - 20 (#Vesse ls)	Avg calls /yr	Avg Stem/ vessel (MT)	Annual Bunker Need (MT)
Dry Bulk carriers	151	172	127	120	88	132	300	39,600
Liquid bulk carriers	445	402	478	478	430	447	500	2,23,500
Break bulk vessels	382	321	326	325	352	341	400	1,36,400
Container vessels	755	705	699	683	594	687	800	5,49,600
Total	1,733	1,600	1,600	1,606	1,464	1,607		9,49,100

It gives an optimistic picture of when all vessels will be taking bunkers, leading to a total traffic of around 1.0 MTPA. This may not happen. For a realistic estimate, a certain percentage of a total number of vessels calling at ChPA may be taken, which may then be gradually increased at a rate of 10% per annum.

On the other hand, IOCL assumes a mean figure of 120 T bunker-stem per vessel which gives the possible traffic as 0.19 MTPA only.

Table 7.2: Actual Bunker Traffic for the last 10 years

S. No.	Year	Bunker Volume (T)	Total Vessel Calls
1.	2010 - 11	1,27,127	2,181
2.	2011 - 12	82,164	2,043
3.	2012 - 13	62,259	1,928
4.	2013 - 14	62,528	1,804
5.	2014 - 15	48,059	1,790
6.	2015 - 16	52,386	1,733
7.	2016 - 17	61,963	1,600
8.	2017 - 18	54,426	1,600
9.	2018 - 19	64,807	1,606
10.	2019 - 20	49,513	1,464
11.	2020 - 21	46,497	1,315

*These volumes include bunkers supplied to the Indian Navy and Coast Guard Vessels

IOCL has tankage at the Foreshore Terminal. It has the following storage capacities: IFO 180 - 19,020 MT; IFO 380 - 16,325 MT; and MGO - 17,400 MT. The supplies are made through barges. IOC has presently two barges — one for white oil and the other for black oil.

The bunker barges are handled through a small jetty at the root of the northern breakwater of Bharathi Dock and to the west of BD II berth. This is closer to the IOCL Foreshore Terminal and connected by $2 \times 10^{\prime\prime}$ lines for FO and $1 \times 8^{\prime\prime}$ line for HSD. HPCL and IMC have each $1 \times 8^{\prime\prime}$ line for FO. The layout of the barge jetty and the satellite picture are shown below:

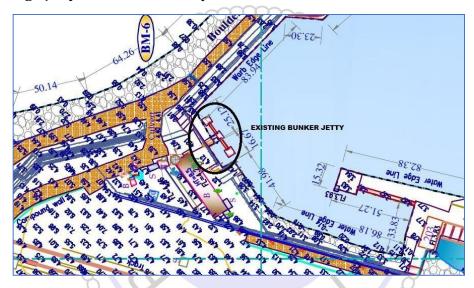


Figure 7-2: Location and Layout of the Existing Bunker Jetty



Figure 7-3: Satellite Picture of the Existing Bunker Jetty

7.3 Goods Shed at Jolarpet

Chennai Port intends to enhance the port infrastructure and boost its cargo warehousing and handling capacity by establishing an inland logistics node similar to railway goods shed on railway land at Jolarpet.

The area of Jolarpet is arrived at on the basis of industrial concentration and rail & road connectivity of the region to Chennai and Bangalore. It is envisaged that this goods shed facility would enable shuttle service of container rakes to/from the port. The containers from the nearby hinterland can arrive at the goods shed via road and then can be transferred to rail for connecting to the vessels at the ChPA. With Jolarpet acting as an extended gate to the port, it is likely to tap into the exports, generating from areas like Karur, Erode, Salem, Madurai - which will then be competitively placed with respect to ports like Chennai, Tuticorin and Cochin. The rail service would not only augment the rail share and circumvent road congestion but also ease movement for cargo generated in the Chennai cluster.

The scheduled rail facility would reduce variability in transit times thereby reducing the chances of missing vessels. The multimodal movement of containers will also reduce the cost of transportation to the port. Indian Railways has selected Chennai Port through an online tendering process and has awarded the contract to develop a goods shed facility at Jolarpet.

Jolarpet is ~220 kms from Chennai and the identified rail parcel is along the existing railway junction. It falls on the Bengaluru-Chennai line. The proposed facility is envisaged to be built on railway land at JTJ. The possession of the land would remain with the Railways and the port would develop a common user goods shed facility for a share in the terminal handling charges.

The development of a rail linked facility like an MMLP/ Dry Port / Goods shed could alleviate the issues faced by the city-locked port. This goods shed can act as an extended gate of the port wherein the containers from various centres could get aggregated and move to the port using rail shuttle services.

In an earlier Techno-Economic Feasibility study by a consultant viz. Ernst & Young (E&Y), appointed during 2018-19 by SDCL, for a similar project, the consultant indicated that the proposed facility at Joalrpet Jn. (JTJ) is strategically thought and placed to retain/augment container traffic at Chennai Port. The location is well suited to cater to cargo generating clusters like Bengaluru, Hosur, Coimbatore Mysuru, Erode, Karur, Salem, Namakkal, Krishnagiri, Tiruppur, Pollachi amongst others. This study considered a 30 Acres leased land at JTJ. The recommendations were to develop a facility on about 16 acres of land in Phase I and later on 24 acres of land in Phase II. The Consultant has arrived at a total capital cost of Rs.109 Cr (including the

upfront land lease cost for Phase I and the development cost including equipment). The computed NPV of the project was calculated at Rs.19.5 Cr while IRR was 13%. However, the approval of leasing of land from Indian Railways did not materialize.

Subsequently, Southern Railway called e-tenders for Development of Goods shed at Jolarpet on a revenue-sharing basis. ChPA participated in the tender and became the successful bidder. Southern Railway issued LOA to Chennai Port. Chennai Port invited tender for "Development of the Goods shed facility at Jolarpet" and work order was issued on 31.01.2022. Project expected to complete by December 2022.

7.4 Multi-Modal Logistics Park (MMLP) at Mappedu

DEVELOPMENT OF MULTIMODAL LOGISTICS PARK AT MAPPEDU.

Brief of the Project: The Ministry of Road Transport & Highways (MoRT&H) approved the Management model for implementation of "Development of Multimodal Logistics Parks (MMLP)" through PPP mode, by forming an SPV with Stakeholders of NHAI, ChPA, GoTN &RVNL as equity partners and the actual MMLP infrastructure to be developed by a private developer.

The total Estimate Cost of MMLP isRs.1423.50 Cr. (including Rs.782.58 Cr. to be invested by the Concessionaire).NHLML/NHAI is the implementing agency, through SPV, "CHENNAI MMLP PRIVATE LIMITED" comprising NHLML, ChPA, TIDCO & RVNL.

The Total area for development of MMLP is 184.27 acres. ChPA has offered land parcels measuring to an extent of 121.74 acres at Mappedu, which was leased from SIPCOT, for the development of MMLP project and valued at Rs.166.78 Cr. TIDCO is facilitating the acquisition of additional land for the project and its contribution is Rs.50 Cr. NHLML/NHAI contribution is Rs.257.50 Cr. (cost towards land for MMLP, road connectivity, land for rail connectivity & power supply connection) and RVNL contribution is Rs.166.64 (cost towards rail connectivity)

Salient Features: To cater to the domestic cargo requirements of Chennai region and evolve an economically feasible network of rail-to-road and to road-to-rail cargo movement across the country. In line with this, the location of Mappedu is chosen as it is close to the industrial clusters in Sriperumbudur, Irungattukkotai, Oragadam, etc. which have all developed as manufacturing basis for automobiles, heavy manufacturing engineering industries, etc. Southern Railway has approved for railway corridor plan from the nearest railway line near Kadambattur station to MMLP site. NHAI is widening and upgrading the existing SH-50B from Chennai Peripheral Ring Road (CPRR) to

MMLP site. The site is located at approx.52 Kms from Chennai Port, 80 Kms from Ennore Port and 87 Kms from Kattupalli Port and Chennai Airport is located at approx.44 Kms from the site.

Proposed Project Components: The Project also envisaged various related and allied infrastructure facilities like core ware housing facilities, support logistic facilities, administrative commercial and other amenities facilities, utility facilities, landscaping facilities, staff housing facilities and racking system facilities including maintenance of the railway line connectivity and optional facilities road & transportation facilities.

Letter of Award issued on 11.11.2022 to the Concessionaire, M/s Reliance Industries Limited, Navi Mumbai for Development Operation and Maintenance of the Multimodal Logistics Park (MMLP) at Mappedu in Thiruvallur district through PPP on DBFOT basis.

The Development of MMLP is envisaged in Phases:

- Phase-1 is to be completed by 2 years from Appointed Date at an investment cost of Rs.349.78 Cr.
- Phase-2 is to completed within 10 years from the Appointed Date at an investment cost of $122.52\ Cr$
- Phase-3 is to completed within 15 years from the Appointed Date at an investment cost of Rs.310.28 $\,\mathrm{Cr}$

Period of Project: 45 years (including the construction period from the Appointed Date)



Figure 7-4: MMLP at Mappedu

7.5 Development of Buffer Parking yard for Container Trailers at 24B (BDII) backup area

In order to provide a smoother flow of trailer traffic within and outside the Port, a buffer parking area on the backup area of 24B (BDII) berth is being planned. The BDII backup area of approximately 84,000 sqm will provide a parking facility for approx. 350 trucks. Two toilet blocks, a canteen and, an office area are also planned along with the provision for illumination of the yard, CCTV, RFID,ATM etc. The estimated cost of development is approximately Rs.52.65 Crores.

The facility is expected to reduce the trailer load on the city as well as port roads. It will help smoothen the trailer flow and reduce congestion on the roads. The trailers parked on a designated area within the port would provide a sense of security for the drivers as well the trailer owner. It would help in avoiding diversion of cargo to the competitor ports, improving vessel and port productivity, curb air and noise pollution from idling of trailers in road congestion, and help monetize port assets. Tender for the above work will be floated shortly.

7.6 Drive-through Container Scanner

The Letter of Intent (LoI) to M/s. Rapiscan System Pte. Ltd. (RSPL), Singapore has been issued by IPA on 09/07/2019 for procurement of 4 nos. Drive Through X-Ray Container System (Road) System for JNPA, VoCPA, ChPA & KoPA. The Work order has been issued to RSPL and the contract agreement has been signed on 16/10/2019 for supply, installation and commissioning of one No. Drive Through X-Ray Container Scanning (Road) System in Chennai Port at the total cost of approx. Rs. 46,25,21,855/-

The site approval for the installation of 6 MV & 3.5MV Accelerator-based container Scanner has been accorded by AERB in September 2018. Layout Approval for installation of 6 MV & 4 MV Accelerator-based Drive Through container Scanner has been accorded by AERB in December 2019. AERB has accorded the permission for procurement of 6MV & 4MV (Dual Energy) Accelerator-based Drive Through Container Scanner in December 2020. Factory Acceptance Test (FAT) has been conducted at the factory of M/s. Rapiscan in Stoke/UK during December 3-4, 2020 by the third party "BUREAU VERITAS". FAT reports have been reviewed in IPA and are satisfactory and acceptable. The DTCS arrived at Chennai Port on 23.02.2021.

AERB has accorded the approval for commissioning of 6 MV and 4 MV (dual layers) accelerator based container scanner.

An additional drive-through container scanner Near Gate No. 2A was inaugurated by Hon'ble Union Minister of Ports, Shipping and Waterways, Shri Sarbananda Sonowal, on 14th August 2022 to expedite cargo clearances and reduce import dwell time.

7.7 Development of Dry Dock at Timber Pond and Boat Basin by Indian Coast Guard

Development of Dry Dock at Timber Pond and Boat Basin was envisaged under PPP mode to optimize the use of Port facilities and increase revenue to the port. Accordingly, tenders were invited through PPP Mode, but they failed to yield satisfactory responses. Later, Cochin Shipyard Limited (CSL) was offered to take up the project on a nomination basis, they communicated their inability to take up the project.

During 2015, the Indian Coast Guard (ICG) evinced interest to develop a Dry- Dock facility through their funds on a long-term lease basis and agreed to pay an upfront premium. In April 2019, ICG informed that the Ministry of Defence has sanctioned this ICG the project of leasing of Timber Pond / Boat Basin area from ChPA for 99 years.

ChPA approved the leasing of Boat Basin and Timber Pond for 99 years to the Indian Coast Guard for the Development of Dry Dock/Ship repair facility subject to the approval of Ministry of Ports, Shipping, and Waterways. The Empowered committee approved this proposal vide letter dt. 10/10/2019.

All assets of Timber Pond/Boat Basin, which consists of 61000 sqm of water front area and 48400 sqm of land area, including buildings/workshops, Slipway(s), Roads, Jetties, water supply & electricity arrangements, drainage system, etc. were handed over to ICG from September 2019 in a phased manner and completed as on 21.10.2020, pending finalization of financial terms.

ICG, requested Chennai Port to consider i) 25% concession on upfront Premium; and ii) waiver of security deposit. ChPA Board, vide BR No.130 dated 17.12.2021 resolved except the request of ICG. ICG yet to remit the balance amount.

7.8 New Four-lane Elevated Road from Chennai Port to Maduravoyal

The project proponents are National Highways Authority of India (NHAI), Chennai Port Authority (ChPA) and Government of Tamil Nadu (GoTN) and NHAI is the implementing agency. Earlier, in December 2008, CCEA accorded approval for execution of this Elevated Road project on BOT basis.

The project under BOT model commenced during 2011 and stalled due to intervention of GoTN during 2012, citing violation of alignment along Cooum

river. After pursuance of MoS&ChPA, GoTN issued NOC for the revised alignment with certain conditions, based on the recommendations of the Technical Committee. NHAI, vide letter dated 23.07.2020, informed that Competent Authority has given approval to take up the project on EPC mode.

Subsequently, during the review meeting held on 16.02.2021, the Hon'ble Minister suggested for implementing the project in a Double Deck Elevated Road with 13 Entry/Exit ramps, in which Tier I meant for carrying local city traffic and Tier II dedicated for Port bound traffic. The length of the road is 20.565 Km having width of 4 lane. The capital cost of the project is Rs.5852.07 crores (as per the Draft Revised DPR furnished by NHLML on 11.04.2022).

An MoU for the project was entered among NHAI, GoTN, ChPA& Indian Navy on 16.05.2022 and Chairman, Chennai Port Authority signed on behalf of ChPA in the presence of the Hon'ble Chief Minister of Tamil Nadu and the Hon'ble Minister of State for Road Transport & Highways. Foundation Stone for the Project was laid by the Hon'ble Prime Minister on 26.05.2022. The project configuration changed as double deck with ramps, ChPA is in the process of obtaining CRZ clearance for the Project from MoEF&CC.

7.9 Privatization of Oil and Bunker Berths

During the Review Meeting at Chennai on 19.12.2019 with the Chairmen of all Major Ports, Secretary (Shipping) suggested exploring the possibility of providing existing berths / infrastructure under PPP mode so that in near future the Ports smoothly shift to Landlord model. Based on the above direction, Chennai Port is exploring possibilities of setting up the dedicated facilities at the existing Berths 26B & 27B by Port Dependent Industries (PDI) for handling POL and other liquid cargoes as per the Policy for the award of waterfront and associated land to Port Dependent Industries in Major Ports (Captive Policy). The POL operators of ChPA viz., CPCL and IOCL evinced their interest in setting up a dedicated facility in Chennai Port to handle POL cargoes. Hence, IOCL & CPCL have been requested to submit their proposal along with the Feasibility Report for Setting up a dedicated facility to handle Captive Cargo at Berth 26B & 27B in the Bharathi Dock in line with the Captive Berth Policy.

8.0 PORT CONNECTIVITY

Various steps are being taken by Chennai Port to ensure unhindered movement of cargo to and from Chennai Port both by road and rail.

8.1 ROAD CONNECTIVITY

Due to the increase in the containers movement by road, severe congestion was experienced and the port has taken the following steps to ease congestion.

- opening additional lanes at Gate No.1 was completed
- work for construction of 8 lanes, Gate Complex at Gate No.1 (4 in & 4 out) was completed
- widening of internal roads and along with road dividers was completed
- Chennai Corporation has re-laid the arterial roads connecting the Port.

In addition to the Elevated Express Highway, the EMRIP project has also been initiated to improve the road connectivity to the Port. The work includes upgradation of 1.6 KM stretch of road from Gate No.1 to S.N. Chetty Road through the Fishing Harbour. The project is monitored by the State Government.

8.2 RAIL NETWORK

8.2.1 Rail facilities inside Chennai Port:

Chennai Port is served with two Rail Entry / Exit arrangements connecting Indian Railway network, one through Gate No.4 connecting Bharathi Dock at the Northern end of the Port with Royapuram Station and the other through Gate No.9 connecting Port Marshalling Yard at the southern end of the Port with Chennai Beach Station Yard. Total length: Inner Harbour – 22.90 KM & Outer Harbour – 14.10 KM.

8.2.1.1 Port Marshalling Yard

Port Marshalling yard at the Southern end of the Port is connected to Southern Railway network through Chennai Beach Yard with a single line. This Marshalling yard is also connected to Bharathi dock through a Port transfer line. This Marshalling yard consist of 4 lines of Eastern yard, 6 lines of Central Yard.

Port Marshalling yard is the feeding yard for the second Container Terminal, Jawahar Dock and CONCOR yards. In addition, this yard also handles loading / unloading of Port's other general cargo / bulk cargo handled in Eastern yard.

The layout of Port Marshalling Yard is such that entry/ exit to all sidings and Chennai Beach are on the Northern end of this yard.

Feeder sidings of Chennai Port

Common Railway loading Platform - 700m x 30m wide concrete platform was developed with 2 full rake capacity lines in Western Yard.

8.2.1.2 Chennai Container Terminals (P) Ltd (CCTPL)

This terminal's Rail bound Container traffic is road-bridged to this terminal from the available CONCOR facility inside the Port.

8.2.1.3 Chennai International Terminals (P) limited (CITPL)

This terminal is supported by dock rail siding with 2 lines of 725 mts each capable of handling 2 rakes simultaneously.

8.2.1.4 Container Corporation of India (CONCOR)

CONCOR has a Port side Container Terminal within Chennai Port and is one of the licensed Container Operators of Indian Railways. CONCOR is the only container operator, operating both rail and road container traffic to and from the Chennai Port. One full rake rail handling line is available in CONCOR yard for handling container trains.

9.0 TONDIARPET HOUSING COLONY

Tondiarpet Housing colony having total Area of 81.64 Acres, in which Encroachment (under litigation) is 2.25 Acres and therefore Net Area Available is 79.39 Acres.



Figure 9.1 Total Layout of Tondiarpet Housing Colony

For working Convenience, the above available area is divided into I to V Zones

Area of Zone I - 64,806 Sqm.

Area of Zone II - 88,804 Sqm.

Area of Zone III - 53,194 Sqm.

Area of Zone IV - 1,06,689 Sqm.

Area of Zone V - 7,787 Sqm.

Total area - 3,21,280.5Sqm. (79.39 acres)

Encroachment - 2.25Acres

9.1 ZONE-I

Zone I, earmarked at North East corner, bounded north by MGR Road, East by Arunachaleswarar Koil street, South by KK Scheme Road and

west by AA Scheme Road.

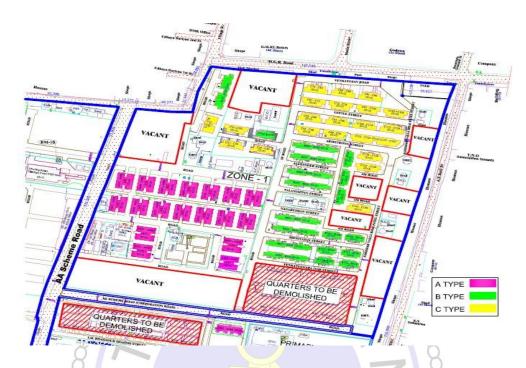


Figure 9.2 Layout of Zone - I

- 9.1.1 Total area of Zone I is $64,\!806$ Sqm . Almost 76.25% of the quarters are located in this zone. In this Zone, 'A 'Type blocks 18 Nos, 'B' Type blocks 19 Nos, 'C' Type Block 21 Nos, and other service area occupying. Total area occupied by above quarters including service area is about $48,\!933$ Sqm.
- 9.1.2 It is proposed to dismantle the dilapidated condition quarters. An area about 4620 Sqm. will be obtained by dismantling the dilapidated quarters. Already 10,619 Sqm. area of land is vacant. After dismantling of dilapidated condition quarters, total area about 15239 sqm (3.77 acres) will be lying vacant. This 3.77 acres of vacant land may be reserved for future expansion of Residential quarters / building. An area measuring 634 Sqm of Land has been leased out for TANGEDCO.

9.2 **ZONE - II**

Zone II is earmarked at South East corner, bounded north by KK Scheme Road, East by Arunachaleswarar Koil street, South by Private Buildings and west by AA Scheme Road.

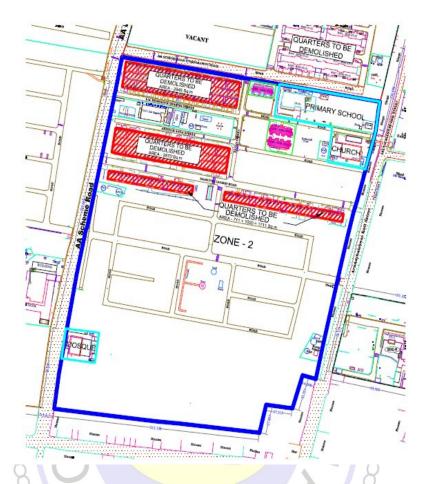


Figure 9.3 Layout of Zone - II

9.2.1 Total area of Zone II is 88,804 Sqm. This Zone is occupied by (i) 'A' Type blocks – 3 Nos, (1227 Sqm.) (ii) Chennai Port Primary School (Not functioning) (3229 Sqm.), (iii) Church, (1554 Sqm.) (iv) Mosque (1014 Sqm.) and (v) otherservice area electrical sub-station (1112 Sqm.). It is proposed to dismantle the dilapidated quarters. The area occupied by this quarters is 7529 Sqm. Therefore total area occupied is 15,665 Sqm and at present vacant area is 73,139 Sqm.

9.2.2 Presently, Chennai Port Primary school is not functioning. Hence, this area can be effectively utilized. Type 'A' Qts (1227sqm.) can be shifted to Zone I.By leaving Electrical Sub-Station, Church & Mosque, (1112+1554+1014= 3680 sqm.), the rest of the area about (88,804-3680= 85,124 sqm) including area after dismantling the dilapidated Building can be effectively utilized for Industrial / Commercial Purpose.

9.3 ZONE - III

Zone III is earmarked at South West corner, bounded north by Zone IV, East by AA Scheme Road South by Elaya Mudali Street and west by Encroached area.



Figure 9.4 Layout of Zone -III

9.3.1 Total area of Zone III is 53,194 Sqm . Welfare facilities are located in this zone. This Zone comprises of Community Hall, Sports Complex, Badminton Court, Stadium and School run by Greater Chennai Corporation. Most of the area in this zone is occupied by welfare facilities of the Port Employees & their wards. Hence, no shifting / adding is recommended in his zone.

9.4 ZONE - IV

Zone IV earmarked at North West corner , bounded north by Otraivadai Street, East by AA Scheme Road, South by Zone III and west by Encroached area & Railway Track.

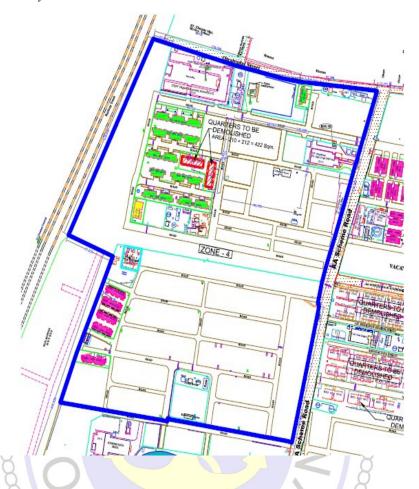


Figure 9.5 Layout of Zone - IV

- 9.4.1 Total area of Zone IV is 1,06,689 Sqm. This Zone comprises of 'A' Type blocks 5 Nos (2237 Sqm), 'B' Type blocks 16 Nos, 'C' Type Block 1 No (7375 Sqm), Chennai Port Higher Secondary School with open auditorium (Sports Ground) (7267 Sqm), Dispensary block currently occupied by High Court CISF (1669 Sqm), Two Temples and other service area (1110 Sqm). Apart from this an area around 37,818 Sqm,. is occupied by OHT and electrical stores, Roads etc., Area occupied by Dilapidated condition quarters is 422 Sqm.
- 9.4.2 Out of 1,06,689 Sqm.(26.36 Acres) of area available, already 57,476 Sqm. (14.2 Acres)(2237+7375+7267+1669+1110+37818) area has been occupied by Quarters, Temples (2 Nos.), Dispensary Block (occupied by CISF deployed for Chennai High Court), Chennai Port School, OHT, Electrical stores and Roads. This 14.2 Acres of Land may be continued as Residential Purpose.
- 9.4.3 An area about 19,195 Sqm.(4.74 Acres) earmarked for Kendriya

Vidyalaya School run by GoI. An effective area of (1,06,689 Sqm. – 57,476 Sqm. -19195 Sqm.) 30018 sqm (7.42 Acres) in Zone IV earmarked for Chennai Port's future Proposal.

9.5 **ZONE - V**

Zone V is earmarked at South East corner, bounded North by Private Buildings, East by Tiruvottiyur High Road, West by Arunachaleswarar Koil street, and South by Private Buildings.



Figure 9.6 Layout of Zone - V

- 9.5.1 Total area of Zone V is 7,787 Sqm (1.92 acres). This Zone occupied by (i) Civil Division Office incl. Emp. Rest room, shops & other service area is 769 Sqm.
- 9.5.2 Hence, Area occupied by Civil Division office and employees rest room 769 sqm can shifted to Zone I.
- 9.5.3 Zone V is located in Tiruvottiyur High Road. All other zones are surrounded by narrow street except Zone V. Hence it is suggested to earmark area for four lane road in the north side of the Zone V, so as to have better connectivity from Tiruvottiyur High Road to all other Zones. For this purpose 20m (approximately) in width may be earmarked along north side of Zone V. This proposed road will connect all other Zones with Tiruvottiyur High Road for better accessibility, and land in other zones may be attractive for commercial purpose.
- 9.5.4 Out of 7,787 Sqm. land an area about 2,000 Sqm. earmarked for four Lane Road. Remaining area of 5787 Sqm. Land may be utilized for commercial Purpose.



Figure 9.7 TOTAL VACANT DETAILS LAYOUT

ABSTRACT

- Zone 1: All 16.01 Acres in this Zone will be Continue as Residential Zone
- Zone 2 : Out of 21.95 Acres, 21.03 Acres shall be Leased out after converting as Commercial Zone.
- Zone 3 : All 13.14 Acre will be Continue with exg. Facilities.
- Zone 4: Out of 26.36 Acres, 14.20 Acres shall continue as Residential purpose, 4.74 Acres Earmarked for CBSE school, 7.42 Acres Earmarked for ChPA future Proposals.
- Zone 5: Out 1.92 Acres, 0.49 Acres earmarked for Four Lane Road and remaining 1.43 Acres shall be leased out after converting as Commercial Zone.

10.0 CONCLUSION

- At present, ChPA has a land area admeasuring 827.21 Acres. Where 714.54 Acres is within Custom Bond area and 112.67Acres is outside the Port area.
- Within the Custom Bond area the Port has facilities like Berths/Jetties/Terminals storage of bulk cargoes, break bulk cargo, Tank farms, road, railway stations, plantation and buildings for operations/offices totaling to 714.54 Acres
- Land outside Custom Bond area, the port has facilities such as buildings, staff quarters at Tondiarpet Housing Colony 79.39Acres
- Port has taken land of 121.74 Acres from SIPCOT at Mappedu and 8.54 Acres at Tiruvottiyur from Greater Chennai Corporation.
- Locations have been identified within the Custom Bond area for future facilities like Tank farms, Paved Storage Yard for Bulk/Break bulk cargo etc.,
- The 3.46 acres of Railway land exchanged from Southern Railway is having proximity with Bus Route, Suburban Train and also Metro Rail, the same can be used for Construction of Tank Farms and other allied activities relating to Port operations.

11.0 CONCLUSION (OUT SIDE CUSTOM BOND AREA AT TONDIARPET)

- Out of 79.39 Acres,
 - 22.46 Acres (Zone II 21.03 Acres + Zone V 1.43 Acres) can be effectively utilized for Commercial Purpose after converting from Residential zone to commercial zone.
 - 0.49 Acres in Zone V earmarked for Four lane Road
 - 4.74 Acres may be earmarked for CBSE School in Zone IV
 - 7.42 Acres may be earmarked for ChPA future Proposals in Zone IV
 - 44.28 Acres may be earmarked for Continue as Residential Zone & Existing welfare facilities (Zone- I 16.01 acres + Zone-II 0.92 acres + Zone-III 13.15 acres + Zone-IV- 14.20acres).

