

---

# Initial Environment Examination (IEE) report for Retrofit of Government Working Women's Hostels at Chennai

---

*Final Report*

(Strictly confidential for controlled circulation)

Date: 5<sup>th</sup> May 2021

Submitted by,



**Emergent Ventures India Pvt Ltd**

Magnum Tower 1, 8th Floor,  
Golf Course Extension Road,  
Sector-58, Gurgaon  
Haryana, India – 122001



## Table of Contents

1. Project overview .....	4
2. Existing Environment.....	8
2.1. Physical Environment.....	8
a) Topography.....	8
b) Meteorology and Climate.....	8
c) Hydrology and drainage .....	8
d) Water supply and sanitation.....	8
e) Air Quality & Noise.....	9
2.2. Biological Environment.....	9
a) Forest and Land Use.....	9
b) Flora and Fauna.....	9
2.3. Socio-economic& cultural environment.....	9
3. Potential Environmental Impacts and Mitigation Measures.....	10
4. Analysis of Alternatives.....	12
5. Institutional Arrangements.....	13
6. Environmental Monitoring & Management Plan (EMP).....	13
7. Public Consultation & Disclosure Mechanism .....	13
8. Grievance Redressal Mechanism .....	13
9. Conclusion & Recommendations.....	14
10. Annexures.....	15
Annexure1: Documents received and reviewed.....	15
Annexure 2: Site Photographs .....	16



## Disclaimer

This report contains information that is confidential and proprietary to Tamil Nadu Infrastructure Fund Management Corporation Ltd. (TNIFMC) and may not be reproduced in whole or in part, nor may any of its contents be divulged to any third party without the prior written consent of TNIFMC. This report includes information obtained by EVI from TNIFMC and Tamil Nadu Working Women's Hostels Corporation Limited (TNWWHCL) considered to be reliable. EVI and its respective affiliates, officers, employees, agents and consultants make no representation or warranty as to the accuracy or completeness of the contents of this report, and take no responsibility for any loss or damage suffered as a result of any omission, inadequacy or inaccuracy herein. EVI makes no representation or warranty as to the accuracy of such statements or assumptions.

This report contains both historical and analytical information to the best knowledge of EVI. In particular performance or results or achievements are subject to known and unknown risks, uncertainties and contingencies, and which may cause actual performance, results or achievements to differ materially from those which are anticipated. Factors which may affect such statements include, among other things, overall political, economic and business conditions, pricing and other competitive factors in the focus sectors changes in regulations etc.

This report is only intended for distribution to TNIFMC. The transmission of this report without the written consent of TNIFMC to any person other than the stated recipient is unauthorised and may contravene regulatory requirements of relevant authorities.

## 1. PROJECT OVERVIEW

The Tamil Nadu Infrastructure Fund Management Corporation Limited (TNIFMC) is an Asset Management Company (AMC) promoted by the Government of Tamil Nadu (GoTN) for the purpose of raising and managing alternative asset funds focused on sectors like infrastructure, affordable housing etc. TNIFMC is currently managing two Alternative Investment Funds (AIF), viz., Tamil Nadu Infrastructure Fund (TNIF) and Tamil Nadu Shelter Fund (TNSF). Tamil Nadu Shelter Fund (TNSF) is registered as a Category I (Social Venture) Alternative Investment Fund, with a mandate to invest in affordable housing in Tamil Nadu. TNSF invests in affordable housing projects in the private, PPP or Government and/or its agencies. The primary focus of TNSF is:

- Affordable housing – housing for the economically weaker (EWS) and low-income groups (LIG),
- Hostels - for working women from all sections of the society
- Industrial accommodation for workers in SIPCOT Industrial Complexes/ Parks
- Senior and assisted living

Tamil Nadu Working Women’s Hostels Corporation Limited (TNWWHCL) is a Special Purpose Vehicle (SPV) established in 2019 and incorporated on 6<sup>th</sup> February 2020 as per Companies Act 2013 by Department of Social Welfare and Nutritious Meal Programme under Government of Tamil Nadu in order to handle the social infrastructure projects in the state such as Working Women’s Hostel, Senior Citizen Homes, Inclusive Living, etc. Owing to the huge demand for safe and affordable accommodation for working women, the TNWWHCL has initiated the process of retrofitting existing Working Women Hostel so as to provide affordable accommodation and protection to working women. TNSF is planning to invest in TNWWHCL for the retrofitting of existing Working Women Hostel at eight locations (Salem, Tiruppur, Perambalur, Villupuram, Vellore, Tirunelveli, Thanjavur and Chennai)

This Initial Environment Examination (IEE) report is for the proposed retrofit of working women hostel in Chennai. The description of proposed site is provided in table below:

*Table 1. Description of proposed site*

Parameters	Description
------------	-------------



Project details	The project aims to retrofit the existing hostel for working women and girls in Chennai, Tamil Nadu. The hostel will be retrofitted with environmentally friendly interventions suited to the needs of the occupants.
Location	The hostel is located in 2nd Cross Street, Shastri Nagar, Adyar in South Chennai, TN - 600020 Latitude: 12°59'57.74"N, Longitude: 80°15'27.26"E
Total area	Total land area of the site is 1319 Sq. m and built-up area is 1443 Sq. m
Present and Past land use	The site is presently being utilized as a Welfare hostel for working women.
Adjoining area	The hostel building is surrounded by residential apartments & independent bungalows. There are also some small, medium and large scale IT/ITES and other companies situated nearby.
Access road	The hostel building is accessible through 2nd Cross street, a branch out road from the main Lattice Bridge (LB) Road.
Building	Corporation Building (renovated & handed over on 20.01.2019) Structure (number of floors) – Ground + 2 floors Number of Rooms - 52
Operational Since	Inaugurated in 1987
Present Strength (as on 15.10.20)	Total 52 Rooms with 158 Beds. The hostel is currently 48% (58 beds) occupied <ul style="list-style-type: none"> <li>• 8 seater - 3 rooms</li> <li>• 6 seater - 2 rooms</li> <li>• 3 seater - 28 rooms</li> <li>• 2 seater – 19 rooms</li> </ul>
Present Staff Details	Office Assistant-1 (Govt.) Night watchman-1(Govt.) Cook – 2 (Contract Employee)

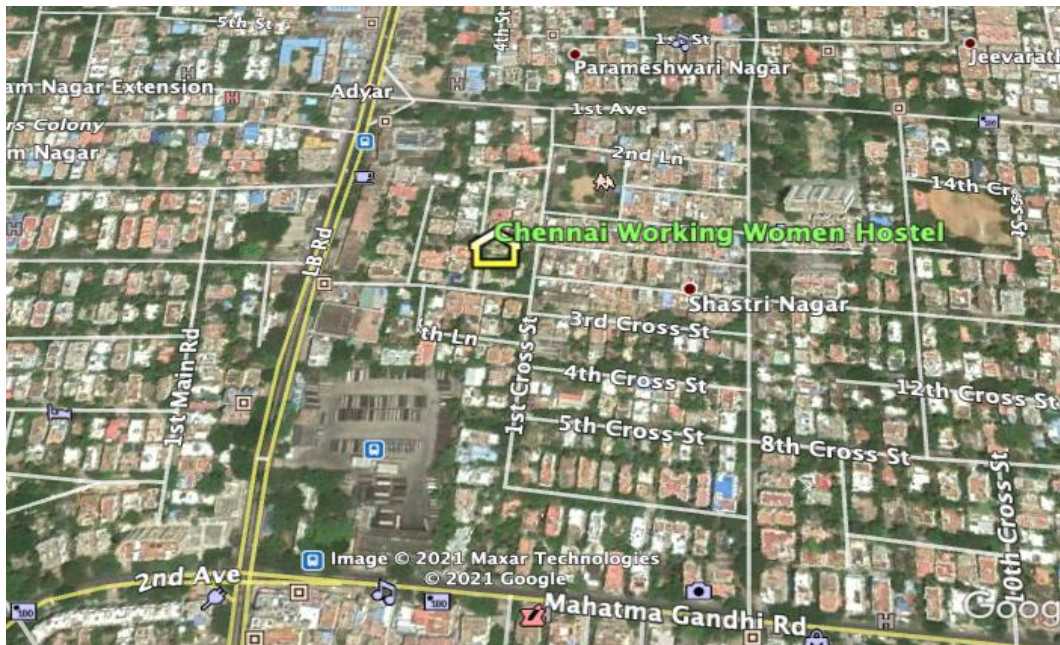


Figure 1. Location of project site on google earth

The feasibility report prepared by Cushman and Wakefield details out the present status of the Chennai Working Women Hostel, requirements of retrofitting and proposed enhancements.

The retrofitting plan is proposed for all the hostel floors. As per the proposed plan for ground floor, the storage room will be converted into the dining room for the occupants. The warden room will be converted to cooks room and a partition will be added in the hostel office to accommodate the warden room. Rice store and cook's room will be converted into hostel rooms. For the first floor, the dorm room will be converted into the entertainment room. The layout of the 2 bedded rooms will be retained. However, the room layout for 3; 6 and 8 bedded rooms will be converted into 2; 4 and 6 bedded rooms respectively.

CCTV camera, RO water dispenser, one Garbage bin per room and common bins in the corridor will be provided along with fire extinguishers. Fly mesh screen will be provided for windows along with mirrors and mattresses for each room. Repair work will also be carried out which will include replacement of broken tiles and damaged electrical fixtures. Exterior and interior repainting will be also be done as part of the retrofitting process

The summary of proposed retrofitting are mentioned in table

Table 2. Summary of proposed retrofitting

S. No	Proposed Retrofitting
-------	-----------------------



Site Level Retrofitting	
1	Security cabin with toilet
2	Exterior painting in accordance with standardization scheme
3	2-wheeler parking with GI sheet roof covering
4	Laundry area in the courtyard
For Existing 2 Bedded Room	
5	Room layout retained
6	Cupboard shutters
7	Foldable study unit
For Existing 3 Bedded Room	
8	Room layout changed to 2 bed/room
9	Cupboard shutters
10	Foldable study unit
For Existing 6 Bedded Room	
11	Room layout changed to 4 bed/room
12	Cupboard shutters
13	Foldable study unit
For Existing 8 Bedded Room	
14	Room layout changed to 6 bed/room
15	Cupboard shutters
16	Foldable study unit

This is Initial Environment Examination (IEE) report prepared as per the requirement of ADB's Safeguard Policy Statement. The information collection for preparation of this report includes collection of secondary information, site observation by EVI team, meetings with TNIFMC,



TNWWHCL, Department of Social Welfare, Government of Tamil Nadu and District Social Welfare Officer, Chennai.

## 2. EXISTING ENVIRONMENT

---

### 2.1. Physical Environment

#### a) Topography

The project site is in Adyar, which is a prominent residential suburb of Southern part of Chennai District. It has flat land topography<sup>1</sup> with an average elevation of about 22 ft. above msl (6.7 meters)<sup>1</sup>.

The Chennai district is surrounded by Bay of Bengal on the east and the district of Kancheepuram<sup>1</sup> & Tiruvallur<sup>1</sup> on the remaining sides.

The site is located at 12°59'58.34"N and 80°15'26.78"E and is surrounded by residential apartments & independent bungalows of Besant Nagar and Thiruvanmiyur. There are also some small, medium and large scale IT/ITES and other companies situated nearby

#### b) Meteorology and Climate

Chennai lies on a thermal equator and along a coast<sup>1</sup>, thus experiences a tropical dry and wet climate<sup>1</sup>. The average annual rainfall of the district is 140 cm (55 inches)<sup>1</sup>. The temperature varies between 35-40°C<sup>1</sup> in May-June and 15-22°C<sup>1</sup> in December-January.

#### c) Hydrology and drainage

Chennai is intersected by two rivers, the Cooum and the Adyar<sup>1</sup>. The latter flows through the southern part of the district and meets the sea near Adyar region. The rivers are mainly stagnant<sup>1</sup> and flow only during the rainy season<sup>1</sup>. A third river, the Kosasthalaiyar<sup>1</sup>, flows to the north and falls into Bay of Bengal at Ennore<sup>1</sup>. The Buckingham canal<sup>1</sup> runs parallel to the Coromandel Coast<sup>1</sup> and links the Cooum and Adyar. The Otteri Nullah<sup>1</sup>, an east-west stream, runs through north Chennai and meets the Buckingham Canal at Basin Bridge<sup>1</sup>.

#### d) Water supply and sanitation

The source of water supply for the hostel will be from CMWSSB (Chennai Metropolitan Water Supply and Sewerage Board). Only when the quantity is inadequate, borewell water is used.

---

<sup>1</sup><http://tnenvis.nic.in/files/CHENNAI.pdf>



## e) Air Quality & Noise

Chennai has an average AQI of '35'<sup>2</sup> and maximum AQI of '52'<sup>2</sup>. Adyar recorded an avg. of 16 PM<sub>2.5</sub> and 53 PM<sub>10</sub><sup>3</sup> in 2017-18.

## 2.2. Biological Environment

### a) Forest and Land Use

The proposed project site is currently utilized as a welfare hostel for working women and girls and is situated in a residential area. The built-up area in the image is mainly industrial estates, residential complexes or other infrastructural developments. There is no established forest however, some scattered trees, shrubs and bushes are present. There are urban green spaces present nearby.

### b) Flora and Fauna

The project site has few bushes and shrubs. Based on the biodiversity screening of the area using IBAT (Integrated Biodiversity Assessment Tool) no rare, endangered and threatened species were found in the project area.

## 2.3. Socio-economic & cultural environment

The project site is situated at Adyar in Chennai district in Tamil Nadu. The district has a total of 1,154,982 households<sup>4</sup> with a geographical area<sup>4</sup> of 175 Sq.km. The total population<sup>4</sup> of the district is 4,646,732 out of which 2,335,844 are males<sup>4</sup> and 2,310,888 are females<sup>4</sup>. The sex ratio<sup>4</sup> of the district is 989 which is lower as compared to the state average<sup>4</sup> of 996. The total population of children (age 0-6)<sup>4</sup> in the district is 459,324 out of which 235,519 are males<sup>4</sup> and 223,805 are females<sup>4</sup>.

The district has an overall literacy rate of 90.2%<sup>4</sup> which is the second highest among all other districts. The male literacy is at 93.70%<sup>4</sup> while the female literacy is at 86.64%<sup>4</sup>. The work force participation and the women workforce participation rate in Chennai is the 2<sup>nd</sup> lowest<sup>4</sup> among all the districts in the state.

The Scheduled Caste (SC) constitutes 16.78%<sup>4</sup> while the Scheduled Tribe (ST) constitutes 0.22%<sup>4</sup> of the total population in the district.

---

<sup>2</sup><https://www.aqi.in/dashboard/india/tamilnadu/chennai#forhourdash>

<sup>3</sup>[http://tnenvs.nic.in/Database/TN-ENVIS\\_793.aspx](http://tnenvs.nic.in/Database/TN-ENVIS_793.aspx)

<sup>4</sup>[https://censusindia.gov.in/2011census/dchb/3302\\_PART\\_B\\_DCHB\\_CHENNAI.pdf](https://censusindia.gov.in/2011census/dchb/3302_PART_B_DCHB_CHENNAI.pdf)

The site is connected via Ambai road and is in a good proximity to the public transportation system. The bus stop is within a distance of 0.24 km from the project site. The Indiranagar railway station and Chennai airport are at a distance of 1.1 km and 12.9 km respectively. There are no cultural or heritage site present in and around the project site.

### 3. POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The proposed retrofitting requirements include minor changes in the furniture, painting and layout of the hostel. It doesn't involve the structural changes i.e. no civil construction is anticipated in the project implementation. Based on the ESG due diligence study conducted by EVI, there were no major environmental and social risks identified in the retrofitting project implementation. Few minor risks were identified and the proposed mitigation plan against them is motioned in the table below:

S. NO	Material Risk	Related Key findings	Mitigation action plan
1	Consumption of water	Records of consumption of water are not maintained.	A monitoring mechanism shall be developed to record the daily and monthly consumption of water. The hostel staff i.e. security guard may be assigned this responsibility. Water meter may be installed to monitor and record the ground water withdrawal.
2	Health, Safety and security	<ul style="list-style-type: none"> <li>•The security guard is available only during night and no guard is appointed for day duty.</li> <li>•Scope of retrofitting includes installation of security cameras and fire extinguishers which will enhance</li> </ul>	A 24/7 security guard may be hired for the hostel premises

		safety and security.	
3	Corporate level governance policies	As TNWWHCL is in early stage the corporate policies i.e. prevention of sexual harassment, anti-bribery & corruption etc. have not been developed so far. However, the company is owned and operated by Government of Tamil Nadu, the government regulation and guidelines shall be applicable	As TNWWHCL is a Government owned company registered under company act 2013, it would be good to have company's corporate policies on following: <ul style="list-style-type: none"> <li>• Prevention of sexual harassment</li> <li>• Anti-bribery and corruption,</li> <li>• Child labor and Forced labor</li> <li>• Whistle- blower</li> <li>• Environment health and safety policies</li> </ul>
4	Grievance Redressal Mechanism	At present grievance redressal is done through District Social Welfare Officer (DSWO). Evidence of documented records of grievances is not available.  Grievance redressal system for the company needs to be put in place before start of retrofitting of hostels.  However, GRM of TNIFMC as a Fund Manager will be in effect. This further requires company to appoint field level GRO. GRM guidelines should be displayed and communicated to women	A Grievance Redressal Mechanism (GRM) of the company may be put in place with clear process of grievance receiving, documenting and closure and contact details of GRO.

		staying in hostel.	
5	Monitoring Reporting and	At present Monitoring and reporting of hostel is through DSWO. A periodic monitoring and reporting system specific to company as well as project sites needs to be prepared before start of retrofitting of hostels.	A periodic inspection or monitoring mechanism may be developed. The mechanism can include the key ESG risk i.e. floods, GRM, Contractor management etc. inspection/audit template for each ESG risk shall be prepared.
6	Contractor management	Contractor for retrofitting work will be appointed through tender process. Guidelines of the Government of Tamil Nadu (Tamil Nadu Tender Transparency Act) will be followed to the extent applicable	Company may ensure that site specific ESG aspects are integrated in tender and contractor's agreement. This should include monitoring and reporting system, system to ensure non ethical practices, anti-bribery and anti-corruption measures, guidelines for prevention of sexual harassment, system to handle grievances of contractor, ensuring presence of designated officer at the time of retrofitting done by workmen

## 4. ANALYSIS OF ALTERNATIVES

As the proposed project is to retrofit the existing government working women hostel in Chennai hence the analysis of alternative site is not applicable. Moreover, the proposed retrofitting activities have minimal or no impact on environment and social aspect. It can be concluded that the proposed retrofitting options are the best suited environment and social friendly options hence alternative analysis is not required.



## 5. INSTITUTIONAL ARRANGEMENTS

---

Project is being developed by Tamil Nadu Working Women's Hostels Corporation Limited (TNWWHCL), a SPV established by the Department of Social Welfare and Nutritious Meal Programme (DSW) under Government of Tamil Nadu. TNWWHCL was incorporated on 6<sup>th</sup> February 2020 as per Companies Act 2013. The purpose of the SPV is to oversee construction, maintenance and operations of selected Government Hostels. The Chairperson and Directors of the company are from Government Departments. TNWWHCL shall be the key institution with the responsibility to implement the Environment and Social recommendations at the site.

## 6. ENVIRONMENTAL MONITORING & MANAGEMENT PLAN (EMP)

---

As the proposed retrofitting project has no major environmental and social impact, a separate environmental monitoring and management plan is not required. There are few minor impacts can be easily manageable with the suggested mitigation actions. However, due care will be taken to follow 'Good Engineering Practices' to ensure least pollution (air, noise, etc.) during the retrofit works. Company may develop guidelines for the contractor to ensure good engineering practices. Some onetime changes in the governance structure of the TNWWHCL have been suggested for the implementation of mitigation plan.

## 7. PUBLIC CONSULTATION & DISCLOSURE MECHANISM

---

As the proposed retrofitting project involve only cosmetic changes in the layout of the hostel and the rooms and there are no structural changes suggested as part of retrofitting hence, no additional construction activity shall take place. The complete project implementation shall be done within the hostel premises. Hence, this proposed retrofitting project doesn't warrant public consultation. Regarding disclosure mechanism, there is a provision of notice board to share the information regarding the retrofitting project with the residents.

## 8. GRIEVANCE REDRESSAL MECHANISM

---

As the overall responsibility lies with Department of Social Welfare, Government of Tamil Nadu, the grievance redressal is done through District Social Welfare Officer (DSWO). However, evidence of documented records of grievances is not available. GRM of TNIFMC as a Fund Manager will be in effect. This further requires company to appoint field level GRO. It is suggested in the mitigation

plan that TNWWHCL may develop a company level Grievance Redressal Mechanism detailing out the process of grievance receiving, addressing, documenting and closure along with contact details of GRO. The GRM guidelines should be communicated to women staying in hostel.

## 9. CONCLUSION & RECOMMENDATIONS

---

This Initial Environment Examination (IEE) study reveals that there are no major environmental and social impacts of the proposed retrofitting project. There are few minor possible impacts, but these are very much understood and manageable i.e. Impacts can be completely avoided, or minimized. The proposed project site is not located in environmentally or culturally sensitive areas. The hostel complex is Government owned, so no further land acquisition is anticipated, hence no physical and/or economic displacement of people shall be required for project implementation.

Based on the findings of the IEE, the classification of the project as **Category C** is confirmed i.e. it is likely to have minimal or no adverse environmental impacts. Hence no further special study or detailed EIA needs to be undertaken to comply with ADB SPS (2009).

## 10. ANNEXURES

---

### Annexure1: Documents received and reviewed

1. Detailed feasibility report
2. TNWWHCL - Certificate of Incorporation
3. GO's stating TNWWHCL Under SPV- formation
4. GST Certificate TNWWHCL

## Annexure 2: Site Photographs



**Hostel Facade**



**Hostel Entrance**



**Garbage Bins at the hostel**



**Overhead Tank at the site**



**Hostel Courtyard**



**Hostel Courtyard**





Kitchen



Kitchen



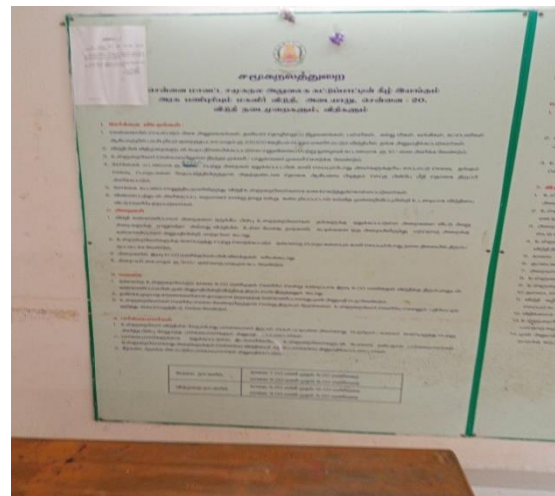
Wash Area



Storage



Information disclosure



Information disclosure