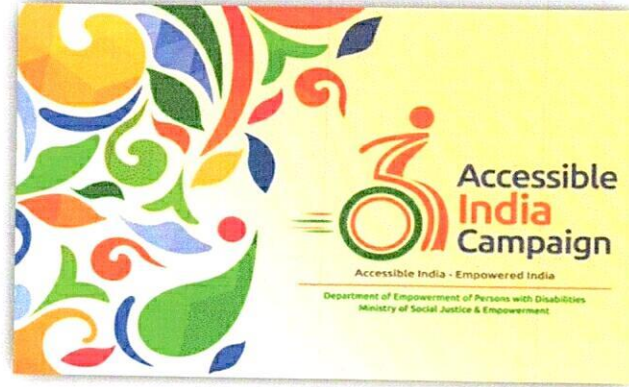


# ACCESS AUDIT REPORT

Aditi Mahavidyalay  
New Delhi

SO (Adm)  
Manita  
22.10.22

Submitted under:



*Sugamya Bharat Abhiyan*  
(Accessible India Campaign)

: Prepared By:



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## INTRODUCTION

This refers to Accessible India Campaign (**Sugamya Bharat Abhiyan**) launched by the Department of Empowerment of Persons with Disabilities (**DEPwD**), Ministry of Social Justice Empowerment (**MSJE**), Govt of India, in 3<sup>rd</sup> Dec, 2015 for achieving universal accessibility for persons with disabilities and to create an enabling and barrier free environment, with a focus on three verticals of built-environment accessibility, transportation system accessibility and information and communication eco-system accessibility as a nationwide campaign for achieving accessibility for persons with disability based on Universal Design principles.

The task involved under the initiative, include identification of important public buildings, conducting access audits and retro-fittings of ramps, lifts, toilets, and signage in the buildings; making 75 important railway stations and all international airports fully accessible and ensuring that at least 50% of all web sites and public documents of the central and the state governments meet accessibility standards. Specific timelines have been set all the above goals.

**Association for Disabled People**, a not-for-profit organization working in the field of disability for the past around 18 years was an empaneled organization under the **DEPwD, MSJE**, Govt. of India. ADP has done Access Audit more than 137 buildings under the first & second of AIC at Kanpur, Nagpur, Surat, Vadodara, Vishakhapatnam and Ahmadabad. Also in 3<sup>rd</sup> phase of AIC under Divyangjan Sashaktikaran Vibhag, Govt Uttar Pradesh we have done 143 buildings at Aligarh, Mathura and Meerut. The Tamil Nadu Govt has launched the Access Audit in Tamil Nadu. Under the said initiative, ADP done access audit of 69 Govt buildings (Block Developments Office, Taluk Office/ Revenue Davison Office and Tourist Places in Vellore, Krishnagiri and Dharmapuri, districts.

### INTRODUCTION: ACCESSIBILITY (Accessibility in the built-environment):

Environmental access is a set of norms and standards designed to provide safe and independent use of varied environments such as transportation, roads, buildings and communication by persons with disabilities. Universal design is a commitment for designing products and environments for the broadest population possible, especially for the people who have not been considered as part of the general population.

## The Legal Framework

The importance of promoting greater access as an effective approach to reversing exclusion and enhancing the equalization of opportunities in a sustainable way has been the mandate of the *United Nations Convention on the Rights of Persons with Disabilities* (UNCRPD), approved by the General Assembly in December 2006, ratified by India on October 1, 2014 and which entered into force in May, 2008.

The Convention also mandates that all Governments shall take measures for implementation of minimum standards and guidelines for accessibility of facilities and services open to the public; to ensure that private entities that offer facilities / services open to the public comply with all aspects of accessibility for persons with disabilities; train stakeholders on accessibility issues; provide Braille signage and live assistance, professional sign language interpreters to facilitate accessibility to buildings and other facilities open to the public.

Further, Goal No. 3 of the *Inchon Strategy*, which provides the Asian and Pacific Region and the world the first set of regionally agreed distinct inclusive development goals, mentions that access to the physical environment, public transportation, knowledge, information and communication is a precondition for persons with disabilities to fulfill their rights in an inclusive society.

Sections 40, 41, 45 and 46 of *The Rights of Persons with Disabilities Act 2016*, categorically provides for nondiscrimination in education, transport, the roads, built environments and information and technology.

Article 9 of the UNCRPD on “Accessibility” stipulates that persons with disabilities are to be enabled to live independently and participate fully in all aspects of life. The Article casts an obligation on all signatory governments to “....take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communication, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas.....”

## **ACCESS AUDIT:**

### **Purpose of an access audit:**

The purpose of an access audit is to assess how a particular building or environment performs in terms of access and ease of use by a wide range of actual and potential users, including person with disabilities and to recommend access improvements. The aim of the access audit and its follow-up are to:

- ✓ Identify the extent of the problem of access to public buildings and recommend changes additions to make the environment accessible
- ✓ To create awareness of the importance of the concept of barrier-free environments for persons with disabilities
- ✓ To enforce the inclusion of accessibility for persons with disabilities in the official agenda of government and private agencies.

The report includes observations, measurements, sketches and photographs covering all parts of the public building audited including the external and internal environment as well as the services provided in the building.

### **OBJECTIVE:**

The objective of the campaign is to create mass awareness for accessibility, which will enable persons with disabilities to live independently and participate fully in all aspects of life. The buildings being audited shall be judged for the accessibility based on standards and the identified barriers will be looked into to enhance accessibility.

### **STANDARDS:**

The accessibility standards and parameters adhered to in the instant access audit are as per the revised guidelines (2014) of the **Central Public Works Department Manual, Handbook on Barrier-Free and Accessibility** (URL: <http://cpwd.gov.in>)

For some points not specifically covered by the said Handbook, reference has been taken from the **Harmonized Guidelines and Space Standards for Barrier Free Built Environment** of the Ministry of Urban Development Government of India.

The **National Building Code** of the Ministry of Urban Development Government of India.

## **PRINCIPLES OF THE AUDIT:**

The Access Audit has been undertaken to appraise defined areas of the existing buildings/campus to access the extent of accessibility to services and facilities and propose the extent of works required to improve the current facilities in accordance with the definitions of the Disability Discrimination Act 1995. The audit takes into account the needs of people with mobility impairments (including wheelchair users) and sensory impairments. The audit will identify physical barriers to access against pre-determined criteria. The audit should be treated as the starting point of an ongoing access plan, constantly updated by the committee. This audit should only be seen as snapshot of the position at the time of the report. Changes made after the site inspection may improve or reduce levels of accessibility.

## **AUDIT TEAM:**

<b>S.No.</b>	<b>Name</b>	<b>As</b>
<b>1.</b>	<b>Mrs. Suvarna Raj</b>	<b>Access Auditor &amp; Wheelchair User</b>
<b>2.</b>	<b>Ms. Gayatri Betra</b>	<b>Special Educator</b>
<b>3.</b>	<b>Mr. Omprakash</b>	<b>Photographer /Escort</b>
<b>4.</b>	<b>Ms. Hemlata</b>	<b>Report Maker</b>

## **Access Audit Report:**

This report gives a narrative outline of existing facilities, lays down the areas of concern with pictorial illustrations of the existing infrastructure. The report comes with an annexure which is a compilation of recommendations with technical details along with photographs and suggestions. The Audit is structured into three parts, viz, the external environment, internal environment and information, communication and services.

# Introduction

## Aditi Mahavidyalay, Delhi



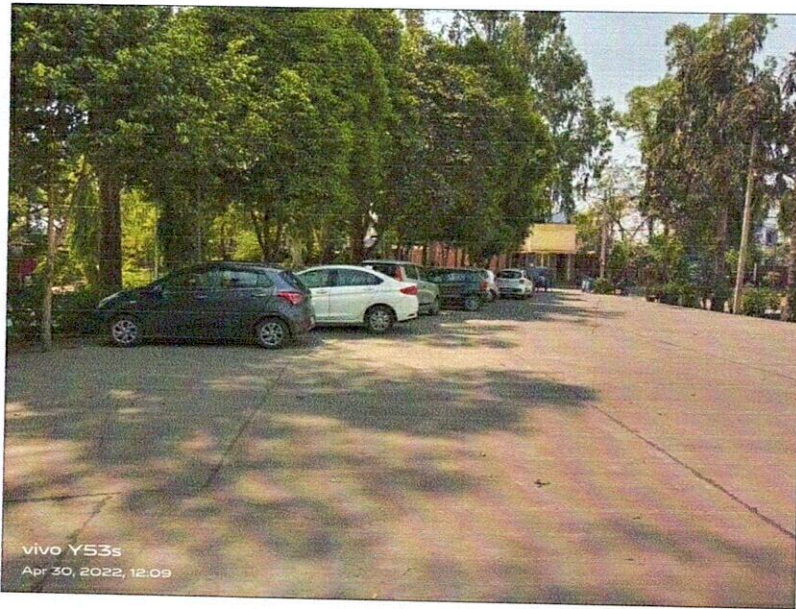
Building Type	College
Principal Name	Prof. (Dr.) Mamta Sharma
Contact Details	infor@aditi.du.ac.in
College Area	3.68 Accor
PwD Staff	3
PwD Student	5
Audit Report Date	22 June 2022

## EXTERNAL ENVIRONMENT

The external environment includes the following:

### Parking Lot

There is designated parking for staffs & visitors for two wheelers as well as four wheelers also there is no reserved car or two wheeler parking for persons with disabilities. This should be allocated as per the accessibility guidelines.



**Accessible parking bay can be proposed near the Entrance**



## Recommendation / Priority: Parking Lot

- It's a small Govt. office & is recommended to have reserve parking for person with disabilities close to building entrance (30-50 Meters.) as per the accessibility guidelines.
- The space as shown above in Fig. (Where ramp) can be identified and converted into a parking bay for people with disability.
- Parking bay for people with disability has to be constructed along with a proper shed adjacent to the access route.
- The parking bay and the adjacent access route has to be laid with tactile floor guidance tiles and a leveled pathway minimally 1200 mm wide, laid with antiskid tiles and built as per CPWD guidelines, for independent navigation for persons with disabilities.
- Proper lighting (during evening hours) along with accessible parking /directional signage as per CPWD guidelines should be installed at the parking bay.



Design for parking

## **Alighting**

Right now, there is no designated space for alighting of people with disabilities. But after the parking bay for people with disabilities has been identified and transformed, there is space to design one alighting point with required signposts, step free access and tactile guidance.

### **Recommendations: Alighting**

- Alighting point has to be constructed next to the parking bay.
- Alighting point should be leveled and cleared out of traffic lane.
- Proper sign-posts and signage to be installed along with tactile guiding path including directional, hazard warning and positional tiles directing to the entrance.
- There should be a step free route leading from the alighting point to the main entrance of the buildings

## Accessible Route

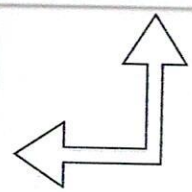
The Office is accessed by one main gates meant for vehicular and pedestrian entry and exit. There is security post at main entrance gate. There is pedestrian walkway in the office that is separated from the vehicular roads. The road is not accessible for visually impaired persons.



**Route without tactile**

## Recommendations: Accessible Route

- A small access route connecting the building to the parking through the road can be created. The accessible path should ideally have a minimum width of 1200mm, preferably covered, free of any barriers or obstacles and is to be constructed away from vehicular traffic route in the premises. In the present scenario, the accessible route, for limitation of space, can be around 900 mm wide.
- The route should have guiding path including directional, hazard warning and positional files provided for independent navigation across all the chief functions at the building.
- There should be curb ramps in case there are any level changes between the traffic lane and the accessible path.
- There should be accessible directional signage directing to the accessible entrance.
- The area should have adequate artificial light after sunset hours.



Access route and signage

## Signage

The Office has external signage for parking, toilets, the different branches / units / departments; also we found internal signage for toilets and rooms etc. International standard of symbols for accessibility is missing. For other areas like drinking water, there is no signage at all. Also directional signage, indicating the various offices, is completely missing.

The some signage does not comply with the standard size, color, placement according to the guidelines. No Braille or Tactile signage is installed in the building.

The existing signs are mostly in color contrast but not in accordance with the international standards.



**No accessible signage**



## Recommendations: Signage

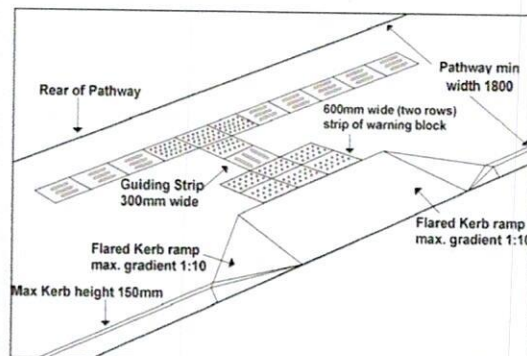
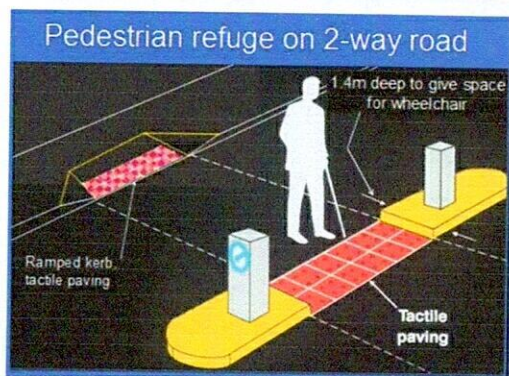
- International Standards for symbols of accessibility to be installed where appropriate.
- The signage size and placement has to comply with the handbook specifications.
- Audio Signage to be installed along with Braille and Tactical Signage.
- All the signages have to be in high colour contrast.
- All the signage has to be well illuminated.
- Visual and auditory public address system to be installed.
- Provide external signage's near entrance gate.
- Implementation as part of specific regular maintenance/renewal.



Site Map



Direction Identification Information



Sample designs for accessible path and signage

## Internal Environment

The internal environment includes the following:

### Observations: - Accessible entrance and Ramp

- There is no accessible identification signage to identify the entrance. Audio signals are also missing.
- The entrance has four stairs (Height 100mm/300mm) with no railing leading up to the main door.
- There is an also entry ramps with both side railing as per the accessibility guidelines the gradient of ramp is 1:12(standard 1:12 / 15 gradients.)Also there is no railing and no tactile marking to accessible for persons with disabilities in some ramps.
- Entrance area is illuminated.

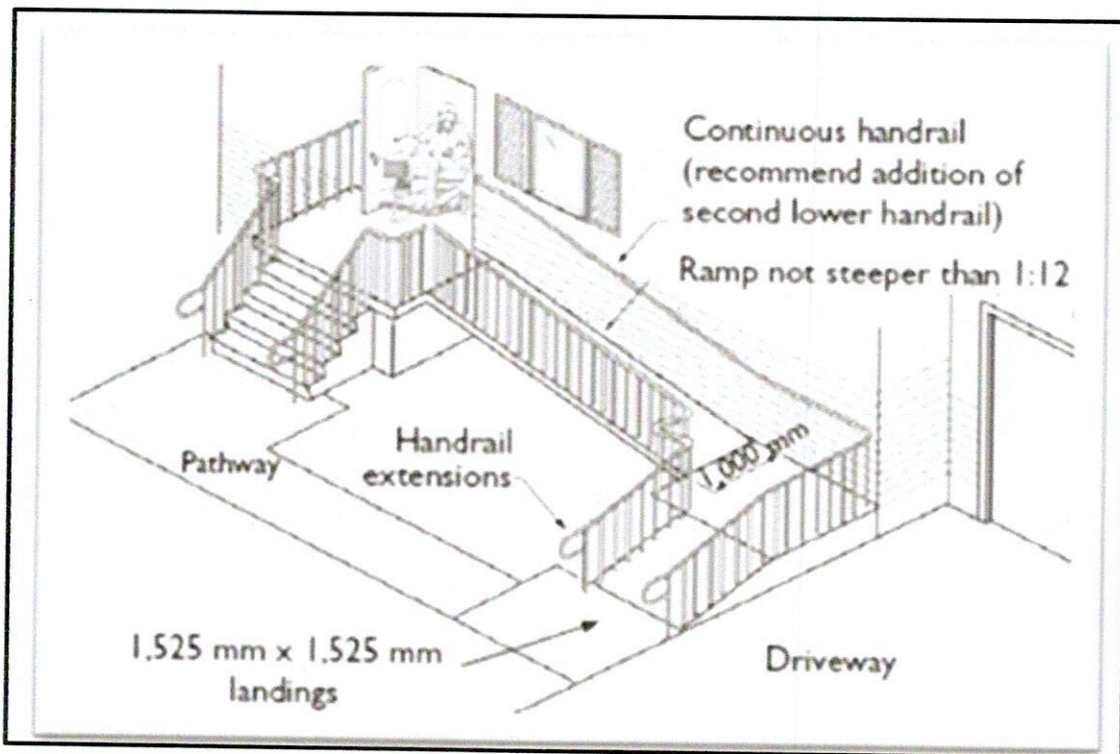


**Main entrance for building with ramp and stairs (gradient 1:12)**

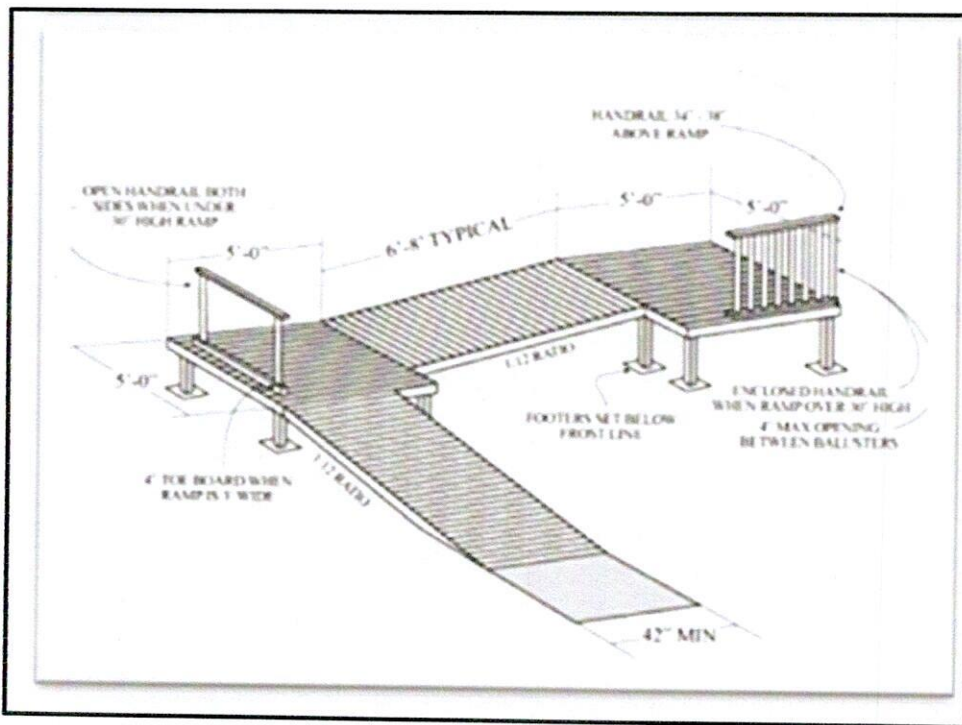
## Recommendations: Accessible entrance and Ramp

### Recommendations: Accessible entrance and Ramp

- The existing stairs to be made disabled friendly as per specifications (Refer to Stairs in Appendix)
- Accessible identification signage to be installed at the entrance, complying with the CPWD guidelines.
- Audio signals should also be installed in the entrance doorway.
- Provide ramp leading to all gardens as per the accessibility guidelines.
- Also can provide hydraulic chair in staircase







Level difference	Minimum gradient of Ramp	Ramp Width	Handrail on both sides	Comments
≥ 150 mm ≤ 300 mm	1:12	1200 mm	✓	
≥ 300 mm ≤ 750 mm	1:12	1500 mm	✓	Landings every 5 meters of ramp run.
≥ 750 mm ≤ 3000mm	1:15	1800 mm	✓	Landings every 9 meters of ramp run.
≥ 3000 mm	1:20	1800 mm	✓	Landings every 9 meters of ramp run.

Sample design for ramp

## Reception and Lobby

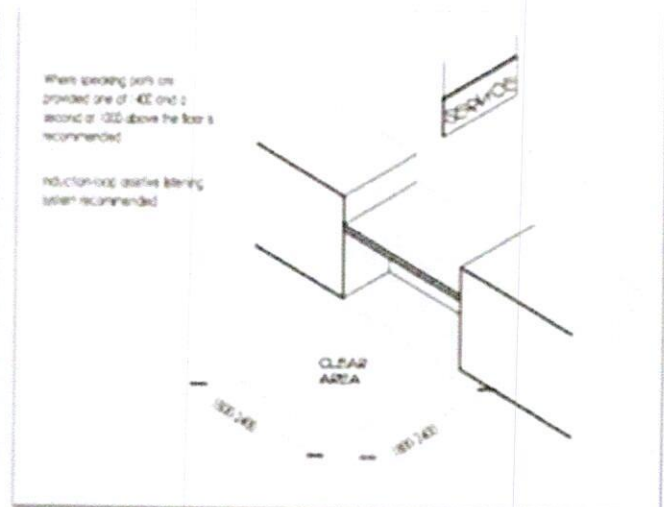
There is no particular accessible reception counter at the entrance. There is no signage that leads to the reception and hence-forth to various building facilities. Also missing signage of department / unit name. The office also does not have Audio-Induction Loop and Accessible Printed Information for people with disabilities. There is no live assistance available at the counter to guide people to their destination. None of the staff are trained to communicate in Indian Sign Language. **Counter height 1100mm with no toe and knee space**



**Inaccessible reception counter**

## Recommendation: Reception and Lobby

- A reception counter to be installed as per the CPWD guideline (Refer to Reception and Lobby in Appendix) The reception desks to have clear recess of 400 mm x 600 mm under the desks. Desks should have clear color contrast with the background wall and should be non reflective. There should be accessible identification signage for the reception.
- There should be accessible directional signage directing to various building facilities at the reception. Induction Loop to be installed to aid people with hearing disabilities.
- Printed information to be made available in all accessible alternate formats, e.g. Braille, Large Print, Audio, Pictorial, Easy-to-Read, Plain Language, available in Hindi and English and Accessible Electronic Formats that can be shared over email or mobile platforms.
- At least one sign language interpreter should be on call for the office.



Sample design for reception

## Staircase and Handrails

### Staircase and Handrails:

- There is different types of staircase and Color-contrasting strips not installed at the edge of the steps
- The steps in all stairs have uniform risers and treads of 150 mm and 300 mm respectively.
- The staircases are well illuminated but there are missing tactile floor guidance, color contrast strips at edges of steps and warning tiles at the beginning and end of each flight.
- Stairs are non slippery and non-glary and run straight and uniformly without any abrupt breaks or gaps in between them.
- Handrails not installed on the side of the walls have the desired minimum hand clearance of 50 mm between handrails and walls.
- The staircases flights have steel handrails on one side at a single height of, non-slippery, have uninterrupted grip and have no sharp edges.

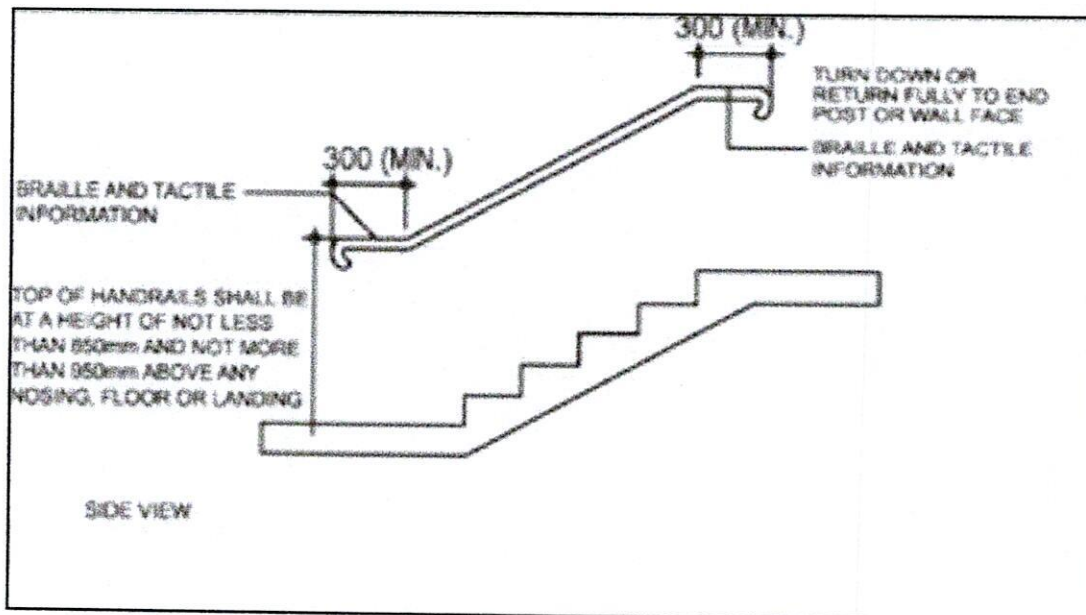


**Inaccessible Staircase**

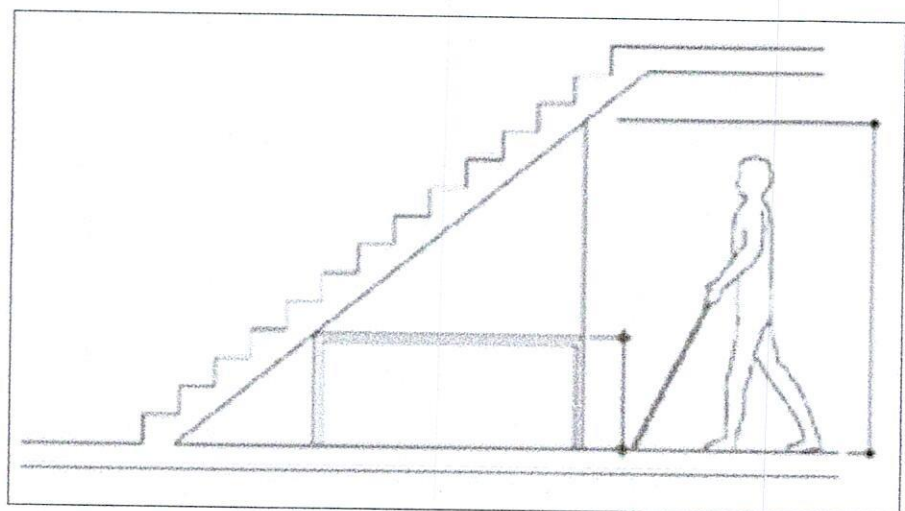
## **Recommendation: Staircase and Handrails**

- Color-contrasting strips to be installed at the edge of the steps.
- Treads and walls of a staircase shall be in contrasting colours.
- Tactile warning strips shall be provided at landings and at both the bottom and top ends of a staircase, regardless of the number of steps it comprises. For landings leading to a floor or those enclosed by wall, railing or balustrade, tactile warning strips of 300 mm in width shall be provided; for those leading to an open space or the entrance / exit of a building, the tactile warning strips shall be 600 mm in width. In this case, Braille and tactile information signs shall be provided on the adjacent wall to indicate the presence of an opening. For a staircase with intermediate steps between two flights, the provision of tactile warning strips shall follow the arrangement in.
- Hand rails to be installed at two heights of 760 mm and 900 mm.
- Handrail to ramp and step shall be fixed not less than 35 mm and not more than 50 mm clear of wall and with a clear height of 70 mm from the top of the bracket to the top of the handrail. Handrail shall be tubular, not less than 40 mm and not greater than 50 mm in external diameter and in other shapes that can provide the user a grip similar to that specified in the case of tubular handrails.
- Handrail shall extend horizontally not less than 300 mm beyond the first and last nosing of every flight of steps or beyond the ends of a ramp and terminate into a closed end which shall turn down or return fully to end post or wall face and which shall not project into a route of travel.
- Handrail finished in more noticeable colors with Braille and tactile information should facilitate self-help circulation of persons with visual impairment.

- One more handrail should be provided at a height of not less than 700 mm and not more than 800 mm above any nosing, floor or landing for schools and places of public entertainment.
- Handrail should have a minimum luminous contrast of 30% with the surrounding wall surfaces.
- Area below staircase (headroom) hazards for visual impaired should be cordoned off.



**Head room cordoned off**



### **Elevators / Lifts**

There is no need for elevator or Lift as building has only G + 1

### **Escalators / Passenger Conveyors:**

There are no Escalators/Passenger Conveyors present in this building. In any case, escalators / passenger conveyors are not considered as accessible for disabled people and, hence, not recommended.

### **Control and Operating Mechanisms:**

There are no vending machines or user operable units present in the building.

The electric sockets and switches are not all present at recommended heights from the ground level, and some are placed as high as around 1200 mm. There is no color contrast in between the electrical sockets, switches and the walls in almost all cases. The manual switches are easy to operate. Touch panels, considered inaccessible, are not used in the building. The switches or the electrical panels do not have embossed letters/symbols or Braille information next to them.

### **Recommendation: Control and Operating Mechanisms:**

- Operable switches and panels to be located adjacent to clear floor space of 900 X 1200 mm.
- The electrical switches and panels to be reinstalled at height in between 400mm to 1200mm.
- The panels are to be retouched to enhance color contrast in between the switches and walls.
- Switches and panels to be provided with letters/symbols accompanied by Braille information for tactile reading.
- Touch Panels to be avoided in future cases.

## Emergency Evacuation:

Emergency evacuation instrument was installed in building.

There is no emergency evacuation provision in the building. The building does not have any visual or audible alert system, nor is there any designated refuge area for persons with disability. Also, any kinds of emergency evacuation signage are.



### Recommendation: Emergency evacuation

- All alerting buttons should be between 600mm and 1200mm from the floor and have a high contrast with the background wall.
- Refuge area to be identified in the corridor / landing near stairs for all floors and should be identified and signposted for disabled people.
- There should be directional signage leading to the refuge area and the evacuation plans to have the refuge area marked on them.
- All emergency and directional signage should be accessible.
- The refuge area should be minimally a 900mm x 1200mm space for parking a wheelchair.
- There should be smoke barriers around the refuge area that can hold the smoke for at least one hour.
- There should be an audio and visual two way communication system in the refuge area at the height of 1000mm.
- Evacuation plans to be prominently displayed on all floors.
- The evacuation plans and building maps should be made available in tactile /Braille formats.
- The plan should be of right size and easy to read.
- The accessible evacuation route and the refuge points should be shown on the plan.
- The plan should have a 'you are here' point identified on it.
- The plan should contrast well with the background wall.
- The Staff should be trained to assist persons with disabilities in evacuation.
- Evacuation chairs should be available in the building.



## Corridors:

- The building has wide corridors and clear space for maneuverability and turning of wheel chair users.
- Some corridors are cluttered with unwanted barriers, which are not guarded off, emergency evacuation instrument, almirah and chairs which are hazard for persons with vision impairment.
- There is no color contrast from the floors to the walls, doors and ceiling and the corridor floors are with heavy patterns.
- There were no handrails found in the whole building, particularly the corridors. We found tactile in some corridors which are useful for persons with vision impairment.



Corridors

### Recommendation: Corridors

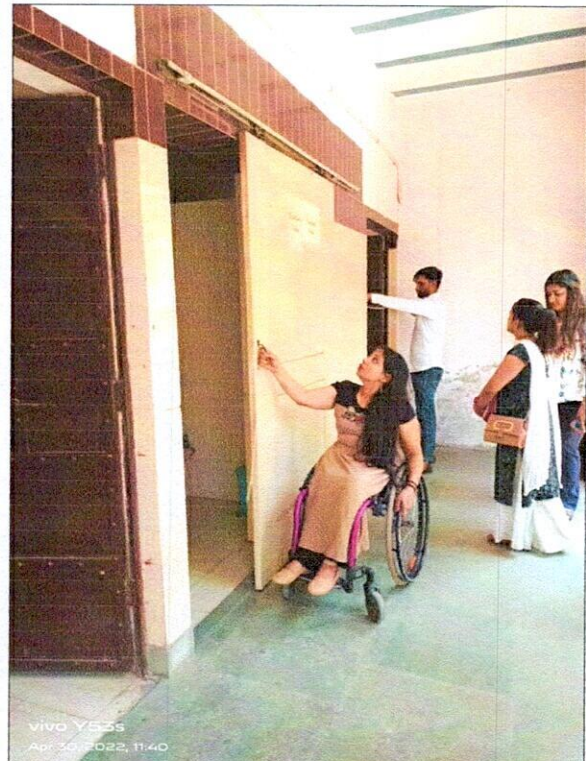
- The corridors are to be fitted with handrails on both sides, complying with the guidelines of CPWD.
- The floor finish of the corridors are to be modified so that they bring up a contrast between the floor, walls, doors and ceilings and are without heavy patterns.
- Any loose furniture etc is to be guarded and secured well off from the maneuverability space.



Accessible Corridors with Tactile flooring and low height grab bar as highlighted

## Doors & Doorways:

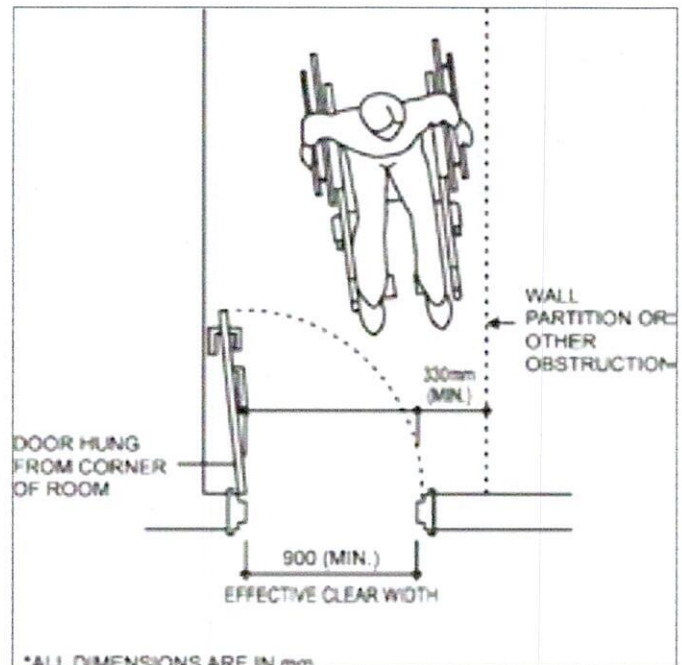
Some doors in the building not maintain a minimum of 1000mm opening. They are easy to operate and do not require a lot of effort. The building has single-hinged doors, which are push type doors which swing one way. Door handle height is 950mm. Doors open inward from the corridor including most of the toilet doors. All doors, doorframes, door furniture contrast in colour with the background wall. The doors do not have timed-release spring for shutting. All the doors are manual. There is sliding doors in toilet. Most doors have not enough space like toilet for a wheel chair user to operate it without any difficulty.



Doorways

## Recommendation: Doors & Doorways

- Door, including one leaf of a pair of double doors, shall have a clear width of not less than 900 mm between the open door and opposite jamb or the other leaf.
- The colour of the doorframe should contrast in colour with the door and the background wall as well as with the colour of the door furniture.
- Toilet doors to open outwards in the corridor.
- All doors which allow the passage of wheelchairs should have kick-plates of not less than 200 mm high fitted on the face which swings away



Sample design for door

- Guardrails to be installed at doorways which lead to a route of travel.
- Doormats in front of doorways should be flush with the floor level and all doorways to have clear, obstructed space in front.
- Door threshold shall not exceed 20 mm in height and shall be beveled to facilitate passage of wheelchairs. Door handle shall not be less than 950 mm and not more than 1050 mm above the finished floor level, measured from the top surface of the grip.

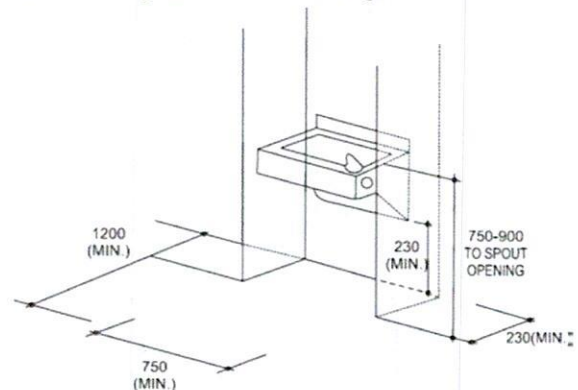
## Drinking Water Facilities:

We found inaccessible drinking water facility with two steps

### Recommendation: Drinking Water facilities

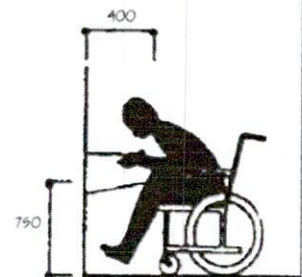
The special arrangement should allow for the provision of every section of the Rest House: -

- A clear floor space of at least 750 mm x 1200 mm;
  - A clear knee space of at least 750 mm wide, 200 mm deep and 680 mm high between the bottom of the apron and the floor or ground;
  - A toe space not less than 750 mm wide, 230 mm deep and 230 mm high.
  - All wall-mounted drinking fountains should be placed in an alcove to eliminate the hazard of collision to persons with visual impairment.
  - A wall guard should be installed to protect a drinking fountain that extends into a corridor and has an open space underneath.
- The drinking water facility should have hygiene and dry & clean area. Should be lever type tap and should be also easily accessible by persons with disabilities. Glasses should be made available to drink water and it should not be kept at an inaccessible height (not higher than 1200 mm)



### Water Fountains (Drinking)

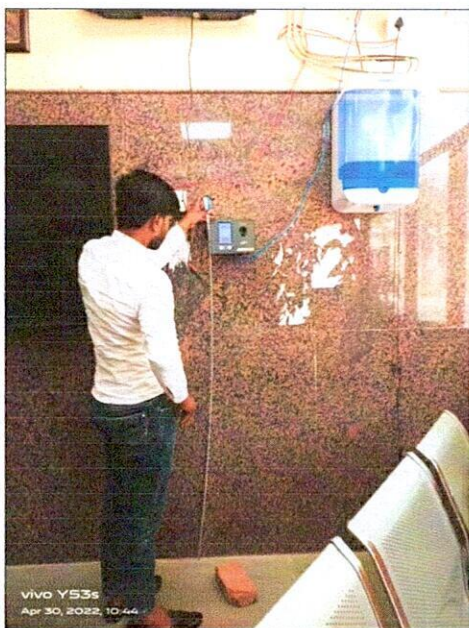
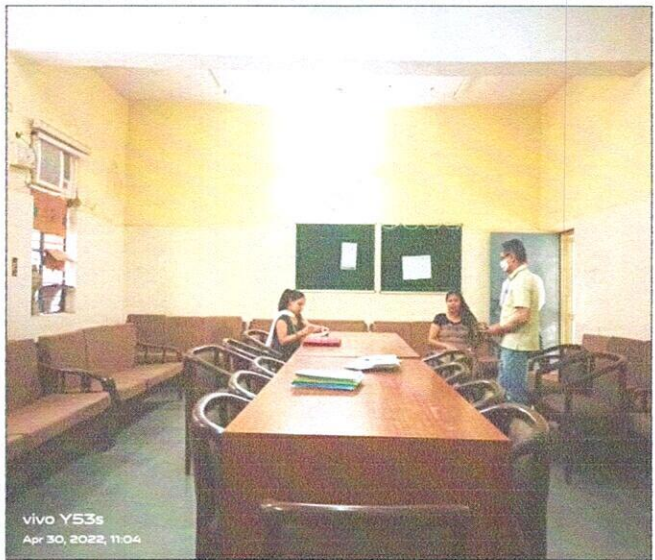
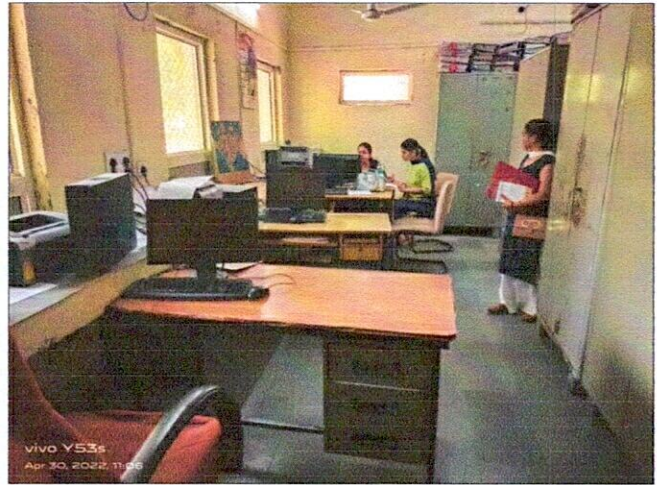
- Allow sufficient space around the water fountain to make it easily accessible for wheelchair users.
- Depending on the type of water fountain allow a space about 750 mm high and 400 mm deep under the fountain.



Sample figure for accessible drinking water facility

## Flooring and Furniture

The furniture of different places was not according to the accessibility guidelines. (Table height 760 mm) some table with no toe and knee space, Circulation space in office was good. Switch board and thumb machine variable heights is 1100-1400mm.



furniture in different place

### **Recommendation: Flooring and Furniture**

- Flooring has to be as per specifications highlighted in the Appendix to this Report.
- Arrange properly furniture in the room so that to have ample moving & circulation space for PWDs.
- There should be some such arrangement in office and classrooms and examine room for some adjustable furniture for the PWDs which can be easily accessible to them.
- To facilitate the way finding for persons with visual impairment, surfaces and finishes with luminous contrast between the wall and the ceiling, and between the wall and the floor should be adopted. Appropriate lighting design with adequate illumination should also be considered. Sufficient level of illumination shall be provided in order to help people to apprehend the physical environment of the space they have entered or to move around safely.  
Provide adequate required amount of luminance as per the guidelines in workshop so that jobs can be done easily. Working areas of a building should have an illumination level of not less than 120 lux measured at the finished floor level.

### **Common Building Elements:**

**Colour contrast** (in critical surfaces, sudden change in level, toilets, stairs, handrails, doors, switches and sockets, skirting, free standing obstacles and signage):

The building has minimum or no color contrast in different relevant surfaces, and there is a need to improve and upgrade on the same.

### **Recommendation: Common Building Elements**

Clear colour contrast to be maintained in all critical surfaces, sudden change in level, toilets, stairs, handrails, between doors, door frames and walls, switches and sockets, skirting, free standing obstacles and signages.

## Accessible Toilets

### Observations:

There is one accessible toilet for disabled person in the building, but not as per the guideline. Toilets has sliding door, door width more than 1000mm, wash basin height 840mm, mirror height more than 900mm, low circulation space in toilet, grab bars not fitted in toilet. The floor surface of the toilets is slippery. Toilets in office were in good condition & maintained. Toilets also do not comply with accessibility parameters in terms of size, colour, fittings, accessories, requirements for alarm systems etc.

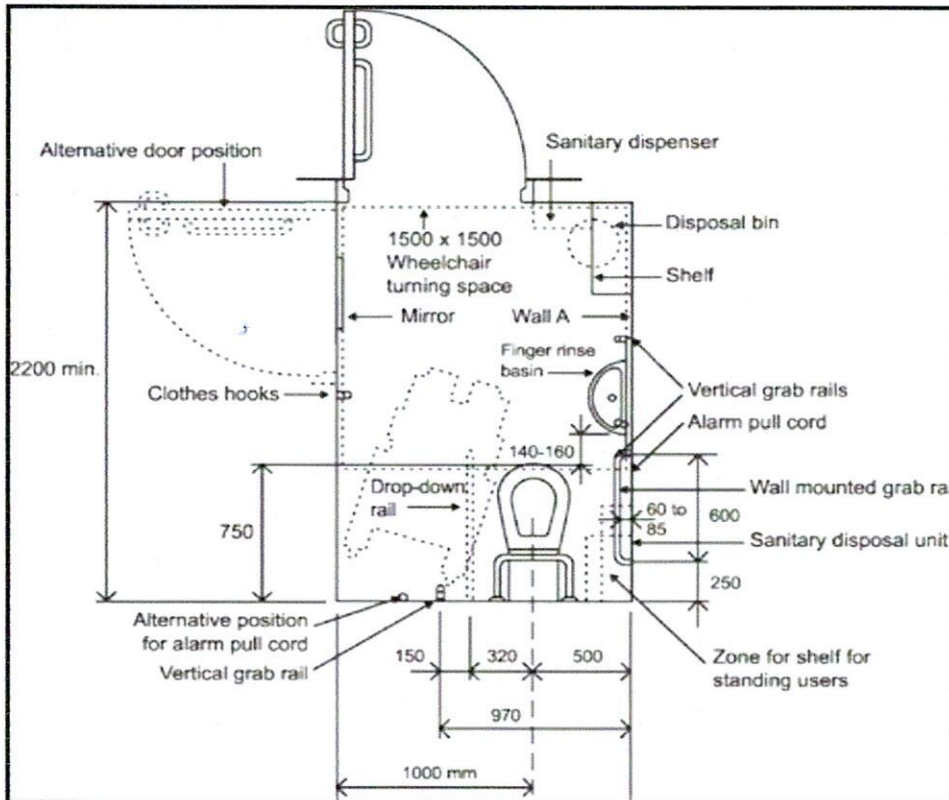




## Recommendations: Toilets

- It is recommended having reserve toilet for person with disabilities close to building entrance and near parking area also (within 30-50 Meters.) as per the accessibility guidelines.
- Both or one of the present toilets can be made into unisex accessible toilet by dismantling them and making one with bigger dimensions.
- Width of the unisex toilet door to be at least 900 mm. The toilet door must be outward opening, double hinged or sliding door.
- The WC should be installed in a corner with centerline of the WC at a distance of 450mm to 500mm from the adjacent wall. The front edge of WC should project 750mm off/from the rear wall.
- The WC should have a backrest and seat height of the WC should be 450mm.
- Lever type flush control is to be installed at a height of 1100mm from the floor surface, or on the transfer side of the WC. The force required to flush should be comfortable.
- There should be 800mm of clear transfer space next to the WC.
- A horizontal grab bar is to be installed on the adjacent wall, at a height of 200mm from the WC seat.
- A fold up grab bar is to be installed at a centerline distance of 320m-200mm from the WC seat.
- A wash basin is to be installed at a distance of at least 400mm from the side wall. The wash basin should have automatic or lever type faucets.
- The top-edge of the wash is to be between the height of 800mm and 840mm from the floor level.
- There should be clear knee space of at least 750mm height x 750mm width x 200mm depth under the wash basin, with additional toe-space of 300mm height x 750mm width x 230mm depth.
- The floor-surface of the toilet should be non-slippery. There should be colour contrast between the floor, wall and sanitary fittings.
- There should be an alarm system within easy reach to alert persons outside, in case of emergency. Visual alarm must be there to alert people with hearing disability in case of emergency.
- The door should be able to be locked from inside but also released from outside in case of emergency. The accessible toilet should not be kept locked or used as a janitor's room. The toilet should be kept clean, well-maintained and with proper lighting.

- Mirror should be at accessible height. All toilet accessories, soap dispensers, coat hooks should be at accessible reach.
- In addition to the accessible unisex toilets, the other toilets (Men / Women) should also follow standardization of placement of utilities like
  - Basin taps to be placed at the centre of the basin.- Soap dispensers must be either at the immediate right or left side of the basin.- Water jets on the right or left side of the WC.- Flush must be either immediately behind the seat or at the centre.- WC water tap must be either at the right or left of the WC.



Sample design for toilet



## **Information, Communication and Services:**

The office does not have an accessible website or alternate accessible formats of publications / brochures / public information material; none of its staff are trained in Indian Sign Language and neither are there Sign Language interpreters available on call. Also there are no assistive technologies like loop hearing systems, audio orientation tools and so on. The staff has never attended any disability sensitization sessions nor do they have trainings on how to extend assistance to people with disabilities. Also there is no Equal Opportunities Policy in place to promote employment of staff with disability.

### **Recommendations:**

- The website should comply with accessibility standards in compliance with Web Content Accessibility Guidelines 2.0 (WCAG 2.0) along with availability of accessible software for electronic filling of forms, if applicable.
- Relevant information in publications / brochures to be made accessible for the public in alternate accessible formats.
- Staff to be given awareness of accessible facilities in the premises.
- There should be a simple procedure of complaint lodging or making suggestions for a client with disability.
- There should be trained staff to extend live assistance to disabled people whenever needed and especially during emergencies etc.
- All staff to have disability sensitization sessions from time to time.
- Office to develop and implement an Equal Opportunities Policy to promote employment of staff with disability.
- Reasonable adjustment of workplace environment should be made, whenever the need arise, to accommodate disabled staff.
- Services like availability of wheelchairs, loop induction system, sign language interpreter etc. should be ensured.
- All accessibility equipments in the building to be regularly checked and maintained in good working condition.
- There should be a policy to allow guide dogs, wherever a disabled person is accompanied by one.

## GENERAL SUMMERY/ RECOMMENDATION

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1. The **website** should comply with accessibility standards in compliance with Web Content Accessibility Guidelines 2.0 (WCAG 2.0) along with availability of accessible software for electronic filling of forms, if applicable.
2. **Provide Braille, Audio, Visual facility, Directional Signage's Horizontal & Vertical** in Reception Area, Evacuation Area, workplace area, Corridors, staircase, parking, alighting point, lift, toilets, drinking water area, canteen, library, hostel area (if), door and doorways.
3. Provide **Ramp** in whole internal building like for entrance to reception Area, Evacuation Area, workplace area, Corridors, staircase, toilets, canteen, library, hostels(if) and curb ramps for external area.
4. Provide **Lift** in whole internal building if is it multilevel building
5. Provide tactile marking in the campus including pathways, entrance corridors, ramps, staircase & internal corridor.
6. Provide **handrails & grab bars** in corridors, staircase & landings in whole building premises as per the PWDs guidelines.
7. Provide at least **one unisex Accessible Toilet** in each floor and also each building block.
8. Relevant information in publications / brochures to be made accessible for the public in alternate accessible formats.  
such as: - Braille, - Large Print, - Audio, - Pictorial (wherever possible), - Easy-to-read, - Plain language, - Available in Hindi& English, - Accessible Electronic formats that can be shared over email or mobile.
9. Provide sign language interpreter on call in office and reception counter entrance foyer.
10. Implement immediately to eliminate a serious barrier or hazard to access and use of the internal premises of all buildings.
11. Implementation as part of specific regular maintenance/renewal.
12. Needs to improve maintenance of emergency & evacuation system.

13. Provide beveling to cater to level differences at each doors & Remove Channel gate barriers at floor level.
14. Vision glass of door panel should be at accessible level for the wheel chair users.
15. No hurdle / obstruction should be in whole office foyer & corridors such as air cooler, window panels, potted plants, electrical wires & pipes.
16. Provide elevators for free accessibility of PWDs at every staircase locations.
17. Provide all information detailing the accessible facilities in the building with photographs.
18. Need to train the staff to assist persons with disabilities, including persons with learning disabilities.
19. Need to train the staff disability sensitization sessions are part of the staff induction program.
20. Common alternative formats can be used to assist people with visual impairments who are best able to interpret information through hearing or touch, embossed letters with Braille (Audio/ Visual information, Maps and models).
21. Information from signs can be conveyed by the colour of lettering and brightness differentials between the letter and background colours. Safety signs use primarily red, yellow and green as information colours. For other signs it is preferable to use Blue and White Colours.
22. Basic principles for Colour Contrast:  
Text should contrast with sign background, Sign should contrast with environment, Light levels (measured in Lux), 70% contrast between wall and sign panel, Avoid shades of colours, Avoid using same colours as safety signs, Non-reflective surface.
23. Provide Evac chair at each floor in case any type of emergency for the PWDs.
24. Please intimate builder on accessibility requirements so that any future changes do conform to the guidelines.

25. Safety/ERT recommendations, 1. Orientation for visually impaired to fire exit on each floor.  
2. Procedure for PwDs is to go along with a buddy. For PwDs in wheelchair – they will have to be carried down. Designated members have to be responsible for this.
26. Procedure for PwDs is to go along with a buddy. For PwDs in wheelchair – they will have to be carried down. Designated members have to be responsible for this.
27. **For visually impaired:** We request signage to be put up in Braille signage in key areas such as restrooms.
28. **For Low vision persons:** all glass doors/walls should have a strip which alerts them to the presence of glass wall (may be useful for even sighted persons!).

## Technical Specification and Recommendation

Refer to Handbook on Accessibility of CPWD Guidelines 2014

(Examples of Best Practices)

### SI# 1 – Parking (Refer to Page No 44 for Parking)



↑ Reserved Parking Area ↓



Reserved Parking Signage



Parking Special Permission for Disabled Person

**SI# 2 - Alighting**



**Alighting Area**

**SI# 3 – (Refer to Page No 1 for Accessible Route)**



**Accessible Route for PWDs**



**SI# 4 – Entrance (Refer to Page No 12 for Entrance)**



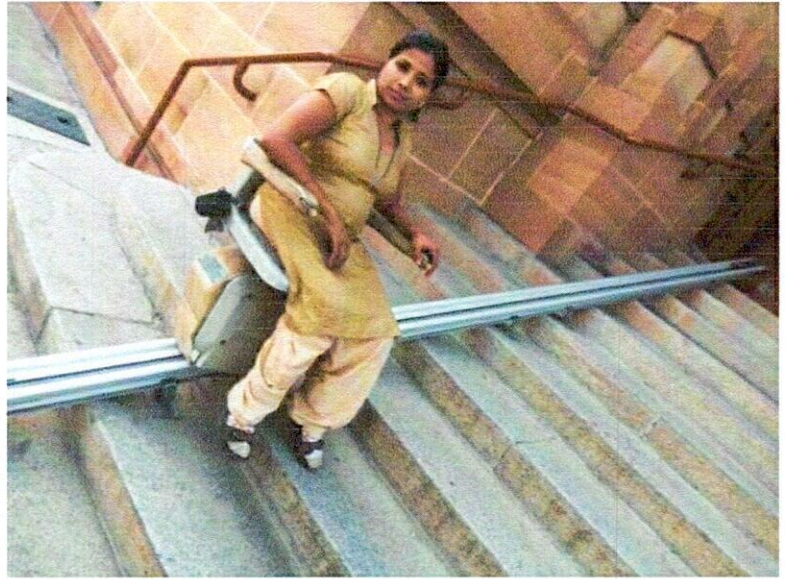
**Broad Entrance for Wheel Chairs**

**SI# 5 – Reception & Lobby (Refer to Page No 29 for Reception & Lobby)**



**Wheel Chair Accessible Reception**

**SI# 6 – Stairs (Refer to Page No 7 for Stairs)**



**Lift Stairs**

**SI# 7 – Ramp (Refer to Page No 4 for Ramps)**

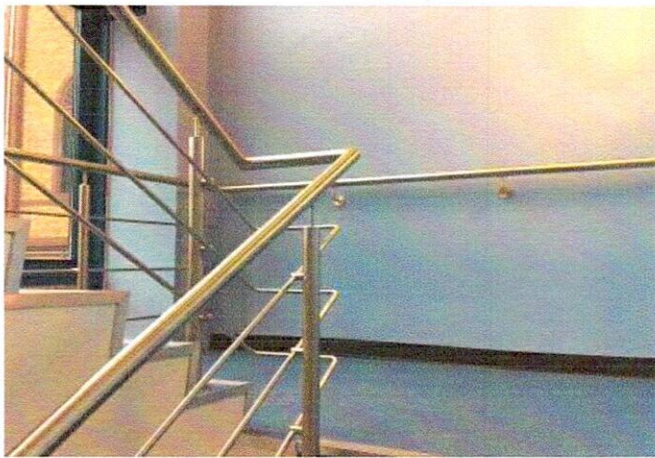


Accessible Ramp with Handrails for PwDs

Signage



**SI# 8 – Handrils (Refer to Page No 9 for Hand Railing)**



**Proper Hand railing**



**Grip Bar**

**SI# 9 - Elevator / Lift (Refer to Page No 31 for Elevator/Lift)**

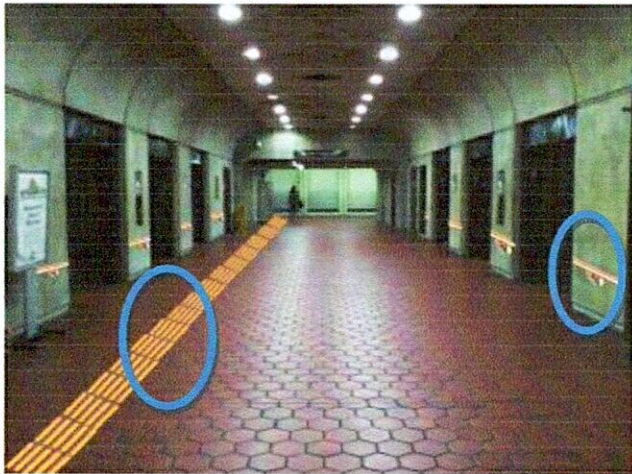


**Accessible Elevator with Grab Bar, Mirror and auditory floor announcement system**

**SI# 10 – Escalator & Passenger Conveyor**

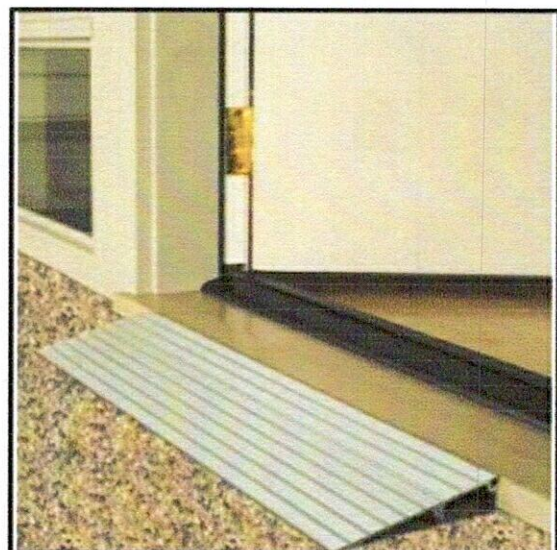
**NOT APPLICABLE**

**SI# 11 – Corridors (Refer to Page No 12 for Corridors)**



**Accessible Corridors with Tactile flooring and low height grab bar as highlighted**

**SI# 12 - Doors and Doorways (Refer to Page No 17 for Doors and Doorways)**



**Accessible Doors and Doorways**

**SI# 13 - Accessible Toilet (Refer to Page No 20 for Toilets)**

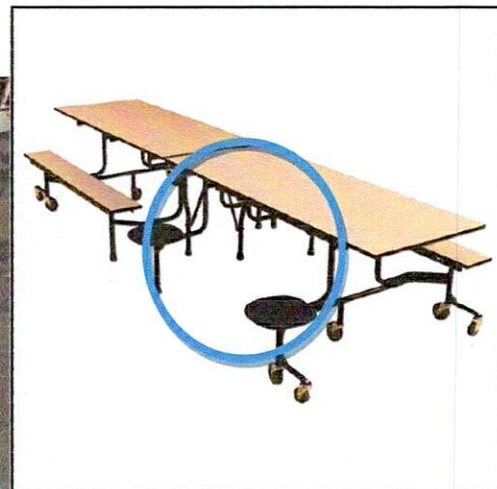


**Accessible Toilets with Grab Bars**

Signage

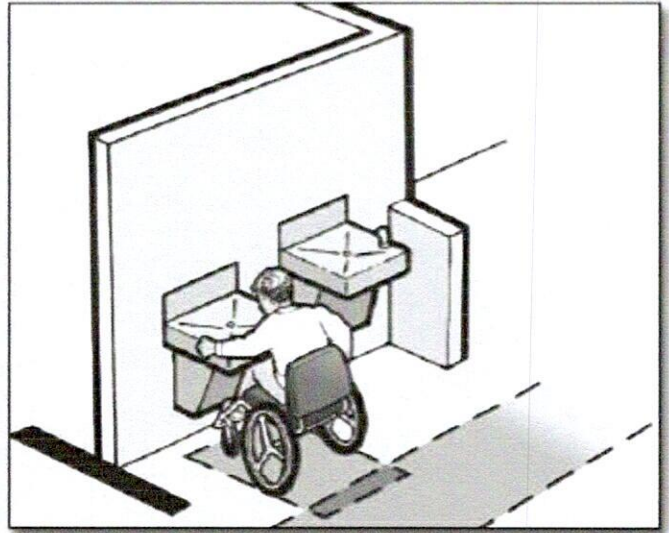


**SI# 14 - Cafeteria**



**Accessible Tables in the Cafeteria Highlighted circle shows knee space for wheel chair users**

**SI# 15 - Drinking Water Facility** (Refer to Page No 38 for Drinking Water Facility)



**Accessible Drinking Water Area**

**SI# 16 - Control and Operating Mechanisms** (Refer to Page No 61 for Control and Operating Mechanisms)



**Accessible Fire Extinguisher**



**Accessible Operating Machines**



**Accessible Switches in Lift**

**SI# 17 – Signage (Refer to Page No 25 for Signage)**



**SI# 18- Emergency Evacuation (Refer to Page No 35 for Emergency Evacuation)**



**Emergency Evacuation**



**Evacuation Chair**

**Evacuation Signage**



## RECOMMENDED VENDORS FOR ACCESSIBILITY PRODUCTS

S. No.	Name of the Vendor	Dealing with	Contact
1	<b>Barrierfree- Source One Enterprises</b>	<ul style="list-style-type: none"> <li>➤ Braille and Tactile Signage</li> <li>➤ Tactile Maps &amp; Audio Tactile Maps</li> <li>➤ Signage, Audio Signs</li> <li>➤ Tactile Tiles</li> <li>➤ Grab Bars, Braille Handrail Indicators</li> <li>➤ Ramp Anti Skid Surfaces</li> <li>➤ Emergency evacuation Chair</li> <li>➤ Accessible Drinking Water Fountains</li> <li>➤ Braille Lift Signs</li> <li>➤ Accessories for Accessible Toilets</li> </ul>	202, Shridhar Apts, Shriram Society Warje, Pune - 411058 Mob : 9823392219 Email : sourceonebizenquiry@gmail.com www.barrierfree.in
2	<b>Mass Lift, P. Padmanabhan (CEO) Hydraulic Lift India</b>	<ul style="list-style-type: none"> <li>➤ Accessibility Lifts</li> </ul>	New No. 1, Old No. 19A, Sathyamoorthy Street, Devaraj Nagar, Saligramam, Chennai - 600093, Tamil Nadu Mobile: 9884970377, 9176148407 Telephone: (044)-23765988
3	<b>SUGAMYA ACCESSIBILITY AND INCLUSION (OPC) PVT LTD.</b>	<ul style="list-style-type: none"> <li>➤ Access Auditor &amp;</li> <li>➤ Accessibility Consultant:</li> </ul>	Regd. Office: B-52, Street No. 5, East Nathu Colony, Shahdara, Delhi-110032 Email: aicaccessaudit@gmail.com Mob: +91 87662 40665
4	<b>Eco Tatv Trading &amp; Marketing Pvt. Ltd.</b>	<ul style="list-style-type: none"> <li>➤ Tactile Items</li> <li>➤ Signage</li> <li>➤ Accessories for accessible toilets</li> </ul>	Office: JG-3, 95C, Vikas Puri, New Delhi-110018 Contact: 8766240665, 9999888252 Email: info@ecotatv.com

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**Association for Disabled People**

*[Signature]*  
**Gen. Secretary**