

Urban95 Phase-II, Udaipur

Infant, Toddler and their Care- givers (ITC) Master Checklist

- ### ITC Master Checklist
- ✓ EPDM Flooring
 - ✓ Fiber Reinforced Plastic (RFP) Slides
 - ✓ Wooden Logs
 - ✓ Used Tyres
 - ✓ Musical Installation of Hollow Aluminum Pipes
 - ✓ Apex Paint
 - ✓ Dustbins made of HDPE

Foreword



Dear Colleagues,

As Udaipur continues to grow rapidly, it is crucial that we address the needs of our youngest citizens. With children making up a significant portion of our population, ensuring their well-being is essential for the city's future.

Udaipur has proudly joined the Urban95 Program, a global initiative by VLF, aimed at creating healthy and vibrant cities for babies, toddlers, and their families.

As part of Urban95 Phase- II, this ITC Master Checklist has been developed to enhance our existing Schedule of Rates (SoRs) with addition of new Infant, Toddlers and their Care-givers (ITC) and Early Childhood Development (ECD) friendly design components, materials along with their specification, rates and usage as well. This comprehensive document includes both new and existing material, ensuring it serves as a valuable resource for Udaipur's development agencies, including UMC, UDA, USCL, PWD, other service providers such as ICDS, Medical and Health Department and Urban Practitioners-Architects, Urban Planners & Designers and individual domain experts as well.

The checklist aims to streamline the process of developing or retrofitting ITC- friendly spaces and facilities, making it easier for Udaipur to transform itself into an Urban95 city in its true sense. By incorporating these elements into our urban fabric, from neighborhoods and streets to parks and social infrastructure, we are committed to creating a city where our youngest residents can thrive.

Looking forward for implementation of these guidelines collectively, enabling Udaipur to transform itself into a Lighthouse Urban95 city for other to follow the lead.

Sincerely,

A handwritten signature in blue ink, appearing to be 'Ram Prakash'.

Ram Prakash, IAS
Commissioner, Udaipur Municipal Corporation

Note



Dear Stakeholders,

The rapid urbanization of Indian cities presents both challenges and opportunities. As cities like Udaipur expand, it is crucial to focus on creating environments that support the well-being and development of our youngest citizens. Recognizing children as a national asset, the Government of India has initiated various programs to make cities more responsive and family-friendly. One such initiative is the Urban95 Program, led by VLF, which aims to foster healthy, prosperous, and vibrant cities for babies, toddlers, and their families.

Udaipur has demonstrated remarkable commitment by joining the Urban95 Program, starting June 2019 with Urban95 Phase-I and following the success of it, which was completely led by Udaipur Municipal Corporation, has then moved into Urban95 Phase-II, started February 2021. It has aimed to transform Udaipur into a Lighthouse Urban95 city, leading the way for other municipal corporations across India. The Urban95 Program emphasizes prioritizing young children and caregivers, inclusive planning and design, integrated services, development of public spaces, and the implementation of sustainable urban development practices.

The ITC Master Checklist is designed to be a guiding document for anyone involved in developing, retrofitting, or rejuvenating ITC-friendly spaces, facilities, and amenities in the city. By incorporating these guidelines, Udaipur can create a more nurturing urban environment for its youngest residents, ensuring their growth and development in a safe and supportive setting.

We are proud to support Udaipur in this transformative journey and look forward to seeing the positive impact of these efforts on the city's future.

Best,

A handwritten signature in blue ink that reads "Prakash Paul". The signature is stylized and cursive.

Prakash Paul
Country Lead & Principal Consultant
Van Leer Foundation (VLF), India

Message



Greetings!

I am pleased to share the Urban95 ITC Master Checklist, a comprehensive guide developed to enhance the urban landscape of Udaipur for its youngest residents. Our team at Udaipur has meticulously prepared this checklist as part of the Urban95 Program, aiming to create a city that supports the growth and development of Infants, Toddlers, and their Care-givers along with Pregnant and Lactating Women as well.

Udaipur's rapid urbanization presents unique challenges, especially in ensuring that our infrastructure meets the needs of all citizens, particularly children. Recognizing this, we have collaborated closely with the Udaipur Municipal Corporation (UMC) and other key stakeholders to develop this document. The checklist integrates both new and existing items & materials aligning with the current Schedule of Rates (SoR) for Rajasthan Urban Infrastructure Development Projects (RUIDP) and Public Works Department (PWD).

UMC's role is critical not only in implementing this Checklist, but also in inspiring other development agencies and service providers of the city to adopt the said checklist in their daily working. Designed and prepared to serve as user- friendly and ready reckoner document for its users, it can play an important role as far as developing and/ or retrofitting, rejuvenating projects with new and existing design components, materials, specifications, rates and usage in place, crucial for creating child- friendly urban built environments.

The design components, materials listed in the document have been carefully selected based on their proven effectiveness in various projects carried out during Urban95 Phase-I and Phase- II as well. By incorporating these elements, we aim to transform Udaipur into a city that truly embodies the principles of the Urban95 initiative.

We are excited about the potential impact of this checklist and look forward to seeing Udaipur evolve into a more inclusive and nurturing city for its youngest citizens.

Best Regards,

A handwritten signature in blue ink, appearing to read 'Emani Kumar', with a long horizontal stroke extending to the right.

Emani Kumar
Deputy Secretary General, ILCEI- Local Government for Sustainability &
Executive Director, ICLEI South Asia

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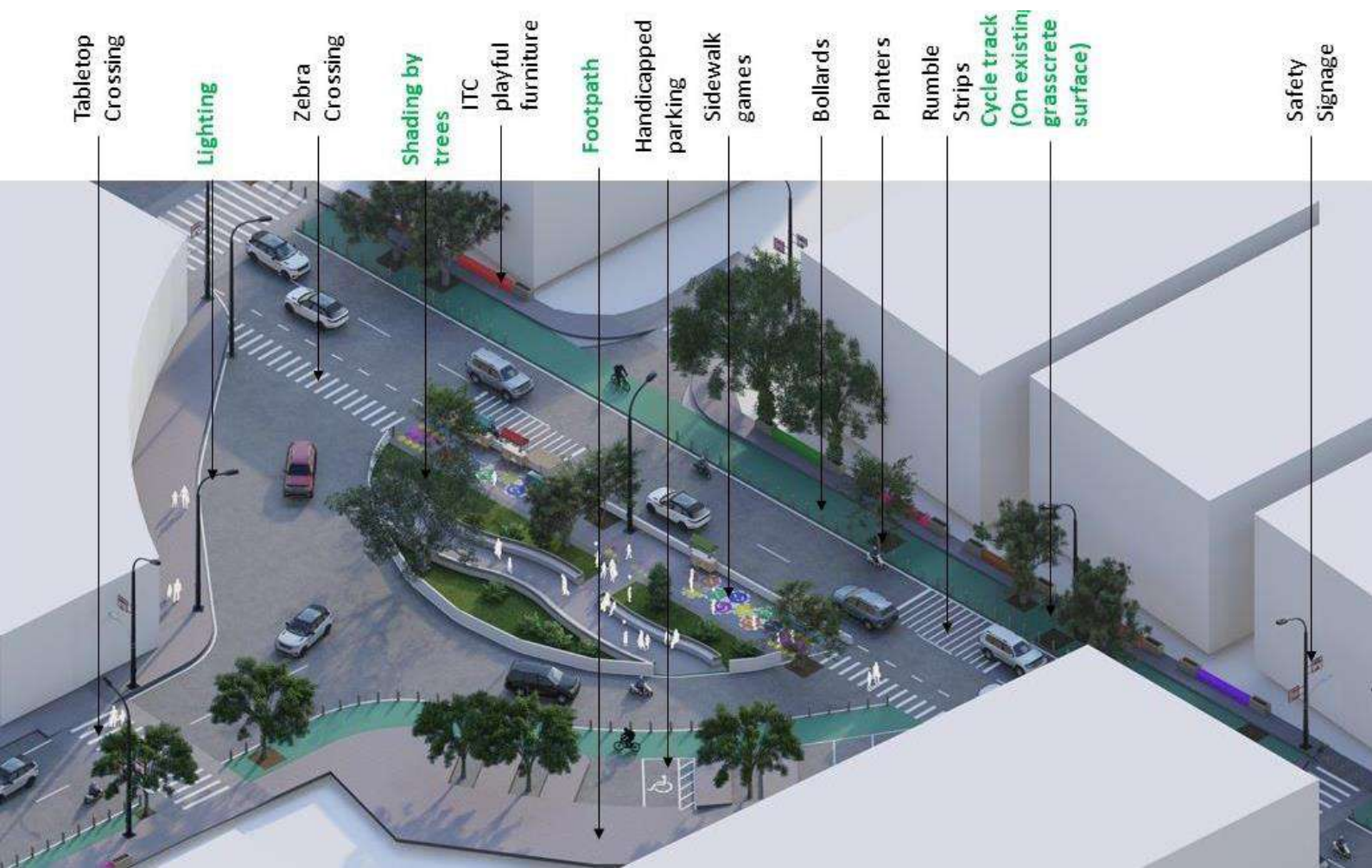
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List of Abbreviations

S/n	Abbreviation	Definition
1	ADB	Asian Development Bank
2	AFD	Agence Française de Développement
3	ANM	Auxiliary Nurse Midwives
4	AWC	Aanganwadi Centre
5	AWW	Aanganwadi Workers
6	AMRUT	Atal Mission for Rejuvenation and Urban Transformation
7	CBW	Capacity Building Workshop
8	CDP	City Development Plan
9	CPZ	Children Priority Zone
10	CSR	Corporate Social Responsibility
11	CFSC	Child- Friendly Smart Cities
12	CSCAF	Climate Smart Cities Assessment Framework
13	DPR	Detailed Project Report
14	DFID	Department for International Development
15	EU	European Union
16	ECD	Early Childhood Development
17	EWS	Economic Weaker Section
18	EBRD	European Bank for Reconstruction and Development
19	ECCE	Early Childhood Care & Education Center
20	EPDM	Ethylene Propylene Diene Monomer
21	FGD	Focused Group Discussions
22	GoI	Government of India
23	GHG	Greenhouse Gas
24	GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
25	IDI	In- depth Interview
26	ITC	Infant, Toddler, and Care- giver
27	ICDS	Integrated Child Development Services
28	ITDP	Institute for Transportation and Development Policy
29	ICLEI- South Asia	ICLEI – Local Governments for Sustainability, South Asia
30	KII	Key Informant Interview
31	MS	Mild Steel
32	MoU	Memorandum of Understanding
33	MAS	Mahila Arogya Samitis
34	MHRD	Ministry of Human Resource Development
35	MWCD	Ministry of Women & Child Development
36	MoHUA	Ministry of Housing and Urban Affairs
37	NEP	National Education Policy
38	NCAP	National Clean Air Program
39	NIUA	National Institute of Urban Affairs
40	O&M	Operational & Maintenance
41	OPD	Outpatients Department
42	PHC	Primary Healthcare Centre
43	PMU	Project Management Unit
44	PWD	Public Works Department
45	PSC	Project Steering Committee
46	PHED	Public Health Engineering Department
47	RTDC	Rajasthan Tourism Development Corporation
48	RUIDP	Rajasthan Urban Infrastructure Development Project

49	SoR	Schedule of Rate
50	SCM	Smart City Mission
51	SNP	Supplementary Nutrition
52	UDA	Urban Development Authority
53	UMC	Udaipur Municipal Corporation
54	UPHC	Urban Primary Healthcare Center
55	USCL	Udaipur Smart City Ltd.
56	USAID	United States Agency for International Development
57	VBR	Vidhya Bhawan Road
58	VLF	Van Leer Foundation
59	VBES	Vidhya Bhawan Educational Society



Urban 95, Udaipur Key Partners



City Partner, Urban95 Phase-II, Udaipur

The Udaipur Municipal Corporation (UMC) is the main civic agency responsible for provision, operations and maintenance of the urban services in the city municipal area. With an area of 64 sq km, it is the district headquarters and is divided into 55 wards. UMC is headed by Mayor and Municipal Commissioner (MC), wherein Mayor is the elected representative and represents councilors of all the wards, while MC is the administrative head and oversees the day to day working of Corporation.

Supporting Partner, Urban95 Phase- II, Udaipur

Van Leer Foundation (VLF) believes that giving all young children a good start in life is both the right thing to do and the best way to build healthy, prosperous and creative societies.

A private foundation focused on developing and sharing knowledge about what works in early childhood development. Over the last 50 years VLF has worked in all regions of the world. VLF partnerships have informed public policies in more than 25 countries, led to innovations in service delivery and training that have been widely adopted by governments & NGOs, and generated breakthrough ideas that have changed the way stakeholders from parents to policymakers think about the earliest years of a child's life.



Technical Partners, Urban95 Phase-II, Udaipur

ICLEI – Local Governments for Sustainability is a network of more than 1,750 local & regional governments, supported by a team of global experts, driving sustainable urban development worldwide. Active in 100+ countries, ICLEI impact over 25% of the global urban population. ICLEI South Asia - the South Asian arm of ICLEI, aims to build and serve a regional network of local governments to achieve tangible improvements in regional and global sustainability through local initiatives. In Udaipur, ICLEI- South Asia is supporting UMC on the themes of climate change, sustainable urban mobility, built environment and low carbon –resilient development. It was also the technical partner for Urban95 Phase-I, and has helped Udaipur to become the lighthouse/ showcase city through the successful implementation of its various activities, especially the tactical interventions.



Headquartered in the Netherlands and a 91-year-old international organization, Ecorys provides research, consulting, programme management and communications services from its 22 offices spreading all over the globe and is known for its vision- "to address today's most important societal challenges." Having a multi-disciplinary team with good mix of researchers, policy experts, programme managers, communications specialists, planners & designers, they have marked their presence amongst the leading agencies such as World Bank, ADB, USAID, European Commission, DFID, AFD, EU, GIZ, EBRD etc. (in India & other countries) and have secured 3rd rank in the European Union under the field of Development.



Executive Summary

Indian cities are urbanizing and growing at an unprecedented speed in recent decades, and the growth has been so rapid and uncontrolled, that cities infrastructure services has been outstripped to meet the physical and social needs much faster than anticipated. With increase in urbanization and population, India is witnessing robust growth in younger population, with 10% (~36 million) is constituted by children below 6 years¹ and another 32% of its population (~120 million) is constituted by children between 6 to 18 years of age².

Growing up in the cities is as complex as it is exciting, as with plenty of opportunities it is also wrought with enormous threats that impact the overall growth and development of a child. Thus, making cities more children and their care giver friendly is an objective that cuts across many overlapping problems and doesn't just benefit children.

Recognizing children as a national asset, Government of India (GoI) has initiated and taken up various programs, plans and policies, initiatives, flagship missions etc. to make cities more responsive and friendly from the perspective of children and their families, and one such initiative is Urban95 which is VLF's global initiative aimed at creating healthy, prosperous, and vibrant cities where babies, toddlers and their families can thrive.

Realizing the need to transform its urban built environment into more Infant, Toddler, and their Caregivers (ITC) responsive and ITC friendly, Udaipur in Rajasthan has agreed to be part of Urban95 Program, and in process has join hands with VLF via a formal Memorandum of Understanding (MoU). The Phase-I of the Program began in June 2019 for a period of 18 months and given the success of the same, Udaipur has moved into larger and bigger phase starting Feb'21, planned for 36 months.

As a part of Urban95 Phase-II, a ITC Master Checklist has been envisaged with the aim to strengthen the items and material list of existing Schedule of Rates (SoR), i.e. Rajasthan Urban Infrastructure Development Projects (RUIDP), 2023 and Public Works Department (PWD), 2023- 24 with the addition of new ITC and Early Childhood Development (ECD) friendly items & materials, its specifications and rates, currently missing from the above set of SoRs.

For making it a comprehensive document, the said checklist not only consists of new items & materials but also of existing items and materials, currently the part of existing SoRs.

This comprehensive and detailed yet easy to use checklist is also aimed to be a ready reckoner document for Udaipur's numerous development agencies such as UMC, Urban Development Authority (UDA), Udaipur Smart City Ltd. (USCL) and it's PMU, PWD along with other service providers, i.e. Integrated Child Development Services (ICDS) and Medical & Health Department along with Urban Practitioners- Architects, Urban Planners & Designers and for anyone responsible and/or wanting to develop or retrofit, rejuvenate ITC friendly spaces, facilities, utilities and amenities in the city.

The items & materials along with their details are identified and included based on their usage in various planned and executed projects including tactical interventions, also referred to as semi- permanent projects as a part of Urban95 Phase- I and Phase- II.

1 Census 2011

2 Census 2011

Moreover these projects essentially covers all the ITC elements of urban fabric starting from neighbourhood, streets & roads, parks, social infrastructure, urban services and facilities and amenities, hence has covered all the items and materials, in the process making it easier for city to transform itself into an Urban95 city in its true sense.



Figure 1 Graphical Representation Showcasing ITC Enabled Footpath

1 Background- Need & Purpose of ITC Master Checklist

Urban95 is VLF's global initiative, aims to create healthy, prosperous, and vibrant cities where babies, toddlers and their families can thrive. The initiative is meant to make lasting change in the urban landscape and provide opportunities that can shape the crucial first five years of children's lives. The goal of this initiative is to support healthier, safer, and more exciting urban neighbourhoods for young children, for those who care for them, and for everyone.

With the success of Urban95 Phase-I, Udaipur has moved into Urban95 Phase-II, focusing on scaling up and sustainability of various projects through implementation of various "lighthouse" projects, mostly tactical interventions. Phase-II aims to incorporate Urban95 components in policy, enhance institutional capacities through trainings and peer learning workshops and other initiatives such as creation of institutional documents such as ITC Master Checklist, Child Safety Guidelines (CSG) and ECD Policy as well.

As a part of Urban95 Phase-II, a ITC Master Checklist has been envisaged with the aim to strengthen the items and material list of existing Schedule of Rates (SoR), i.e. Rajasthan Urban Infrastructure Development Projects (RUIDP), 2023 and Public Works Department (PWD), 2023- 24 with the addition of new ITC and Early Childhood Development (ECD) friendly items & materials, its specifications and rates, currently missing from the above set of SoRs and collating & compiled them in one place for it's easy use.

This has explicitly done for two reasons, detailed out below

- 1) to eradicate the current practice of city engineers of avoiding to use the non- SoR items and materials, even if they really would like to use it, because of tedious and time taking process involved in using non- SoR items and materials.

This tedious process involved a) obtaining minimum 3 quotation of the same item and its details- tech specifications, warranty and/or guarantee (if any), rates from three different vendors. b) negotiating with the vendor offering the lowest rate on reducing the quoted cost even further. c) Moreover, there is a huge possibility of unavailability of few items with local vendors, hence the same needs to be ordered from online vendors and/ or vendors from other nearby cities.

Example- young children slides made of Fiber Reinforced Plastic (FRP) for outdoor areas, proposed in Retrofitting Project of Aanganwadi Center (AWC) was not available with local vendors and has to added by getting quotations from local vendors details from online vendors at IndiaMART, a trusted and verified website for such items.

Moreover, questioning by approval authority of using more non- SoR items instead of limiting themselves to SoR items also deter city engineers in using non- SoR items. This seriously leads to lack of applying and/or using new ideas, innovative designs, design principles and/ or materials etc.

- 2) for helping city engineers and others in using new, innovative, durable and sustainable items and materials in their respective projects.

Once adopted by city authorities and city's numerous developing agencies- UMC, Urban Development Authority (UDA) and PWD, Udaipur Smart City Ltd. (USCL) and it's PMU along with other service providers- i.e. Integrated Child Development Services (ICDS) and Medical & Health Department, this comprehensive and detailed yet handy & easy to use

checklist will be a ready reckoner document not only for these departments but also for Urban Practitioners- Architects, Urban Planners & Designers and for anyone responsible and/or wanting to develop or retrofit, rejuvenate ITC friendly spaces, facilities, utilities and amenities in the city.

For making it an comprehensive document, the said checklist not only consists of new items & materials but also of existing items, materials, available in existing SoRs. For example, the SoR consists the details (nos. of coats, process before and during its usage, thickness along with its rate per sqm) of Thermoplastic Paint, specifically for road markings. However, the same details are missing for Primer and Apex Paint, when it comes to have interactive road markings and this is where, this checklist will come as a useful and handy document.

The items & materials along with their details are identified and included based on their usage in various planned and executed projects including tactical interventions, also referred to and/or known as semi- permanent projects as a part of Urban95 Phase- I and Phase- II. In continuation, ITCN Design Template has also been taken into account while compilation of the same.

Moreover, these projects essentially covers all the ITC elements of urban fabric starting from neighbourhood, streets & roads, parks, social infrastructure, urban services and facilities and amenities, hence has covered all the items and materials, in the process making it easier for city to transform itself into an Urban95 city in its true sense.

With all the items, materials and their details (specifications, rates) in place, if the said checklist is institutionalize at state and/or city level, then has the potential of changing urban built environment into an ITC friendly built environment.

Important to note that all the Non- SoR cost present in the document are the prevailing quoted/ market rates and might change during institutionalization, hence actual rates based on new quotations/ market rates should be obtained and included for making it an authentic and genuine checklist, making it easier for all involved to use this document.

2 Project Brief- Urban95 Phase-I & Phase-II, Udaipur

Taking into account the ITC Focus areas and ITC Elements and its spaces as discussed in previous chapters various projects has been planned, and implemented, which are mix of tactical interventions (Phase-I) and permanent projects (Phase-II) as well, along with other project activities such as Capacity Building and Peer Learning Workshops, formulation of Guideline and Policy documents such as Child Safety Guideline (CSG), ITCN Design Template, Early Childhood Development (ECD) Policy, Hosting of Urban95 Kids Festival etc.

All the implementable projects caters to each of ITC Elements and its related spaces and are planned and designed using ITC objectives, its design principles, identified ITC barriers as discussed in previous chapters. This is done as the demonstration/ showcase projects for the city for them to incorporate the same while development and/ or retrofitting of such spaces by city authorities.

Learnings from all the activities, especially the interventions (planned & implemented) has helped in shaping up the master checklist, as inclusion of non- SoR design components, material, specifications and their rates are the results of these interventions. Moreover ITCN Design Template, a document with similar objective as Master Checklist has also been prepared in Phase-I and has helped immensely in shaping up the ITC Master Checklist.

2.1 Urban95 Phase-I

As mentioned, Phase-I was more of a testing phase with implementation of tactical interventions (4 nos.). which are different from each other in ideas, in design, in scale, in their application and on- ground implementation along with user behaviours around them, having potential to become important 'demonstration and showcase examples' to city govt., to its primary targeted audience and to the citizenry in general. Moreover all these interventions fulfill different and/or all ITC focus areas, i.e. inclusive, accessible, safe, playful and green as well. These four interventions includes

- 1) Traffic Calming Measure outside Vidhya Bhawan Pre- primary School (ITC Focus Areas- Safe, Accessible, Playful);
- 2) Activating an Informal Chowk (Nayion Ki Talai Chowk (Public Plaza)) within the dense setting of Walled City into an children and their care- givers Friendly Chowk (ITC Focus Areas- Accessible, Inclusive, Safe, Playful);
- 3) Rejuvenating Meera Park, within the dense setting of Walled City into an ITC Friendly Park (ITC Focus Areas- Accessible, Inclusive, Safe, Playful, Green);
- 4) Hosting of Urban95 Udaipur Kids Festival at Dudh Talali- A city level park (ITC Focus Areas- Accessible, Inclusive, Safe, Playful, Green).

Below sections imparts the details of the above mentioned interventions separately for better understanding.

2.1.1 Traffic Calming Measure Outside Vidhya Bhawan Pre- primary School

Vidhya Bhawan Road (VBR) is one of the major road segment of the city with Vidhya Bhawan Educational Society (VBES) as its immediate catchment, opening up directly onto the main road and is many educational & surrounded by residential colonies. VBES

includes gamut of educational units such as pre- primary, primary and secondary school, polytechnic college, teachers training institute along with playground, auditorium, hostel, mess block etc. with high movement of young children and their care- givers throughout the year along the stretch..

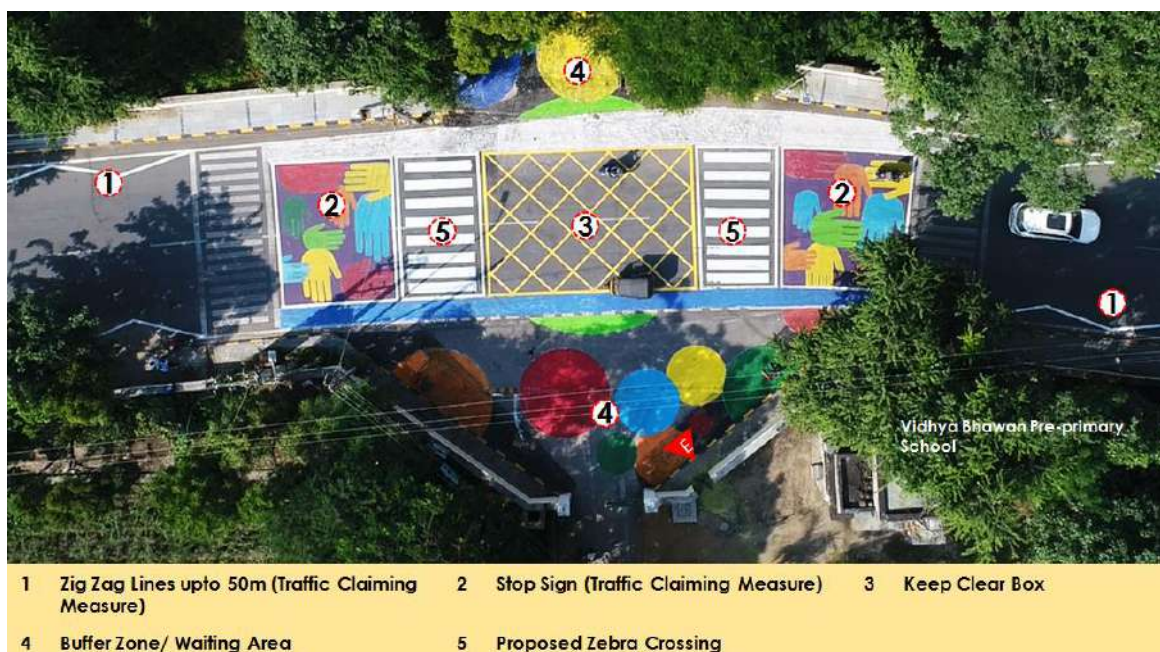
In spite being a major road with high presence of young kids, VBR didn't had effective traffic calming measures such as table tops or speed barriers, road markings, signages etc., resulting in high vehicular speed throughout the day. It is in this context, it was planned to introduce innovative traffic calming measures using colors/ paints for safety of ITC, aiming at

- a) To slow down the high vehicular speed on wide, undivided carriageway that has educational zone as its immediate catchment;
- b) To create color coordinated schemes that not only creates interactive and engaging visually compelling streetscape in the city but also provide engaging opportunities to young children and their care givers.;

Moving forward, series of surveys were conducted using Gehl Toolkit & other means as well. The surveys includes Traffic Count, Activity & Stationary Mapping, FGDs and KIs with school management, ward councilor, care- givers, other road users etc. not only to understand the problems they face on daily/ regular basis but also for taking their need and aspirations into account for incorporating the same into the design proposal.

Based on these surveys and interactions, a proposal was developed, aimed at traffic calming for the safety of the young children and their care- givers and other vulnerable road users as well by the means of color coodinated and visually compelling spaces.

This was planned by proposing mix of technical and interactive solutions using not only the carriageway space but also by using the buffer space on either side, by using road markings as a means of visual traffic calming measure forcing motorists to slow down in this zone.



The proposed desing had series of technical and interactive measures spreading over in 35M space, club together to from a holistic design with measures such as new zerba

crossing, 'Keep Clear Box'- in the middle of the crossing as a sign to pass through this box at not more than 15 kmph, Zig Zag Lines'- on either side of the carriageway with 75M in length from school entrance, proposed to visually reduce the uneven carriageway width to the even 7.5M and also for breaking the straight line of sight on wider carriageway allowing motorists to traverse at high speed.

The zig zag lines were also proposed to visually extend the kerb line, creating extra safety net for road users. All these were the part of technical measures and were to be painted using thermoplastic paints, universally used for road



markings and are permanent in nature **Figure 2 Implemented Intervention & its Post Implementation Impact**

Interactive measures includes 'big colorful hands imprints suggesting 'a stop' to the incoming vehicles, further forcing motorists to slow down while approaching this zone. along with colorful circles of different sizes in buffer zones, as a means of engaging elements for the waiting children also and also as a measure for freeing up the space from parking. It also includes having interactive and engaging boundary walls, especially for ITCs as a measure for having interactive facades.

All the proposed technical measures were to be painted in thermoplastic paints (part of SoR), universally used for road markings and are permanent in nature. Alternatively, Interactive measures were to be painted using emulsion/ apex paint (non- SoR items) over the double coat of primer of its longevity.

2.1.2 Activating an Informal Chowk (Naiyon ki Talai Chowk) into an Children Friendly Chowk

With the objective of transforming a dead public space into a safe, playful, vibrant, interactive and engaging space for young children and their care-givers, Naiyon ki Talai Chowk(public square within the dense setting of Walled city) was identified as the site for implementation of tactical intervention.

'Naiyon ki Talai Chowk' is an amalgamation of two triangular chowks- one bigger and one smaller, surrounded by G+2 residential buildings on one side and has a temple, non-functional Water ATM, public bathing house, few trees with low- heighted sitting platforms around them along with a public hand- pump and an electric pole in middle of the chowk with electric cables radiating out in all directions.

With parking (2 & 4 wheels) consuming almost entire chowk space along with dull and mundane built environment (dilapidated wall surfaces of bathing house, broken structures, construction debris & solid waste lying around inviting strays etc. causing safety

and hygiene concern), playing and/ or other engaging opportunities for the young children and others user groups were nullified, impacting their behaviour in outside environment.

It is in this context, it is envisaged to transform the 'Nayion ki Talai Chowk' into a safe, and playful yet vibrant, interactive and engaging chowk for young children and their care-givers. It was also envisaged to use this chowk as demonstration of how multiple uses can co- exist within the same space with carefully planned and thoughtfully designed ideas. It is in this context, it was envisaged to develop the theme for this intervention in a way that the chowk can be transformed into children space during day time and also offer organized parking space for vehicles during night hours.

Moving forward, series of surveys were conducted using Gehl Toolkit & other means as well. The surveys includes Activity & Stationary Mapping, FGDs and KIs with community, ward councilor, care- givers etc. not only to understand the problems they face on daily/ regular basis but also for taking their need and aspirations into account for incorporating the same into the design proposal.

As a part of overall design proposal, a learning cum playing and interactive cycling cum walking track was proposed along with few traditional floor games, an imprint of scenic landscape including sun, hills, pond with fish in playful formations, jungle in bright and primary colors, not only for creating attractive and engaging spaces which are safe yet stimulating urban spaces for young children but also for creating visually compelling streetscape in the city. Graffiti on temple wall in form of animated younger 'avataar' of the temple deity was included. The bathing house walls were colored in bright shades and spinning wheels of different sizes were installed at different heights as an engagement activity for children under the natural shade of the trees. The planter beds were repaired to make low- height seating for young kids and their care- givers, in the



process transforming this into an bright, active and interactive and engaging corner.

The design also showcased the efficient manner in which multiple and co- use of the same space is possible, minimizing the need for additional space. This was done by

organizing 2 and 4 wheel parking within the intervention zone by merging them into the proposed design elements, in a way that the chowk can be transformed into children space during day hours and also offer organized parking space for vehicles during night hours. All the painting related work has been done using emulsion/ apex paint (non- SoR item).



Figure 3 Implemented Intervention & its Post Implementation Impact

2.1.3 Rejuvenation of a Meera Park into an ITC Friendly Park

Meera Park, a neighbourhood park is situated within the dense setting of walled city and is accessible from a road with steep gradient with many AWCs, play schools, pre- primary and primary schools situated within the close proximity.

The park is an elongated space with good nos. of trees, benches, light poles, slides and other playing equipment's for young kids, landscaped areas, mix of hard and soft paving but all in in defunct condition due to lack of maintenance and regular upkeep. In absence of regular cleaning and upkeep, the park was full of wild bushes and unwanted shrubs grown up in and around children playing areas keeping young children and their care-givers away from the park.

Given the fact that walled city offers very little green or recreational spaces for young children to engage with, due to its dense setting and to have this big space within the dense setting was kind of blessings, however the space was getting wasted due to the above mentioned reasons, and it is in this context it was envisaged to transform it into a safe, and playful yet vibrant, interactive and engaging space for young children and their care-givers.

It was also envisaged to developed the park space into a play and sensory - motor learning space by introducing sand pits, gravel pits, installations and games using waste material like old tyres, wooden logs along with introduction of traditional games on grounds, for promoting 'learning while playing', '3R' (Reduce, Recycle, Reuse) and 'best out of waste as well.

Moving forward, series of surveys were conducted using Gehl Toolkit & other means as well. The surveys includes Activity & Stationary Mapping, FGDs and KIs with community, ward councilor, care-givers etc. not only to understand the problems they face on daily/ regular basis but also for taking their need and aspirations into account for incorporating the same into the design proposal.

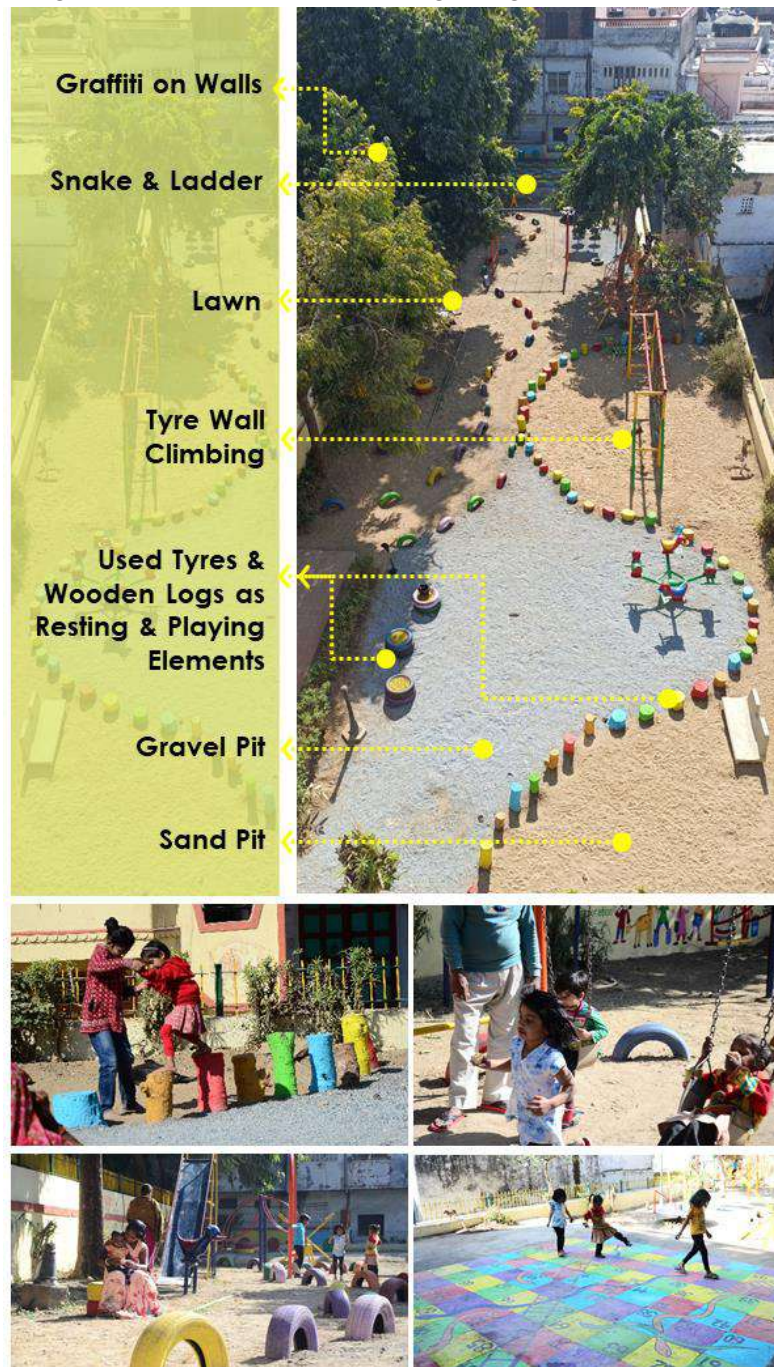


Figure 4 Implemented Intervention & its Post Implementation Impact

A draft proposal was developed for the park with the aim of revitalizing the park into a highly interactive and engaging park. proving beneficial for young children in developing and/or activating their gross motor, cognitive, imaginative skills by engaging themselves in various playful and other engaging activities within the safety net of the softscape. It was

also aimed at increased social interaction and peer learning among young children with increase in time spent in outdoor playful and engaging environments.

As a part of overall design proposal, it was envisaged to segregate the park spaces into various zones with the help of softscaping using kids friendly material such as sand, gravel, grass etc. Moreover, all the defunct playing equipments (swings, slides), benches and light poles were repaired for creating attractive and engaging spaces which are safe yet stimulating urban spaces for young children. Boundary wall of the parks were also transformed into an interactive and engaging facades.

2.1.4 Urban95 Udaipur Kids Festival, Manikya Lal Verma Park (Dudh Talai)

A Kids Festival has been planned aimed at engaging primary target audience. i.e. younger children and their care-givers as the 'direct and active users' of the implementation activities and of the space and its immediate surroundings as well during the 'implementation stage' itself.

Taking this as the basis for implementation of 4th tactical intervention, a 2 days kids festival , branded as 'Urban95 Kids Festival' has been conceptualize to engage young children and their care- givers by the means of different games and activities, and was held at one of the city level park famously known as Manikya Lal Verma Park or Rock Garden at, Dudh Talai.

Situated on the bank of Lake Pichola, Manikya Lal Verma Park at Dudh Talai is a beautiful park, situated within the dense setting of walled city, on the foothills of 'Machla Magra'. The park was selected as the site/ venue for organizing the 'Urban95 Kids Festival' due to the fact that the park presents vast sensory and multi- leveled movement opportunities due to its contoured and multi- leveled topography having dense and natural tree cover, tucked away in silent corner yet within the core city limit and presents a very calming and soothing atmosphere to its users.

Constructed in late seventies, the park is carved out of a rugged rock with multiple fountains, an artificial water stream along with beautiful & unique structures. Accessible via multiple locations (2 pedestrian gates and 1 vehicular entry with ample parking space), the Park also presents lot of sensory (visual, hearing, smell etc.) and physical engagement activities (swings, slides) to its users and also has other ITCN elements such as naturally shaded seating spaces (ample of benches, steps, lawn), dustbins at strategic locations, lighting, utilities such as potable water and toilets, a food kiosk and a restaurant.

However, the park has lost its sheen in absence of timely repair and maintenance and regular upkeep, and most of the slide and swings needs repairing/ retrofitting to make them functional again for its users.

It is this context a kids festival has been planned at this park with the aim of bringing back the associational value of the park, creation of an engaging space for young children and was also aimed at demonstrating how such urban spaces, which has lost their charm and relevance (in absence of timely repair and maintenance and upkeep) can be transformed into an active ITC friendly and ITC responsive zone with right kind of activities and improvement of its built environment.

In continuation, park retrofitting/ repairing has been taken up with support from UMC and includes but not limited to repairing and maintenance of kids playing equipments, tiling

work, fountain along with its unique structures and were revived to their original glory to be ready for kids festival.

As part of festival series of activities were planned, aimed to involve and engage young children as the direct and active beneficiary by providing stimulating, active and cognitive atmosphere which helps in developing and improving gross and fine motor skills, locomotor skills along with exposing them to various sensory experiences necessary to develop the sensory processing capabilities and stimulating the touch, sight and hearing senses. These activities includes kids hurdle games, target throw games, ball games, clay modeling, bubble zone, sandpits, low hanging visual gallery, learning trees and so on.

The festival also had visual and sound based engagement activity such as story- telling, puppet and magic shows along with other activities such as art and craft, planned and organized to develop imaginative and creative thinking and Cognitive learning through the active actions and expressions.

The festival also had 'Plantation' as one of the activity, planned and aimed to connects young children with nature and help to promote locomotor and management skills.

A free of cost transportation facility (pick and drop) with support from UMC was arranged for the schools and AWCs, not having their own transportation facility and could not arrange one. All the participating kids were served with healthy snacks and fresh fruit juice to keep them active and hydrated during the festival, and the venue had hydration points at every 15- 20 M. A 'Feeding Room' was also erected at the venue- 1st of its kind for the city in public domain for lactating mothers.

The festival has also proved as seamless multi- departmental coordination with a)



Ambulance and 2 nurses with first aid kit and other medical equipments in case of medical emergency from Medical & Health Dept., b) home guards manning the venue on the festival days, c) artists and activity partners from West Zone Cultural Centre (WZCC) on pro- bono basis and d) Fire Brigade and mini buses for safety and transportation facility respectively from UMC.

As a part of festival visually compelling and aesthetically designed promotional material in form of bilingual activity banners, posters, invitation cards were also prepared to disseminate the festival information (on social media and at other platforms) and also for maximum outreach for increased participation in the festival.

In the span of 2 days the 'Kids Festival' had participation from 14 private schools (pre and play schools) and all the AWCs of the city along with individual walk in, totaling more than 1500 young children along with their care- givers (teachers and parents).



Figure 5 Implemented Intervention & its Impact

In continuation two more Urban95 Udaipur Kids Festival has been organized as a part of Phase-II with similar objectives and activities as well. These two festivals of Phase-II were organized at Gulab Bagh and Nehru Baludhyan, Town Hall respectively with participation of more than 3500 young children and their care- givers along which is mix of privately run schools, AWCs and individual walk in.





Figure 6 Excerpts from Urban95 Udaipur Kids Festival, Phase-II

Two more tactical interventions, namely transformation of identified AWC and Primary Healthcare Center (PHC) into an model Urban95 AWC and PHC were planned, however due to COVID- 19 lockdown, become part of Phase-II and were subsequently implemented in Phase-II, with further details outlined in the following sections.

2.1.5 Learnings from Urban95 Phase-I

- 1) Support and willingness of city partner (administrative and political) is important for any project and it helps immensely in project activities- from planning to resource allocation (manpower, financial) to on- ground implementation as well;
- 2) Stakeholder engagement- government, non- government (NGOs, CBOs, RWAs,, Urban Practitioners, individual experts etc.) and community at all stages of project helps strongly in building broader support and trust, resulting in seamless and hassle free project activities including on- ground implementation;
- 3) It also helps in building sense of ownership and sense of belonging among govt. and communities, resulting in long- term sustainability of projects;
- 4) Also helps in scalability and replicability of concept/ ideation and its projects;
- 5) Building broader support and trust also facilitates the co-creation of spaces, exemplified by students volunteering in all implementation activities.

2.2 Urban95 Phase-II

The focus of Urban95 Phase-II is in on scaling up and sustainability of various projects through various “lighthouse” projects in neighbourhoods, streets and junctions, parks, and health facilities, incorporating Urban95 components in policy, enhance institutional capacities through trainings and peer learning, and build a broad coalition of support by involving relevant stakeholders in projects and other initiatives.

As explained, the projects in neighbourhoods, streets and junctions, parks, and health facilities were aimed at creating ITC friendly spaces and destinations catering to ITC needs, fulfilling different and/or all ITC focus areas, i.e. inclusive, accessible, safe, playful and green as well. The projects includes

- 1) Development of Child and Family- friendly Junctions and 1.5 kms Connected & Shared Street (ITC Focus Areas- Accessible, Inclusive, Safe, Green, Playful);
- 2) Development of two Child Priority Zones around Anchor Institution like AWC, PHC, Parks/ Playground and defined perimeter around it (ITC Focus Areas- Accessible, Inclusive, Safe, Green, Playful);
- 3) Development of Sensory Park in a neighbourhood or a city level park (ITC Focus Areas- Green, Playful, Safe, Accessible, Inclusive);
- 4) Retrofitting of an AWC into an model Urban95 AWC (ITC Focus Areas- Playful, Safe, Green, Accessible, Inclusive);
- 5) Retrofitting of an PHC into an model Urban95 PHC (ITC Focus Areas- Accessible, Safe, Playful, Green, Accessible, Inclusive);

Below sections imparts the details of the above mentioned interventions separately for better understanding.

2.2.1 Development of Child and Family- Friendly Junctions and 1.5kms Connected & Shared Street

Development of 1.5 kms Road/ Street and 3 connected junctions at the identified site is aimed at transforming these road/ street stretch and 3 junctions into an urban95 model road/ street and junctions by plugging in the suitable ITCN features using ITC objectives, its design principles and identified ITC barriers as well.

It is in this context a road stretch known as ‘Saheli Marg’, situated between UIT Junction and Fatehepura Police Chowki (also known as Seva Mandir Chauraha) along with the road stretch known as ‘Big Bazaar Road’ situated between ‘Saheli Marg Triangular Junction’ & ‘Sukhadia Circle Junction’ has been identified and finalized for transformation of the same into Urban95 model roads/ streets and junctions.

The above has been finalized basis on available Right of Way (RoW), availability of other ITCN destinations (neighbourhood parks, AWCs, PHCs, etc.) within close proximity, higher footfalls of ITCs etc. along with ITCN surveys (Footfalls count, Stationary Mapping, Activity Mapping etc.).

In continuation, a conceptual design proposal was planned and finalized to transform these roads/ streets and junctions into Urban95 model roads and junctions with the following features-

- Continuous and unobstructed footpaths/ sidewalks;
- Traffic Calming Measures- table tops, road markings & signages;
- Bus shelters and earmarked Intermediate Public Transport (IPT) waiting and parking spaces and their pick-up and drop-off locations;
- Public Bicycle Sharing (PBS), Bicycle Stands;
- ITC Enabled Street Furniture including Shaded Resting Areas- benches, light poles, bollards, dustbins, water ATMs, Feeding Booths, along with road side planters;
- Sidewalks Games, Public Art, Murals;
- ECD messages at regular intervals informing community and service providers on the importance of these elements and moreover informing caregivers on the importance of Outdoor Activities for children for their overall growth and development etc.





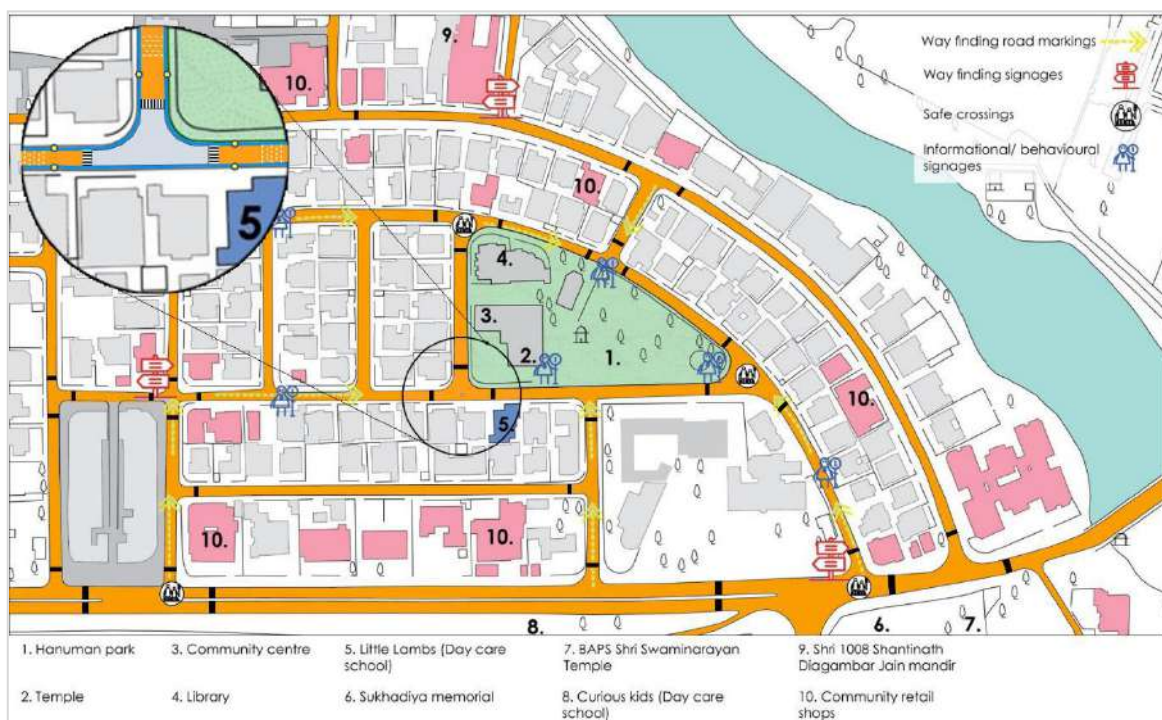
Figure 7 Graphical Representation of ITC Enabled Road Stretch and Junctions

2.2.2 Development of Children Priority Zone (CPZ) at Ashok Nagar

Development of CPZ is aimed at transforming the identified neighbourhoods into an Urban95 neighbourhoods by plugging in the suitable ITCN features using ITC objectives, its design principles and identified ITC barriers as well. It is in this context Hanuman Park (Anchor Institute) and its 600m catchment/ periphery in Ashok Nagar has been identified and finalized for transforming this neighbourhood into a CPZ.

In this regard, various on- site surveys and assessment were conducted and the findings of the same has fed into design and development of Ashok Nagar CPZ. Taking these findings into account along with the identified ITCN barriers, a conceptual design proposal has been developed using ITC friendly elements, features, material and specifications etc. The transformation of Ashok Nagar CPZ has following features

- Demarcation of dedicated ITC zone within the Hanuman Park with provisioning of
- age- appropriate playing equipments, sandpits, and other engaging elements;
- Adequate yet shaded resting cum playing spaces made out of wooden logs;
- Interactive & inclusive pathways with ITC enabled Ramps, floor games;
- Plantation in & around ITC dedicated zone;
- Availability of public amenities- water ATM, separate yet child friendly toilet, lactation room;
- Shared street with ITC enabled sidewalks
- Sidewalks with drain covers, shaded resting spaces at regular intervals;
- Availability of public amenities- water ATMs, separate yet child friendly toilet, lactation & diaper change room at regular intervals;
- Interactive and engaging facades with in- built games, interactive stories, ECD messages;



- Traffic calming measures including road marking & signages;
- Interactive wayfinding and informatory signages;
- organized parking (2 and 4 wheelers);
- Availability of Cycle Stands outside Hanuman Park and at Junctions as well;
- Availability of street furniture- dustbins, road side plantation;
- Lighting within the neighbourhood and at anchor institute as well;

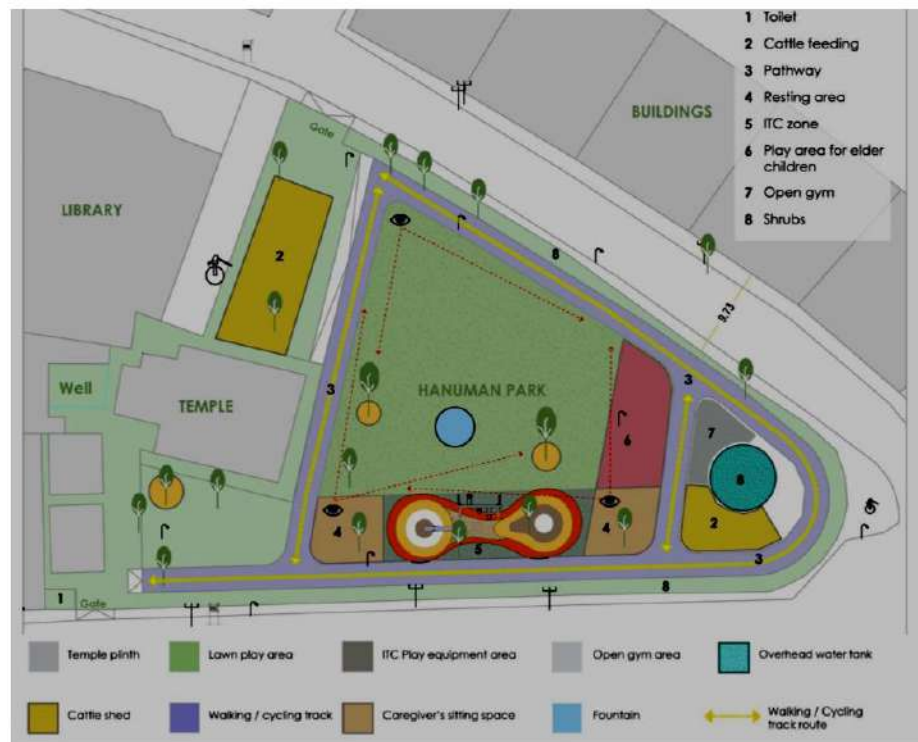




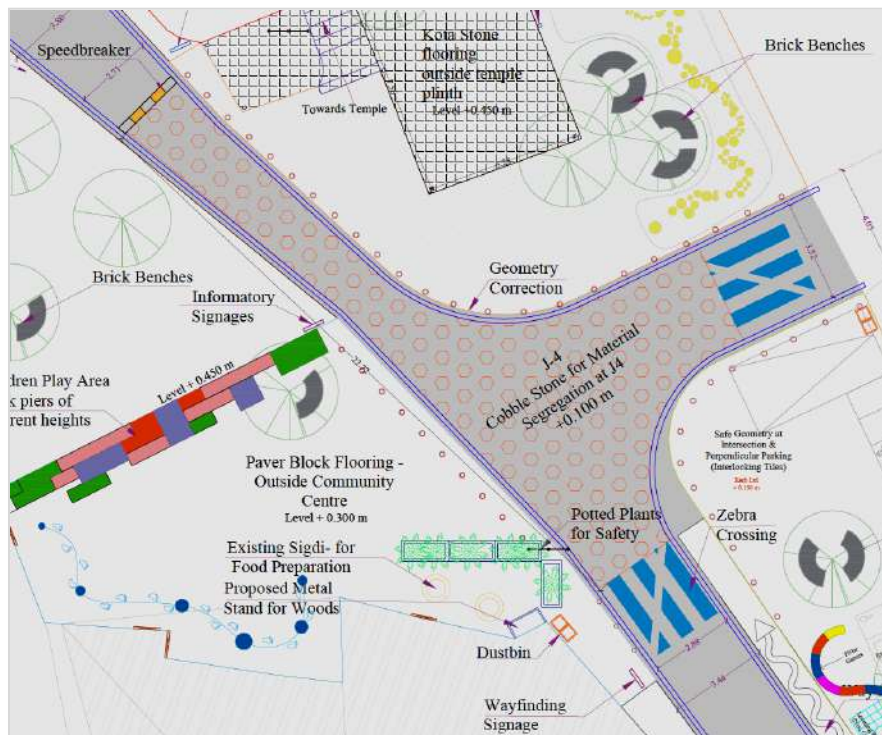
Figure 8 Graphical Representation of ITC Enabled Park (Anchor Institute) & Connected Street

2.2.3 Development of Children Priority Zone (CPZ) at Neemuch Kheda

Development of CPZ is aimed at transforming the identified neighbourhoods into an Urban95 neighbourhoods by plugging in the suitable ITCN features using ITC objectives, its design principles and identified ITC barriers as well. It is in this context a AWC has been identified as Anchor Institute and its 600m catchment/ periphery in Neemuch Kheda has been identified and finalized for transforming this neighbourhood into a CPZ.

In this regard, various on- site surveys and assessment were conducted and the findings of the same has fed into design and development of Neemuch Kheda CPZ. Taking these findings into account along with the identified ITCN barriers, a conceptual design proposal has been developed using ITC friendly elements, features, material and specifications etc. The transformation of Neemuch Kheda CPZ has following features

- Shared street with ITC enabled sidewalks;
- Sidewalks with drain covers, shaded resting spaces at regular intervals;
- Adequate yet shaded resting cum playing spaces;
- Interactive & inclusive pathways with ITC enabled Ramps, floor games;
- Material differentiation for road finishes at the junctions
- Interactive and engaging facades with in- built games, interactive stories, ECD messages;
- Traffic calming measures including road marking & signages;
- Interactive wayfinding and informatory signages;
- Availability of Cycle Stands at Junctions;
- Availability of street furniture- dustbins, road side plantation;
- Lighting within the neighbourhood for increased sense of safety;



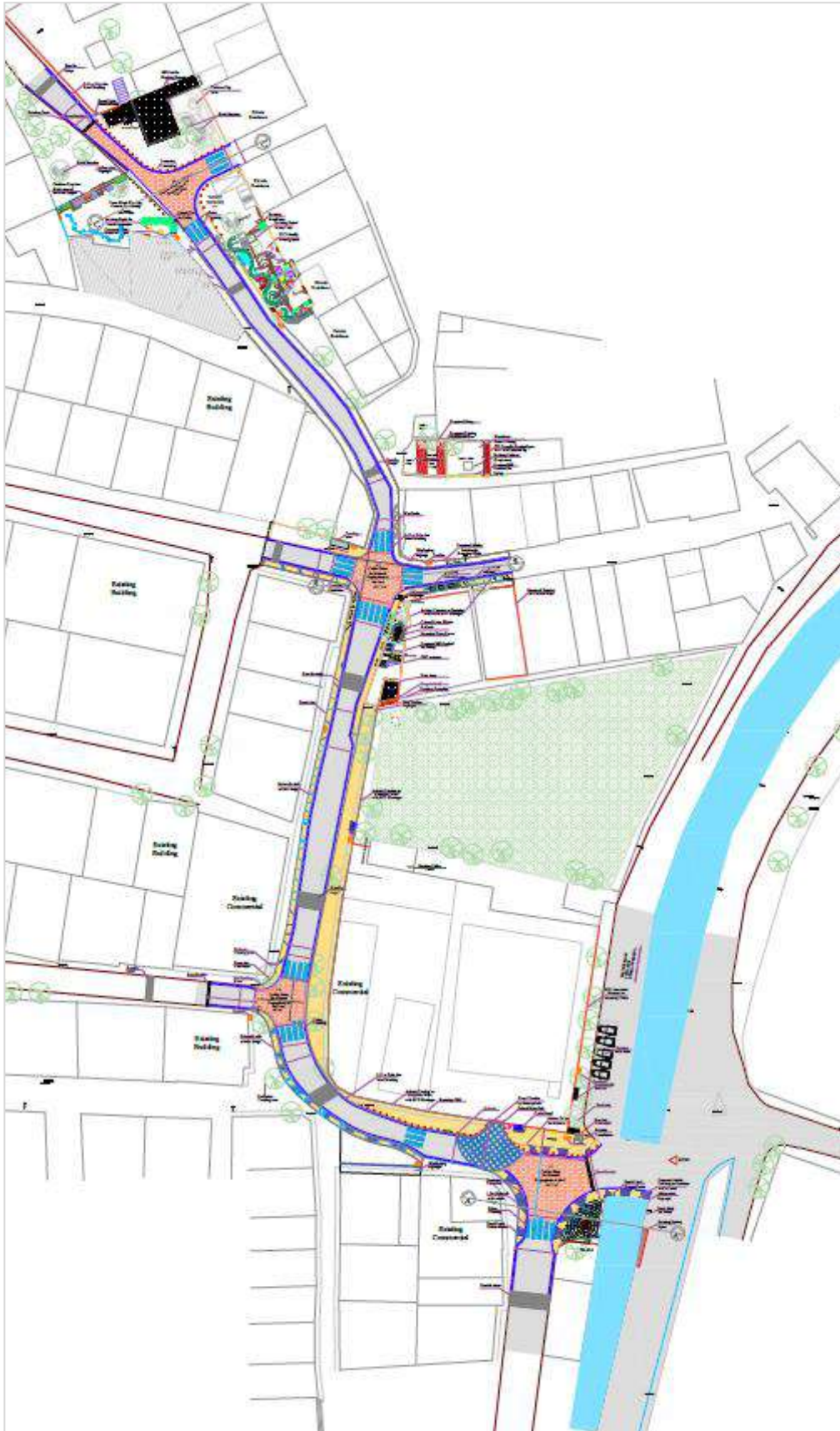




Figure 9 Graphical Representation of Neemuch Kheda CPZ

2.2.4 Development of Sensory Park at Gulab Bagh

Development of Sensory Park is aimed to transform an identified park or a space into an Urban95 Sensory Park by plugging in the suitable ITCN features using ITC objectives, its design principles and identified ITC barriers as well. It is in this context a space measuring 1200 sqmt has been identified at Gulab Bagh (city level park) and finalized for transforming this into an Sensory Park. The identified site is conveniently located near to already dedicated children park within Gulab Bagh, famously known as Haathiwala Park and a Bird Park as well. The site also has Toy Train station, public amenities, a public library and other garden area within close proximity.

Urban Sensory Park is a specialized and all abilities park aimed at exposing children to various sensory experiences for developing and/ or activating various sensory processing capabilities, stimulating the touch, sight & hearing senses & sensory experiences, helping in improving the overall cognitive, imaginative, creative abilities of children. Sensory Park also provides an opportunity to children and their care-givers to experience a stimulating and active atmosphere through various games, activities and social interaction which positively impact their physical and mental growth and overall development.

Sensory Park is also aimed to bring awareness in the city on the importance of ECD through various components & activities & games, such as sand, mud, water, planters and sensory play and many more. It is also aimed at increased frequency and duration of targeted audience group (Children & Care- givers) in outdoor playing and engagement activities and also on targeting behaviours of concerned service providers in developing and maintaining such and other open green spaces in order to facilitate children and care- giver comfort, safety, hygiene, and stimulation etc., helping in children overall growth & development

It is In this regard, various on- site surveys and assessment were conducted and the findings of the same has fed into design proposal of Sensory Park. Taking these findings into account along with the identified ITCN barriers, a conceptual design proposal has been developed using ITC friendly elements, features, material and specifications etc. The development of Sensory Park has following features

- Interactive & appealing entrances for increased usage & participation;
- Aesthetically designed key map showcasing facilities & features in the park;
- Interactive wayfinding/ signages for easy access within the park;
- Barrier Free Movement by following universal standards to make it an 'all abilities park' by suitable infrastructural provisions;
- Pathways & Stop Points using variety of natural & artificial materials- Sand, Grave, Grass, Water, Artificial Grass Carpets, EPDM flooring, Acupressure flooring etc.;
- Specified area with natural elements- sand pits, water fountains, plants/ shrubs planted in lower beds etc. for children to access, engage & connect with, allowing children to access nature- Interconnected playing equipments for easy & uninterrupted access and use;
- Interactive ITC friendly shaded resting spaces in and around various zones;
- Adequate lighting for increased sense of safety

- Promoting 'Circular Economy' via 3 R's (i.e. Reduce, Recycle & Reuse) for inculcating 'Best out of Waste Practices' and set it as an examples for Development Authorities to bring this in regular working practices as well- 'Wooden Logs' for Playing cum Seating, 'Used Tyres' as Playing Equipments, Seating, Planters, 'Old and Discarded Utensils' for Musical Installations.
- Natural & Artificial Playing Elements- Mud, Sand & Water Play, Well Connected & Brightly Colored Playing Equipments;
- Plants/ Shrubs for Activating Various Senses- a) Visual- Colorful Flowering Plants, Butterflies, Bees etc., b) Touch & Feel- Plucking, Crushing, c) Smell- Good Fragrance based Flowering Plants, d) Taste- Low heighted Seasonal Plants/ Shurbs with Edible Flowers, Fruits, Leaves- Rose, Tomato, Carrots, Mint etc., e) Natural & Artificial Elements with Good Sound/ Hearing Effect- Natural- Butterflies, Bees, Cricket, Birds Chirping, Artificial- Wind Chimes, Musical Installations, Water Fountains with Gurgling effect





Figure 10 Graphical Representation of ITC Enabled Sensory Park, Gulab Bagh

2.2.5 Retrofitting of an AWC into an Model Urban95 AWC

Retrofitting of an AWC into an Model AWC is aimed to transform an identified AWC into an Urban95 AWC by plugging in the suitable ITCN features using ITC objectives, its design principles and identified ITC barriers as well. It is in this context Aanganwadi Center at Indira Colony, Sec 14 has been finalized for transformation the same into an Model Urban95 AWC.

In this regard, various on- site surveys and assessment were conducted to feed into design and development of AWC. Based on these surveys, 'Very Less Time Spent in outdoor Physical and other Engagement Activities by young children' has been identified as behaviour indicator/ challenge and taking this into account along with other ITCN barriers, a conceptual design proposal has been developed using ITC friendly elements, features, material and specifications etc. to transform the identified behaviour barrier into motivator leading to increase in enrollment and overall retention time as well. The AWC retrofitting project has following features-

- Traffic calming measure outside school- rumble strips, road marking & signages,
- Covering of drain running adjacent to school premises for safe, inviting and pleasant entrance;
- Parking demarcation within School premises;
- Construction of Ramp, promoting 'universal accessibility';
- Installation of age- appropriate Playing Equipments (slide, swings, children friendly exercise element, hurdle games etc.);
- Installation of Interactive ITC friendly shaded resting spaces for children and their care-givers;
- Transformation of dull school walls & floors into an Interactive and engaging surfaces by thoughtfully designed yet interactive wall and floor paintings/ art- mix of games, stories and other interactive yet informatory content;
- Transformation of AWC room into an interactive and engaging room using all the available surfaces, i.e. walls, floor and ceiling in the process motivating AWC children to attend the school daily and moreover motivating new enrolments as well.;
- Installation of 'Interactive Shading Element' for weathering protection for making the dedicated children spaces into an all-weather usable spaces;
- Construction of separate toilet blocks & 'Mori- Low- heighted was basin';



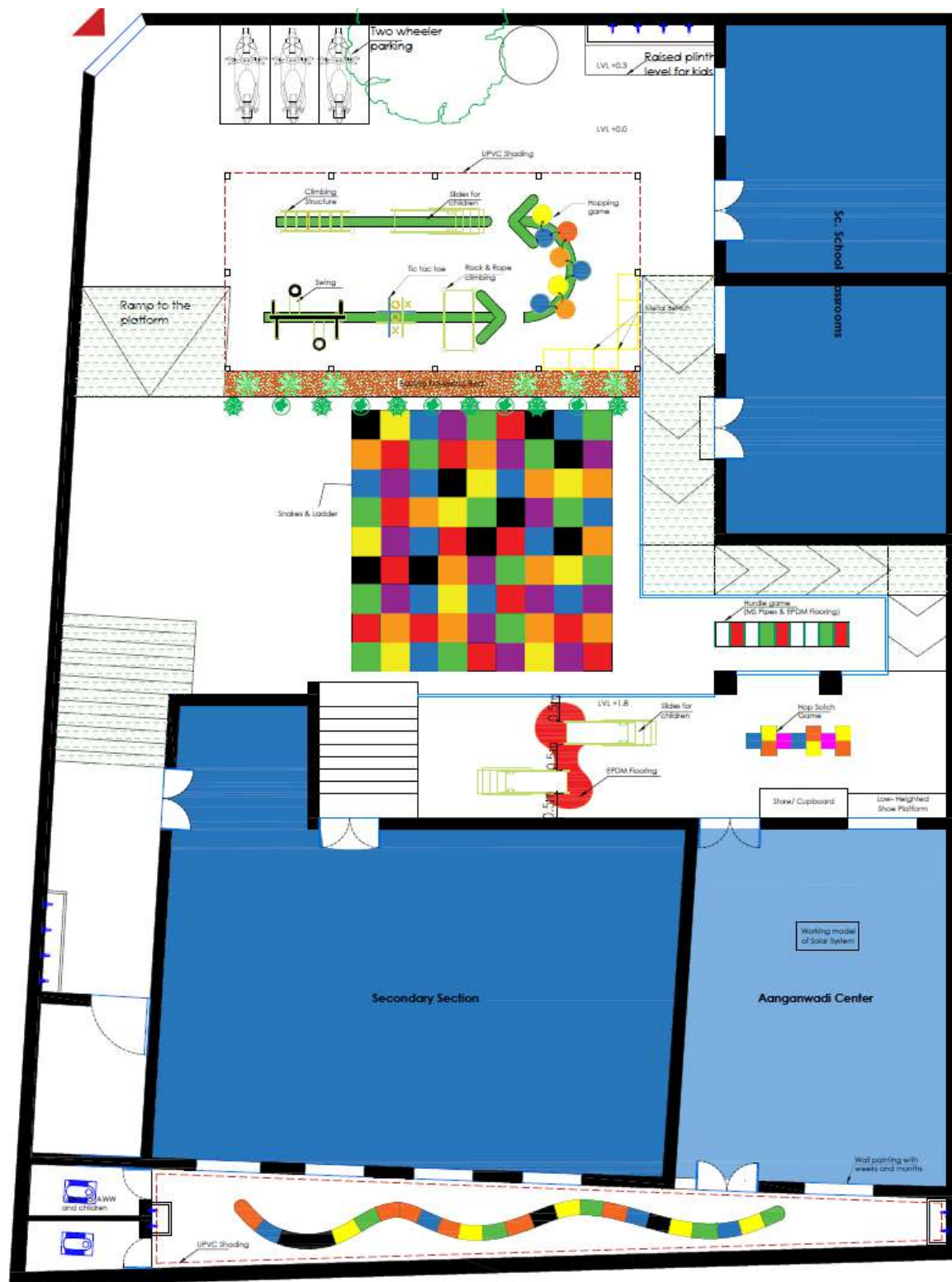


Figure 11 Visualization of ITC Enabled AWC

2.2.6 Retrofitting of an PHC into an Model Urban95 PHC

Retrofitting of an PHC into an Model PHC is aimed to transform an identified PHC into an Urban95 PHC by plugging in the suitable ITCN features using ITC objectives, its design principles and identified ITC barriers as well. It is in this context Primary Healthcare Center at Sec 14 has been finalized for transformation the same into an Model Urban95 PHC.

In this regard, various on- site surveys and assessment were conducted to feed into design and development of PHC. Based on these surveys, 'Lack of Comfort for care- givers due to inadequate seating spaces, subdued and monotonous atmosphere and Absence of Playful Opportunities for young children' has been identified as behaviour indicator/ challenge and taking this into account along with other ITCN barriers, a conceptual design proposal has been developed using ITC friendly elements, features, material and specifications etc. to transform the identified behaviour barriers and more so the experience of young children and their care- givers into +ve experience, which is not only comfortable but has interactive, engaging and playful activities and keeping young children busy/ occupied while they are at PHC waiting for their turn and/ or even after the checkup and vaccination.

The design proposal was also planned and finalized taking cues from the Post Implementation Impact Assessment of Semi- permanent (Tactical Intervention) at PHC, Sec-11 (Implemented under Urban95 Phase-II) in form of numerous ITCN elements, features which goes into developing a holistic PHC not only for the benefits of young children and their care- givers but also for Pregnant and Lactating Women (Primary Targeted Audience Group) and others as well. The PHC retrofitting project has following features-

- Traffic calming measure outside PHC- rumble strips, road marking & signages,
- Covering of drain running adjacent to PHC premises for safe, inviting and pleasant entrance;
- Parking demarcation within PHC premises with separate provision of cycle stand as well;
- Creation of dedicated ITC corner in semi- covered waiting space with sandpits and other playful and engaging equipments/ elements;
- Transformation of dull walls & floors into an Interactive and engaging surfaces by thoughtfully designed yet interactive wall and floor paintings/ art- mix of games, stories and other interactive yet informatory content;
- Development of 'Creative Wall' outside the Immunization Room;
- Provision of age- appropriate & separate Amenities and Utilities- low- heightened urinals with low- heightened wash basin as well



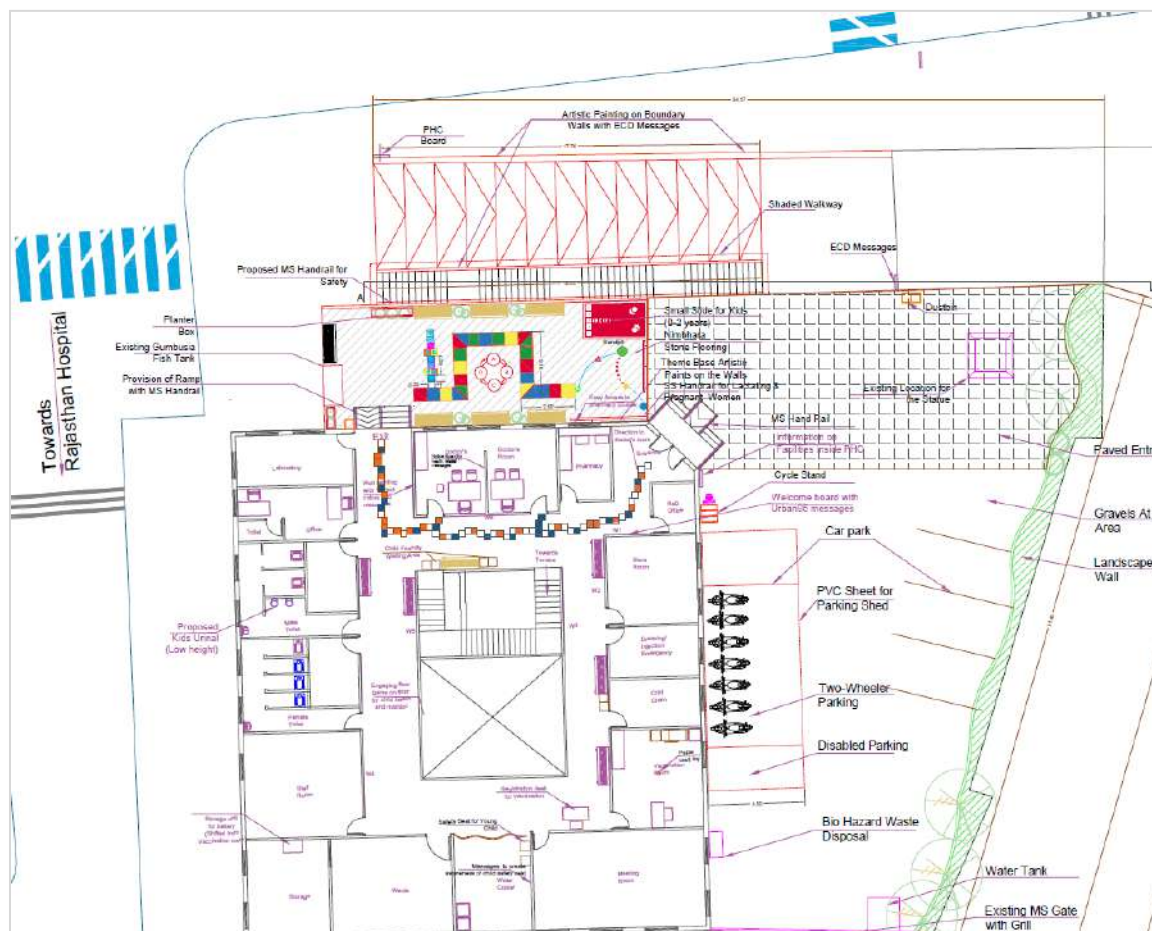


Figure 12 Visualization of ITC Enabled PHC

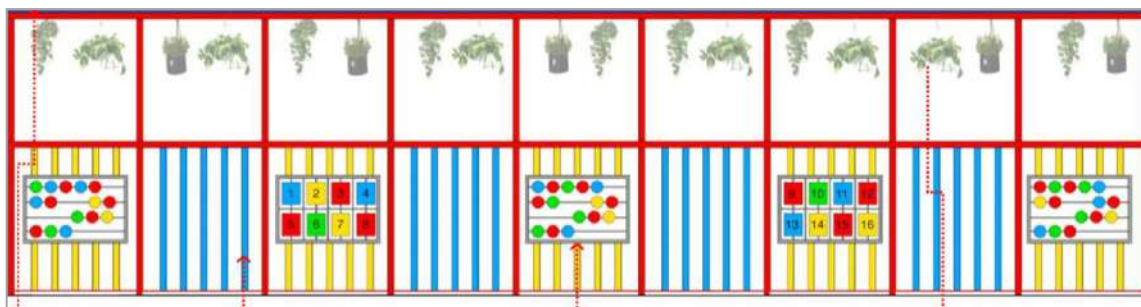
2.2.7 Transformation of an AWC into an Model Urban95 AWC (Semi-permanent Project)

As mentioned in phase-I project brief, transformation of AWC and PHC are the carry forward activities from phase-I in form of tactical interventions referred to as semi-permanent project in phase-II.

In continuation AWC at Manoharpura has been finalized for transformation the same into an Model Urban95 AWC by plugging in the suitable ITCN features using ITC objectives, its design principles and identified ITC barriers as well.

In this regard, various on- site surveys and assessment were conducted to feed into design and development of AWC. Based on these surveys, a design proposal has been developed using ITC friendly elements, features, material and specifications etc., aimed at increase in enrollment and overall retention time by children. The semi- permanent project has following features-

- Safe, Inviting and pleasant entrance by covering of drain running in front of school;;
- Installation of age- appropriate Playing Equipments (slide, swings);
- Transformation of dull school walls & floors into an Interactive and engaging surfaces by thoughtfully designed yet interactive wall and floor paintings/ art- mix of games, stories and other interactive yet informative content;
- Transformation of AWC room into an interactive and engaging room using all the available surfaces, i.e. walls, floor and ceiling in the process motivating AWC children to attend the school daily and moreover motivating new enrolments as well.;
- Installation of 'Interactive Shading Element' for weathering protection for making the dedicated children spaces into an all-weather usable spaces;
- Construction of 'Mori- Low- heighted was basin' & low heighted platform for shoe storage for inculcating hygiene practice among AWC children;
- Imprinting 'Meri Aanganwadi, Sabse Pyari' translating into 'My Aanganwadi is the best & lovely among all' in the approach corridor for generating the 'sense of ownership' and 'sense of belonging' within AWC children;
- Installation of 'Interactive & Colourful Mild Steel (MS) Railing' with inbuilt/ precast playing elements, acting as an learning and sensory element;
- Installation of a 'low- heighted MS gate' virtually segregating the back side space for AWC children and primary school children.



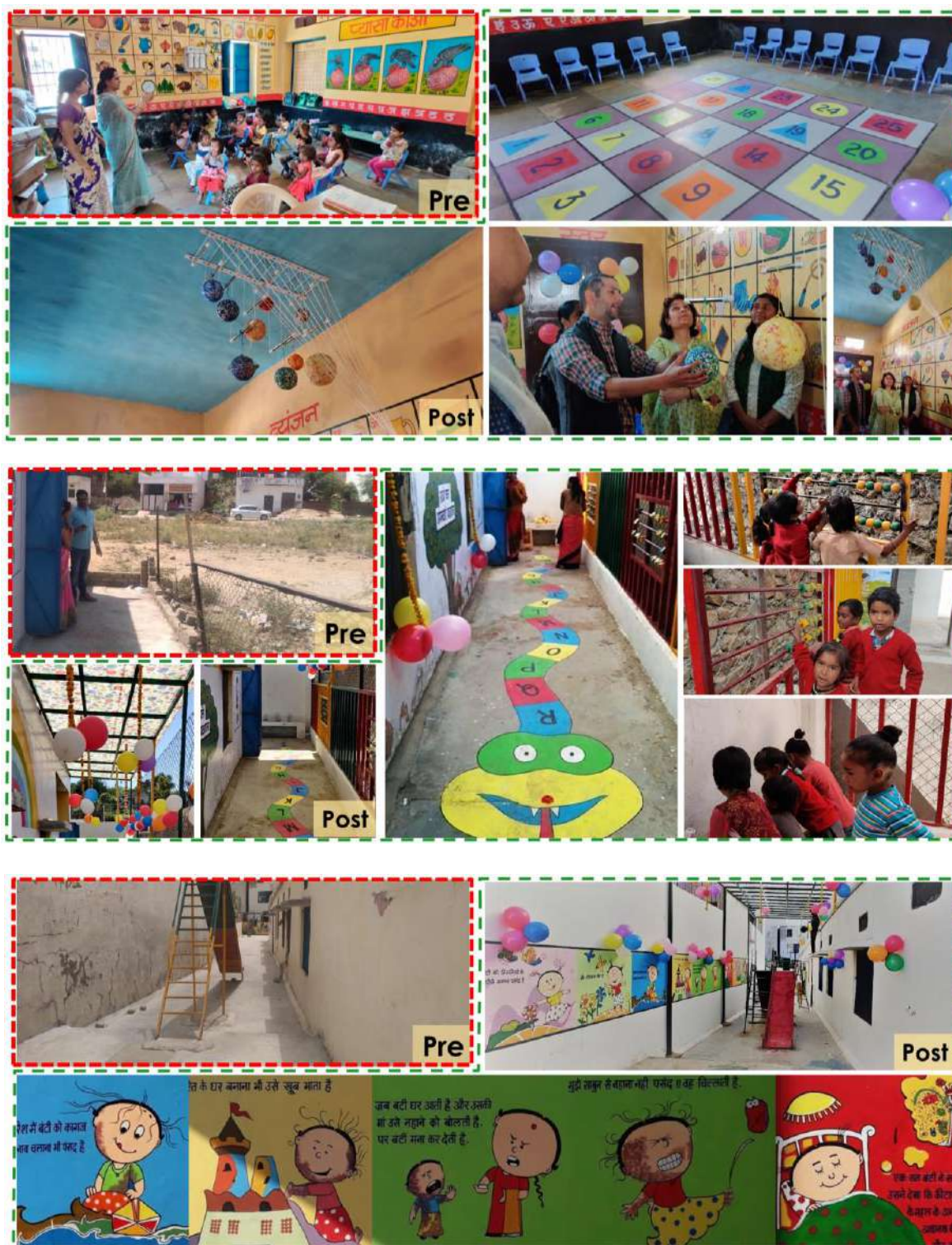


Figure 13 Implemented Features at AWC, Manoharpura (Semi- permanent Project)

2.2.8 Transformation of an PHC into an Model Urban95 PHC (Semi-permanent Project)

As mentioned in phase-I project brief, transformation of AWC and PHC are the carry forward activities from phase-I in form of tactical interventions referred to as semi-permanent project in phase-II.

In continuation PHC at Machla Magra, Sec 11 has been finalized for transformation the same into an Model Urban95 PHC by plugging in the suitable ITCN features using ITC objectives, its design principles and identified ITC barriers as well.

In this regard, various on- site surveys and assessment were conducted to feed into design and development of PHC. Based on these surveys, a design proposal has been developed using ITC friendly elements, features, material and specifications etc., aimed at transforming the behaviours and more so the experience of its targeted users while using this facility into a wholesome and memorable one by transforming the same into an easily accessible yet highly interactive, engaging facility with adequate seating spaces and interactive activities around these seating spaces.

Moreover the design proposal was also conceptualized with simpler and easy to implement yet impactful design solutions keeping in mind the 'scalability' and 'replicability' of the same by the concerned service providers/ decision makers

All the design interventions have been thoughtfully planned & designed not only for transformation of this PHC into an interactive, engaging and playful yet safer PHC but also the one promoting 'Learning while Playing', facilitating not only the overall growth and development of young children but also the cognitive development and increased social interaction among them. The semi- permanent project has following features-

- Safe, Inviting and pleasant entrance by rearranging the entrance with installation of interlocking paver blocks;
- Ramps on either side of entrance promoting 'universal accessibility';
- Traffic calming measure- rumble strips, road markings & signages, it being situated on one of the major arterial road with high vehicular movement throughout the day;
- Installation of 7 feet high Mild Steel (MS) gate along with railings as an added safety measure;
- In- built games within railing for promoting 'learning while playing' and also for transforming the tedious wait period into an engaging one;
- Installation of aluminum for increased seating;
- Transformation of walls & floors into an Interactive and engaging surfaces by thoughtfully designed yet interactive wall and floor paintings/ art- mix of games, stories and other interactive yet informatory content;
- Installation of interactive shading element in the entrance corridor for weathering protection for the comfort of ITCs.

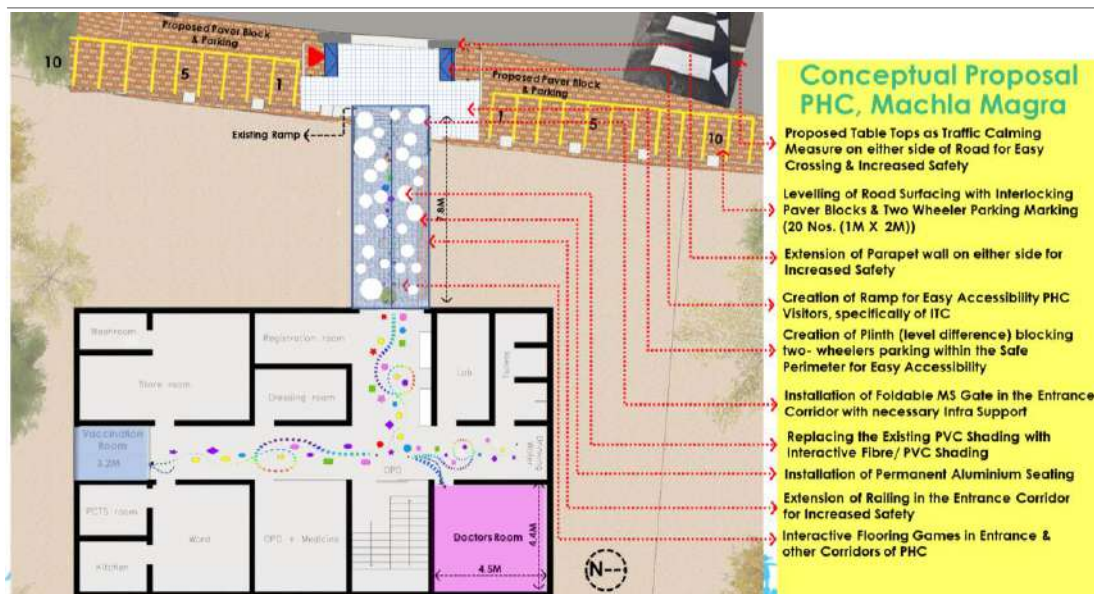




Figure 14 Implemented Features at PHC, Machla Magra, Sec 11 (Semi- permanent Project)

3 ITC Focus Areas (Objectives)

Urban95 is meant to make lasting change in the urban landscape through various interventions- tactical and permanent. The goal of this initiative is to support healthier, safer, and more exciting urban neighbourhoods for young children, for those who care for them, and for everyone.

It intends to transform city's urban fabric & streetscape into children and their care- giver friendly streetscape, focusing on Inclusivity, Accessibility, Playfulness, Green, and last but not the least Safe, as illustrated in Fig 1.



Figure 15 ITC Focus Areas, ITCN Policy Framework Revised

4 ITC Spaces/ Elements

To transform Udaipur or any city globally into an Urban95 city, it essentially focuses on transforming spaces such as Neighbourhood, street, Parks & Garden, Social Infrastructure- Aanganwadi Centers (AWCs) and Primary Healthcare Centers (PHCs), by various interventions and/ or projects- tactical or permanent specifically planned and designed for these spaces using the above mentioned objectives. All the above mentioned spaces are categorically referred to as ITCN Elements.

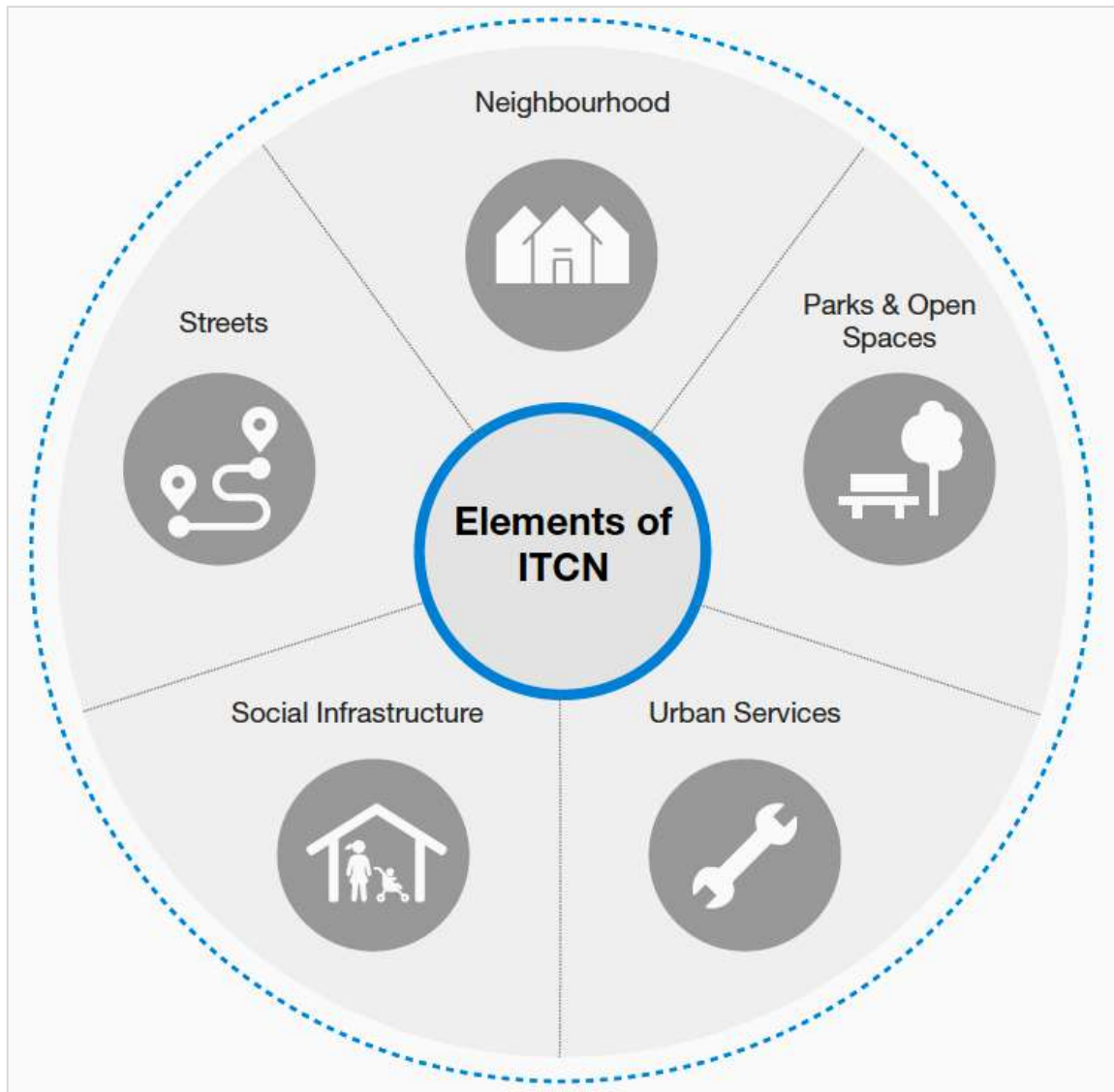


Figure 16 ITCN Elements, ITCN Policy Framework, Revised

Additionally, it also includes day care centers, crèches, other educational and medical facilities pertaining to young children along with nearby Public Transport (PT) or Intermediate Public Transport (IPT) stops.

Moreover through these interventions only, the gaps AFA ITCN friendly items & materials in the existing SoRs has been identified and this is where this checklist shall come as handy and useful document for anyone- govt. or private wanting to develop and/or retrofit, rejuvenate such spaces.

Subsequent sections define all the above mentioned spaces and also dwelled into the reasons of them becoming the focal point of Urban95.

4.1 Neighbourhood

Neighbourhoods, are the spatial units within the city, promoting social interactions between residents, where they seek to perceive common values, socialize youth, and maintain effective social control. From Urban95 perspective, neighbourhoods should be planned to enhance young children everyday journeys and outdoors experiences and ideally is a place fulfilling ITC objectives, ie. neighbourhoods that are inclusive, easily accessible, safe, playful and green.

A neighbourhood planned for young children and their care- givers has a mix of uses, spaces, functions and services within comfortable walking distances, encouraging young children and their care- givers to spent as much as time as possible in outdoor yet environment while walking.

However, for achieving this, positioning of ITC destinations and spaces such as Neighbourhood Park & Playgrounds, Aanganwadi Centers (AWCs), Primary Healthcare Centers (PHCs) requires careful consideration, with all these destinations and spaces should spread as evenly as possible within neighbourhood. This also includes Tot- lots, day care centers, crèches, other educational and medical facilities pertaining to young children along with nearby Public Transport (PT) and/ or Intermediate Public Transport (IPT) stops along with cycle stands (if any). All these forms the primary level ITC destinations and spaces within the neighbourhood, frequented by ITCs.

The secondary level ITC destinations and spaces includes but not limited to chowks (public plazas), community centers, nearby grocery stores and shopping markets, places of religious importance such as temples, mosques, churches etc., library and/or any other places frequented by ITCs.

Moreover the journey to these destinations and spaces also plays an important part and if that also has been taken care of with suitable interventions- active and engaging wall facades, in- built floor games within naturally and/or artificially shaded footpaths/ sidewalks, shaded resting places with public amenities- water ATMs, toilets, breastfeeding room within close proximity, then can be termed as Urban95 neighbourhood.

The explanation for comfortable distance can be mapped from this- "The likelihood of a child using a destination declines beyond about 800m from their home. This restricts their range and access to amenities to below one km"³ and as shown in Fig 3. Taking this range of access for a young child as maximum one km, from any one point to the other, a zone can be defined that covers an area of roughly 60-80 hectares that contains all the community facilities and amenities within easy access for a young child.

³ Page 9, ITCN Policy Framework

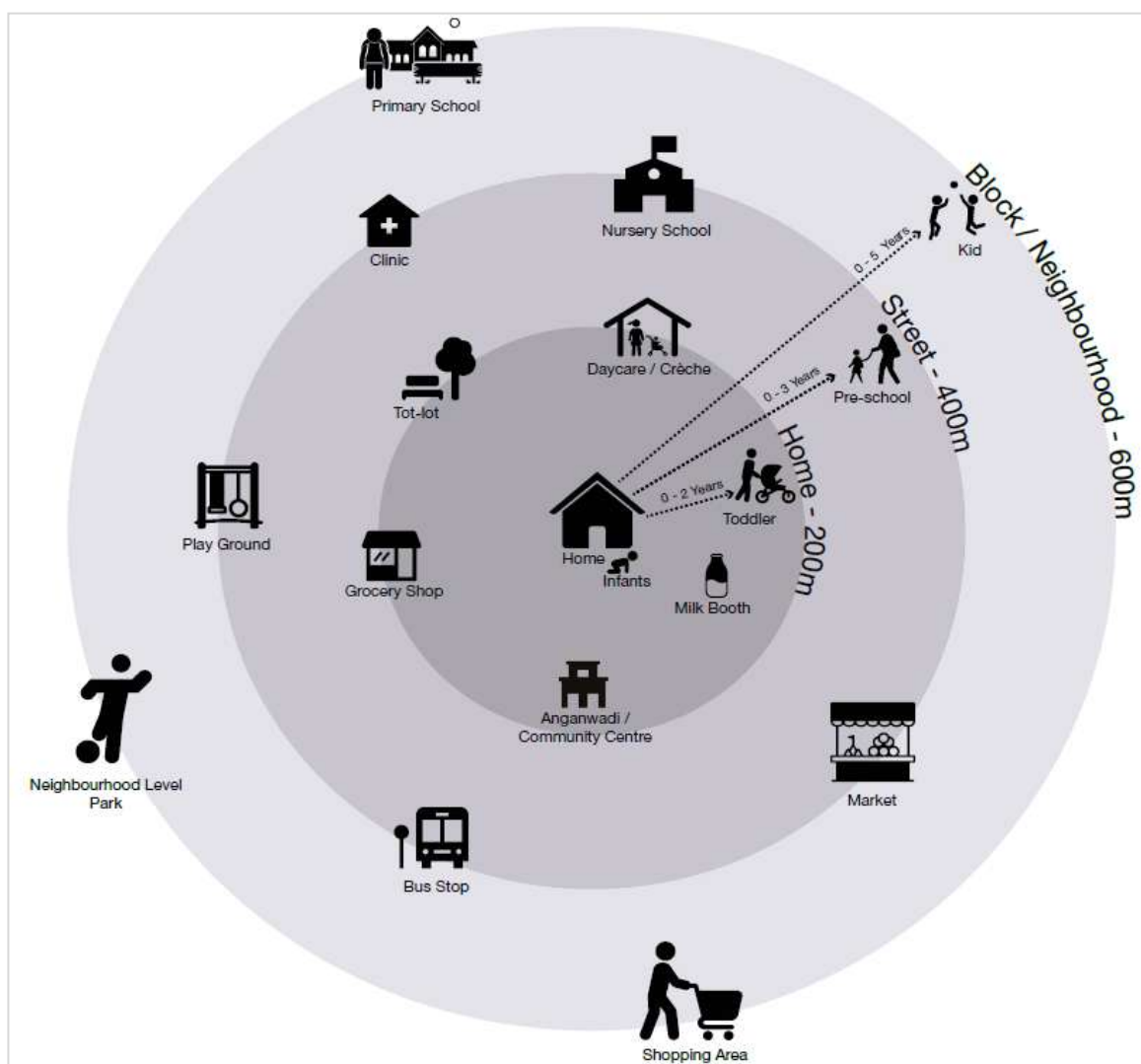


Figure 17 Walking Range & Access by Age, ITC Policy Framework

Development of two Child Priority Zones (CPZs), one of the project under the program is aimed to transform city's neighbourhoods into an Urban95 neighbourhoods, using ITC objectives, its design principles and also taking into the account the above pointers while planning of the same and also while development and/ or retrofitting of such spaces by city authorities.

4.2 Streets, Roads and Junctions

The first space that young children encounter outside the home is the street. Streets make almost 20%⁴ city's space and are a very important open space available to everyone and can be attractive and enjoyable places. There are many elements that need to come together to make streets that are welcoming, safe and inclusive of ITCs, in the process helps in forming an healthy ITC neighbourhood.

For the streets and roads to be known as ITC friendly streets and roads, it is imperative that they are

⁴ Page21, ITCN Design Guidelines- Revised

a) calmer streets, as in having limited numbers of vehicles, driving at a very limited/ slower speed with suitable policy and infrastructure level interventions in place.

Policy level intervention- a govt. regulated policy/ notification mandating prescribed speeds for internal and external streets and roads.

Infrastructure level Interventions- Traffic Calming Measures, including but not limited to physical barriers in form of roads bumps, rumble strips along with suitable Road Signages and Markings, safe crossing at junctions with suitable design interventions, raised intersections, narrowing down of lane (if needed), chicanes, , diagonal parking, etc. Important to ensure that all has been designed following the set standard and norms.

b) Linking key destinations, specifically which are frequented by ITC such as neighbourhood park, AWCs and PHCs, Tot- lots, crèches and/or day care centers along with grocery stores etc. and establishing a priority route with ITC enabled features for them.

A naturally and/ or artificially shaded and interactive, engaging and stimulating priority route is the one which has universal accessibility (enabling easy movement of wheel chair and stroller as well) at its core, having ample stop points coupled with ITC enabled seating spaces, water ATMs, other public utilities/ amenities such as public toilets, breastfeeding rooms along with lot of greenery with planting pollinators.

Moreover, it also consists of unobstructed, continuous yet playful streets, having wider and safer footpaths/ sidewalks suitably coupled with ramps and bollards and are free from all sort/ type of encroachments- parking, vending activities, electrical units such as transformers and street lighting, with dedicated and earmarked spaces for these facilities and utilities, promoting uninterrupted, safer and playful movement on foot by ITC to these destinations.



Figure 18 Graphical Representation of ITC Enabled Street & Junction

Additionally, this priority route or such streets also consists of permeable fencing, interactive wayfindings, adequate street lighting increasing the sense of safety along with having neighbourhood grocery stores and other such units and activities which are open throughout, along with presence of people acts as a means of passive control, and form the 'eyes on the street', in the process again increasing ITC's sense of safety without any

infrastructural support and moreover building a support system and connection between unknowns, also helping in having healthier and happier streets and neighbourhoods.

Development of Child and Family- friendly Junctions and 1.5 kms Connected & Shared Street, one of the project under the program is aimed to transform an identified street and connected junctions into an Urban95 street and junctions, using ITC objectives, its design principles and also taking into the account the above pointers while planning of the same and also while development and/ or retrofitting of such spaces by city authorities.

4.2.1 Greenery within Neighbourhood & Streets

Thoughtfully planned, designed and implemented Green Areas and Planting is an important and integral part of ITC friendly neighbourhoods and streets as well, as it not only helps in creating shade and cooling environments, provide protection from glare and heat, but also helps in creating pleasant and enjoyable environment.

Planting zones, placed alongside roads act as a buffer between the street and the pavement, in the process screen the pollution- air & noise along with doubling up as protection. Planting zones, placed along facades, helps in cooling the built environment by absorbing the



heat absorbed and radiated from the buildings.

Figure 19 Thoughtfully Planned Landscaping/ Greening Adjacent to Road, JM Road, Pune

Moreover, planting zones introduce ITC with nature, with them attracting birds, butterflies, insects etc., in the process enhancing children sensory processing abilities along with their cognitive, imaginative and also helps in building curiosity among them.

4.2.2 Identified ITC Barriers- Neighbourhood, Streets & Junctions

As neighbourhood is formed from the cluster of elements and/or activities such as residential- single & multi storey units, commercial- grocery shops & stores, shopping centers, hawking and vending activities, eating/ consuming joints- restaurants, cafes, food court (if any), community centers, library, gyms (if any), neighbourhood parks, AWCs, PHCs, crèches, day care centers and/ or privately run educational and medical facilities.

It also consists of chowks (public plazas, if any), streets, junctions and public facilities/ amenities- water ATMs, toilets along with breastfeeding room (currently missing, mostly) along with transport terminals/ units- bus and auto stops, taxi stands, cycle stands (if any).

Moreover it also consists of services such as storm water drains, sewerage system and street furniture- street lights, dustbins, benches along with vegetation- road side plantations, trees (if any), road signages etc..

Given the gamut of elements, Operation & Maintenance (O&M) of all the above elements on daily/ regular basis become complicated partly due to lack of resources (man, machinery, material) with the agencies responsible for maintaining the same and partly because of lack of willingness and/ or problem with ownership rights between development agencies and/ or other responsible agencies.

Common issues pertaining to ITCs within neighbourhood and streets has been identified as open, unclean and overflowing sewerage systems, water logging, absence of footpath/ sidewalks and/ or broken footpaths, encroachments (haphazard and illegal parking, informal vending & hawking activities, construction debris), open electrical units (loose cables, street lights, transformers), absence of traffic calming measures, non- functional and unmaintained public amenities releasing bad odour, overflowing and open waste dumping spots, inviting strays, high, opaque and dull boundary walls and many more.

All the identified ITC barriers pose severe risks and health hazards for ITCs. For example- absence of footpath or footpath mired with encroachments force ITCs to walk on road, posing safety risks with the incoming traffic, in the process discouraging walking, even if they would like to.

Open, unclean and overflowing drains along with open and overflowing waste dumping spots, releasing bad odour, not only attracts strays but also is the breeding place for flies, mosquitoes, and organisms which cause disease. These also severely hampers ITCs movement within the neighbourhood, specifically on foot, in the process impacting their overall time in outdoor environments.



Figure 20 Identified ITC Barriers- Open Drains, Strays, Haphazard Parking, Ashok Nagar, Udaipur

Moreover, malfunctioning street lights along with strays also lessen the sense of safety among ITCs drastically, hampering their overall outdoor movement.

4.3 Parks and Garden

Parks forms the most important physical space as far as child overall growth and development is concerned, as these are the spaces which should and are primarily used by young children for recreational and playing purpose.

An 'All Abilities Park', providing equal opportunities to young children for outdoor play, enabling them to engage & interact with various experiences, in the process helping them in developing/ activating sensory processing capabilities & stimulating the touch, sight & hearing senses leading to heightening awareness along with and bringing positive peer learning experiences with increased social interaction among peers.

Any kind of play not only encourages children risk- taking abilities, but also encourage them to participate & interact with nature, their surroundings & other children in the process enables them to create, investigate & explore etc. helping in improved behavior, mood, cooperation, self- confidence, increased socializing and peer learning etc.

Engaging in play also help children in developing and/or improving Fine & Gross Motor Experiences, fosters listening skills & support 'Auditory Processing Needs' as well. It also fosters better connection between children and their care- givers resulting in holistic development in early years of child life takes place. Most importantly engaging with environments offering different textures is very beneficial to the growing brain, both structurally and emotionally. Parks and other green spaces have been found to reduce stress in children and adults and also improve mental health.

However it's not any park, but thoughtfully planned and designed park with age-appropriate playing equipments and overall park environment, catering to the need of young children within a dedicated space for them and their care- givers to feel safe and secure, enabling them to express themselves freely and explore things on their own. It is like If a city invests in better quality play areas for children, it also invests in creating better citizens for tomorrow.

Moreover, for better usage of the parks by its targeted audience and specifically for ITCs, all the parks, neighbourhood and/ or city level should be conveniently located and should have entries and exits designed taking 'universal accessibility' into account, enabling them to be the inclusive and 'all abilities park'. In- fact not only parks and other open spaces, all the other ITC spaces should have inclusiveness and following 'universal accessibility criteria' for its better usage by its targeted audience.

In continuation, a well maintained and properly lit park and other ITC spaces has good chances of it being used as envisaged, compare to spaces which are poorly maintained due to lack and/or absence of maintenance and upkeep.

Moreover easily accessible, well maintained and properly lit parks with ITC and other user movement on regular basis have its own and larger benefits, such as they are free from antisocial elements, lesser stray movement and usage of parks for social gatherings and other purposes, in the process minimizing/ restricting its actual usage and many more.

A well maintained park shall not only have dedicated ITC zone but is the one supporting other ITC facilities and utilities such as enough seating and other engaging facilities for care- givers to engage with along with breastfeeding room, water ATMs, toilets, means & mechanism for proper waste disposal within the close proximity of ITC zone, ensuring maximum usage of such parks.



Figure 21 Graphical Representation of ITC Enabled Sensory Park, Urban95 Phase- II, Udaipur

Development of Sensory Park, one of the project under the program is aimed to transform an identified park or a space into an Urban95 Sensory Park, using ITC objectives, its design principles and also taking into the account the above pointers while planning of the same and also while development and/ or retrofitting of such spaces by city authorities.

4.3.1 Identified ITC Barriers- Parks and Gardens

Parks (neighbourhood or city level) are also mired with lot of challenges, impacting ITC behaviour in accessing and using them.

As far as ITC barriers in parks and/ or garden is concerned, it starts with uninviting entrances (undulated and broken entrances) with rusted and broken gates & cow catchers, absence of dedicated ITC zones, playing equipments meant for older children that too mostly in broken and dilapidated condition, lack of resting spaces, wild grass, bushes and unwanted shrubs grown up in and around playing equipments and lawn areas, lack of lighting, presence of strays and many more.

All these pointers deters ITC to access and using these spaces, even if they would like to. Moreover, absence of public amenities and even if available, their inconvenient location within the parks (far away from circulation and playing areas) also deter ITC from using these spaces.



Figure 22 Identified ITC Barriers- wild bushes, Broken Playing Equipments, Open Drains, Hanuman Park, Udaipur

All these transpired because of lack and/ or absence of regular upkeep and maintenance of parks and gardens by the concerned authorities/ agencies. Moreover in absence of regular upkeep, these parks become the breeding ground for antisocial elements and strays, further hampering the park usage by ITCs.

4.4 Social Infrastructure- Aanganwadi Center (AWC)

Aanganwadi Centers (AWCs) means 'Courtyard Shelter' and serves as the focal space to implement health, nutrition initiatives for children, adolescent girls, pregnant, nursing mothers; and early learning needs of young children below 6 years.

AWCs come under the Government of India's flagship program Integrated Child Development Services (ICDS) launched in 1975. The program is specifically designed to reach disadvantaged and low- income groups through centrally sponsored schemes implemented by States/ Union Territories (UTs). The package of the following six services is provided under the Aanganwadi Services, 1) Supplementary Nutrition (SNP), 2) Pre- school Non- formal Education, 3) Nutrition & Health Education, 4) Immunization, 5) Health Check-up, and 6) Referral Service⁵.



Figure 23 Snippets from Semi- Permanent Project Implemented under Urban95 Phase-II, Udaipur at AWC, Manoharpura

Given the above context, the ideal AWC should have following design features for making it an model Urban95 AWC- 1) Interactive, appealing and barrier free entrance(s); 2) Barrier Free Movement within the school premises by following universal standards to make it an 'All Abilities AWC' by suitable infrastructural provisions; 3) Provisioning of inclusive, interactive & engaging, playful, green environments promoting 'learning while playing'; 4) Provisioning of BALA guidelines, four corner theory and simulation corners, 5) Dedicated children play using age- appropriate playing equipments (slides, swings) and other ITC friendly material such as EPDM Flooring, sandpits etc.; 6) Interactive ITC friendly shaded resting spaces; 7) Provision of age- appropriate & separate toilets for children and staff as well and last but not the least 8) Transformation of all the available surfaces (floors, walls, roof, ceiling) and other Infrastructural elements- railings, doors, windows etc.) into an interactive and engaging surfaces by having in- built games and other sensory elements,

⁵ Annual report, Ministry of Women & Child Development (MWCD), 2021 -2022

interactive yet contextual wall art- content disseminating benefits of being hygienic, responsive caregiving and positive parenting messaging etc. given the space constraints within and outside AWCs.

All the above shall not only motivate children to attend AWC on daily basis but shall also help in increasing the overall retention time within AWC, which currently is missing. Moreover the same shall motivate other care- givers also to send their children to AWC, in the process ensuring high enrollments and increase in average presence as well.

Retrofitting of an AWC into an model Urban95 AWC, one of the project under the program is aimed to transform an identified AWC into an model Urban95 AWC, using ITC objectives, its design principles and also taking into the account the above pointers while planning of the same and also while development and/ or retrofitting of such spaces by city authorities.

4.4.1 Identified ITC Barriers- Aanganwadi Centers (AWCs)

AWCs, though built and meant with good intent of providing and fulfilling the educational, nutritional and health needs of young children along with health & medical needs of pregnant and lactating women from Economic Weaker Sections (EWS), however lacks in many areas, hampering the process to meet these needs and demands with high absenteeism (huge difference in average presence vs enrollment ratio) of AWC children and high dropout ratio as well.

AWCs as mentioned, are mired with lot of challenges, impacting ITC behaviour in accessing and using them.

To begin with, most of AWCs has unpleasant, uninviting entrances (undulated and broken entrances) with

rusty and broken gates, mostly established in shared premises with secondary

and/or senior secondary schools and also in rental premises, with only one or maximum two rooms for themselves with no separate/ dedicated play area and no separate toilets (that too mostly in unusable conditions leading to unhygienic practices), one and only AWC room used for multiple purpose- education, play, eating, storage of raw material, stationary, and other material etc., school building and AWC room in dilapidated condition, last but not the least almost all or most of them are situated within the premises having no access ramps, hence are not the centers for 'physically abled children', even though they have to be the one.

All these pointers presents dull, mundane and unhygienic atmosphere, impacting not only the overall enrollment of children, but also leads to absenteeism (huge difference in average presence vs enrollment ratio) and high dropout ratio as well.



Figure 24 Identified ITC Barriers- Uninviting Entrance, Open and Unhygienic Toilet, Rusty MS Railing, Storage Material Occupying Space, AWC, Udaipur

All these transpired because of lack and/ or absence of regular upkeep and maintenance by the concerned authorities/ agencies.

4.5 Social Infrastructure- Primary Healthcare Center (PHC)

The Government of India launched the National Urban Health Mission (NUHM) in May 2013 to comprehensively address the health concerns of the urban population, particularly of vulnerable sections through Urban Primary Healthcare Centers (U-PHCs). UPHCs are the epicenters for preventive, promotive and curative healthcare, which operates and manages outreach sessions, special camps, home visits by Auxiliary Nurse Midwives (ANMs), community mobilization through ASHAs and Mahila Arogya Samitis (MAS), apart from providing medical care through the out-patient services. In Udaipur, PHCs are managed and monitored by the Department of Medical, Health and Family Welfare, Government of Rajasthan.

The package of 12 services that the UPHC is expected to provide spans preventive, promotive, curative, rehabilitative and palliative care for the following areas- 1) Care in pregnancy and child-birth (the latter would be provided based on the state context); 2) Neonatal and infant health care services; 3) Childhood and adolescent health care services including immunization; 4) Family planning, Contraceptive services and Other Reproductive Health Care services; 5) Management of Common Communicable Diseases and General Outpatient care for acute simple illnesses and minor ailments; 6) Management of Communicable diseases: National Health Programmes; 7) Screening and Management of Non- communicable Diseases; 8) Screening and Basic management of Mental health ailments; 9) Care for Common Ophthalmic and ENT problems; 10) Basic Dental health care; 11) Geriatric and palliative health care services; 12) Trauma Care (that can be managed at this level) and 12) Emergency Medical Services.

Given the above context, the ideal PHC should have following design features for making it an model Urban95 PHC- 1) Interactive, appealing and barrier free entrance(s); 2) Barrier Free Movement within the PHC premises by following universal standards to make it an 'All Abilities PHC' by suitable infrastructural provisions; 3) Provisioning of Adequate & Interactive ITC friendly waiting spaces; 4) Provisioning of inclusive, interactive & engaging, playful, green environments (indoor & outdoor), promoting 'learning while playing' without disturbing other PHC visitors (placement of such spaces should be thoughtfully planned); 5) Indoor and outdoor play areas with opportunities for role play, dramatic play, book reading etc.; 6) Provision of age- appropriate & separate toilets for children, adults and staff as well, 7) Transformation of all the available surfaces (floors, walls, roof, ceiling) and other Infrastructural elements- railings, doors, windows etc.) into an interactive and engaging surfaces by having in- built games and other sensory elements, interactive yet contextual wall art- content disseminating benefits of being healthy by eating healthy food, role of play, exercise along with responsive caregiving and positive parenting messaging etc.



Figure 25 Snippets from Semi- Permanent Project Implemented under Urban95 Phase-II, Udaipur at PHC, Sec- 11, Hiran Magri

This should be done within specifically in corridors, Doctors and immunization/ vaccination room and children toilets and any other places accessible to and/or visited by children and their care- givers.

All the above shall not only helps greatly in transforming the outlook of PHC by children and their care- givers from a medical centers into an 'experience centers', but shall also help in increase the overall Outpatients Department (OPD) numbers that too specifically of ITCs (checkup and immunization), pregnant and lactating women.

Retrofitting of an PHC into an model Urban95 AWC, one of the project under the program is aimed to transform an identified PHC into an model Urban95 PHC, using ITC objectives, its design principles and also taking into the account the above pointers while planning of the same and also while development and/ or retrofitting of such spaces by city authorities.

4.5.1 Identified ITC Barriers- Primary Healthcare Centers (PHCs)

PHCs, tough built and meant with good intent of providing and fulfilling the health & medical needs of children, pregnant and lactating women along with city's citizenry in large, however lacks in many areas, hampering the process to meet these needs and demands, specifically of ITC, pregnant and lactating women.

PHCs as mentioned, are mired with lot of challenges, impacting ITC behaviour in accessing and using them.

To begin with, most of PHCs has unpleasant, uninviting entrances (undulated and broken entrances, entrances blocked by haphazard parking etc.) with no dedicated play area for children and no separate toilets for children. Moreover they also suffer from inadequate seating spaces, long waiting time, dull and mundane atmosphere in absence of any interactive and engaging spaces, elements, features etc., leaving its visitors,

specifically ITC, pregnant and lactating women with bad & disappointing visiting experience(s).



Figure 26 Identified ITC Barriers- Uninviting Entrance. Long Waiting with Inadequate Seating Spaces, Dull & Mundane Atmosphere, Haphazard Parking

4.6 Urban Services- Public Toilets, Water ATMs, Breastfeeding & Diaper Changing Room

ITC Enabled public amenities, i.e. separate and ITC friendly Toilets, Water ATMs, Breastfeeding & Diaper Changing Room forms an important part of urban streetscape and ITC destinations as well, be it Neighbourhood or a street, a city and/or neighbourhood level park. Presence of these amenities/ facilities at neighbourhood level and at ITC destinations helps greatly in ITC movement and engagement in outdoor environments, important for their overall growth and development.



Figure 27 Temporary Lactation Room, Urban95 Kids Festival, Pune

As a part of Urban95 Udaipur Kids Festival in Phase-I and Phase-II as well, cluster of activities were proposed and set up on temporary basis including all these amenities (mobile & separate toilets, water points, dedicated Breastfeeding Room) for the comfort of young children & lactating women.

4.6.1 Identified ITC Barriers- Urban Services

PHCs, though built and meant with good intent of providing and fulfilling the health & medical needs of children, pregnant and lactating women along with city's citizenry in large, however lacks in many areas, hampering the process to meet these needs and demands, specifically of ITC, pregnant and lactating women.

As mentioned above, even though ITC Enabled public amenities, i.e. separate and ITC friendly Toilets, Water ATMs, Breastfeeding & Diaper Changing Room forms an important part of urban streetscape and ITC destinations as well, for the comfort of ITC and

Lactating Women, however presence of these amenities and/or facilities is almost negligent and even if it present, its functioning still leave lot to desire for its users.

Having a separate Breastfeeding & Diaper Room is still a new and emerging concept in India and is available only at few selected locations and places such as shopping malls, airports, star hotels and restaurants, catering to few and selected section of society. In recent times, Breastfeeding Room has been found a place at Railway and Bus Stations, but act more as a showpiece and are found non- functional (locked mostly) with no furniture for its comfortable use by a mother.



Figure 28 Identified ITC Barriers- Absence of Age-appropriate Toilets & Unclean Amenities, Udaipur

Moreover, Breastfeeding Rooms are not to be found as a separate unit and are mostly clubbed within a public toilet, even if its usage is very different from how it is envisaged and placed.

Moreover, it become difficult to find a clean facility, especially public toilets, even when most of these are functioning on chargeable basis. As far as Water ATMs are concerned, it is a great concern that they are not be found easily in any of ITC destinations other than parks and gardens, and more so if available, most of these are not operational/ functional and even if operational, the quality of potable water is questionable, hence are avoided by public in large, ITC included.

All the above factors leads to demotivated situation for ITCs, forcing ITCs to remain indoors, even when there is strong want of venturing out and engage in outdoor environments.

Given, the above factors it is imperative to have the cluster of these activities in well maintained conditions not only at all the ITC destinations and spaces but should be part of neighbourhood and streets as well, that too at regular intervals, leading to increased ITC movement in and around neighbourhood and other ITC destinations and spaces as well.

4.7 Gehl Surveys and Findings from Rapid Behaviour Assessment (RBA)

All the identified ITC barriers and challenges has been identified from various on- site surveys (conducted for projects) using Gehl Toolkit, including Focused Group Discussions (FGD), In- depth Interviews (IDI) & Key Informant Interviews (KII) with identified group and personnel for the said projects along with findings from Rapid Behaviour Assessment (RBA) Study done separately at all the above mentioned ITC destinations.

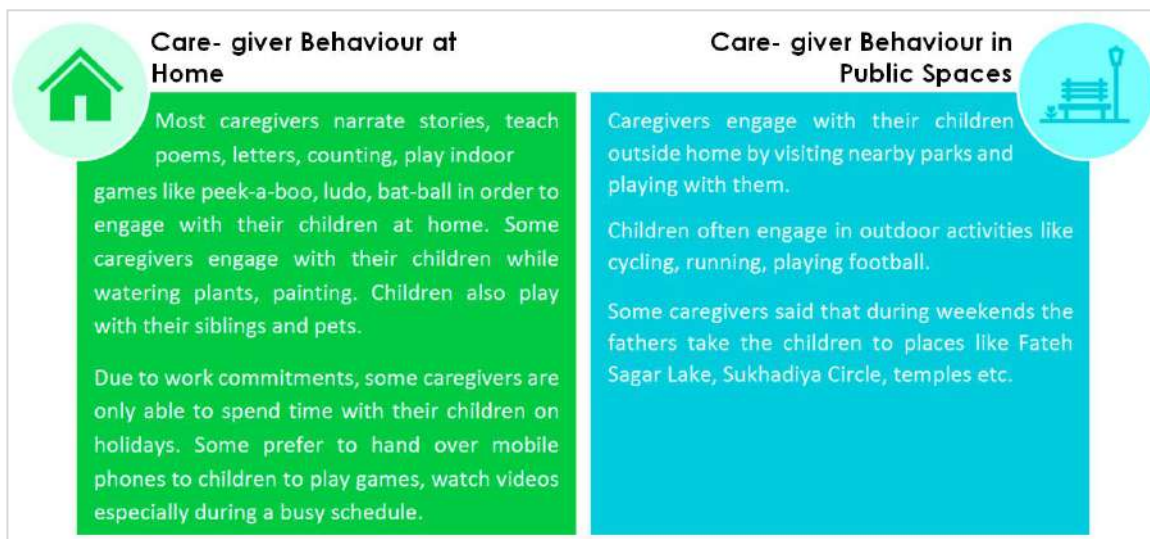


Figure 29 Excerpt from RBA, showcasing Care-giver Behaviour at Home & in Public Spaces

4.8 Learnings from Urban95 Phase-II

- There is a significant need of ITC friendly destinations and spaces in the city as city seriously lacks in such and other interlinked ITC friendly spaces;
- It has been observed over the project period that there is strong need for heightening the stakeholder (govt. and non- govt.) awareness on importance and need for ITC Friendly destinations and spaces in the city for transforming Udaipur into an Urban95 city in its true sense. One of the direct way of achieving this is the continuous engagement with them through various on- ground and other project activities, events, periodic meetings with them and so on;
- Continuous engagement with govt. stakeholders via Project Steering Committee (PSC) meetings and Project Review Meetings has helped a lot in keeping stakeholders engaged and updated on the project activities, which in turn has helped in garnering their support for project activities, specifically in on- ground implementation of semi-permanent projects, Capacity Building Workshops (CBWs) and Urban95 Udaipur kids festivals etc. along with approval on numerous documents including project DPRs, institutional documents and other project documents as well;
- The above become more important in situations like frequent transfers and new commissioners and other decision makers;
- Workshops & Events such as CBWs & Urban95 Udaipur Kids Festivals proved crucial as far as city level visibility & wider reorganization of Urban95 program, its objectives and other details are concerned. In- fact these activities has also helped in garnering additional support from UMC and other stakeholders;
- Important to keep govt. stakeholders engaged & updated as far as budgetary provision is concerned for approvals, else can lead to unforeseen delays. This also helps in ensuring project ownership by stakeholders;
- Timely completion of project documents is vital for keeping stakeholders interested in project activities;

- h) Important to keep media (print, electronic & digital) engaged through the program period for wider support and coverage. This not only helps in building city wide awareness of the program, its objectives but also helps in higher visibility of the same, enhance awareness and last but not the least foster consensus among diverse stakeholders.

5 Importance of Reduce, Recycle and Reuse (3R) & Monitoring, Review and Verification (MRV)

Urban95 as a programme has always focused on applying best practices and that's has been reflected through its various projects- implemented and planned. In continuation, 3Rs has been emphasized within its project framework,

Moreover MRV also comes as an important tool as far as ITC Master Checklist is concerned, as in the ever evolving environment, inflow of new ITC friendly item and/ or material shall be a continuous process and it is where it become imperative that the said checklist should go into periodic review for inclusion of the new item, material with better and improved specifications, cost etc. for the convenience of city engineers, other service providers, urban practitioners and any other engaged in developing and/ or retrofitting of ITC friendly spaces.

Inclusion of new, user friendly and easily available items shall help city(ies) greatly is using those items without any difficulty(ies) for the benefit of the city and specifically for the ITCs and pregnant and lactating women. The specifics of both has been detailed out in subsequent sections.

5.1 Reduce, Recycle and Reuse (3Rs)

As the part of Urban95 Phase- I & Phase- II, focus has always been given on maximizing the use of 3Rs as seen in implemented and planned interventions under the program. For example- used tyres and wooden logs has been proposed and implemented as playing and resting elements in the two tactical interventions under Urban95 Phase- I (Fig 9 & 10) . Moreover the same has been proposed as design elements with the same purpose in Sensory Park and CPZ, Ashok Nagar design proposal under Urban95 Phase-II (Fig 11 & 12).



Figure 30 Used Tyres as Playing & Resting Elements, Urban95 Phase-I, Udaipur



Figure 31 Wooden Logs as Playing & Resting Elements, Urban95 Phase-I, Udaipur

3Rs is envisaged to help greatly in changing the city's mindset that it's not always the new material but 'used and waste' material with thoughtful and careful planning and usage, has the potential to play an important role in development projects, in the process reducing the overall project cost significantly. In- fact not only capital cost but these being easy to implement and maintain elements, also helps in reducing the overall Operation & Maintenance (O&M) cost as well.



Figure 32 Wooden Logs proposed as Playing & Resting Elements in Sensory Park Design Proposal



Figure 33 3D Rendered Image showcasing Wooden Logs proposed as Playing & Resting Elements in Sensory Park Design Proposal

5.2 Monitoring, Review and Verification (MRV)

MRV, as explained earlier come across as an important tool as far as ITC Master Checklist is concerned, as in the ever evolving environment, inflow of new ITC friendly item and/ or material shall be a continuous process and it is where it become imperative that the said checklist should go into periodic review for inclusion of the new item, material with better and improved specifications, cost etc. for the convenience of city engineers, other service providers, urban practitioners and any other engaged in developing and/ or retrofitting of ITC friendly spaces.

The suggested periodic review should be held on half yearly or yearly basis by a Urban95 committee, if it can be constituted, consisting of city engineers, traffic police personnel, other service providers and urban practitioners, specifically the leading architects and urban planners & designers with good numbers of projects in their kitty along with individual domain experts (if any).



Figure 34 MRV Illustrative

In- fact if the said committee can be formed, it shall help greatly in taking up the Urban95 and/or children friendly initiatives in the city with high possibility of convergence opportunities in existing as well as new development projects.

6 ITC Motivators (Elements) and its Components

All the studies, surveys, design proposals has helped extensively in developing this detailed checklist consisting of ITC friendly elements, components, materials currently missing from existing SoRs.

Subsequent sections details out the checklist elements, component along with its details such as specifications, rates, usage etc.

6.1 ITC Motivators and their Benefits

Table 1 ITC Motivators and their Benefits

S/n	ITC Motivators	Benefits for ITC
1	Presence of unobstructed continuous footpath/ ramps	Increase in usage of footpaths and walkways, which creates a safe and joyful experience while reaching the ITC destinations
2	Presence of Utilities/ Amenities in and around ITC Destinations and other Public Spaces (Neighbourhood, Streets) & Transport Terminals- Separate and Age- appropriate Toilets, Breastfeeding Room, Water ATMs	Increase the time spent in ITC destinations
3	Shaded Resting Spaces (ITC Enabled)	Increase the time spent in ITC destinations in all Weathers
4	Interactive & Engaging Steetscape and Facades	Promote 'walking' along with increase in time spent in outdoor environment, boosting 'Learning while Playing' experiences
5	Dedicated ITC Spaces, Zones at ITC Destination and other Public Spaces	Increase in time spent in outdoor environment, helping in their overall growth and development along with increased social interaction and peer learning as well
6	Street Lights, Bollards, Road Markings & Signages	Increased sense of safety among ITC resulting in increase in time spent in outdoor environment
7	Integrated Mobility	Increase in the number/ percentage of the ITCs using sustainable mobility options such as walking, cycling, PT etc.

6.2 Elements for ITC Destinations & Spaces

Series of elements & material plays an important role for ITC enabled Streets, Parks and Transit Stop. It can ranges from ITC friendly street furniture (bollards, road side plantations, signages etc.) to interactive and engaging walkways (footpaths/ sidewalks, pathways within parks etc.) and surfaces (floors, walls etc.) along with age- appropriate playing equipments (swings, slides, musical installations etc.) and spaces (sandpits, mounds etc.) made from different material as well. All these impacts the children behaviour, especially in outdoor spaces and environments, hence thoughtfully planned and designed spaces and elements can work wonders, enabling holistic growth & development of children.

6.2.1 ITC Friendly Element- Benches

The ITC friendly benches as shown are specifically designed to be used in streets, parks and at transit stops as well.

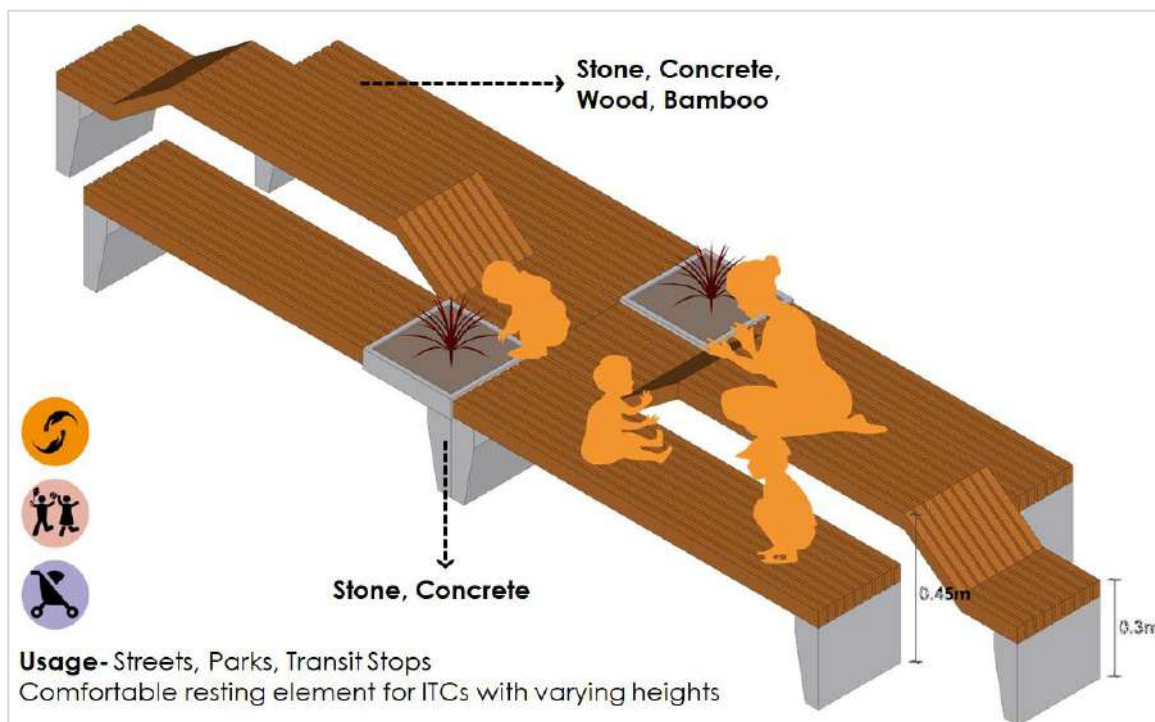


Figure 36 ITC Enabled Benches

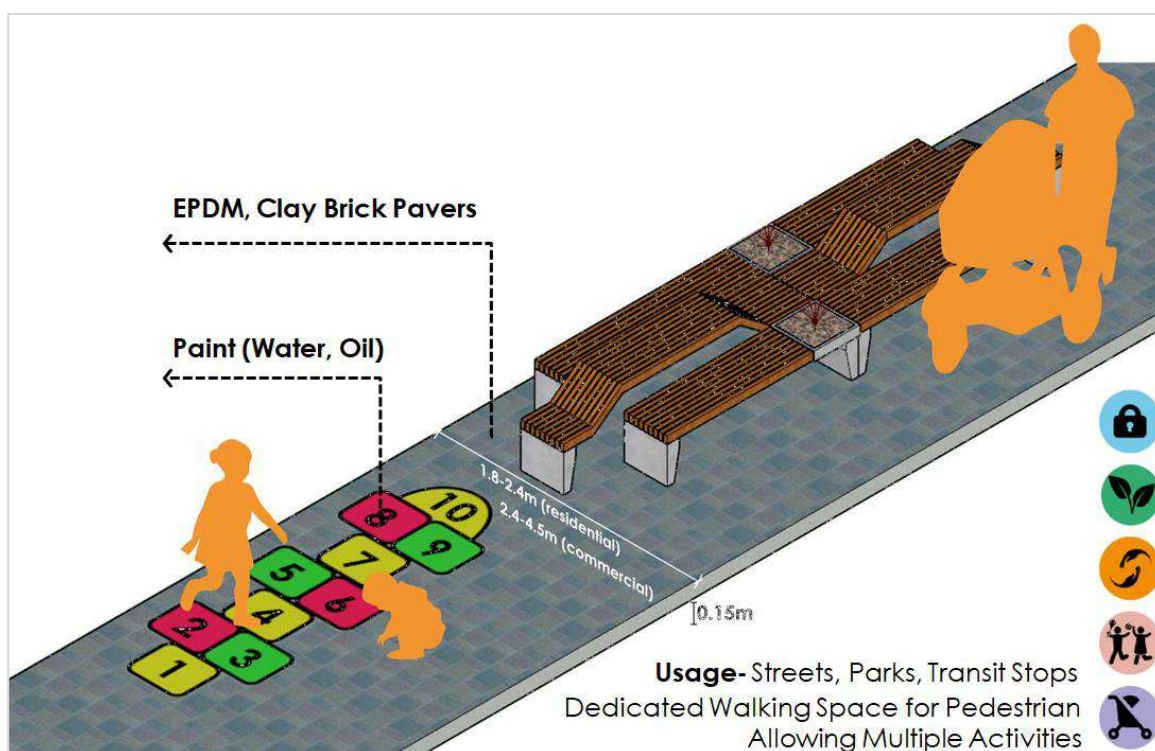


Figure 35 Usage & Placement of ITC Enabled Benches on Sidewalks

6.2.2 ITC Friendly Element- Plantation Strips

Plantation Strips are specifically designed to be used in streets, parks for creating buffer space at sidewalks & in parks and also for giving access to nature.

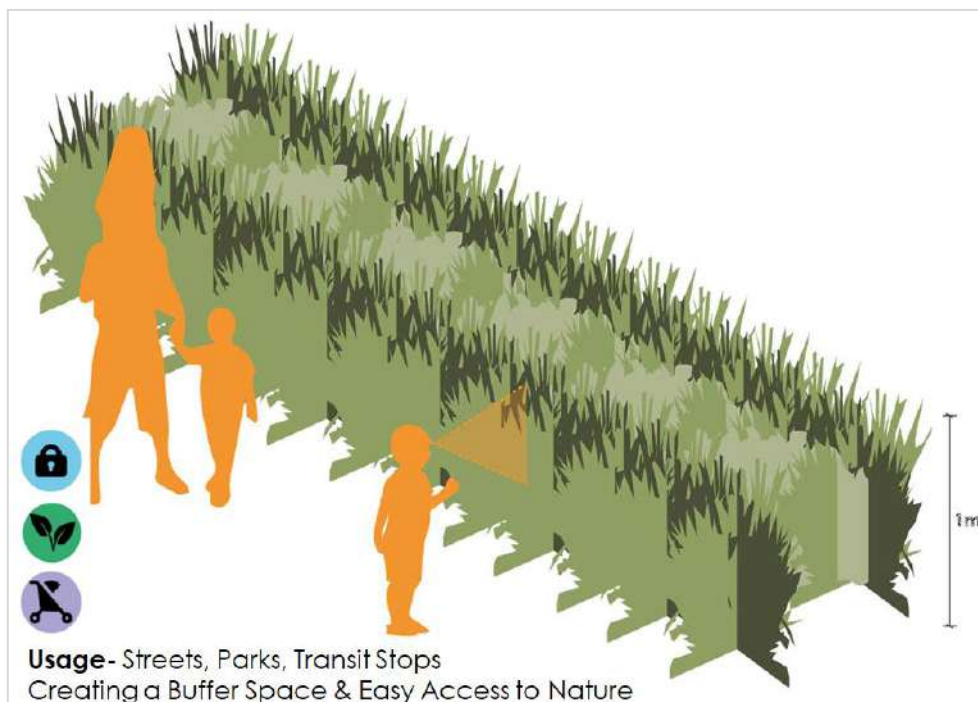


Figure 37 Plantation Strip for Creating Buffer & Providing Easy Access to Nature

6.2.3 ITC Friendly Element- Bollards

Bollards are designed to be used in streets, specifically at footpaths/ sidewalks for easy and safe movements of ITCs.

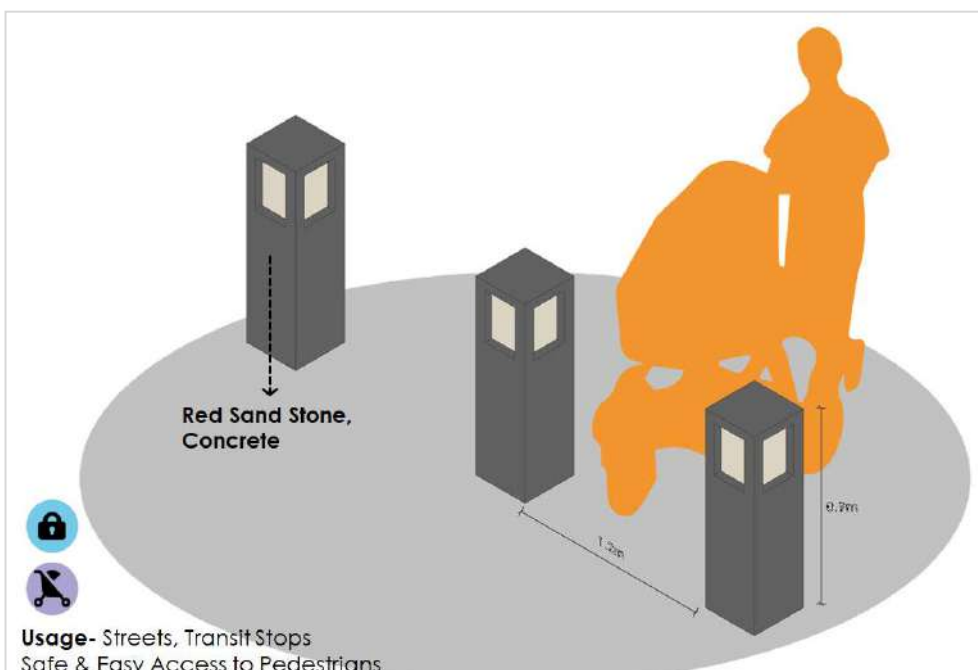


Figure 38 Bollards for Providing Safe & Easy Access to Pedestrians

6.2.4 ITC Friendly Element- Interactive & Engaging Facades

Interactive & engaging streetscapes and facades is important for making ITCs journey an playful and joyful one, resulting in increased time spent by ITC in outdoor environment and also increase the usage of walking and cycling. .

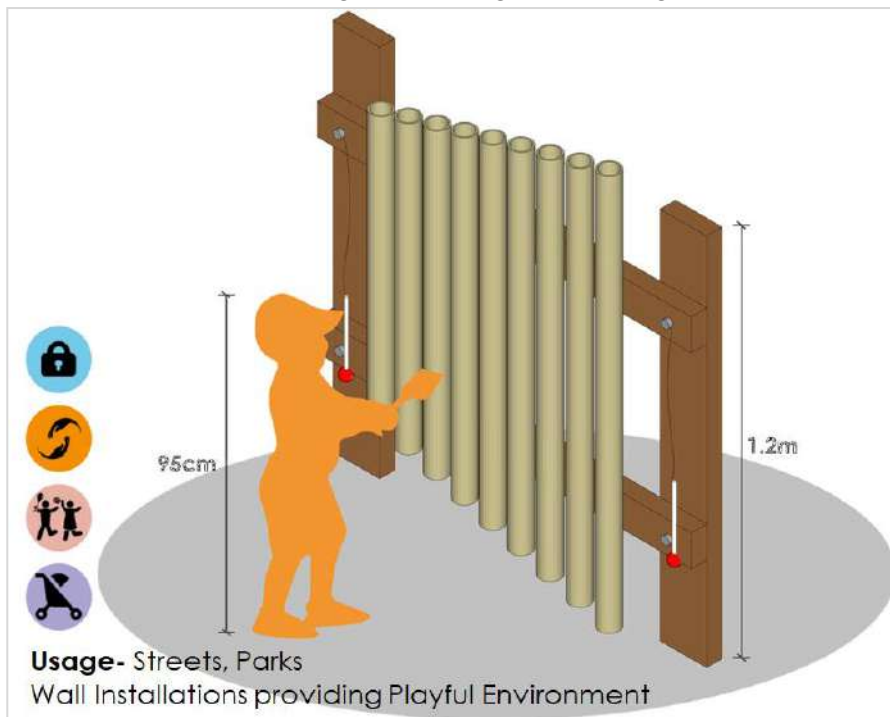


Figure 39 Interactive & Engaging Streetscape & Facades for Playful Experiences

6.2.5 ITC Friendly Element- Sandpits & Permeable Fencing

Sandpits are one of the best spaces for young children to feel the textures, kindle their imagination and creativity, role play, and interact socially or play alone for long durations.

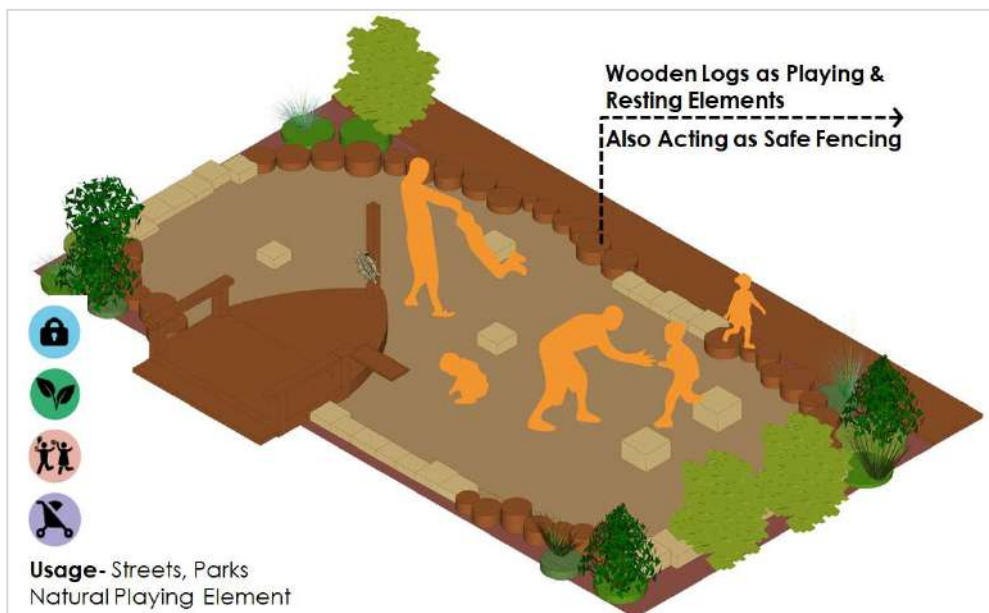


Figure 40 Sandpits as Playing & Sensory Elements

6.2.6 ITC Friendly Element- Permeable & Interactive Fencing

Interactive, permeable and playful fencing forms an important part of interactive streetscape, enabling ITC to enjoy their journeys and also encouraging them to make their journeys on foot and/or by cycle, resulting in increased time spent by ITC in outdoor environment and also increase the usage of walking and cycling.

Permeable fencing work very well in streets and at parks as well, as it helps in increasing the sense of safety among ITC by acting as 'eyes on the street' elements.

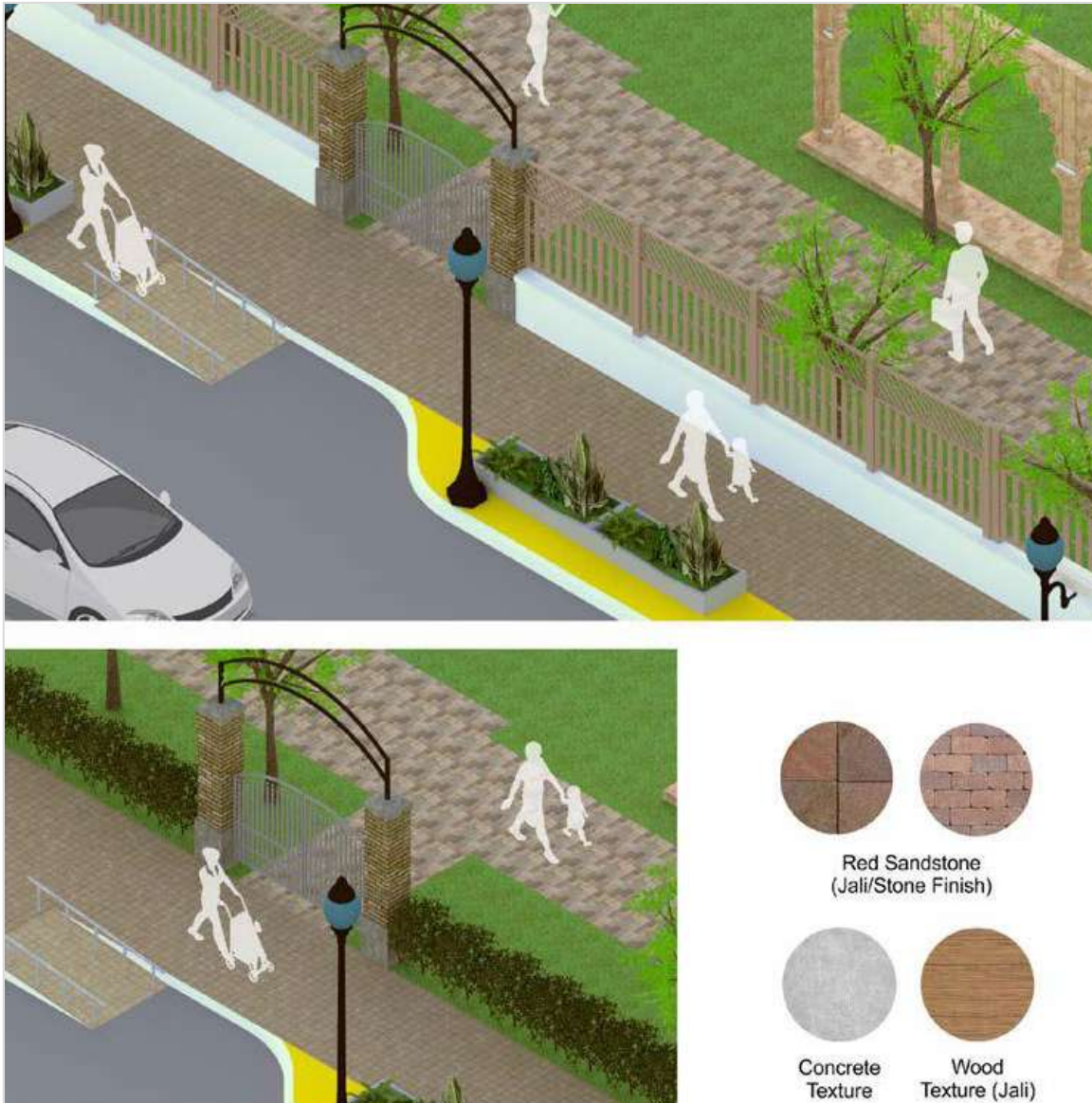


Figure 41 Permeable Fencing in & around Park

6.2.7 ITC Friendly Element- Interactive, Playful & Safe Footpath/ Sidewalk

Interactive, playful yet safer footpaths/ sidewalks are one of the most important design elements, enabling ITCs to make their journeys to numerous ITC destinations and spaces a playful and joyful one, that too on foot, resulting in increased time spent by ITC in outdoor environment and also increase the usage of walking and cycling.

Interactive, engaging, inclusive and playful footpath/ sidewalks helps children in engage with their surroundings arousing curiosity among them, leading to heightened interaction among ITCs. Such footpaths are adorned with interactive floor games, in- built playing and sensory elements, ITC friendly flooring such as EPDM flooring, soft tiles and patterned tiles and all these helps in increased safety for children while walking and/or playing and provide opportunities to children for spending quality time with other children and care-givers, leading to increased social interaction.

Moreover suitable placed (in shade) ITC enabled benches and other seating elements act as a boon to these already interactive footpaths. Road side plantation strips act as safety barrier between vehicular traffic and footpath while adding greenery to it.



Figure 42 Interactive, Playful & Safe Footpath/ Sidewalk

6.2.8 ITC Friendly Element- Chicanes

Chicanes are one of the most used elements for calming the high speed traffic, specifically within the neighbourhood. Especially used for creating curves within a straight road, forcing motorists to slower down the vehicular speed, they can act an playful spaces for children by utilization of extra space within the curve.

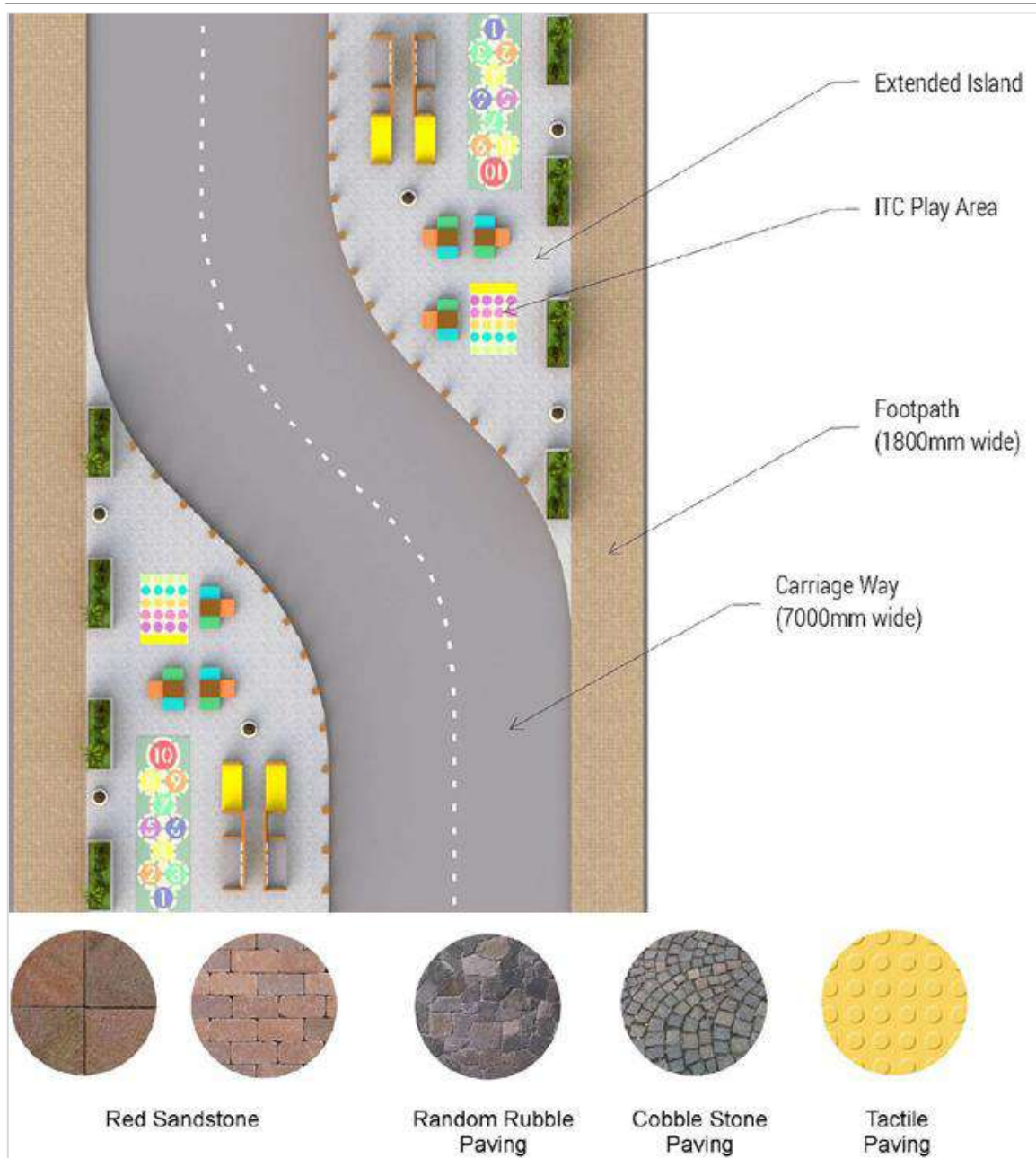


Figure 43 Chicane as Traffic Calming Measure and Playful Spaces for Children

6.2.9 ITC Friendly Element- Cycle Tracks

Thoughtfully planned and designed, interactive and visually appealing cycle tracks along with its ancillary infrastructure (marking, signages, cycle stands etc.) helps children in explore the neighbourhood independently and/ or along with other children and care-givers, leading to increased social interaction and also helps in building self- confidence and navigational skills as well.

Cycling also helps children in building and strengthening body movements, body muscles while they learn balancing. Overall, it helps children in keeping themselves physically, mentally and socially fit and active.



Figure 44 Interactive & Visually Appealing Cycling Tracks

6.2.10 ITC Friendly Element- Planters along Seating Spaces

Thoughtfully planned and designed planters of varied species and colors along seating spaces not only provides visually appealing and vibrant environments to ITC and other visitors, but also helps in providing and engaging children in varied sensory opportunities- touch & feel, visual, smell and taste as well. Such environments also has the possibilities of increase in time spent by ITC in outdoor environments and leading to learning while playing', as such planters arouse curiosity among children, leading to increased interaction between children and their care- givers and other children as well.



Figure 45 Aesthetically Designed & Visually Appealing Planters along Seating

7 Conceptualization of ITC Destinations & Spaces

Idea conceptualization is the snapshot of possible ITC enabled design interventions and ideas for transforming the existing spaces and surfaces to an ITC friendly spaces, specifically showcasing potential interventions for streets, parks and transit stops as well.

7.1 Visualization for ITC Friendly Streets (Safe, Green & Playful)

The existing street, as seen in Fig 31 has no footpath/ sidewalk, is missing road safety elements with dull & mundane streetscape as well. The visualization showcase an model ITC friendly street with addition of ITC motivators such as continuous footpath, shaded resting spaces with interactive floor games, road side planters not only as safety buffer but also for absorbing noise and air pollution. Moreover the boundary walls has been transformed into active façades with interactive games, stories, messaging on positive parenting and responsive caregiving etc.

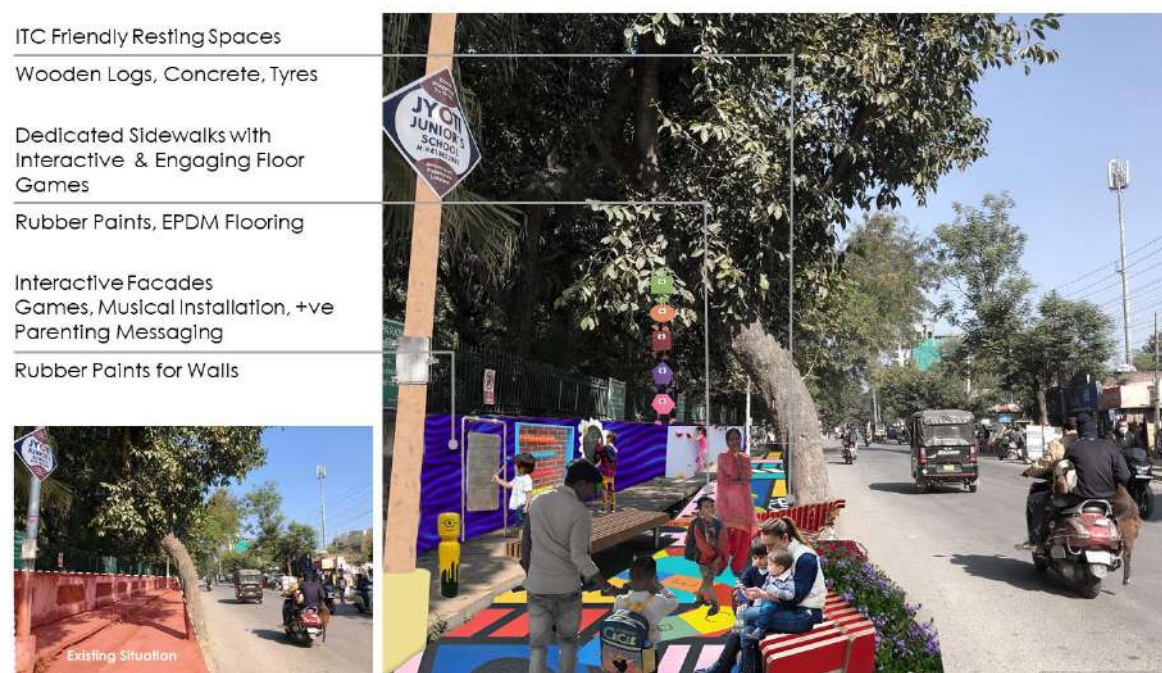


Figure 46 Visualization of ITC Enabled Street, Udaipur

7.2 Visualization for ITC Friendly Parks (Safe, Green & Playful)

The existing park, as seen in Fig 32 is missing dedicated ITC Zone, doesn't have any any playing equipments and other engaging elements and/or activities for keeping children engage in them. The visualization showcase addition dedicated ITC zone (playing and seating spaces) within the natural shade of trees with interactive & engaging floor games on pathways. Visualization also showcase use of different material such as sand for sandpit, wooden logs as playing and resting elements, wooden crates for creating visual boundaries etc.

Interactive Floor Games

Rubber Paint

Balancing, Playing & Seating Installations

Wooden Logs

Children Seating Space

Wooden Logs, Tyres, Concrete, Metal



Figure 47 Visualization of ITC Friendly Park, Udaipur

7.3 Visualization for ITC Friendly Transit Stops (Safe, Accessible & Playful)

The existing park, as seen in Fig 20 is missing dedicated ITC Zone, doesn't have any playing equipments and other engaging elements and/or activities for keeping children engage in them. The visualization showcase addition dedicated ITC

Interactive yet Informatory Signages

ITC Enabled Seating Spaces/ Benches

Interactive Floor Games

Mending the Road, making it an ITC Enabled & Accessible Bus Stop



Figure 48 Visualization of ITC Friendly Transit Stops, Udaipur

8 Annexures I- ITC Design Components Checklist for ITC Friendly Interventions

A checklist consisting of ITC friendly elements & components and its applicability in various ITC destinations and their interventions respectively, specifically Child Priority Zone (CPZ), Street Development & Junctions, Parks, Aanganwadi Centers (AWCs) & Primary Healthcare Centers (PHCs).

This has been prepared as the ready reckoner document for the easy use of city engineers, managers, urban practitioners, individuals and anyone else wanting to plan, design, develop and/or retrofit, rejuvenate such spaces.

All the said elements & components has been derived from their usage in implemented and planned projects under Urban95 Phase-I & Phase-II as well.

Table 2 Design Component Checklist

S/N	Component	CPZ	Shared Street & Junctions	Parks	AWC & PHC
A	Streets and Junctions				
1	Footpath				
2	Kerb Ramp				
3	Cycle stand				
4	Cycle Track				
5	ITC Enabled Ramps				
6	Waiting Area				
7	Handicapped Parking				
8	Sidewalk Games				
9	Active Façade along the Route				
10	Surface Material & Textures				
11	Benches				
12	Shading Devices				
13	Lighting				
14	ITC Playful Furniture				
15	Planters				
16	Bollards				
17	Seating along the Planters				
18	Way Findings Signages for ITC Destinations & Amenities				
19	Traffic Safety Signage				
20	Safe Crossings Signages				
21	Kerb Extensions				
22	Rumble Strips				
23	Lane Markings				

24	Chicanes				
25	Public Art				
B	Parks and other Open Public Spaces				
1	Fencing/ Permeable Perimeter				
2	Camera monitoring				
3	ITC Enabled Ramps				
4	Benches				
5	Shading Devices				
6	Lighting				
7	ITC Playful Furniture				
8	Age- appropriate Playing Equipments				
9	Natural Playing Elements				
10	Planters				
11	Public Art				
12	Surface Material & Textures				
C	Utilities/ Public Buildings				
1	Breastfeeding Room/ Booth				
2	Water ATMs				
3	Toilets				
4	Dustbins				

9 Annexures II- ITC Master Checklist Items, Material- Consolidated for all ITC Spaces

The annexures showcases the SoR and Non- SoR items, material along with its unit rates for ITC destinations & spaces and referenced as readily available dataset at one place and can be plugged easily while development and retrofitting, rejuvenating such spaces. Annexure I contains the consolidated item list applicable to all the spaces with common design elements, components and material as well, while Annexure II- IV contains the specific item list and details for individual ITC spaces and destinations.

With all the items, materials and their details (specifications, rates) in place, if the said checklist is institutionalize at state and/or city level, then has the potential of changing urban built environment into an ITC friendly built environment.

Important to note that all the Non- SoR cost present in the document are the prevailing quoted/ market rates and might change during institutionalization, hence actual rates based on new quotations/ market rates should be obtained and included for making it an authentic and genuine checklist, making it easier for all involved to use this document

Table 3 ITC Master Checklist- Consolidated for all ITC Spaces

ITC Master Checklist- Consolidated for all ITC Spaces				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
		Civil Works		
1	2.3.1	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to a lead of 50 metres from road boundary including removal and disposal of top organic soil not exceeding 150 mm in thickness as directed by Engineer - In area of light jungle	Hectare	38600
2	10.19	For Safety Providing 1.20 metre high fencing with angle iron posts 50 mm x 50 mm x 6 mm at 3 metre center to center with 0.40 metre embedded in M15 grade cement concrete, corner, end and every 10th post to be strutted, provided with welded steel wire fabric of 75 mm x 50 mm mesh or 75 mm x 25 mm mesh and fixed to iron posts by flat iron 50 x 5 mm and bolts etc. complete in all respects including all material, labour	M	696

ITC Master Checklist- Consolidated for all ITC Spaces				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
3	12.5.1	Drain Cover Providing and fixing of reinforced Ferro-Cement drain covers designed for 'A' class loading duly marked on cover with adequate steel reinforcement having thickness 75mm to 150mm anti corrosive bitumen painted M.S. plate , Rim and M.S. lifting hooks, Admixtures like plasticizer, bond improving compound, shrinkage, resistance compound, abrasion resistant complete as per approved design etc. Standard Size 600x800mm (75mm thick) for span 300 to 450mm	sqm	1520
4	11.1 & 11.1.2	Sidewalk - PCC Plain cement concrete 1:3:6 mix with crushed stone aggregate mechanically mixed, placed in foundation and compacted by vibration including curing as per clause 1000 & 1700 of MoRT&H specification including all material, labour form work, machinery. Using stone aggregate 20 mm nominal size	cum	4535
5	9.10.2	Providing and fixing of precast concrete interlocking tiles of desired shape of M 30 grade manufactured from fully computerized automatic stationery hydraulic vibro pressed machine and fully computerized automatic batching plant of class A1/A2 as per BS 6717:2001. The CC interlocking paving blocks be laid on average 50mm. thick bed of coarse sand and the joint is to be filled with fine sand. Laying procedure on compacted sub-base as defined. Complete job is to be executed as per the instruction of Engineer incharge. The rates to be inclusive of all lead & Lifts etc. complete as per specifications. Tensile splitting strength, abrasion and braking load etc. as per BS 6717:2001, Grey cement. - 80mm thick	sqm	855
6	9.13	Flooring with Cobble stone of approx. Size 125x125x75 mm (thick) laid on 25 mm average thick cement mortar 1:3 (1 cement : 3 Coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the stone, laid in approved pattern complete in all respect as per direction of Engineer-in-charge.	Sqm	1775

ITC Master Checklist- Consolidated for all ITC Spaces				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
7	30.25	For flooring and seating benches Kota stone slab flooring 25mm thick over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :	Sqm	1299
8	28.113	Bench Providing and fixing Bamboo jaffery/ fencing consisting of superior quality 25mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of hollock wood in scantling of section 50X25mm fixed with nails and G.I wire to existing surface complete as per direction of Engineer-incharge.	Sqm	526
9	14.1	For Seating Benches Brick masonry work with First class FPS bricks (min. 10.5 Mpa) in cement mortar with mechanical mixer in substructure/ super structure at all levels complete as per clause 1300 and 2200 of MoRT&H specification including all material, labour, scaffolding etc but excluding pointing and plastering.		
10	14.1.2	In cement mortar 1:4 (1 cement : 4 coarse sand)	cum	5280
11	10.7 & 10.7.1	ECD Messages - Painting new letters and figures of specified size , of any shade with first quality synthetic enamel paint, black or any other approved colour to give an even shade as per clause 801 of MoRT&H Specification including all material, labour. Hindi (Matras, Commas and the like not to be measured and paid for. Half letters shall be counted as half)	Cm. Height per letter	2
12	10.8	For Rumble Strip in three layers 2.5mm thk each before 18 nos zebra crossings Providing and laying marking of center line and stop line etc with hot thermoplastic compound 2.5 mm thick on road/ plain surface, including reflectorizing glass beads @ 250 gms per sqm area with special applicator machine, as per IRC:35 including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control involved. The finished surface to be level, uniform and free from streaks and holes as per clause 803 of MoRT&H Specification including all material, labour, machinery, lighting, guarding and maintenance of diversion.	Sqm	382

ITC Master Checklist- Consolidated for all ITC Spaces				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
13	30.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, making of lines or groove etc. complete but excluding the cost of nosing of steps etc. complete		
	30.3.1	40mm thick	sqm	384.5
	30.3.2	75mm thick	sqm	721
14	30.36	Providing and Fixing Cushion Vinyl/Fully flexible Vinyl Flooring confirming to I.S.-3462 Flooring of approved make with fiber base using rubber base adhesives including rolling with light wooden roller complete :		
	30.36.1	1.0 mm thick	sqm	858
	30.36.2	1.5 mm thick	sqm	949
	30.36.3	2.0 mm thick.	sqm	1026
15	30.17	Precast terrazo tiles 20mm thick with graded marble chips of size upto 12mm laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete with precast tiles on 20mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :		
	30.17.1	Light shade using white cement	sqm	964
	30.17.2	Medium shade using 50%white cement and 50% ordinary cement	sqm	915
16	3099	Chequered precast cement concrete tiles 22mm thick using marble chips of size 6mm – Light shade using white	sqm	245
17	23.15.1	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarses and : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits. 50 mm thick	sqm	1113
18	3206	Non - Asbestos multi-purpose fiber cement board 8mm thick.	sqm	255

ITC Master Checklist- Consolidated for all ITC Spaces				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
19	10.26	Bollards Providing and fixing "SWISS" type bollard 134cm height made out of 1.25mm thick M.S. sheet welded in conical section having upper dia 15cm and lower dia 20cm with another attachment of mandatory 7mm thick plate and fixed with the help of 7cm long, 30cm dia chrome plated MS tube, this part is fixed on the body with another attachment of a cap 30x7cm, whole body is painted in black stove enamel and mandatory plate in azure blue with one compulsory keep left arrow with 10mm border reflective strip each of 7.5cm on body complete in all respect including all material, labour, diversion.	Each	1723
20	DSR-2021-4.9	Precasting and placing in position 125 mm dia Bollards 600 mm high of required shape including providing M.S. Pipe Sleeve 50 mm dia 300 mm long in the Bollard and M.S. Pipes 40 mm dia and 450mm long with 150x150x6mm M.S. plate welded at bottom and embedded 150mm in cement concrete 1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources), including necessary excavation of size 250x250x450mm deep for the same in bitumen/ concrete pavement at specified spacing.		
		Precast bollards, including all items and cement in the foundation, but excluding cement in the section above ground	each	785.70
21	29.32	Cycle Stand Providing & Fixing in position, MS fabrication work using angles, sqr tubes, c channels etc for various partition frame as per Design & Instructions & Complete in all aspects . including all materials labour, finishing etc complete	KG	88
22	2515	For Shading 1.5 mm thick PVC sheet confirming to IS 3462	Sqm	378
		Paint Works		
23	10.5	Painting two coats on specified surface with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour.		
	10.5.1	On new plastered concrete surface	sqm	97.9

ITC Master Checklist- Consolidated for all ITC Spaces				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
	10.5.2	On steel surface	sqm	84.2
24	33.64.1	Finishing walls with water proofing cement paint of required shade : - Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 lits/10 sqm complete including cost of Priming coat.	sqm	53
25	10.5 & 10.5.2	MS Grill Paint Painting two coats on specified surface with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour	Sqm	84
		Play Area		
26	39.49	Supply and fixing different type of steel pre-fabricated garden bench/ jhula/ slides and other children play items made of steel duly painted as per approved design and specifications by engineer in charge made of MS pipe, Flats, rectangular hollow section or other steel sections duly welded and or nut bolted where ever required, rubbing and buffing welded joints to make safe for use of children and painted in approved pattern complete as required	kilogram	81.4
27	4.12	Filling with locally available river sand at all levels including watering ramming consolidating and dressing complete including cost of sand.	cum	966
28	10.9.2	Signages Providing and fixing of retro- reflectorised cautionary , mandatory and informatory sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 3 metre long and size 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing including all material, labour. - 60 cm equilateral triangle	Each	2895

ITC Master Checklist- Consolidated for all ITC Spaces				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
29	10.1	For Informative boards Providing and erecting direction and place identification retroreflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick framed to angle iron 40x40x5mm with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing including all material, labour.	Each	9510
30	10.15 (SOR-2017)	Supply and fixing sign board upto 4.5 meter height made of the following specifications board base of A.C.P / transparent PVC acrylic sheet 3 mm thick fixed on MS hollow rectangular section size 50mmx25mm, letters made of acrylic material sheet 3 mm thick of any colour fixed with LED lights with all accessories and wiring with copper wire complete as required	sqm	11100
31	3786 (SOR-2017)	Fabricated sign board made of board base of A.C.P / transparent PVC acrylic sheet 3 mm thick fixed on MS hollow rectangular section size 50mmx25mm, letters made of acrylic material sheet 3 mm thick fixed with LED lights with all accessories	sqm	73
32	8717	12.5 mm thick Glass fibre reinforced Gypsum board.	sqm	210
33	7116	Hard board 6 mm thick	sqm	192
34	1.9.3	Jute Rassi	kg	140
35	8654	Masking Tape	M	6
36	39.13 (SOR-2017)	Grassing with 'Carpet' grass (selection no. 1) including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for moving including supplying good earth if needed.(The good earth shall be paid separately)		
37	39.13.1	In rows 5 cm apart in either direction	sqm	928
38	39.13.1	With Grass Turf	sqm	710
39	1.7	Supply of different sized earthen pots at site/store including loading unloading & transportation etc. complete		

ITC Master Checklist- Consolidated for all ITC Spaces				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
	1.7.1	Earthen pot 150 mm size	Each	18
	1.7.2	Earthen pot 225 mm size	Each	30
	1.7.3	Earthen pot 300 mm size	Each	43
40	11.29	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement in position to the required line, level and curvature jointed with cement mortar 1:3	cum	5686
41	28.155	For breast feeding booth Supply and Installation of SMALL ROOM (TOILET & GUARD ROOM) with following thickness PREFABRICATED INSULATED PPGL FACE closed lip panels (for door, wall and roof) of thickness mentioned below. Panel shall have 0.50mm (+/- 0.04mm) thick pre coated metal sheet on both sides of rigid PUR insulation. The pre coated metal sheet shall be PPGL (Pre Painted Galvalume Sheet with AZ coating) sheet having SDP (Super Durable Polyester) colour coat of 18 micron(min). The Pre coated metal sheet on both sides must be pre-strengthened by full lengthwise stiffening with semi-circular beading of 12mm wide & 3mm depth at 240 (+/-5) mm pitch. Panels shall have closed lengthwise sides made by right angle flange on both side of Pre coated metal sheets, free from cap type covers. The top and bottom part on width wise sides of panels must have full width MS Square tube insert of (min 25mm x 1.0mm) for better screw retention and strength. The insulation core shall be self-extinguishing DIN 4102, Class B3 fire retardant class rigid PUR with thermal conductivity of 0.025 W/mK and with density of 40kg/m3 (+/- 2kg) suitable for temperature range of -30 degree C to +80 degree C. The panel must be made using glue-free high pressure hot pressing self-bonding method free from major undulations. PPGL sheet on both sides of panel shall have a min15 micron protective plastic guard film to avoid scratches during transportation.		
	28.155.2	Thickness of 50mm (+/-2mm)	SQM	3345
Non- SoR				
42	Non- SoR	Artificial Grass Green Color Synthetic 25m x 10m with 40mm pile height, Double polypropylene backing with green latex coating. UV resistant PE straight and PP curly monofilament yarn, with 3 year warranty and UV stabilized washable with 0.37 gauge. SVHC / REACH Tested Pass Fire Resistance	sqm	322.8

ITC Master Checklist- Consolidated for all ITC Spaces				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
43	Non- SoR	Lighting Aluminum cold white Led with black fixture and size of 215 x 762, electric power source	Each	1500
44	Non- SoR	Art Work, with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour.	Each	5000
45	Non- SoR	Exterior Tensile Roofing structure Prefabricated tensile structure with pyramid shape or any other desire shape with PVC, FRP material. Easily assembled ecofriendly white color. Tear Strength 580/520 N	Sqm	3819.8
46	Non- SoR	Water ATM reverse osmosis (RO) 200 Water dispenser having three dispensing point, using coin acceptor. Dispenser having facility of rfid/card, with mobile wallet accepted for the payment services. Purification capacity of water atm (lph) 100. Automatic with multi-processor integrated control system and remotely controlled web based server system. Water capacity of 201-250 liters with hdpe material. Equipped with an in-built chiller unit for providing continuous cold water of temperature around 15 degree celcius. In-built chiller tank capacity (liter)21-50. Number of filtration steps five. Display type backlit display , touch screen display, display size 7" tablet	Each	50000
47	Non- SoR	Dustbins Two dustbin set of blue and green with capacity of 80 liters each of HDPE material and pole should be of mild steel. Size 120mmx80mm(bottom)x240mm(bin Height)x50mm(lid width) complete in all respects and as per the direction of Engineer incharge.	Each	4500
48	Non- SoR	Providing and applying Aerosol spray paint on floor with artistic design pattern prepared on finish surface with fine finishing and good quality and specifications, complete in all respects and as per the direction of Engineer incharge.	Sqm	410

ITC Master Checklist- Consolidated for all ITC Spaces				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
49	Non- SoR	EPDM FLOORING:-EPDM Providing and fixing 25mm thick Styrene Butadiene Rubber(SBR) with EPDM (Ethylene Propylene Diene Monomer) insitu rubber flooring out of total Thickness of 25 mm the First Layer of 19 Thick should be of Black SBR Second Layer of 6 MM Thick should be with Color EPDM.The above flooring of EPDM should be done with different color grains as per design approved by E-in-C and it should be laid Concrete The glue used should be of (1). PU Binder, it's glue which gives bonding to Rubber and should be in Transparent Color, USP of it should have low UV minimal color change EPDM Granules. (2). Butyl Acetate, its again a kind of Glue which gives bond in-between different layers. The quoted should be inclusive of above glue of transportation etc completely required for satisfactory completion of work	Sqm	2690
50	Non- SoR	Safe and secure, convenient and hygienic. Child Safety Seats are suitable seats in which to restrain a child whilst performing other tasks Durable & High Quality HDPE (High Density Polyethylene) 527mm (h) x 344 mm (w) x 297mm (d). sitting model max weight 25kgs. Equipped with Safety Belt to secure baby when sitting	Each	5000

10 Annexures III- Area Based Development (Child Priority Zone)

Table 4 ITC Master Checklist- Area Based Development (Child Priority Zone)

ITC Master Checklist- Area Based Development (Child Priority Zone)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
		Civil Works		
1	2.3.1	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to a lead of 50 metres from road boundary including removal and disposal of top organic soil not exceeding 150 mm in thickness as directed by Engineer - In area of light jungle	Hectare	38600
2	12.5.1	Drain Cover Providing and fixing of reinforced Ferro-Cement drain covers designed for 'A' class loading duly marked on cover with adequate steel reinforcement having thickness 75mm to 150mm anti corrosive bitumen painted M.S. plate , Rim and M.S. lifting hooks, Admixtures like plasticizer, bond improving compound, shrinkage, resistance compound, abrasion resistant complete as per approved design etc Standard Size 600x800mm (75mm thick) for span 300 to 450mm	sqm	1520
3	11.1 & 11.1.2	Sidewalk - PCC Plain cement concrete 1:3:6 mix with crushed stone aggregate mechanically mixed, placed in foundation and compacted by vibration including curing as per clause 1000 & 1700 of MoRT&H specification including all material, labour form work, machinery. Using stone aggregate 20 mm nominal size	cum	4535

ITC Master Checklist- Area Based Development (Child Priority Zone)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
4	9.10.2	Providing and fixing of precast concrete interlocking tiles of desired shape of M 30 grade manufactured from fully computerized automatic stationery hydraulic vibro pressed machine and fully computerized automatic batching plant of class A1/A2 as per BS 6717:2001. The CC interlocking paving blocks be laid on average 50mm. thick bed of coarse sand and the joint is to be filled with fine sand. Laying procedure on compacted sub-base as defined. Complete job is to be executed as per the instruction of Engineer incharge. The rates to be inclusive of all lead & Lifts etc. complete as per specifications. Tensile splitting strength, abrasion and braking load etc. as per BS 6717:2001, Grey cement. - 80mm thick	sqm	855
5	9.13	Flooring with Cobble stone of approx. Size 125x125x75 mm (thick) laid on 25 mm average thick cement mortar 1:3 (1 cement : 3 Coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the stone, laid in approved pattern complete in all respect as per direction of Engineer-in-charge.	Sqm	1775
6	30.25	For flooring and seating benches Kota stone slab flooring 25mm thick over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :	Sqm	1299
7	28.113	Bench Providing and fixing Bamboo jaffery/ fencing consisting of superior quality 25mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of hollock wood in scantling of section 50X25mm fixed with nails and G.I wire to existing surface complete as per direction of Engineer-incharge.	Sqm	526
8	14.1	For Seating Benches Brick masonry work with First class FPS bricks (min. 10.5 Mpa) in cement mortar with mechanical mixer in substructure/ super structure at all levels complete as per clause 1300 and 2200 of MoRT&H specification including all material, labour, scaffolding etc but excluding pointing and plastering.		

ITC Master Checklist- Area Based Development (Child Priority Zone)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
9	14.1.2	In cement mortar 1:4 (1 cement : 4 coarse sand)	cum	5280
10	10.7 & 10.7.1	ECD Messages - Painting new letters and figures of specified size , of any shade with first quality synthetic enamel paint, black or any other approved colour to give an even shade as per clause 801 of MoRT&H Specification including all material, labour. Hindi (Matras, Commas and the like not to be measured and paid for. Half letters shall be counted as half)	Cm. Height per letter	2
11	10.8	For Rumble Strip in three layers 2.5mm thk each before 18 nos zebra crossings Providing and laying marking of center line and stop line etc with hot thermoplastic compound 2.5 mm thick on road/ plain surface, including reflectorising glass beads @ 250 gms per sqm area with special applicator machine, as per IRC:35 including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control involved. The finished surface to be level, uniform and free from streaks and holes as per clause 803 of MoRT&H Specification including all material, labour, machinery, lighting, guarding and maintenance of diversion.	Sqm	382
12	30.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, making of lines or groove etc. complete but excluding the cost of nosing of steps etc. complete		
	30.3.1	40mm thick	sqm	384.5
	30.3.2	75mm thick	sqm	721
13	30.36	Providing and Fixing Cushion Vinyl/Fully flexible Vinyl Flooring confirming to I.S.-3462 Flooring of approved make with fibre base using rubber base adhesives including rolling with light wooden roller complete :		
	30.36.1	1.0 mm thick	sqm	858
	30.36.2	1.5 mm thick	sqm	949
	30.36.3	2.0 mm thick.	sqm	1026

ITC Master Checklist- Area Based Development (Child Priority Zone)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
14	30.17	Precast terrazzo tiles 20mm thick with graded marble chips of size upto 12mm laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete with precast tiles on 20mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand)		
	30.17.1	Light shade using white cement	sqm	964
	30.17.2	Medium shade using 50%white cement and 50% ordinary cement	sqm	915
15	3099	Chequered precast cement concrete tiles 22mm thick using marble chips of size 6mm - Light shade using white	sqm	245
16	23.15.1	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarses and : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centring and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits. 50 mm thick	sqm	1113
17	3206	Non - Asbestos multi-purpose fibre cement board 8mm thick.	sqm	255
18	10.26	Bollards Providing and fixing "SWISS" type bollard 134cm height made out of 1.25mm thick M.S. sheet welded in conical section having upper dia 15cm and lower dia 20cm with another attachment of mandatory 7mm thick plate and fixed with the help of 7cm long, 30cm dia chrome plated MS tube, this part is fixed on the body with another attachment of a cap 30x7cm, whole body is painted in black stove enamel and mandatory plate in azure blue with one compulsory keep left arrow with 10mm border reflective strip each of 7.5cm on body complete in all respect including all material, labour, diversion.	Each	1723

ITC Master Checklist- Area Based Development (Child Priority Zone)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
19	DSR-2021-4.9	Precasting and placing in position 125 mm dia Bollards 600 mm high of required shape including providing M.S. Pipe Sleeve 50 mm dia 300 mm long in the Bollard and M.S. Pipes 40 mm dia and 450mm long with 150x150x6mm M.S. plate welded at bottom and embedded 150mm in cement concrete 1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources), including necessary excavation of size 250x250x450mm deep for the same in bitumen/ concrete pavement at specified spacing.		
		Precast bollards, including all items and cement in the foundation, but excluding cement in the section above ground	each	785.70
20	29.32	Cycle Stand Providing & Fixing in position, MS fabrication work using angles, sqr tubes, c channels etc for various partition frame as per Design & Instructions & Complete in all aspects . including all materials labour, finishing etc. complete	KG	88
21	2515	For Shading 1.5 mm thich PVC sheet confirming to IS 3462	Sqm	378
		Paint Works		
22	10.5	Painting two coats on specified surface with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour.		
	10.5.1	On new plastered concrete surface	sqm	97.9
	10.5.2	On steel surface	sqm	84.2
23	33.64.1	Finishing walls with water proofing cement paint of required shade : - Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 litrs/10 sqm complete including cost of Priming coat.	sqm	53

ITC Master Checklist- Area Based Development (Child Priority Zone)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
24	10.5 & 10.5.2	MS Grill Paint Painting two coats on specified surface with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour	Sqm	84
		Play Area		
25	39.49	Supply and fixing different type of steel pre-fabricated garden bench/ jhula/ slides and other children play items made of steel duly painted as per approved design and specifications by engineer in charge made of MS pipe, Flats, rectangular hollow section or other steel sections duly welded and or nut bolted where ever required, rubbing and buffing welded joints to make safe for use of children and painted in approved pattern complete as required	kilogram	81.4
26	4.12	Filling with locally available river sand at all levels including watering ramming consolidating and dressing complete including cost of sand.	cum	966
27	10.9.2	Signages Providing and fixing of retro- reflectorised cautionary , mandatory and informatory sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 3 metre long and size 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing including all material, labour. - 60 cm equilateral triangle	Each	2895
28	10.1	For Informative boards Providing and erecting direction and place identification retroreflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick framed to angle iron 40x40x5mm with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing including all material, labour.	Each	9510

ITC Master Checklist- Area Based Development (Child Priority Zone)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
29	10.15 (SOR-2017)	Supply and fixing sign board upto 4.5 meter height made of the following specifications board base of A.C.P / transparent PVC acrylic sheet 3 mm thick fixed on MS hollow rectangular section size 50mmx25mm, letters made of acrylic material sheet 3 mm thick of any colour fixed with LED lights with all accessories and wiring with copper wire complete as required	sqm	11100
30	3786 (SOR-2017)	Fabricated sign board made of board base of A.C.P / transparent PVC acrylic sheet 3 mm thick fixed on MS hollow rectangular section size 50mmx25mm, letters made of acrylic material sheet 3 mm thick fixed with LED lights with all accessories	sqm	73
31	8717	12.5 mm thick Glass fibre reinforced Gypsum board.	sqm	210
32	7116	Hard board 6 mm thick	sqm	192
33	1.9.3	Jute Rassi	kg	140
34	8654	Masking Tape	metre	6
35	1.7	Supply of different sized earthen pots at site/store including loading unloading & transportation etc. complete		
	1.7.1	Earthen pot 150 mm size	Each	18
	1.7.2	Earthen pot 225 mm size	Each	30
	1.7.3	Earthen pot 300 mm size	Each	43
36	11.29	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement in position to the required line, level and curvature jointed with cement mortar 1:3	cum	5686
		Non- SoR		
37	Non- SoR	Lighting Aluminum cold white Led with black fixture and size of 215 x 762, electric power source	Each	1500

ITC Master Checklist- Area Based Development (Child Priority Zone)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
38	Non- SoR	Art Work , with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour.	Each	5000
39	Non- SoR	Exterior Tensile Roofing structure. Prefabricated tensile structure with pyramid shape or any other desire shape with PVC, FRP material. Easily assembled ecofriendly white color. Tear Strength 580/520 N	Sqm	3819.8
40	Non- SoR	Dustbins Two dustbin set of blue and green with capacity of 80 liters each of HDPE material and pole should be of mild steel. Size 120mmx80mm(bottom)x240mm(bin Height)x50mm(lid width) complete in all respects and as per the direction of Engineer incharge.	Each	4500
41	Non- SoR	Providing and applying Aerosol spray paint on floor with artistic design pattern prepared on finish surface with fine finishing and good quality and specifications, complete in all respects and as per the direction of Engineer incharge.	Sqm	410
42	Non- SoR	EPDM FLOORING:-EPDM Providing and fixing 25mm thick Styrene Butadiene Rubber(SBR) with EPDM (Ethylene Propylene Diene Monomer) insitu rubber flooring out of total Thickness of 25 mm the First Layer of 19 Thick should be of Black SBR Second Layer of 6 MM Thick should be with Color EPDM. The above flooring of EPDM should be done with different color grains as per design approved by E-in-C and it should be laid Concrete The glue used should be of (1). PU Binder, it's glue which gives bonding to Rubber and should be in Transparent Color, USP of it should have low UV minimal color change EPDM Granules. (2). Butyl Acetate, its again a kind of Glue which gives bond in-between different layers. The quoted should be inclusive of above glue of transportation etc. completely required for satisfactory completion of work	Sqm	2690

11 Annexures IV- Traffic Oriented Infrastructure (Child & Family Friendly Junctions and 1.5 kms Road Stretch)

Table 5 ITC Master Checklist- Traffic Oriented Infrastructure (Child & Family Friendly Junctions and 1.5 Kms Road Stretch)

ITC Master Checklist- Traffic Oriented Infrastructure (Child & Family Friendly Junctions and 1.5 kms Road Stretch)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
		Civil Works		
1	2.3.1	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to a lead of 50 metres from road boundary including removal and disposal of top organic soil not exceeding 150 mm in thickness as directed by Engineer - In area of light jungle	Hectare	38600
2	10.19	For Safety Providing 1.20 metre high fencing with angle iron posts 50 mm x 50 mm x 6 mm at 3 metre center to center with 0.40 metre embedded in M15 grade cement concrete, corner, end and every 10th post to be strutted, provided with welded steel wire fabric of 75 mm x 50 mm mesh or 75 mm x 25 mm mesh and fixed to iron posts by flat iron 50 x 5 mm and bolts etc. complete in all respects including all material, labour	M	696
3	12.5.1	Drain Cover Providing and fixing of reinforced Ferro-Cement drain covers designed for 'A' class loading duly marked on cover with adequate steel reinforcement having thickness 75mm to 150mm anti corrosive bitumen painted M.S. plate , Rim and M.S. lifting hooks, Admixtures like plasticizer, bond improving compound, shrinkage, resistance compound, abrasion resistant complete as per approved design etc. Standard Size 600x800mm (75mm thick) for span 300 to 450mm	sqm	1520

ITC Master Checklist- Traffic Oriented Infrastructure (Child & Family Friendly Junctions and 1.5 kms Road Stretch)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
4	11.1 & 11.1.2	Sidewalk - PCC Plain cement concrete 1:3:6 mix with crushed stone aggregate mechanically mixed, placed in foundation and compacted by vibration including curing as per clause 1000 & 1700 of MoRT&H specification including all material, labour form work, machinery. Using stone aggregate 20 mm nominal size	cum	4535
5	9.10.2	Providing and fixing of precast concrete interlocking tiles of desired shape of M 30 grade manufactured from fully computerized automatic stationery hydraulic vibro pressed machine and fully computerized automatic batching plant of class A1/A2 as per BS 6717:2001. The CC interlocking paving blocks be laid on average 50mm. thick bed of coarse sand and the joint is to be filled with fine sand. Laying procedure on compacted sub-base as defined. Complete job is to be executed as per the instruction of Engineer incharge. The rates to be inclusive of all lead & Lifts etc. complete as per specifications. Tensile splitting strength, abrasion and braking load etc. as per BS 6717:2001, Grey cement. - 80mm thick	sqm	855
6	9.13	Flooring with Cobble stone of approx. Size 125x125x75 mm (thick) laid on 25 mm average thick cement mortar 1:3 (1 cement : 3 Coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the stone, laid in approved pattern complete in all respect as per direction of Engineer-in-charge.	Sqm	1775
7	30.25	For flooring and seating benches Kota stone slab flooring 25mm thick over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :	Sqm	1299

ITC Master Checklist- Traffic Oriented Infrastructure (Child & Family Friendly Junctions and 1.5 kms Road Stretch)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
8	28.113	Bench Providing and fixing Bamboo jaffery/ fencing consisting of superior quality 25mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of hollock wood in scantling of section 50X25mm fixed with nails and G.I wire to existing surface complete as per direction of Engineer-in-charge	Sqm	526
9	14.1	For Seating Benches Brick masonry work with First class FPS bricks (min. 10.5 Mpa) in cement mortar with mechanical mixer in substructure/ super structure at all levels complete as per clause 1300 and 2200 of MoRT&H specification including all material, labour, scaffolding etc but excluding pointing and plastering.		
10	14.1.2	In cement mortar 1:4 (1 cement : 4 coarse sand)	cum	5280
11	10.7 & 10.7.1	ECD Messages - Painting new letters and figures of specified size , of any shade with first quality synthetic enamel paint, black or any other approved colour to give an even shade as per clause 801 of MoRT&H Specification including all material, labour. Hindi (Matras, Commas and the like not to be measured and paid for. Half letters shall be counted as half)	Cm. Height per letter	2
12	10.8	For Rumble Strip in three layers 2.5mm thk each before 18 nos zebra crossings Providing and laying marking of center line and stop line etc with hot thermoplastic compound 2.5 mm thick on road/ plain surface, including reflectorising glass beads @ 250 gms per sqm area with special applicator machine, as per IRC:35 including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control involved. The finished surface to be level, uniform and free from streaks and holes as per clause 803 of MoRT&H Specification including all material, labour, machinery, lighting, guarding and maintenance of diversion.	Sqm	382
13	30.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, making of lines or groove etc. complete but excluding the cost of nosing of steps etc. complete		

ITC Master Checklist- Traffic Oriented Infrastructure (Child & Family Friendly Junctions and 1.5 kms Road Stretch)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
	30.3.1	40mm thick	sqm	384.5
	30.3.2	75mm thick	sqm	721
14	30.36	Providing and Fixing Cushion Vinyl/Fully flexible Vinyl Flooring confirming to I.S.-3462 Flooring of approved make with fibre base using rubber base adhesives including rolling with light wooden roller complete :		
	30.36.1	1.0 mm thick	sqm	858
	30.36.2	1.5 mm thick	sqm	949
	30.36.3	2.0 mm thick.	sqm	1026
15	30.17	Precast terrazo tiles 20mm thick with graded marble chips of size upto 12mm laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete with precast tiles on 20mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :		
	30.17.1	Light shade using white cement	sqm	964
	30.17.2	Medium shade using 50%white cement and 50% ordinary cement	sqm	915
16	3099	Chequered precast cement concrete tiles 22mm thick using marble chips of size 6mm – Light shade using white	sqm	245
17	23.15.1	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarses and : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centring and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits. 50 mm thick	sqm	1113
18	3206	Non - Asbestos multi purpose fibre cement board 8mm thick.	sqm	255

ITC Master Checklist- Traffic Oriented Infrastructure (Child & Family Friendly Junctions and 1.5 kms Road Stretch)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
19	10.26	Bollards Providing and fixing "SWISS" type bollard 134cm height made out of 1.25mm thick M.S. sheet welded in conical section having upper dia 15cm and lower dia 20cm with another attachment of mandatory 7mm thick plate and fixed with the help of 7cm long, 30cm dia chrome plated MS tube, this part is fixed on the body with another attachment of a cap 30x7cm, whole body is painted in black stove enamel and mandatory plate in azure blue with one compulsory keep left arrow with 10mm border reflective strip each of 7.5cm on body complete in all respect including all material, labour, diversion.	Each	1723
20	DSR-2021-4.9	Precasting and placing in position 125 mm dia Bollards 600 mm high of required shape including providing M.S. Pipe Sleeve 50 mm dia 300 mm long in the Bollard and M.S. Pipes 40 mm dia and 450mm long with 150x150x6mm M.S. plate welded at bottom and embedded 150mm in cement concrete 1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources), including necessary excavation of size 250x250x450mm deep for the same in bitumen/ concrete pavement at specified spacing.		
		Precast bollards, including all items and cement in the foundation, but excluding cement in the section above ground	each	785.70
21	29.32	Cycle Stand Providing & Fixing in position, MS fabrication work using angles, sqr tubes, c channels etc for various partition frame as per Design & Instructions & Complete in all aspects . including all materials labour, finishing etc. complete	KG	88
22	2515	For Shading 1.5 mm thich PVC sheet confirming to IS 3462	Sqm	378
		Paint Works		

ITC Master Checklist- Traffic Oriented Infrastructure (Child & Family Friendly Junctions and 1.5 kms Road Stretch)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
23	10.5	Painting two coats on specified surface with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour.		
	10.5.1	On new plastered concrete surface	sqm	97.9
	10.5.2	On steel surface	sqm	84.2
24	33.64.1	Finishing walls with water proofing cement paint of required shade : - Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 litres/10 sqm complete including cost of Priming coat.	sqm	53
25	10.5 & 10.5.2	MS Grill Paint Painting two coats on specified surface with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour	Sqm	84
26	10.9.2	Signages Providing and fixing of retro- reflectorised cautionary , mandatory and informatory sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 3 metre long and size 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing including all material, labour. - 60 cm equilateral triangle	Each	2895

ITC Master Checklist- Traffic Oriented Infrastructure (Child & Family Friendly Junctions and 1.5 kms Road Stretch)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
27	10.1	For Informative boards Providing and erecting direction and place identification retroreflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick framed to angle iron 40x40x5mm with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing including all material, labour.	Each	9510
28	10.15 (SOR-2017)	Supply and fixing sign board upto 4.5 meter height made of the following specifications board base of A.C.P / transparent PVC acrylic sheet 3 mm thick fixed on MS hollow rectangular section size 50mmx25mm, letters made of acrylic material sheet 3 mm thick of any colour fixed with LED lights with all accessories and wiring with copper wire complete as required	sqm	11100
29	3786 (SOR-2017)	Fabricated sign board made of board base of A.C.P / transparent PVC acrylic sheet 3 mm thick fixed on MS hollow rectangular section size 50mmx25mm, letters made of acrylic material sheet 3 mm thick fixed with LED lights with all accessories	sqm	73
30	8717	12.5 mm thick Glass fibre reinforced Gypsum board.	sqm	210
31	7116	Hard board 6 mm thick	sqm	192
32	1.9.3	Jute Rassi	kg	140
33	8654	Masking Tape	metre	6
34	1.7	Supply of different sized earthen pots at site/store including loading unloading & transportation etc. complete		
	1.7.1	Earthen pot 150 mm size	Each	18
	1.7.2	Earthen pot 225 mm size	Each	30
	1.7.3	Earthen pot 300 mm size	Each	43

ITC Master Checklist- Traffic Oriented Infrastructure (Child & Family Friendly Junctions and 1.5 kms Road Stretch)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
35	11.29	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement in position to the required line, level and curvature jointed with cement mortar 1:3	cum	5686
36	28.155	For breast feeding booth Supply and Installation of SMALL ROOM (TOILET & GUARD ROOM) with following thickness PREFABRICATED INSULATED PPGL FACE closed lip panels (for door, wall and roof) of thickness mentioned below. Panel shall have 0.50mm (+/-0.04mm) thick pre coated metal sheet on both sides of rigid PUR insulation. The pre coated metal sheet shall be PPGL (Pre Painted Galvalume Sheet with AZ coating) sheet having SDP (Super Durable Polyester) colour coat of 18 micron(min). The Pre coated metal sheet on both sides must be pre-strengthened by full lengthwise stiffening with semi circular beading of 12mm wide & 3mm depth at 240 (+/-5) mm pitch. Panels shall have closed lengthwise sides made by right angle flange on both side of Pre coated metal sheets, free from cap type covers. The top and bottom part on width wise sides of panels must have full width MS Square tube insert of (min 25mm x 1.0mm) for better screw retention and strength. The insulation core shall be self-extinguishing DIN 4102, Class B3 fire retardant class rigid PUR with thermal conductivity of 0.025 W/mK and with density of 40kg/m ³ (+/- 2kg) suitable for temperature range of -30 degree C to +80 degree C. The panel must be made using glue-free high pressure hot pressing self-bonding method free from major undulations. PPGL sheet on both sides of panel shall have a min15 micron protective plastic guard film to avoid scratches during transportation.		
	28.155.2	Thickness of 50mm (+/-2mm)	SQM	3345
		Non SoR		
37	Non SoR	Lighting Aluminum cold white Led with black fixture and size of 215 x 762, electric power source	Each	1500
38	Non SoR	Art Work , with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour.	Each	5000

ITC Master Checklist- Traffic Oriented Infrastructure (Child & Family Friendly Junctions and 1.5 kms Road Stretch)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
39	Non SoR	Water atm reverse osmosis (ro) 200 Water dispenser having three dispensing point, using coin acceptor. Dispenser having facility of rfid/card, with mobile wallet accepted for the payment services. Purification capacity of water atm (lph) 100. Automatic with multi-processor integrated control system and remotely controlled web based server system. Water capacity of 201-250 liters with hdpe material. Equipped with an in-built chiller unit for providing continuous cold water of temperature around 15 degree celcius. In-built chiller tank capacity (liter)21-50. Number of filtration steps five. Display type backlit display , touch screen display, display size 7" tablet	Each	50000
40	Non SoR	Dustbins Two dustbin set of blue and green with capacity of 80 liters each of HDPE material and pole should be of mild steel. Size 120mmx80mm(bottom)x240mm(bin Height)x50mm(lid width) complete in all respects and as per the direction of Engineer incharge.	Each	4500
41	Non SoR	Providing and applying Aerosol spray paint on floor with artistic design pattern prepared on finish surface with fine finishing and good quality and specifications, complete in all respects and as per the direction of Engineer incharge.	Sqm	410
42	Non SoR	EPDM FLOORING:-EPDM Providing and fixing 25mm thick Styrene Butadiene Rubber(SBR) with EPDM (Ethylene Propylene Diene Monomer) insitu rubber flooring out of total Thickness of 25 mm the First Layer of 19 Thick should be of Black SBR Second Layer of 6 MM Thick should be with Color EPDM. The above flooring of EPDM should be done with different color grains as per design approved by E-in-C and it should be laid Concrete The glue used should be of (1). PU Binder, it's glue which gives bonding to Rubber and should be in Transparent Color, USP of it should have low UV minimal color change EDPM Granules. (2). Butyl Acetate, its again a kind of Glue which gives bond in-between different layers. The quoted should be inclusive of above glue of transportation etc completely required for satisfactory completion of work	Sqm	2690

12 Annexures V- Parks and Gardens (Sensory Park)

Table 6 ITC Master Checklist- Parks and Gardens (Sensory Park)

ITC Master Checklist- Parks & Gardens (Sensory Park)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
		Civil Works		
1	2.3.1	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to a lead of 50 metres from road boundary including removal and disposal of top organic soil not exceeding 150 mm in thickness as directed by Engineer - In area of light jungle	Hectare	38600
2	10.19	For Safety Providing 1.20 metre high fencing with angle iron posts 50 mm x 50 mm x 6 mm at 3 metre center to center with 0.40 metre embedded in M15 grade cement concrete, corner, end and every 10th post to be strutted, provided with welded steel wire fabric of 75 mm x 50 mm mesh or 75 mm x 25 mm mesh and fixed to iron posts by flat iron 50 x 5 mm and bolts etc. complete in all respects including all material, labour	M	696
3	9.10.2	Providing and fixing of precast concrete interlocking tiles of desired shape of M 30 grade manufactured from fully computerized automatic stationery hydraulic vibro pressed machine and fully computerized automatic batching plant of class A1/A2 as per BS 6717:2001. The CC interlocking paving blocks be laid on average 50mm. thick bed of coarse sand and the joint is to be filled with fine sand. Laying procedure on compacted sub-base as defined. Complete job is to be executed as per the instruction of Engineer incharge. The rates to be inclusive of all lead & Lifts etc. complete as per specifications. Tensile splitting strength, abrasion and braking load etc. as per BS 6717:2001, Grey cement. - 80mm thick	sqm	855

ITC Master Checklist- Parks & Gardens (Sensory Park)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
4	9.13	Flooring with Cobble stone of approx. Size 125x125x75 mm (thick) laid on 25 mm average thick cement mortar 1:3 (1 cement : 3 Coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the stone, laid in approved pattern complete in all respect as per direction of Engineer-in-charge.	Sqm	1775
5	30.25	For flooring and seating benches Kota stone slab flooring 25mm thick over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :	Sqm	1299
6	28.113	Bench Providing and fixing Bamboo jaffery/ fencing consisting of superior quality 25mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of hollock wood in scantling of section 50X25mm fixed with nails and G.I wire to existing surface complete as per direction of Engineer-incharge.	Sqm	526
7	14.1	For Seating Benches Brick masonry work with First class FPS bricks (min. 10.5 Mpa) in cement mortar with mechanical mixer in substructure/ super structure at all levels complete as per clause 1300 and 2200 of MoRT&H specification including all material, labour, scaffolding etc but excluding pointing and plastering.		
8	14.1.2	In cement mortar 1:4 (1 cement : 4 coarse sand)	cum	5280
9	10.7 & 10.7.1	ECD Messages - Painting new letters and figures of specified size , of any shade with first quality synthetic enamel paint, black or any other approved colour to give an even shade as per clause 801 of MoRT&H Specification including all material, labour. Hindi (Matras, Commas and the like not to be measured and paidfor. Half letters shall be counted as half)	Cm. Height per letter	2

ITC Master Checklist- Parks & Gardens (Sensory Park)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
10	2515	For Shading 1.5 mm thick PVC sheet confirming to IS 3462	Sqm	378
		Paint Works		
11	10.5	Painting two coats on specified surface with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour.		
	10.5.1	On new plastered concrete surface	sqm	97.9
	10.5.2	On steel surface	sqm	84.2
12	33.64.1	Finishing walls with water proofing cement paint of required shade : - Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 litres/10 sqm complete including cost of Priming coat.	sqm	53
13	10.5 & 10.5.2	MS Grill Paint Painting two coats on specified surface with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour	Sqm	84
		Play Area		
14	39.49	Supply and fixing different type of steel pre-fabricated garden bench/ jhula/ slides and other children play items made of steel duly painted as per approved design and specifications by engineer in charge made of MS pipe, Flats, rectangular hollow section or other steel sections duly welded and or nut bolted where ever required, rubbing and buffing welded joints to make safe for use of children and painted in approved pattern complete as required	kilogram	81.4

ITC Master Checklist- Parks & Gardens (Sensory Park)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
15	4.12	Filling with locally available river sand at all levels including watering ramming consolidating and dressing complete including cost of sand.	cum	966
16	10.9.2	Signages Providing and fixing of retro- reflectorised cautionary , mandatory and informatory sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 3 metre long and size 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing including all material, labour. - 60 cm equilateral triangle	Each	2895
17	10.1	For Informative boards Providing and erecting direction and place identification retroreflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick framed to angle iron 40x40x5mm with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing including all material, labour.	Each	9510
18	10.15 (SOR-2017)	Supply and fixing sign board upto 4.5 meter height made of the following specifications board base of A.C.P / transparent PVC acrylic sheet 3 mm thick fixed on MS hollow rectangular section size 50mmx25mm, letters made of acrylic material sheet 3 mm thick of any colour fixed with LED lights with all accessories and wiring with copper wire complete as required	sqm	11100
19	3786 (SOR-2017)	Fabricated sign board made of board base of A.C.P / transparent PVC acrylic sheet 3 mm thick fixed on MS hollow rectangular section size 50mmx25mm, letters made of acrylic material sheet 3 mm thick fixed with LED lights with all accessories	sqm	73
20	8717	12.5 mm thick Glass fibre reinforced Gypsum board.	sqm	210

ITC Master Checklist- Parks & Gardens (Sensory Park)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
21	7116	Hard board 6 mm thick	sqm	192
22	1.9.3	Jute Rassi	kg	140
23	8654	Masking Tape	metre	6
24	39.13 (SOR-2017)	Grassing with 'Carpet' grass (selection no. 1) including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for moving including supplying good earth if needed.(The good earth shall be paid separately)		
25	39.13.1	In rows 5 cm apart in either direction	sqm	928
26	39.13.1	With Grass Turf	sqm	710
	1.7	Supply of different sized earthen pots at site/store including loading unloading & transportation etc.complete		
	1.7.1	Earthen pot 150 mm size	Each	18
	1.7.2	Earthen pot 225 mm size	Each	30
	1.7.3	Earthen pot 300 mm size	Each	43
28	11.29	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement in position to the required line, level and curvature jointed with cement mortar 1:3	cum	5686

ITC Master Checklist- Parks & Gardens (Sensory Park)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
29	28.155	For breast feeding booth Supply and Installation of SMALL ROOM (TOILET & GUARD ROOM) with following thickness PREFABRICATED INSULATED PPGL FACE closed lip panels (for door, wall and roof) of thickness mentioned below. Panel shall have 0.50mm (+/-0.04mm) thick pre coated metal sheet on both sides of rigid PUR insulation. The pre coated metal sheet shall be PPGL (Pre Painted Galvalume Sheet with AZ coating) sheet having SDP (Super Durable Polyester) colour coat of 18 micron(min). The Pre coated metal sheet on both sides must be pre-strengthened by full lengthwise stiffening with semi circular beading of 12mm wide & 3mm depth at 240 (+/-5) mm pitch. Panels shall have closed lengthwise sides made by right angle flange on both side of Pre coated metal sheets, free from cap type covers. The top and bottom part on width wise sides of panels must have full width MS Square tube insert of (min 25mm x 1.0mm) for better screw retention and strength. The insulation core shall be self extinguishing DIN 4102, Class B3 fire retardant class rigid PUR with thermal conductivity of 0.025 W/mK and with density of 40kg/m3 (+/- 2kg) suitable for temperature range of -30 degree C to +80 degree C. The panel must be made using glue-free high pressure hot pressing self-bonding method free from major undulations. PPGL sheet on both sides of panel shall have a min15 micron protective plastic guard film to avoid scratches during transportation.		
	28.155.2	Thickness of 50mm (+/-2mm)	SQM	3345
		Non SoR		
30	Non SoR	Artificial Grass Green Color Synthetic 25m x 10m with 40mm pile height, Double polypropylene backing with green latex coating. UV resistant PE straight and PP curly monofilament yarn, with 3 year warranty and UV stabilized washable with 0.37 gauge. SVHC / REACH Tested Pass Fire Resistance Ef	sqm	322.8
31	Non SoR	Lighting Aluminum cold white Led with black fixture and size of 215 x 762, electric power source	Each	1500

ITC Master Checklist- Parks & Gardens (Sensory Park)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
32	Non SoR	Art Work, with synthetic enamel paint of approved brand and shade, after thorough cleaning and necessary filling to give even shade as per clause 803 of MoRT&H Specification including all material, labour.	Each	5000
33	Non SoR	Exterior Tensile Roofing structure. Prefabricated tensile structure with pyramid shape or any other desire shape with PVC, FRP material. Easily assembled ecofriendly white color. Tear Strength 580/520 N	Sqm	3819.8
34	Non SoR	Water ATM Reverse Osmosis (ro) 200 Water dispenser having three dispensing point, using coin acceptor. Dispenser having facility of rfid/card, with mobile wallet accepted for the payment services. Purification capacity of water ATM (lph) 100. Automatic with multi-processor integrated control system and remotely controlled web based server system. Water capacity of 201-250 liters with hdpe material. Equipped with an in-built chiller unit for providing continuous cold water of temperature around 15 degree celcius. In-built chiller tank capacity (liter)21-50. Number of filtration steps five. Display type backlit display , touch screen display, display size 7" tablet	Each	50000
35	Non SoR	Dustbins Two dustbin set of blue and green with capacity of 80 liters each of HDPE material and pole should be of mild steel. Size 120mmx80mm(bottom)x240mm(bin Height)x50mm(lid width) complete in all respects and as per the direction of Engineer incharge.	Each	4500
36	Non SoR	Providing and applying Aerosol spray paint on floor with artistic design pattern prepared on finish surface with fine finishing and good quality and specifications, complete in all respects and as per the direction of Engineer incharge.	Sqm	410

ITC Master Checklist- Parks & Gardens (Sensory Park)				
S/n	RUIDP SOR-2022	Particulars/ Items	Unit	Rate
37	Non SoR	EPDM FLOORING:-EPDM Providing and fixing 25mm thick Styrene Butadiene Rubber(SBR) with EPDM (Ethylene Propylene Diene Monomer) insitu rubber flooring out of total Thickness of 25 mm the First Layer of 19 Thick should be of Black SBR Second Layer of 6 MM Thick should be with Color EPDM.The above flooring of EPDM should be done with different color grains as per design approved by E-in-C and it should be laid Concrete The glue used should be of (1). PU Binder, it's glue which gives bonding to Rubber and should be in Transparent Color, USP of it should have low UV minimal color change EDPM Granules. (2). Butyl Acetate, its again a kind of Glue which gives bond in-between different layers. The quoted should be inclusive of above glue of transportation etc completely required for satisfactory completion of work	Sqm	2690

13 Annexures VI- Gehl Toolkit

Gehl Toolkit comes as handy and helpful resource document as far as on- site surveys are concerned. The same has been used extensively in Phase-I and Phase-II for all the projects- tactical, permanent not only in identification of ITC barriers at various sites & projects, but also in getting real time experience of particular spaces, helping largely in identifying ITC presence, their behaviours, the kind of activities, facilities, amenities present and the activities ITCs and others are involved in and so on.

This shall help city engineers, managers, urban practitioners & individuals greatly in mapping the existing scenarios while planning, designing and/ or developing such spaces.



People Moving Count

This tool records people moving through an area at a given time. It allows us to understand who is moving through and their form of mobility.

What

Counting people moving through a space and by what means they do so helps us understand how busy a space is, but how accessible it is with different modes of transportation. Here we can learn factors about a place that pin point what specific questions should be asked through the other tools. This tool is helpful to layer against the stationary activity mapping. For example, we can learn that a place has a high volume of people moving through, but very little people stopping to stay.

This can give us flows according to time of day, week, year and is comparable across cities and places.

Directions

- Stand at a location on your map, and count all of the people that pass you
- When doing a simple count – time yourself for 10 minutes. When doing a detailed count – count 200 people.
- For each person that passes, make a tally mark in the box. Write in the totals when you are finished.
- If there are too many people to count, simply make your best guess. Count people walking or biking in both directions on both

When

This quantity data tool can be used in specific sites or at a city-wide scale and can be used to compare different cities or sites. When you know how many people are moving through, you can identify places for interventions or projects. If you know where the flows of people are you can identify where they should be supported. Once a intervention or project has been implemented, you can also use this as an evaluation tool – to define how the site has changed for people.

- sides of the street, including kids carried or rolled in strollers, people in a wheelchair, or women who are pregnant. If conducting the detailed count in a busy location, you will likely need to be two people counting different types of mobility
- Note on your sheets if anything out of the ordinary happens.

DATE 	TIME 	LOCATION 	WEATHER 
			






People Moving Count

Timing Count for 10 minutes. If in a busy location - count only one age category at a time. This count will allow you to collect the total numbers of people moving according to the time of day, week, or year.

	10 MIN	TOTALS
BABY		total
TODDLER		total
CHILD UP TO 5		total
CAREGIVER		total
OTHER		total








NOTES

DATE 	TIME 	LOCATION 	WEATHER 
			

Age and Mode Count

Timing: Count at least 200 people to get a validated sample size for finding the percentage of different age groups or modalities. It is helpful to pair with another person to count each category if in a busy location.

MODE CATEGORIES		BABY	TODDLER	CHILD UP TO 5	CARE-GIVER	OTHER	TOTALS
PEDESTRIANS	WALKING <small>(independently)</small>						<small>total</small>
	LIMITED MOBILITY <small>(Pregnant or other)</small>						<small>total</small>
	SUPPORTED <small>(supported, i.e.: stroller, hand in hand)</small>						<small>total</small>
	ROLLING MANUAL						<small>total</small>
	CARRIED <small>(any kind, i.e.: on someone's back or other)</small>						<small>total</small>
	TOTAL AGE	<small>Total</small>	<small>Total</small>	<small>Total</small>	<small>total</small>	<small>total</small>	

DATE 	TIME 	LOCATION 	WEATHER 
			

Bikes Moving Count — Detailed

Timing: Count at least 200 people to get a validated sample size for finding the percentage of different age groups or modalities. It is helpful to pair with another person to count each category if in a busy location.

MODE CATEGORIES		BABY	TODDLER	CHILD UP TO 5	CARE-GIVER	OTHER	TOTALS
BICYCLISTS	PRIVATE BIKING <small>(independently)</small>						total
	PASSENGER <small>(Cargo bike, child seat, trailer)</small>						total
	TOTAL AGE	Total	Total	Total	total	total	

Stationary Activity Mapping

This tool observes what kinds of stationary activities are happening in a place. It allows us to understand who is present and how a place invites for different uses.

What

In order to evaluate how a place is performing for people, we observe what kinds of stationary activities are happening in that place. When we understand what is happening, we can begin to identify what is working well and what enhancements can be made. The Urban95 plug-in for observing stationary activities includes observing the ways in which children and caregivers interact and type of play taking place. By tracking activities, who is doing them, and what type of interaction is happening, we can get an understanding of how inviting a place is for different people.

When

This quantity data tool can be used in specific sites or at a city-wide scale and can be used to compare different cities or sites. Observe stationary activities when you want to understand how many children or caregivers are present, what activity patterns are occurring, and what opportunities are available for play and interaction to occur. This helps provide a baseline understanding of the use of the space – generate ideas for improvement and investments (such as programming of the space) – and informs development strategies. You can also use this as an evaluation tool to compare before and after data.



DIRECTIONS

- Mapping people spending time is like taking a snapshot of all activities taking place in the survey area at a given moment (imagine looking down from above and taking a picture). It is not based on predesignated time.
- Walk through the space outlined on your map
- Map everyone staying inside the outlined area, not only along the line. Do not map people moving through unless they are moving within the area (IE: a skateboarder practicing tricks). If people are moving around the area, mark them as multiple.
- Use the menu card to apply Urban95 categories to your survey sheet
- Use individual maps even if mapping more than one location or mapping the same location more than once and summarize all activities on each map individually
- Take notes of any observations and note if large groups are doing the same activity

Stationary Activity Mapping

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
GENDER	OTHER/UNSURE																				
	MALE																				
	FEMALE																				
AGE	BABY																				
	TODDLER																				
	CHILD UP TO 5																				
	6-15 YOUTH																				
	16-24 YOUNG ADULT																				
	25-64 ADULT																				
POSTURE	65+																				
	STANDING																				
	SITTING - PUBLIC																				
	SITTING - COMMERCIAL																				
	SITTING - INFORMAL																				
LYING DOWN																					
MULTIPLE (MOVING AROUND)																					

ACTIVITIES	WAITING FOR TRANSPORT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	EATING/DRINKING																					
	ENGAGED WITH COMMERCE																					
	CULTURAL ACTIVITY																					
	USING ELECTRONICS																					
GROUPING	ALONE																					
	PAIR																					
	3-6																					
	7+																					

Urban95 Quality Criteria

This tool assesses specific urban qualities from the perspective of caregivers and young children. It is an informative discussion tool that allows us to highlight central characteristics of a public space for human well-being.

What

The Urban95 Quality Criteria looks specifically at caregivers and young children. For small children and their caregivers, the quality of a space is important as is how connected and accessible it is, what kind of amenities are available and what kind of interaction between caregivers and young children is supported by the built environment. This tool offers deep insights into the quality of a place. This tool is meant to research the quality of a public space and how it is experienced by its users.

When




























































This qualitative data tool can be used in many different types of public spaces in many different cities but is not to be used to compare sites from different cities or countries. Use this quality criteria to conduct an assessment to understand what is impacting the use, or lack of use, of a public space. The tool can be used in the initial analysis phase and during a project development. It can be used as a starting point for an in-depth analysis, as a way to create a common language for practitioners and designers, to identify potentials for improvement, and as a way to evaluate a place.

You can both use the tool alone as a surveyor, but also with people in the public to fill out themselves. By having others fill in the sheet, you can learn more about how specific users perceive a space.



DIRECTIONS

- Select your site: plaza, park, square or street. Spaces with low activity can still be interesting to assess with this tool.
- Take a few minutes to simply observe. Gain an understanding of the space before you do the survey itself. Depending on where you stand, you may find a different Quality Criteria outcome.
- If in groups, perform the survey on your own and convene at the end for a conversation and comparison of evaluations.
- Assess and take note of the individual public space and whether it lives up to the criteria. Remember this is conducted for children and their caregivers, so keep that user group in mind. For every criterion, give it a score: a happy, neutral or sad face (meaning yes, in between, or no).

DATE 	TIME 	LOCATION 	WEATHER 															
 <h2>Urban95 Quality Criteria</h2>																		
<h3>Protection</h3> <table border="1"> <thead> <tr> <th>Protection against traffic and accidents</th> <th>Protection from crime and violence</th> <th>Protection against unpleasant sensory experiences</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> Eliminating fear of traffic Safe crossings with children Safe cycling routes Available width of sidewalks adapted to strollers Clear waiting places Slow moving traffic </td> <td> <ul style="list-style-type: none"> Lively public realm Passive surveillance options Well lit Human scale Mix of uses </td> <td> <ul style="list-style-type: none"> Protection against: Wind/draft Rain/snow Cold/heat Dust, noise, glare Free from trash </td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Protection against traffic and accidents	Protection from crime and violence	Protection against unpleasant sensory experiences	<ul style="list-style-type: none"> Eliminating fear of traffic Safe crossings with children Safe cycling routes Available width of sidewalks adapted to strollers Clear waiting places Slow moving traffic 	<ul style="list-style-type: none"> Lively public realm Passive surveillance options Well lit Human scale Mix of uses 	<ul style="list-style-type: none"> Protection against: Wind/draft Rain/snow Cold/heat Dust, noise, glare Free from trash 									
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<h2>Comfort</h2> <div> <div> Opportunities to walk and cycle <ul style="list-style-type: none"> • Walkability with children stroller • Surfaces for slow moving children • Accessibility for strollers • Clear way-finding • Sidewalk for stroller/good curb </div> <div> </div> </div> <div> <div> Opportunities to stop & stay <ul style="list-style-type: none"> • Attractive & functional edges • Invitations for intended use • Zones for sitting with children • Seats near play area • Mix of seating typologies • Resting opportunities • Ability to park strollers • Ability to observe child - passive & active </div> <div> </div> </div> <div> <div> Opportunities to see <ul style="list-style-type: none"> • Opportunities to observe surroundings • Lighting (when dark) • Access to nature • Visibility at 95cm eye level • Rich sensory experiences • Stimulating built environment </div> <div> </div> </div>	<h2>Interaction</h2> <div> <div> Invitations to interact with environment <ul style="list-style-type: none"> • Presence of interesting and inviting environmental elements • Variation in the natural elements and built environment that is present • Possibility to interact with nature at the height of 95cm </div> <div> </div> </div> <div> <div> Opportunities to talk & listen <ul style="list-style-type: none"> • Low noise levels • Seating conducive to communicating • Place for child & caregiver to talk about environment </div> <div> </div> </div> <div> <div> Opportunities for play & exercise <ul style="list-style-type: none"> • Inviting playscapes for a mix of ages • Children's physical activities • Street playscapes • Temporary activities • Ability to interact spontaneously • Challenging play • In summer/winter/day/night </div> <div> </div> </div>	<h2>Connection</h2> <div> <div> Opportunities for flexibility <ul style="list-style-type: none"> • Flexible and impermanent programming that encourages use at different times of day • Convenient to spend time based on different purposes </div> <div> </div> </div> <div> <div> Opportunities to access <ul style="list-style-type: none"> • Ability to access the place with multiple modes of transportation • Without physical barriers (e.g. fences or traffic) </div> <div> </div> </div> <div> <div> Highly integrated <ul style="list-style-type: none"> • A close proximity to amenities and services - highly mixed • Opportunity to integrate this place into daily patterns and activities • Clear routes to/from/through </div> <div> </div> </div>
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Intercept Survey

Intercept surveys capture information about why caretakers and their children are spending time in a place. This allows us to gain deeper insight into what the other survey tools uncover.

What

Intercept surveys capture information about why caretakers and their children are spending time in a place. Through the intercept surveys we can learn qualitative information, such as why are people visiting a specific place and how long they plan to stay. It allows us to learn how people perceive a place and track sentiment. We can learn if a caretaker feels the place is of high quality for a child to play, if a place is somewhere they could stop casually on their way to another destination, or if it is a place they frequent. This tool gives complete data, but is limited to a small sample size due to the intensive time required to survey people.



DIRECTIONS

- Approach people with small children 0-5. The questionnaire is tailored to that demographic, but if others are curious they can take the questionnaire too. Aim to obtain as many questionnaires as possible from people who can answer from the perspective of a caregiver and young child.
- You may deliver the questionnaire questions verbally or hand the respondent a form.
- If your site is a busy area, you may consider asking every 3rd person to avoid surveyor bias (i.e. only surveying people the surveyor feels comfortable talking to).
- Be sure to record the date of when the questionnaires were collected on the questionnaires themselves.

Intercept Survey

Thank you for completing this questionnaire. **Your response will be confidential.**

DATE	TIME	LOCATION	WEATHER

General

1. Why are you here today?

(check all that apply)

- ☐ Personal need
- ☐ Child needs
- ☐ Passing through
- ☐ Other. Please describe: _____

2. How safe do you feel in this place?

- ☐ Safe
- ☐ Neutral
- ☐ Unsafe

3. Generally, how often do you visit this place?

- ☐ Less than once a week
- ☐ Once a week
- ☐ More than once a week

4. Who is in your party today?

(Write the number of people in each category. Include yourself.)

- ___ Babies
- ___ Toddlers
- ___ Young children
- ___ (7-10) Older children
- ___ (11-14) Teen
- ___ (15-19) Teen
- ___ Parent/s
- ___ Friend/s
- ___ Caregiver/s
- ___ Other family members: _____

5. How long do you plan to stay at this place today?

- ☐ Less than 5 minutes
- ☐ 5 - 10 minutes
- ☐ 10 - 30 minutes
- ☐ More than 30 minutes

6. Have you or the children you are here with met or interacted with anyone new here?

- ☐ Yes
- ☐ No
- ☐ Not sure/ we just got here

7. What is the likelihood you will interact with others you did not come here with?

☐ — ☐ — ☐ — ☐ — ☐ — ☐ — ☐

Not at all Neutral Absolutely

8. How did you get here today?

(check with all that fits)

- ☐ Walk
- ☐ Bike
- ☐ Bus/shuttle
- ☐ Private car
- ☐ Taxi/Rideshare
- ☐ Other. Please write: _____

9. Is it easy to move around in this place with a child?

☐ — ☐ — ☐ — ☐ — ☐ — ☐ — ☐

Not at all Neutral Absolutely

Specifically, for play areas

10. Is it clear that this is a play area or that it was okay to play here?

(if applicable)

☐ — ☐ — ☐ — ☐ — ☐ — ☐ — ☐

Not at all Neutral Absolutely

<p>11. Do you feel that this place is a high quality place for a child to play?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not sure</p> <p>12. What do you like about this place?</p> <p>Please write:</p> <div style="border: 1px solid black; height: 60px; margin-top: 5px;"></div> <p>13. Is this place comfortable for you as a caregiver?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not sure</p> <p>14. Is this a place for short or long stops?</p> <p>Please write:</p> <div style="border: 1px solid black; height: 60px; margin-top: 5px;"></div>	<h2 style="margin: 0;">Demographic Questions</h2> <p style="margin: 0;">[Your information will be kept strictly confidential.]</p> <p>1. Do you identify as</p> <p><input type="checkbox"/> Male</p> <p><input type="checkbox"/> Female</p> <p><input type="checkbox"/> Other</p> <p>2. What is your age?</p> <p><input type="checkbox"/> 15-20</p> <p><input type="checkbox"/> 20-60</p> <p><input type="checkbox"/> 60+</p> <p>3. Where do you live?</p> <p><input type="checkbox"/> Please note your post code: _____</p>
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Sensory Mapping

This tool maps how children's senses can be used in the built environment. It allows us to gain knowledge on what environmental prompts can be stimulating for small children 0-5.

What

Mapping how children use their senses provides insight into how the built environment can influence children's sensory development. Architects and designers use design to trigger visual senses, but equally important is stimulating all senses such as feeling and balance. For young children, walking on changing texture of the pavement or steps on which to balance when climbing can stimulate more than touch, but the development of balance and motor skills. The built environment offers opportunities to challenge and build strength, even when not designed intentionally to do so.

When

Sensory Mapping is used at a specific site but not for comparisons across a city. It is a valuable qualitative discussion tool, allowing the surveyor to 'place themselves in a child's shoes'.



DIRECTIONS

- Use the symbols provided to note where different senses can be engaged in a given area.
- Each sense can be triggered positively or negatively, so note each symbol with a + or -
- This exercise is subjective, but should be carried out from a child's perspective, so

if you have the opportunity - follow the actions of a child in the space, but if you cannot follow a child, you must imagine what a child's behaviour could be in the space. (IE: are there engaging things to touch? Is there something stimulating to look at such as a mural or plants? Or, is there loud noise from traffic or construction?)

DATE	TIME	LOCATION	WEATHER

Sensory Mapping

Insert site map here

	+ - 	TOUCH i.e. play equipment
	+ - 	SEE i.e. Access to nature
	+ - 	HEAR i.e. noise from Traffic
	+ - 	SMELL i.e. food odours
	+ - 	BALANCE i.e. uneven pavement

Figure 49 Copy of Gehl Toolkit for Easy Use & Reference

“A city that works for young children tends to become a place that works for everyone”

