# URBAN95

## Estimated Cost of the Project – INR ₹ 83.47 Lac



## Detailed Project Report For Child Priority Zone-Ashok Nagar



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## List of Abbreviations

S/n	Abbreviation	Definition				
1.	AMRUT	Atal Mission for Rejuvenation and Urban Transformation				
2.	AWC	Aanganwadi Centre				
3.	BSR	Basic Schedule of Rates BSR				
4.	B∨LF	Bernard van Leer Foundation				
5.	CDP	City Development Plan				
6.	CFFTJ	Child and Family Friendly Traffic Junctions				
7.	CFSC	Child- Friendly Smart Cities				
8.	CPZ	Child Priority Zone				
9.	CSCAF	Climate Smart Cities Assessment Framework				
10.	CSR	Corporate Social Responsibility				
11.	DPR	Detailed Project Report				
12.	ECD	Early Childhood Development				
13.	EU	European Union				
14.	EWS	Economic Weaker Section				
15.	FGD	Focused Group Discussions				
16.	GHG	Greenhouse Gas				
17.	Gol	Government of India				
18.	HIG	High Income Group				
19.	ICLEI- South Asia	ICLEI – Local Governments for Sustainability, South Asia				
20.	IPT	Intermediate Public Transport				
21.	ITC	Infant, Toddler and Caregiver				
22.	ITC	Infant, Toddler, and Care-giver				
23.	ITCN	Infant, Toddler and Caregiver Friendly Neighbourhood				
24.	ITDP	Institute for Transportation and Development Policy				
25.	KII	Key Informant Interviews				
26.	LCMP	Low Carbon Mobility Plan				
27.	LIG	Lower Income Group				
28.	MIG	Middle Income Group				
29.	MoHUA	Ministry of Housing and Urban Affairs				
30.	NCAP	National Clean Air Program				
31.	NIUA	National Institute of Urban Affairs				
32.	O&M	Operational & Maintenance				
33.	PHC	Primary Healthcare Centre				
34.	PHED	Public Health Engineering Department				
35.	PMSU	Project Management Steering Unit				
36.	PMU	Project Management Unit				
37.	PMU	Project Management Unit				
38.	PT	Public Transport				
39.	PWD	Public Works Department				
40.	RBA	Rapid Behavioural Assessment				
41.	RIDC	Rajasthan Tourism Development Corporation				
42.	RUIDP 2022	Rajasthan Urban Infrastructure Development Project				
43.	SBC	Social and Behavioural Change				
44.	SCM	Smart City Mission				
45.	SOR	Schedule of Rates				
46.	SP	Sensory Park				
47.	UIT	Urban Improvement Trust				
48.	UMC	Udaipur Municipal Corporation				
40.	UNIC					

Table 1 List of Abbreviations

## Preface

Creating children's priority zones for the youngest people and their caregivers Experiencing the city from an elevation of 95 cm, we are creating spaces/zones specific to young children and their caregivers, which will further improve:

- The quality and frequency of interactions between young children and their caregivers, and the well-being of these caregivers
- Through the provision of early childhood services, public space, transport, and planning neighbourhoods
- Need frequent, warm, responsive interactions with loving adults and a safe, stimulating physical environment to explore
- Experience the world at a much smaller scale and have a dependent and far the shorter range of mobility than the typical city-dweller is particularly vulnerable to air and noise pollution
- Need to travel regularly to early childhood services such as PHCAWC and crèche is always to be found with their caregivers.
- This means walkable neighbourhoods that cater for the basics of a young family's needs, public spaces close to home that attract all generations while allowing small children to explore safely, and reliable transport that makes it easy, affordable, and enjoyable for families with young children to travel where they need to go.

#### Children and their caregivers are more likely to thrive in cities when they have access to:



Clean air

The effects of poor air quality are felt disproportionately by the youngest, and especially those in low-income areas.



Nature

Exposure to nature for play, exercise and rest is beneficial for mental and physical health at all ages.



Proximity to services and healthy spaces

Ensuring that key early years services and spaces are easily accesible provides support to caregivers and the children they care for.

Figure 1 - Source BvLF- Urban95

## **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 have been outstripped to meet the physical and social needs much faster than anticipated. With the increase in urbanization and population, India is witnessing robust growth in the population, with 10% (~36 million) constituted by children below 6 years and another 32% of its population (~120 million) instituted by children between 6 to 18 years of age.

Growing up in the cities is as complex as it is exciting, as with plenty of opportunitiesaccess to better schools, sports facilities and health care, the urban environment is also wrought with threats- pollution, lack of independent mobility, inadequate play spaces, lack of recreational/ public spaces and break down of community support structures, that impact the overall growth and development of a child.

It is a well-known fact that issues that make urban life difficult for an infant, toddler or grown-up child also make it difficult for their caregiver too- parents, grandparents, and other vulnerable sections of society in general- women, elderly, and disabled people. Thus, making cities more infants, toddlers and their care-givers friendly is an objective that cuts across many overlapping problems and doesn't just benefit children. The overall focus on ECD in the pining and management of cities is a matter of great concern in India.

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 BvLF 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 now has moved into larger and bigger phase starting Feb'21, planned for 36months.

As a part of Urban95 Phase-II scoping, two CPZs are planned to be developed under Phase-II at selected neighbourhoods. It is in this context Hanuman Park (Anchor Institute) and its 600m catchment in Ashok Nagar and AWC and PHC and its 600m catchment at Neemuch Kheda has been identified and finalized for transforming these into a Lighthouse CPZs. In continuation a design proposal was planned and finalized for Ashok Nagar CPZ taking cues from national case- studies in form of numerous elements, features, material which goes into developing a holistic CPZ for the benefits of children and their care- givers. The elements considered in designing are sidewalks with proper drain covers and indicative way finding signages. Road safety and speed limit signages along with ECD messages on regular intervals, to encourage community to use the dedicated space. Creating a dedicated space for playing and engagement in the anchor institute for young children (0-5 years) and having ITC friendly furniture in the park.

The Total cost of the project Rs 83.47 Lac.

## Urban95

#### About Urban95

Urban95 is BvLF's global initiative, which 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.

#### Urban95 in India

The challenges of any urban city in India are mirrored across length and breadth of the country and can be broadly categorized into rapid and chaotic growth concentrated on informal, slum settlements with inadequate infrastructure; open defecation; parks not being accessible; lack of footpaths, streetlights, and safe places to crossroads; and children in some neighbourhoods needing to use public transport, which is not child-friendly, to get to the nearest school.

Thriving and happy children are indicators of a healthy and sustainable society with high levels of well-being. Children form an understanding of their environment through everyday discoveries and encounters in the park, at school, during a stroll in neighbourhood or by imagining and inventing games and stories. The built environment plays a crucial role in shaping young children's narratives of the city, and their understanding and experience of urban spaces.

Realizing the need to address the issues surrounding the ITC, **Bhubaneswar in Odisha**, **Pune in Maharashtra**, **and Udaipur in Rajasthan** became the part of the Urban 95 program as a part of its Phase-I which was for 1 year period.

#### Urban95 in Udaipur

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 BvLF 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 now has moved into larger and bigger phase starting Feb'21, planned for 36 months.

#### **Udaipur City Profile** 2

Considered one of the oldest cities in India and famous nationally and internationally as City of Lakes, Udaipur is the administrative capital of the district and is the only municipal corporation in the district with an area of 64 Sq km, divided into 70 election and revenue wards.

With the population 0.45 million<sup>1</sup>, city has 47932 young children population (0-6 years). The projected population for Udaipur in 2021 is estimated to be 0.83 million and 1.03 million in 2031<sup>2</sup>.

Udaipur is surrounded by hills and lakes, hence presently it is growing

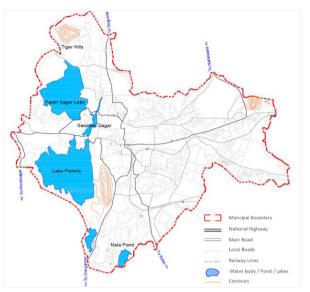


Figure 2 Municipal Area, Udaipur

towards the northeast and western part along the National Highways NH8 and NH76.

The city has witnessed multi-fold development in the last two decades. It acts as an industrial, administrative, and educational center of the region. The city's connectivity and historic significance plays a major role in making it an important and famous city in the region and draw more than a million tourists annually<sup>3</sup>.

However, with increasing population and spread of the city, the overall quality of life is deteriorating for its citizens, especially for children and their caregivers from pollution and noise pollution perspective, as with growing city needs, the pollution levels are rising at an alarming pace and due to lot of construction activities and growing vehicular traffic the avg. decibel levels are at 75 DB<sup>4</sup> wiser way above the standard 55DB for neighbourhood levels. Flooding and increasing temperatures are also worsening the emissions profile of the city, having adverse impact on ECD.

#### 2.1 Population and Decadal Growth Rate

Udaipur is the 6th largest city among cities having more than 1 lakh population in the state. The Municipal Corporation population accounts for 2.65% of the urban population of the state and 74.14% of the urban population of the district<sup>5</sup>.

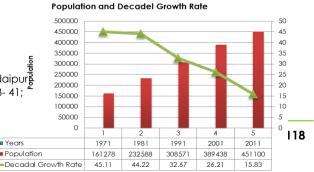
The city has witnessed considerable population growth in the last four decades while acting as a magnet city for the surrounding region. The growing economy and growing

Years

tourism sector has attracted both

3 Rajasthan Tourism Development Corporation (RTDC), Udaipur

<sup>5</sup> City Development Plan (CDP), Udaipur 2014;



<sup>1</sup> Census 2011;

<sup>2</sup> Master Plan, Udaipur 2031;

<sup>4</sup> Low- Carbon Comprehensive Mobility Plan (LCMP), 2013-41;

urban as well as rural populace. The decadal growth rate from 2001 to 2011 was 15.83% which is near to natural growth rate of population. Areas outside the core city started developing during the last few years.

According to Census 2011, the young children population (0-6 years) has been recorded at 47932 and significant improvement in the sex ratio has been observed over the decades in the UMC area, Figure 3 Population Growth Trend- Udaipur (Census 2011) i.e. from 844 in 1981 to 928 (state average too) in 20116. The sex ratio of young children (0-6 years) in Udaipur is 866 compare to the state average of 8887.

Table 1 shows the city's children population along with its child sex ratio of Census 2011.

years			Ratio	
<b>1</b> 47932	250	691 2224	41 866	

Table 2 Age-wise children population (0-6 years) and Child sex ration, Udaipur (Census 2011)

According to the latest Udaipur district report, infant mortality rate in Udaipur district is 63 (2012-13) compared to 41 at state level, and under five mortality rate is 91 (2012-13)<sup>8</sup> compared to just 45 at state level indicating a high percentage of mortality.

Some of the indicators about young children and pregnant women are available for district level only like Crude Birth Rate (CBR) and Crude Death Rate (CDR), Neo-Natal Mortality Rate, Maternal Death etc.

As far as CBR and CDR, it is 21.9 and 5.9 respectively while neo- natal mortality rate and post- natal mortality rate is 35 and 12 respectively. The maternal mortality rate in Udaipur is 39, which is highest among all the major districts of the state.

#### 2.2 Population Density

Population density within the city has decreased from 10525 Persons Per Sq km (PPSK) in 2001 to 7048 PPSK in 2011<sup>9</sup>, due inclusion of new census town to the total city area of the UMC area.

Years	Population	Area (Sq km)	Population Density (person per Sq km)
2001	389438	37	10525
2011	451100	64	7048

Table 3 Population density, Udaipur (Census 2011)

#### Land Use and Master Plan Provisions 2.3

<sup>6</sup> Census, 2011

<sup>7</sup> Census 2011

<sup>&</sup>lt;sup>8</sup> Annual Health Survey, 2012-13

<sup>&</sup>lt;sup>9</sup> CDP, Udaipur 2014.

Considering that Udaipur will be million plus city in another few years, the Master Plan 2031 proposes to increase the urbanisable area to around 20,012 ha with residential area is projected to go up from 57.23% to 62.62%, the water bodies are projected to decrease from 7% to 5% of the total area and only 9% of total area has been allocated for entertainment and recreational activities, which when compared with URDPFI guidelines is close to half to what it recommends (12-14%).

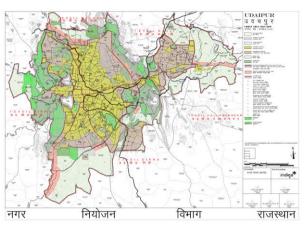


Figure 5 Proposed Master Plan for Udaipur, 2031



Figure 4 Landuse and Land Cover Udaipur, 2015-16, Bhuvan (India Geo- Platform of ISRO)

## 2.4 Open Green & Recreational Spaces

As per UMC, Udaipur has over 200 parks of different sizes and shapes spread across the city and about 8 lakes which make it a highly livable city if one goes by absolute numbers and early impressions. However, delving deeper, the baseline study shows that this blue green infrastructure of the city needs better access, upkeep, and maintenance.

As per UMC, the green cover within the city limit is 4 sq km approximately i.e., 6.25% of the city area which unfortunately stands at 0.007 sq.mt only as per capita green cover. Given the existing population it is way too less compared to World Health Organization (WHO) standards, which recommends 9 sq.mt of urban green space for each person.

The built-up area has seen drastic increase in the recent years which increase the impervious layer that is affecting the green cover adversely. It is also increasing the deforestation and tree mortality rate inside the city. An academic study done by CEPT in 2019 also shows the decrease in green over by 45% since 1971 in the city due to rapid urbanization. This clearly shows that Udaipur seriously lacks in open and green spaces and in other recreational activities.

The same fact has been reverberated in the Infant, Toddler, and their Caregivers (ITC) surveys conducted in the city under the Urban95 Phase-I program, wherein it has been observed that over 75% residents would like more green cover and shade in the overall cityscape.

It is a known fact that reduction in green cover adds to rapid climate change, temperature increase, increment in heat islands as well as air pollution in the rapidly growing cities and Udaipur is one of them. Overall urbanization speed serves as an important indicator that it is adversely impacting the well- being of young kids of the city. Table 4 documents the land use allocation as envisaged in Master Plan.

Existing Land Use (2011)			Land Use 2022			Land Use 2032			
Land Use of Udaipur City	Area in Acre	% of Developed Area	% of Urbanized Area	Area in Acre	% of Develope d Area	% of Urbanized Area	Area in Acre	% of Develop ed Area	% of Urbanized Area
Residential	8052	55.7	29.9	13380	57.23	49.23	27788	62.62	56.0
Commercial	659	4.6	2.4	1220	5.22	4.49	1382	3.11	3.0
Industrial	1553	10.7	5.8	1110	4.75	4.08	2852	6.43	6.0
Government/ Semi Government	212	1.5	0.8	340	1.45	1.25	4552	1.02	1.0
Entertainmen t/ Recreational	534	3.7	2.0	2430	10.39	8.94	4512	10.17	9.0
Public/ Semi- Public Places	2066	14.3	7.7	2420	10.35	8.90	2783	6.27	6.0
Circulation	1387	9.6	5.2	2480	10.61	9.12	4610	10.39	9.0
Developed Area	14463	100	53.7	23380	100	86.02	44379	100	-
Government Reserved	629	-	3.5	950	-	3.50	1196	-	2.0
Agriculture and Forest	1521	-	5.7	800	-	2.94	1521	-	3.0
Water Bodies	2354	-	9.0	2000	-	7.36	2354	-	5.0

Table 4 Landuse comparison, Udaipur Master Plan 2011-2031

## 2.5 Major Pollutants and its impact on Children and their Care-givers

As far as air pollution is concerned the major sources of pollutants in the city are vehicular emission, road dust, construction activities, industrial emissions etc. PM10 & PM2.5 has been identified as main air pollutant<sup>10</sup> as they are found to be above the prescribed national standards.

This is mainly due to re-suspension of road dust, emission from vehicles, D.G. sets, construction activities, open burning of solid wastes (sometime), transportation of construction materials such as sand, soil etc. without covering and emission from industrial areas situated in and around Udaipur (Madri and RIICO), emissions from marble mining and cutting.



<sup>&</sup>lt;sup>10</sup> Action Plan for National Clean Air Program (NCAP), 2018

According to the pollutant figures released by Rajasthan State Pollution Control Board (RSPCB) for first six months of 2018, the pollution level in Madri Industrial Area (MIA) of Udaipur was much higher than Delhi from February 2018 to May 2018. It has also been noted that in the industrial area, the

level is three times higher than normal which is extremely harmful to the inhabitants of these areas, especially to young kids along with their caregivers and pregnant & lactating women as well.



Figure 6 Various source of pollutants in Udaipur

Moreover, air quality of Udaipur during winter season becomes very poor & severe due to condensation of fine particulate matter in the lower portions of the atmosphere. This clearly indicates the air is polluted and brings discomfort to children and elderly people.

#### 2.6 Social and Cultural Resources

Famous not only for its lakes and gardens, and being the biggest city in the district, Udaipur is also hub of education and medical facilities in the district. The city has a wide range of educational institutions like universities and colleges which were established by the Government and private organizations.

Udaipur has many parks and gardens which form a major source of attraction for both locals as well as tourists. Due to the availability of lakes, water parks are being developed in different areas of the city. Gulab Bagh, Saheliyo ki Baadi, Nehru Park in Fatehsagar Lake, Moti Magri Park, Town Hall Garden, Sukhadiya Circle Garden, Manikyalal Verma Garden, Dindayal Upadhyay Garden, Sanjay Park, Aravalli Vatika, are few of beautiful gardens raising aesthetic appeal of the city and attract locals and tourist population. There are in all, 200 small, medium and big parks<sup>11</sup> in the city,

Udaipur is also considered to be a regional hub and pioneer in higher education and graduate programmes in the state, as is evident from its literacy rate, which at s 89.66% which is higher than the district (61%) and state average (66.11%).

It is home to old and famous educational institutes in the state. In last few decades a medical college, an agriculture college, the Udaipur Polytechnic College, and an industrial training institute have been established. Udaipur boosts of having 3 universities and 13 major colleges and caters to large influx of students from across the country. Udaipur also has 23 (government) and another 300+ (non-government) primary schools across the city.

Health care facilities in the city are provided by both government and private institutions. There are two major hospitals in the city, i.e., the Maharana Bhopal Public Hospital and the Ayurvedic hospital along with numerous private hospitals such as JK Fortis, GBH American, Geetanjali and Pacific Hospitals etc.

11 UMC

The economic outlook of Udaipur is positive, with tourism being the centre of attraction, growing at over 15% -20%<sup>12</sup> over the last few decades, which is faster than any other city in Rajasthan. Udaipur is also a hub for start-up companies, industries, and educational institutions.

The remaining sections of the report discuss the approach adopted to undertake the Urban95 program in Udaipur, along with activities undertaken and next steps envisaged for the project.

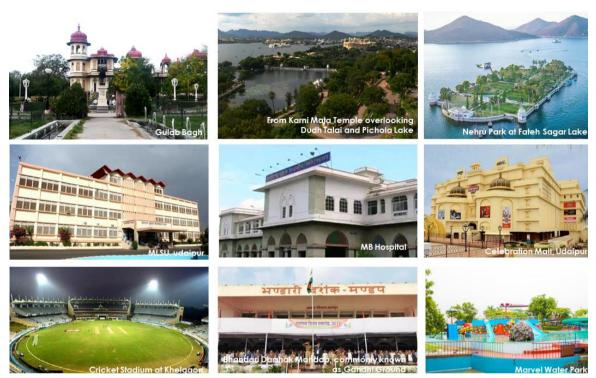


Figure 7 Social and Cultural Resources, Udaipur

<ul><li>3 Methodology and Approach</li><li>4</li></ul>						
Site Identification and Rationale	<ul> <li>Setting up parameters for site identification and in person recce</li> <li>Comparitive analysis of potential sites</li> </ul>					
Stakeholder Engagement I - Site Finalization- UMC, BvLF and Local Representations	<ul> <li>Total Station Survey (TSS) of finalised site with support of UMC, mapping of existing site situation, conducting Gehl and visual surveys</li> <li>Rapid Behavioural Assessment by external support through focused group discussions, in-depth interviews and participatory learning and action approach</li> </ul>					
Design Theme and Ideas, Sem- permanent Design Proposal and Implementation	<ul> <li>Semi- permanent design proposal for tactical intervention on site including design elements and materials through ECD and SBCC lens</li> <li>Costing of implementation, approvals from stakeholders and on- ground implementation</li> </ul>					
Stakeholder Engagement II- Finalization of Concept Design Proposal	<ul> <li>Post- implementation impact assessment of semi- permanent intervention</li> <li>Discussion and finalisation of conceptual design proposal</li> <li>Preparation and conclusion of feasibility report including broad cost</li> </ul>					
Preparation and Finalization of Detailed Project Report (DPR)	<ul> <li>Preparation of DPR including detail drawings, sections, elements, quantitites, project cost, etc</li> <li>Finalization of SBCC strategies for active managementand maintenance of implemented design in the neighbourhood</li> </ul>					
Stakeholder Engagement III- Approval on DPR from UMC, BvLF	<ul> <li>Approval on DPR from UMC and other stakeholders</li> <li>Preparation of specialized scoping &amp; terms and conditions for tender document from O&amp;M perspective</li> </ul>					
Tendering for On-ground Implementation	<ul> <li>Tender floating by UMC for selection of suitable contractor</li> <li>On- ground implementation of the final project</li> </ul>					
Post Implementation Impact Assessment	<ul> <li>Post implementation impact assessment vis-a-vis set objectives and expected outcomes presentation</li> <li>Continuous monitoring of the same by PMU in coordination with UMC</li> </ul>					

## **Urban95 Child Priority Zone**

## 4.1 Introduction for Child Priority Zone (CPZ):

- a) Children live in a world constructed by and for adults. Since birth, young children undergo developmental changes in physical, cognitive, psychological, and social abilities that influence their curiosity, perceptions, risk-taking behaviour, judgement, actions, and reactions to environmental stimuli, thereby affecting their susceptibility to injuries and accidents. Young children (0-5 years) are particularly vulnerable to accidents, and their physical and emotional safety requires a different approach than that of adults.
- b) Generally, there is a lack of knowledge and focus related to young children (0-5 years) in the Urban Built Environment and the elements which encourages them to step out of the house and access the nearby park or play area.
- c) It is essential to provide safe crossing, ease of access to move in the neighbourhood and raise awareness in the community to work together on early childhood development.
- d) An unsafe environment in and around ITC facilities can increase the likelihood of accidents and injury, which can have physical as well as psychological implications for the child. Therefore, it is imperative to have a set of guidelines that can provide a safe built environment for young children in cities.
- e) Behaviour of caregivers directly impacts the physical, social, and emotional security of a young child. Frustration, phobia, anxiety etc. in the early years can lead to a long-lasting impact on a young child.
- f) Specific behaviour guidelines which could sensitize and empower the caregivers on all the aspects of child safety and security can help in preventing all sorts of inadvertent injuries, accidents etc.
- g) Capture Behavioural Changes for:
   Pre Connect with people for behavioural impact and assess patterns in using the children CPZ/Anchor Institute.

**During** - what are the current ideas we are bringing with the partners and monitoring the impact on the end-user/community?

**post-Impact** - assessment and user observations on the final implementation will also increase local community engagement.

## 4.2 Introduction- Anchor Institute and its Catchment Zone- 600M Radius

"Establishing a children's priority zone starts with finding an anchor institution – perhaps a childcare centre, playground, or health clinic – and defining a perimeter around it. Initial events are held to raise awareness and bring families in the community together. Issues affecting children are researched, and solutions proposed – for example, safer road crossings near schools or parks, the rehabilitation of abandoned space into a garden where families grow healthy food, or the allocation of land for a health outpost to increase accessibility for families." Source – BvLF | Urban 95

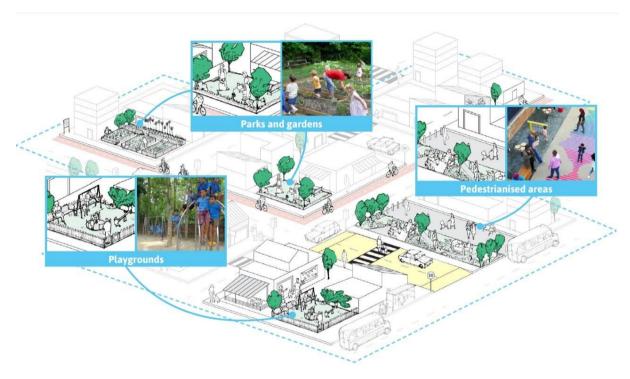


Figure 8 Child priority zone, source- BvLF Urban 95

## 4.3 Proposed Sites for Child Priority Zone

The three sites for developing a Child Priority Zone were shortlisted after several discussions with UMC officials and PMSU team. The choices were based on varied land use typology and functionality of the sites.

Ashok Nagar is a densely populated HIG and MIG neighbourhood area, which is connected with the city main road of Ashok Nagar to the University Road. Neemach Kheda is one of the oldest settlements of the city which caters to LIG and EWS and has small pockets of public spaces, which can be made into better attraction points for young children.

Meera Park and Sahiwalo ki Gali is a major node in the wall city area, with open spaces for public gatherings and children, and play area.

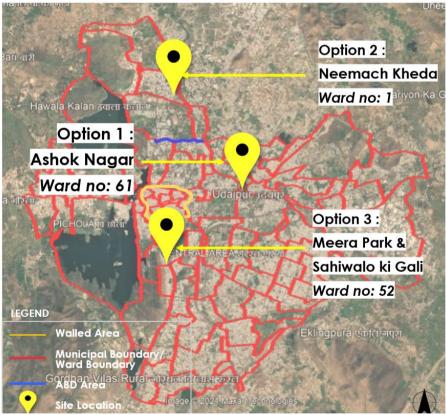


Figure 9 Map showing proposed sites for Child Priority Zone

SITE	ASHOK NAGAR	NEEMACH KHEDA	MEERA PARK & SAHIWALO KI GALI	
WARD NO.	61	1	52	
TOTAL POPULATION	6779	9112	6538	
TOTAL CHILD POPULATION (0-6 AGE)	235	318	115	
AREA TYPOLOGY	MIG and HIG housing and mixed use	LIG and MIG housing and mixed use	MIG and HIG housing, old city area	
POTENTIAL FOR SCALING AND SUSTAINABILITY	<ul> <li>Centrally located</li> <li>Wider road network, availability of ITC facilities</li> </ul>	<ul> <li>Maximum potential for ITC usage</li> <li>Availability of chawk and nearby ITC destinations like AWC and PHC</li> </ul>	<ul> <li>High potential of ITC developme nt</li> <li>One of the prominent areas of the walled city</li> </ul>	

## 4.4 Site Comparison

## Infrastructural Aspect

Indicators	Ashok Nagar	Neemach Kheda	Sahi Walo Ki Gali/ Meera Park
Pedestrian walkway	Available	NA	NA
Availability Of Public Transport, Parking Area, Their Location	Available	Intermediate Public Transport (IPT)	Intermediate Public Transport (IPT)
Dedicated Spaces For Children & Caregivers	<b>Available</b> (In Anchor Institute)	NA	Available (In meera Park)
Children playing equipment's	<b>Available</b> (Can be ITC oriented)	Partially Available (A Large School Playground)	Available (In meera Park
Active Facades To Engage Young Children	Available	NA	NA
Adequate lighting	Available	Available	Available
Safety Signages	NA	NA	NA
Shaded Areas, Seating/ Resting Places	<b>Available</b> (Seating Space Needs To Be Created)	Available (Seating Space Needs To Be Created)	NA
Utilities	Available	NA	Available
AWC in 600 m radius	Available	Available	Available
PHC in 600 m radius	NA	Available	NA
Feasible Zone			Less Feasible
Highly Feasible Zone		$\checkmark$	

Table 5 Site comparison: Infrastructural aspect

## Stakeholder Insights

	Ashok Nagar	Neemach Kheda	Sahi Walo Ki Gali/ Meera Park	
KNOWLEDGE				
Usability of Anchor institute	<ol> <li>The neighbourhood is aware of Hanuman Park, Library, and Community centre</li> <li>Anchor institute is used for kids playing, temple visits, strolling and visiting the library</li> </ol>	<ol> <li>Community is engaged in visiting PHC &amp; AWC</li> <li>No awareness of available spaces/chawks which are potential for ITC elements</li> </ol>	<ol> <li>People using the Park &amp; Chowk for Kids playing</li> <li>Due to unorganised parking the chawk is not preferred for kids playing anymore</li> </ol>	
Approach to the anchor institute	5-10 mins approx.	5-10 mins approx.	2-5 mins approx.	
ATTITUDE				
Duration of time spent	30 – 45 mins	15 – 30 mins	10-15 mins	
Trip behaviour	4-5 times a week	3-4 times a week	2-3 times a week	
PRACTICE				
Constraints	Parks lacks ITC infrastructure The approach can be safe	No magnet /stopping points to attract the community to use the near by facility	Unorganized parking and stray constantly demotivates to use the anchor facility	

Table 6 Site comparison: Stakeholder insights

Based on the infrastructural and stakeholder insight comparisons of the three sites, Ashok Nagar and Neemach Kheda are chosen to be feasible for developing two Child Priority Zones.

The parameters are driven from the site study and understanding the Urban95 objectives to be driven from the selected interventions.

The reasons for finalising these two sites are due to higher ITC footfall and a greater number of ITC destinations in the neighbourhood as compared to the other site. Which was rationalised for the site selection.

## 5 Site- Ashok Nagar

## 5.1 Introduction

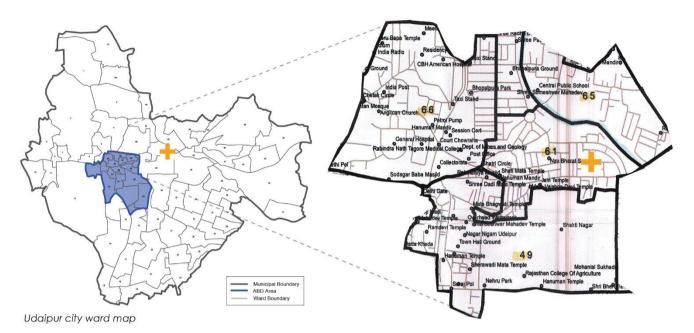


Figure 9 Locating the site at city level

#### Ashok Nagar City Profile

- 1. Ashok Nagar located in ward no. 61 is one of the oldest neighbourhoods of Udaipur city
- 2. It comes under the land use of HIG and MIG, also the adjoining university road had become a major commercial street, which engages a lot of local crowds in the city.
- 3. The community is very active and well-engaged in the social development of the neighbourhood
- 4. There are creches, day schools and childhood hospitals available in the neighbourhood, which attract a lot of footfalls of young children and their caregivers in and around Ashok Nagar
- 5. Ashok Nagar is a well-planned neighbourhood with proper street width which varies from 7m to 10m ROW and planned intersections, wall allows easy flow of traffic and pedestrian moments
- 6. It has a high potential neighbourhood for the ITC destinations as it comprises hanuman park, hanuman temple, a community library and small grocery shops where we see high several footfalls of caregivers with their young children.

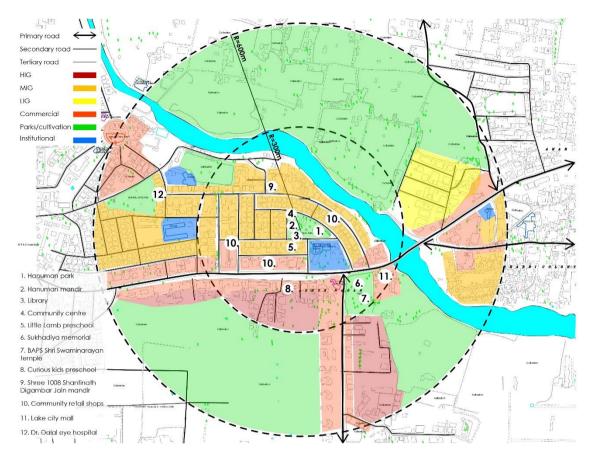


Figure 10 Land use and Area mapping

#### Profile

1	Location Name	Ashok Nagar, Udaipur City
2	Ward No.	61 (Udaipur Municipal Corporation)
3	Ward Member	Mr. Govind Singh Taunk (Mayor)
		9829245955
4	Total Population (No)	6377 (Total)
5	Total House Hold	1050 (Total Household)
6	Total Voters	4012 (18 years onwards)
7	Total Children (0-6 Yrs)	545
		(Approx)
8	Land Use	Major: MIG
		Minor: HIG & LIG

9	Education level of caregivers	graduate or high mostly
10	Major Caste	Minor (Jain), General, OBC

#### Imp. UMC Officials

1	Commissioner UMC	UMC		Commissioner, UMC		
2	In Charge Engineer- (	City, UMC	Superintend	ent, UMC		
3	In Charge Engineer- (	City, UMC	Executive Er	ngineer		
4	In charge Engineer, N	orth Zone, UMC	Mr. Karnesh	Mathu		
			Ast. Enginee	r		
5	In charge Engineer, A	shok Nagar,	Mr. Aditya A	meta		
	UMC		Ast. Enginee	r- UMC		
6	In Charge Garden, UI	ЛС	Anil Kumar			
			Supervisor Gardens- UMC			
7	In charge Health & Sc	initation, UMC	Mr. Mahesh Sathiya			
			Health Inspector- UMC			
Gar	den/Parks/ Play Groun	d				
	Name	Under	Location	Distance from CPZ	Remarks	
1	Hanuman Park	UMC- Public	Ward Area	0 M	-	
2	Sukhadia Samadhi	PWD- Public	Durga	300 M	Heavy traffic and	
	Park		Nursery/		road crossing issue	
			Periphery		to reach there	
			area			

Play	Play schools/ AWC/ Kindergarten					
	Name	Under	Location	Distance from CPZ	Remarks	
1	Einstein Kids School	Private	Ashok Nagar Main Road/ Ward Area	400 M	Mr. Ankit 7014041702	
2	AWC, Ayad (Chhipo Ka Mohalla)	ICDS	Periphery area	600 M	Ms. Pushpa Nayak 9549113304	
3.	Little Lamb Pre school	Private	Ward Area	20 M	Closed	
4.	Curious Kids	Private	Periphery area	600 M	Dimple Singh 9079981056	

Hos	Hospital/ Health					
	Name	Under	Location	Distance from CPZ	Remarks	
1	Gattani Children's Hospital	Private	Ashok Nagar Main Road/ Periphery area	600 M	Dr. Mukesh Devpura (Pediatrics) 94141 62750	
2	Rose Petals Children Clinic	Private	Durga Nursery/ Periphery area	400 M	Dr. S. K. Tak (Pediatrics) 0294-2410777	
3.	Dr. Dalal Eye Hospital Road 10, Ashok Nagar	Private	Road 10/ Ward	500 M	Dr. Rakesh Dalal (Eye/ENT) 0294-241 4328	

Shr	Shrines					
	Name		Location	Distance from CPZ	Remarks	
1	Hanuman Temple	Hindu	Ashok Nagar Main Road/ Ward Area	0 M	Mr. BholeRam	
2	Jain Derasar Temple	Jain	Road No. 10/ Ward	400 M	Road No. 10	
3.	Krishna Temple	Hindu	Ashok Nagar Main Road/ Ward Area	400 M	Ashok Nagar Main Road	
4.	Sukhadia Memorial	Hindu	Durga Nursery/ Periphery area	300 M		
5.	Amba Mata Temple	Hindu	Shakti nagar corner/ Periphery area	500 M		
6.	Ayad Haji Mastan Baba Dargaah	Islam	Ayad Bridge/ Periphery area	450 M	University Main Road	
7.	Ayad Shiya Masjid	Islam	Ayad / Periphery area	600 M	Ayad Main Road	

Sho	pping Areas			
	Name	Location	Distance from CPZ	Remarks
1	Maya Mishthan Shopping Area	Ashok	150 M	Shopping street/

		Nagar Main Road/ Ward		Fruit market
2	Lakecity Mall	Ayad bridge, Periphery area	300 M	Shopping Mall
3.	Shastri Circle Shopping Area	Periphery area	600 M	Fruit/ Vegetable Market
4.	Durga Nursery Road	Periphery area	400 M	Shopping/ Fast Food
5.	Shri Niketan	Ward	250 M	Shopping street/ Fruit market

Oth	Other Institutions					
	Name	Location	Distance from CPZ	Remarks		
1	Manikyalal Varma Tribal Research Institute (TRI)	Ashok Nagar Main Road/ Ward	100 M	Mr. M. L. Chauhan (IRS) Commissioner, TRI		
2	Public Library & Community Centre	Ashok Nagar / Ward	20 M	Mr. Bhagwat Singh Rao 9928682858		
3.	Ashok Nagar Cremation	Road no. 10/ Ward	300 M	9829040849		
4.	Ayad Police Chowki	Ayad road/ Periphery area	600 M	02942413884		
5.	Vigyan Samiti Bhawan	Block D, Near Hanuman Park/ Ward	50 M	02942411650		

## 5.2 Site approaches and access

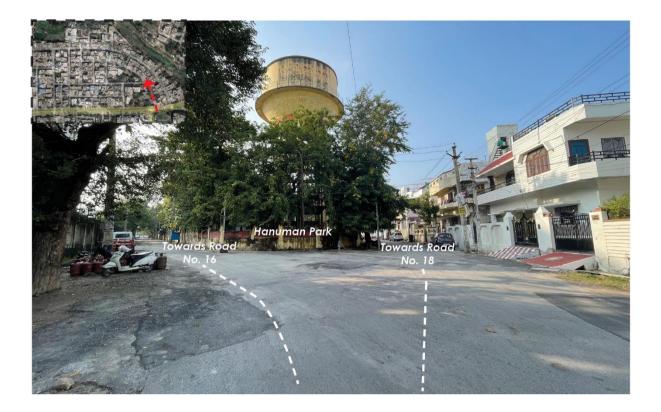




Figure 5 - Silent Street outside Hanuman Park, facing hostel, which has possible solution of sidewalks

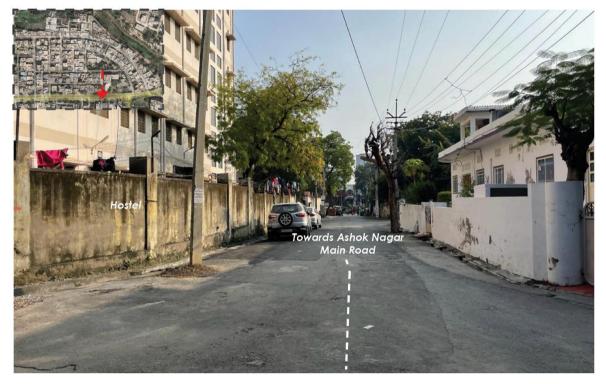


Figure 12 Access Road connecting Ashok Nagar main road and Hanuman Park



Figure 13 Road leading to main entrance of Hanuman Park



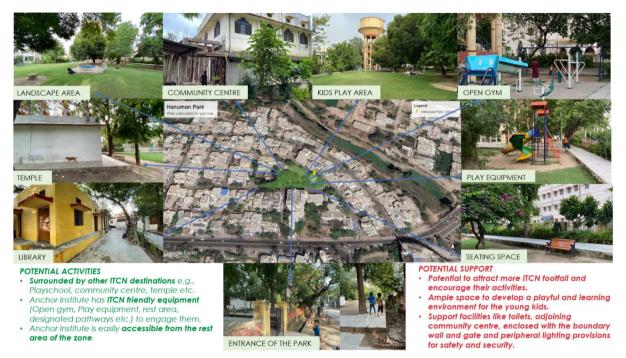
### 5.3 Identifying Anchor Institute

Figure 14 Anchor Institute: Hanuman Park

The anchor institute – hanuman park has been shortlisted due to its various characteristics, which makes it a high potential for a child priority zone:

- 1. It has ample green cover and footfall at various times of the day
- 2. People of all age groups are being seen there, performing activities like sitting, chit-chatting, walking, and playing.
- 3. The anchor institute has the potential to make a major attraction point and converge those into urban95 principles for young children
- 4. We want to motivate more and more caregivers and their young children to use the available public space and encourage outdoor playtime
- 5. It has a kid's play area, open gym, hanuman temple, seating benches and a large community gathering point.
- 6. The park is well-lit in the evening, allowing users to use it throughout the day.
- 7. Hanuman Park will cater as an anchor institute for the whole of the neighbourhood and will attract and motivate people to visit the park and engage with their young children.
- 8. The area is encompassing Nearby ITC destinations like crèche, day care school, grocery stores, public mall etc.
- 9. Serves a large neighbourhood area, where people are motivated to visit such ITC destinations.

## 5.4 Anchor Institute context



*Figure 15 Highlighting the Anchor Institute context and other ITC destinations on site* 

As can be seen in the image above, the anchor institute- Hanuman Park is surrounded by multiple ITC destinations like a community centre, library, temple, and day school. Being a residentially dominant neighbourhood, it caters to a broader age group and higher footfall.

Being the only park in the catchment area of 600m radius, it is the only possible park destination/option for people living in that radius. Through interviews of park users, it was also observed that people travel distances more than 3-5 kms as well to visit this park. This is due to non-availability of neighbourhood parks in the city at frequent intervals.

Currently, the play area is used by both elder and young children. Young children are always accompanied by their caregivers. Many caregivers schedule their visit time to the park in accordance with other caregivers for social interaction with other children.

## 6 ITC Indicators

#### 6.1 Assessment of ITC Indicators

ITC indicators have been derived for three categories of spaces: **Streets**, **parks and open public spaces and Utilities**.

For each category, the indicators are possible solutions that address the issues of protection, basic needs, comfort, interaction, and connection.

Three tables below are shown for each category of space for the chosen site- Ashok Nagar. The table specifies the ITC indicators which have been derived from common contextual issues and whether the specific indicator is available on the site. The indicators are further assessed as motivators or barriers. After the assessment, a reason has been given to explain why the availability or nonavailability of the indicatory is a motivator or a barrier.

As can be derived from the table, majority of indicators are absent on site. The lack of basic amenities like footpaths or traffic calming elements act as barriers for ITC and lead to reduced footfall in outdoor spaces.

Indicator	Availability	Motivator/ Barrier	Reason
Streets			
Footpath	Ν	Barrier	Makes it difficult for ITC to walk around safely
Kerb ramp	Ν	NA	NA
Cycle stand	Ν	NA	NA
Cycle track	Ν	Barrier	Unsafe for children to cycle on carriageway
Ramps for ITC	Ν	NA	NA
Waiting area	Ν	NA	NA
Handicapped Parking	Ν	NA	NA
Side-walk games	Ν	NA	NA
Active facade along route	Ν	NA	NA
Surface material and textures	Ν	NA	NA
Benches	Ν	Barrier	No resting points for ITC demotivate them from going out
Shading devices	Y	Motivator	Trees provide natural shade on streets which makes it more comfortable to walk
Lighting	Y	Motivator	Lighting makes the street safe to use at night

*Figure 16 - ITC indicators assessment for streets* 

The assessment helps in deriving design solutions required on-site. It gives an understanding of the features that are to be incorporated and why is it required. The space categorisation gives a direct way forward for the interventions required in the streets and parks.

Indicator	Availability	Motivator/ Barrier	Reason			
Streets						
ITC playful furniture	N	Barrier	No engaging activities for ITC			
Planters	N	Barrier	ITC do not get any direct access to nature due to the absence of it			
Bollards	N	NA	NA			
Seating along planters	N	NA	NA			
Way-finding signages for destinations and utilities	N	Barrier	Having ITC destinations, makes it difficult for them to reach due to the absence of signages			
Safety signages for traffic	Ν	Barrier	Fast moving vehicles cause threat for ITC to move around			
Safe crossings	N	NA	Unsafe to cross at important junctions			
Kerb extensions	N	NA	NA			
Rumble strips	Ν	NA	NA			
Lane marking	N	NA	NA			
Chicanes	N	NA	NA			
Public art	N	NA	NA			

Figure 17 - ITC indicators assessment for Street

Indicator	Availability	Motivator/ Barrier	Reason		
Utilities					
Breast feeding booths	N	Barrier	Absence of it makes it difficult for mothers to feed their babies in public due to lack of privacy		
Drinking water facility	Ν	Barrier	Absence of basic facility		
Toilets	Y	Motivator	Supporting ITC facility		
Dustbins	Ν	NA	Creates hygiene issues due to randomly disposed waste		

Figure 18 - ITC indicators assessment for utilities across the neighbourhood

Indicator	Availability	Motivator/ Barrier	Reason				
Park and open public	Park and open public spaces						
Fencing/ Permeable perimeter	Y	Motivator	Provides safety to ITC while using the park				
		Barrier	Height of fencing is too high which restricts from getting a vision of activities happening inside/outside the park				
Camera monitoring	N	NA	NA				
Ramps for ITC	N	Barrier	Due to the absence of ramps, the park is inaccessible while carrying strollers as it has steps and raised pathway at the entrance itself				
Benches	Y	Motivator	Resting spaces for ITC when using the park				
Shading devices	Y	Motivator	Trees provide natural shade on streets which makes it more comfortable to walk				
Lighting	Y	Barrier	Most of the lights do not function has it becomes difficult to use park in the late evening hours				
ITC playful furniture	Ν	Barrier	No engaging activities for ITC				
Play equipment	Ν	Barrier	No dedicated equipment for ITC				
Planters	Y	Motivator	Provide direct access to nature				
Public Art	Ν	NA	NA				
Surface materials & Textures	Ν	NA	NA				
Natural Play elements	N	NA	NA				

Parenting related signages/ wall paint- ings/ messages	N	Motivator	create awareness on positive parenting and nurturing car- egiving
Age appropriate (Dif- ferent for 0-2, 2-3, 3-5 years age groups) Active facade/ puz- zles/ games (Shape, size, color, surface, etc)	Z	Motivator	Supporting sensory related developments

Figure 19 - ITC indicators assessment for Hanuman Park

#### 6.2 ITC Motivators

The ITC motivators are a part of evaluating the available ITC indicators on site. Motivators are the positive available infrastructures which facilitate the various activities of ITC. Through the visual survey, all the available infrastructure was assessed on site to understand its existing condition.



Figure 20 Trees act as natural shading elements on the stretch, adequate light poles, and pre-school available



Figure 21 Community retail shops

The images show positive elements at both street and park levels in Ashok Nagar. Even though features like resting spaces and shading are available, the condition can be improved to match the quality standards required to make it ITC-friendly.



Figure 23 Shaded resting spaces at Hanuman Park



Figure 22 Playing equipment's in decent condition

# 6.3 ITC Barriers

The ITC barriers highlight the challenging issues on site which hamper the physical and mental well- being of ITC. The challenges are both physical and experiential which are determined from the perspective of a three-year-old toddler moving around with their caregiver.





Figure 26 Absence of footpath, benches and active facade, no eyes on street

Figure 24 On street parking forces people to walk in the middle of the road



Figure 25 Garbage being dumped outside Hanuman Park, restricting people from visiting



Figure 27 Hanuman Park entrance is an issue for strollers to access

The highlighted issues show the absence of basic infrastructure elements like sidewalks. The street character is monotonous and lacks public safety and engaging features. Parking on street being a common issue throughout the site hampers ITC movement. Garbage dumping is another common practice noticed throughout the site which is done either on streets or vacant spaces. These issues help in deriving site-specific solutions to improve the quality of sitting from all perspectives- physical and experiential.

# 7 Site surveys, Analysis and Results

# 7.1 Total Station Survey (TSS)

The Total station survey drawings of the 600m radius area of Ashok Nagar site were requested by PMU for the topographical and dimensional understanding of the site. The implementing agency, UMC conducted TSS and submitted the drawing in August 2022.

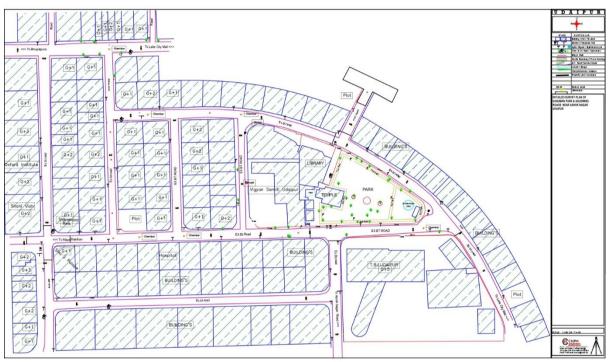


Figure 28 TSS drawing of Ashok Nagar, received by UMC

The TSS drawing of 600m radius area of Ashok Nagar was conducted using the total station survey method for detail understanding of site and its components like road width, road levels/ slope, building heights availability of existing structures like electric pole, trees, water pumps, drainage/stormwater lines, etc.

# 7.2 Gehl surveys, Findings, and Way Forward

# Types of Surveys conducted

Based on the Gehl Toolkit, the following surveys were conducted on-site:

### 1. People moving count

People moving count was conducted all the identified locations on Ashok Nagar site. At each location, Survey count was observed and documented. **The purpose was to identify mobility pattern, age group and mode of transportation used**.

## 2. Stationary activity mapping

Stationary activity mapping was conducted at locations during the peak evening hours to identify all the activities happening at the location. Types of activities were documented along with various use of spaces to identify ITC behaviour pattern and their movement along the site and ITC destination in the neighbourhood.

### 3. Intercept survey

Several intercept surveys were conducted in and around the anchor institute- Hanuman Park in the neighbourhood. The questions were asked only to the targeted group of people- ITCs to understand their behaviour on site.

## 4. Urban95 quality criteria

Quality criteria survey was conducted for the anchor institute-Hanuman Park to **evaluate the various features of the centres from ITC lens and to capture the behaviour infrastructure and social, economic etc.** 

### 5. Sensory Mapping

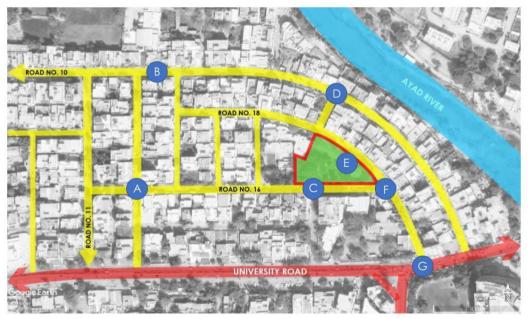
To Gauge the existing sensory features already available at the anchor institute and shall be a value addition to its existing features.

Few additional surveys like route mapping and observational studies were done to gather a morin-depth understanding the topic.

# Duration of Surveys

For surveys like people moving count wherein figures had to be counted, it was conducted for 10-minute slots in the morning, afternoon, and evening peak hours at all the locations.

# Location of Surveys conducted on site



Following are the nodes where the Gehl toolkit was used to conduct surveys for CPZ Ashoknagar

# 7.2.1 People moving count

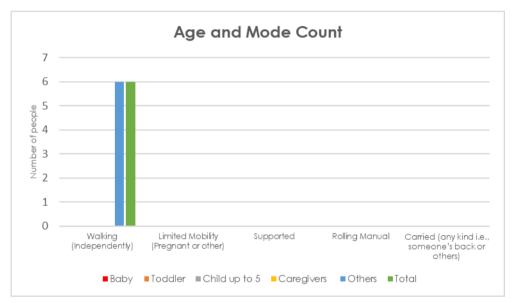
People moving count was conducted at Ashok Nagar site, near the hanuman park and junctions "C" "E" & "F" of Ashok Nagar site in evening hours (5:30pm – 5:40 pm. Survey count was observed and documented for 10 minutes.

People	e Moving Cour	t	
Sr. no.	Category	Time 10 mins	Total no. of people
1	Baby	0	-
2	Toddler	0	-
3	Child up to 5	1	1.26%
4	caregiver	2	2.53%
5	other	76	96.20%
Total no	o. of samples		79

Table 7 People moving count sample



**People moving Count** 



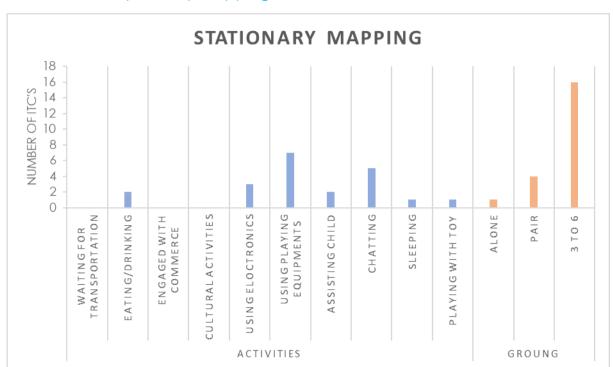
# Findings:

- It was observed that the site received maximum footfall in the evening but with negligible presence of ITC, as compared to others despite having prominent ITC destinations on site (Hanuman Park).
- The most prominent mode of transport used while moving was private vehicles like cars and 2-wheelers.
- Children were seen cycling during the evening hours on weekdays and morning hours on weekends, but their **movement was restricted** and unsafe due to the fast-moving cars..
- **Presence of strays** made ITC un-safe for walking in the park

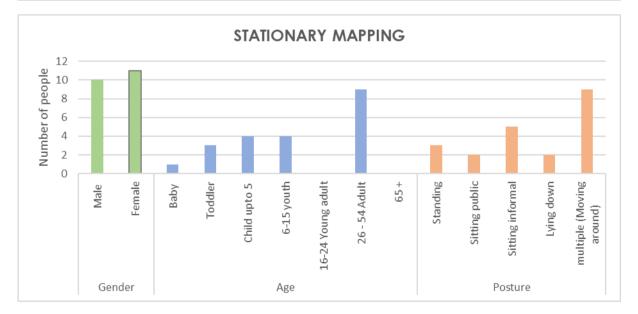
# Way forward:

- As the presence of ITCs was observed to be minimum, Intervention to increase the footfall of ITCs could be made
- Planning and designing of child Safety measures on the site.

- improving the experiential qualities of the area to increase the footfall of ITCs.
- Safety in terms of walking, cycling and user experience of ITCs needs to be catered







# 7.2.3 Intercept Survey

# Findings:

• According to the Intercept data, the majority of people do not feel safe on the site's premises

- 40% of the people do not prefer to visit the Anchor institute more than twice a week
- According to the data, people prefer not to spend longer time in this park
- Most people walk to reach the anchor institute
- The play area is easily visible; however, its quality is inadequate
- 50% of people have a neutral attitude toward the facilities and liking towards visiting this park
- According to the parents, the area is not at all safe for children

### Way forward:

- 1. Interventions addressing child safety and security in terms of infrastructure are required, which will, also have an impact on social behavioural changes that will create a safer environment.
- 2. Interventions supporting child safety and security in terms of social behaviour and infrastructure are required.
- 3. According to the findings, the park could be made more appealing to children by providing new amenities, improving overall infrastructure, and redesigning and organizing the children's play area of the park to increase ITC's footfall
- 4. Interventions for engaging people for longer period needs to be addressed. As a result, interaction, and engagement of children with ITCs and the natural environment would be promoted.
- 5. Development of infrastructure taking into consideration safety protocols for ITCs should be addressed.
- 6. Redesigning and rearranging the play area is needed to attract the children and make them stay longer on the site for better early childhood development
- 7. Things that enhance the experiential qualities of the space should be incorporated into the design, hence increasing the footfall.
- 8. Increasing the safety and security of children by providing necessary street furniture, sidewalks, and Traffic calming measures, also making the area more playful and inclusive.

# 7.2.4 Quality criteria

Findings	Way forward
<ul> <li>Unsatisfactory and neutral response for protection against</li> <li>Traffic and accidents</li> <li>Crime and violence</li> <li>Unpleasant sensory experiences</li> </ul>	Interventions to • Traffic Calming measures, such as tabletops, zebra crossing, rumble strips and street furniture to be included in the design

	<ul> <li>Safety concerns in terms of behavioral changes and violence to be addressed.</li> <li>Improving the quality of the space through greening and creating sensory experiences</li> </ul>
Unsatisfactory and neutral response for Basic needs • Feeling of comfort • Good hygiene and health • Consumption	<ul> <li>Incorporating Interventions which make the space more comfortable and inclusive, taking care of hygiene and health, hence ensuring maintenance of the site</li> </ul>
<ul> <li>Unsatisfactory and neutral response for comfort</li> <li>Opportunities to walk and cycle</li> <li>Opportunities to walk and stay</li> <li>Opportunities to see</li> </ul>	<ul> <li>Developing walking and cycling infrastructure, and visually appealing aesthetics.</li> </ul>
Unsatisfactory and neutral response for Comfort • Interact with the Environment • Talk and Listen • Play and exercise	<ul> <li>Improving the overall space, by sensitizing the approach towards components such as inclusiveness and playful spaces</li> </ul>
Unsatisfactory and neutral response for Connection • Towards flexibility, Access, and integration	<ul> <li>Integration of elements and components while designing, and inculcating visual connectivity, incorporated with accessibility.</li> </ul>

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# 7.2.5 Sensory Mapping



Sensory mapping was conducted at Anchor Institute – Hanuman Park to identify ITC

behavioral prompts of children and document their responses to the built environment.

## Finding from Sensory Mapping

- 1. There is a lack of dedicated playing areas for 0-5 years children, activities, play equipment and stimulating built environment for ITC.
- 2. Non-porous boundary walls restrict visual engagement of ITC with the surroundings inside and outside of the park
- 3. High level of noise pollution from moving traffic affects health of young children.
- 4. It also reduces chances of meaningful interaction of ITC with different groups.
- 5. Absence of walkways inside the park and park approach roads discourages safe and comfortable mobility of ITC.
- 6. Foul smell of garbage outside the park, creates a negative impact on accessibility of ITC movement in and around the park.

## Way Forward –

- Touch Create a dedicated play are for young children, where they can feel the sense of safety and feel and touch with play equipments which will consist of EPDM flooring, sand pits and bamboo furniture
- 2. See Access to the nature to be created, a hedging around the play area, so the kids can always play and see around the nature
- 3. Hear Create sound barriers through landscaping and dedicated car parking away from the anchor institute.
- 4. Smell Clear out the garbage disposal area from the neighborhood and create small aromatic shrubs barrier along the boundary wall and dedicated children play area

# 5. Balance – Sidewalk level to be maintain throughout the park, for ease of access to ITC

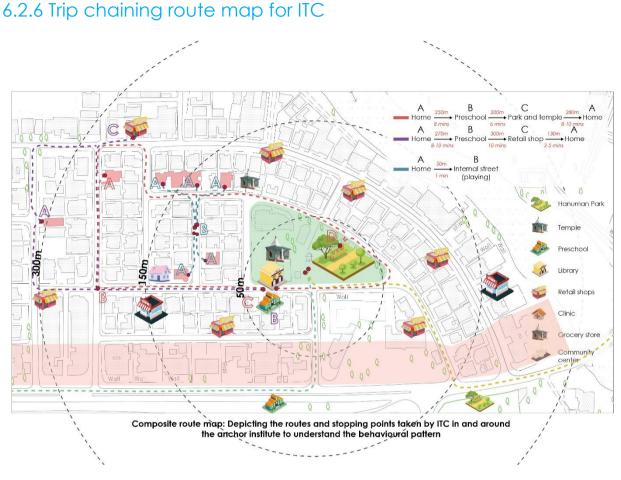


Figure 29 Trip chaining route map for Ashok Nagar

Trip chaining is a process to start understanding the movement of the people in the neighborhood and to give a detail understanding which are the highlight possible routes being used by the people for their day-to-day commute from their home to nearest ITC destination

### Inferences:

- The commercial shops on the periphery which include grocery stores, tea stalls, laundry shops and retail stores are regular ITC destinations or stoppage points
- Within the 600m radius, the average time taken to reach the anchor institute ranges between 10-15 minutes
- While reaching the anchor institute, the commercial shops become stoppage points hence caregivers tend to choose routes where they can complete other routine tasks as well
- Few inner silent streets are used as meeting points by neighboring children to play games like cricket, hopscotch, etc.

• Temple and park are an essential ITC destination, but the main gate of park is regulated by temple staff who keep it locked periodically during cultural events

# 7.3 Summary of Findings from Focus Group Discussion and Participatory Learning & Action from Rapid Behaviour Assessment

This approach involves the active participation of community members to gain an **in-depth understanding of a community or situation**. PLA can be implemented in different ways depending on the circumstances. The main characteristic of this approach is: researchers or project agents try to learn with their target group. It is a unique way to let the people who are the key stakeholders of projects or programs play a defining role in planning and implementing the actions. It also helps to acquire local knowledge and voices. The methods used during the PLA approach differ from case to case but can include interviews, **focus group discussions, observation, social mapping, transect walks, etc.** 

For this assessment, social mapping was used. Social mapping explores where and how people live and the available social infrastructure: roads, drainage systems, schools, drinking water facilities, etc. A social map is made by local people and is not drawn to scale, illustrating what the local people believe to be relevant and important for them. This method is an authentic way of determining what the social reality looks like for locals through social stratification, demographics, settlement patterns, social infrastructure, etc

# 6.3.1 - PLA Findings:

- 1. The caregivers walking with their children stopped at facilities like the retail shop, clothing shop, street food stalls, vegetable vendors and ice-cream vendors.
- 2. Caregivers prefer walking to various ITC facilities in and around the CPZ
- 3. Two/four wheelers are used by most caregivers as a mode for commuting across the neighbourhood. The streets are not pedestrian-friendly due toa lack of footpaths and shading elements
- 4. Commercial areas present in and around Anchor Institute are of CPZ
- 5. Caregivers highlighted that there is a dedicated park in the CPZ. Park's walking track is used by teenagers for cycling, and the track is high, resulting in toddlers not using the walkway.
- 6. Teenagers use the park's area to play cricket, resulting in a reduction of the lawn in the park.

- 7. Park has a space where the temple's priest has tied up cattle that is just beside the play equipment. This poses a threat for young toddlers, as they run nearby those cattle.
- 8. There is a high rate of stray dogs and animals that move around the streets which also poses a threat to young children and their caregivers.
- 9. There are open drains that, at many points, have large widths that would not be safe for young children.
- 10. Lack of common drinking water facilities and public toilets in the park.
- 11. Mothers identified as the primary caregiver, are also responsible for taking children to the nearby facilities.
- 12. There are no footpaths in the area.
- 13. Caregivers said that other than the play equipment such as swings and slides, there are no dedicated age-appropriate materials/tools available in the park to engage with children under 6 years.
- 14. Children were found playing with other children of their age.
- 15. Mothers usually take their children to the park regularly, while they go shopping for groceries. FGD participants across all facilities also said that mothers are the primary decision-makers regarding when to take children out to play and fathers are only able to spend time with children on weekends or after coming back from work. In a few cases, the father or grandparents also decide when to take the child out to play.
- 16. Caregivers engage with their children outside the home by visiting nearby parks and playing with them.
- 17. Some participants convey their park-related feedback to the Ward Parishad. Previous feedback was regarding lights and cleanliness.
- 18. There is a lack of irrigation systems for plants and lawn in the park. The park caretakers use pipelines for watering the muddy patches and potholes that are uncomfortable for caregivers and young children.
- 19. Majority of the caregivers rated the cleanliness and safety aspects of the parks as satisfactory, poor, or very poor. Caregivers said that there were no drinking water facilities or a breastfeeding room. Toilet facilities were also not available.

On the basis above recommendation, the focus is being specific on the Priority Behaviour of:

- a. Safe
- b. Playfulness
- c. Accessible

Detail focus has been derived on sub-priority behaviour, further to categorise themes for each category

Safe – Safe walkways, will encourage caregivers and motivate them to use the street to access the anchor institute and nearby areas.

Safe crossings will lead in the lesser traffic mishap and will lead to behaviour changes in safe street crossing

Safety with adequate lighting, which lets caregivers use the neighbourhood space even in the evening hours and does not restrict them to use specific time of the day.

Playfulness – A journey experience for the young children, while getting engaging in the street towards anchor institute or visiting other ITC destinations Interactive pathways, active facades and signages in the neighbourhood/ITC destinations.

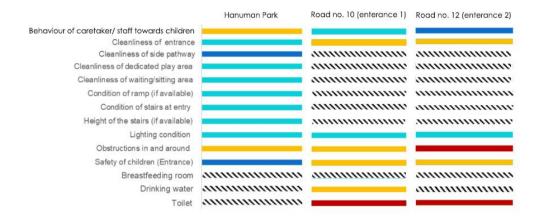
Accessible through way-finding signage, dedicated ramps, road signages and ease of access to all the ITC destinations.

# Accessible to all and all which supports positive interactions between babies, toddlers and their caregivers

Shorter distance to access the ITC destination, where family can reach out by connecting to cycle/walking within the neighbourhood. The design of these spaces is key in increasing their use by families and providing the right conditions for reducing barriers and positing caregiving behaviour

#### **Observations:**

#### 1. Observer's feedback:



Excellent Good Satisfactory Poor Very Poor Not available

### 2. Caregiver's feedback:



Excellent Good Satisfactory Poor Very Poor Not available

**Recommendations:** Based on the surveys analysis from FGDs, IDI and PLA, the RBA team proposed recommendations for infrastructure and social behaviour change respectively.

# A. Infrastructure related:

1. Shaded footpath with seating arrangements that are devoid of any encroachments and stray animals.

2. Development of dedicated open play spaces with sand pits and well-maintained functional play equipment for children under 6 years.

3. Availability of age-appropriate play and learning materials at all the facilities.

4. Regular cleaning and maintenance of all facilities which are commonly visited like – "Panghat" (Public Drinking water facility), Neighbourhood walking streets, Park, Library, Temples, public toilets, etc.

5. Install or refurbish handwashing or hand sanitization facilities at Park, temple.

6. Caregivers prefer well-lit spaces, that have a drinking water facility, functional toilets, and adequate seating arrangement.

7. Maintaining green spaces (colourful flowers and grass) in parks can increase caregiver and young children's footfall.

8. Additional equipment like open gym facilities can be repaired in parks to encourage caregivers to visit parks or remain engaged during their stay.

9. Separate play areas for younger children or separate timings to access the park facilities.

10. Sandpits – a popular and low-cost option can be installed.

11. Adequate lighting arrangements to be made available in the streets, nearby and within the parks.

12. Covering the existing open drains.

13. The inclination angle of the ramp outside the park entrance should be adjusted according to the children.

14. The height of the sidewalk inside the park is high concerning young children and toddlers, it needs to be reduced.

15. Seating spaces for caregivers near children's tot-lots should be added.

16. Pruning of trees, so that the light from the streetlights can reach the street surface, currently, the trees obstruct the light and make the street dark, after evening.

17. Introducing low-height bollards.

## B. Social Behaviour Change (SBC):

1. Use of visually appealing content and play equipment - colourful alphabets, numbers, fruits, animals, short stories, etc. in all facilities for children below the age of 6 years.

2. Display age-appropriate ECD messages in the facilities in the form of wall paintings, posters, and hoardings for parents and caregivers.

3. Display of SBCC materials on COVID-19 appropriate behaviours at ITCN Facilities i.e., Creche, day care schools, grocery shops etc.

4. Counselling sessions at AWC, Creche and Playschool for caregivers on the benefits of preschool engagement and interactive play (at the facility and home).

5. There should be road markings for parking. Awareness should be spread among the people that either the vehicle should be parked at the dedicated space marked or parked inside the house.

6. Addition of active facades of public walls on streets.

7. Dedicated walkways should be constructed on the streets, to increase pedestrian usage and activeness.

8. Addition of floor paintings on the dedicated walkway, to make the walkway attractive.

9. Road signages to be added to create indicators of the nearby ITC destinations.

10. Use of digital media (esp. YouTube, WhatsApp) and regular group meetings to share.

- 11. ECCD-related information.
- 12. Services available at the nearby ITC destinations.
- 13. Importance of preschool education.
- 14. Role of family members in caregiving.
- 15. Inexpensive and easy methods of engaging with children.
- 16. Feedback sharing mechanism.

## C. Regular training of service providers on ECCD-related topics:

1. Empathetic consultation and counselling of parents/caregivers.

2. Use of SBCC materials while engaging with young children, counselling parents, etc. and feedback-sharing mechanism.

### D. Supporting Survey questionnaire is attached as an annexure -01

# 8 Summary of Findings

Barriers	Temporary Design Solutions/Proposed Interventions
Accessibility	
Lack of augropose of the presence of park	Way- finding signages
Lack of awareness of the presence of park	Way- finding road markings
Demotivated to use mobility options like cycles to reach ITC destinations due to the absence / dedicated cycle laned	Cycle stand
People with strollers/ wheelchairs/ elderly unable to access park/ path-ways due to the absence of ramps and raised pathways	Ramps, maintained level difference of ground with path way inside the park
Safety	
Lack of road safety elements for pedestrians, heavy vehicular traffic	Safe crossings, traffic calming measures
Unsafe pavements for ITC in and around the park	Covered drains, Soft surface materials and textures
Lack of awareness of basic hygiene	Informational signages, dustbins
Parking on-street	Dedicated parking spaces for vehicles
Playful	
	Active Facades
	Playful Floor Games
	Dedicated Play Area For ITC
Absence of engaging and playful elements for ITC to interact with in public spaces	Puzzles, Abacus On Side Walls
	3D Murals Of Animals & Other Elements In The Park
	Pathway Signages
	Key Messages On ECCD
	Informed caregivers
Awareness regarding ECCD practices	Motivated/Converted Caregivers
	Transformed, Engaged Caregivers

Table 8 Theme based solutions for converting barriers into motivators

Covering the drains for safety
Dedicated parking spaces
Facilitating the permanent removal of garbage
Provision of dedicated footpath space along with benches
Providing ramps and easy access to the park

Table 9 Design solutions for physical barriers

# 9 Social and Behaviour Change Communications (SBCC) for CPZ- Ashok Nagar

Social and Behavior Change Communication uses communication strategies that are based on behavior science to positively influence knowledge, attitudes and social norms among individuals, institutions, and communities. SBCC is a process of interactively communicating with individuals, communities, and societies as part of an overall programme for information dissemination, motivation, problem-solving and planning. The process understands the targeted audience's needs, drives and preferences to conceptualize and helps a person to understand the information and efforts to bring about desired behavior change easily and feasibly while protecting and improving outcomes.

A comprehensive SBCC approach can be a very resourceful tool when implemented in a planned, coordinated manner and within a wide range of interventions which can result in a change in an individual or community adopting new behavioural social norms or participating in the civic engagement process. This will help in testing all the pre-test the SBCC ideas before implementing them around. Parallel monitoring of the project will be done through defined indicators of FGDs, intercept surveys, community meetings and social media groups

In continuation to the above, a strategy/activity proposed and has been planned for CPZ (**PRE-DURING-POST**), (The expected timeline of the project has been considered to be of six months) Ashok Nagar and has been explained below:

# Pre - Implementation (01 Month of the Project)

- Awareness-raising communication and social behaviour change communication (SBCC) methods are to be applied effectively
- Community Engagement sessions for sensitizing active and more importantly passive users about the importance of using the facility and its numerous benefits via extensive Information Education Communication (IEC) and/ or Communication & Outreach (C&O) within ( and outside the park as well- set periphery (600m or 20 mins walk, more based on the need) on sample size basis (nearby Residential Colonies, local community- household having a children below 6 years of age Mix of HIG, MIG, LIG & EWS, NGOs, CBOs, RWAs- if any, Community groups etc.) using various means such as In-Depth Interviews, Focused Group Discussions (FGDs), Key Informant Interviews (KIIs) etc., disseminating information on the overall objective, design, benefits etc. All the above shall be conducted via specifically designed questionnaire and aesthetically designed outreach material (Banner/ Poster, Leaflets for distribution- if required);
- Advocacy meetings with Service providers and stakeholders



Figure 30 Community engagement session conducted at a resident's place in Udaipur

# During – Implementation (02-05 Months of the Project)

- Community Engagement with various stakeholders is to be conducted
- Conducting Capacity Building programs for caregivers
- Sensitizing caregivers towards the advantages of outdoor exposure for young children
- FAQs with different methods and details of specifications as well as features in the park
- It is also planned to have visually compelling signages in form of posters and/ or banners, disseminating information in form of 'scientifically proven facts', strategically placed not only in and around ITC dedicated zones but also at places having huge gatherings of caregivers such as open gym, general exercise zones, yoga zones (if any), laughing clubs and many more including in route of walkers, joggers, at resting spaces etc. The same is also planned to be placed/hung at all the identified ITC destinations;
- Age-appropriate **ECD messages to be displayed** in the facilities in the form of wall paintings or posters for parents and caregivers
- ECD messages to be supplemented near ITC destinations using visually appealing ECD content and play equipment which include, colourful alphabets, numbers, fruits, animals, short stories, etc.

• To **Promote participation of family members** other than mothers, while playing, conversing, singing, and storytelling interacting with the children, encouraging positive learning experiences through specially designed events, disseminating information about ECD's objective, design, benefits, etc., and discussing the same with the stakeholders regularly

• Encouraging caregivers to take their children to ITC destinations regularly and interact with children from different sections of society (HiGs, MiGs and LiGs) (involve external Advisor) for sensitizing active and more importantly passive users about the importance of parks and their benefits

- **Dialogue with caregivers** and local CBOs and RWAs in nearby Residential Colonies- by providing stimulating and active atmosphere which will greatly impact their physical as well as mental growth & development
- Advocacy meetings with Service providers and stakeholders

# Post – Implementation (06 Months)

- Use of mass media like radio and TV ads to create buzz around the features and benefits associated with Parks and playing together
- Use of Mass Media for popularizing the project objectives and to create buzz around the features and benefits associated with Parks and playing together for larger visibility of the new facility to the targeted audience including

means such Digital/ as Electronic-TV. Radio. Print-Newspaper, Magazines and social media-Facebook, Instagram, Twitter, **WhatsApp** etc.;

• Conducting facilitation Sessions, also

planning,

**EARLY CHILDHOOD** EVERY CHILD DEVELOPS DIFFERENTLY DEVELOPMENT MILESTONES The first four years of a child's life are the most important period of development physically, emotionally, cognitively, socially and morally. This is a guide to what you might expect in their first four years - often called developmental 'milestones' 1 Year 6 Months we moving object hes faces with May speak single words like "Mama" and "Dada" rings hand to mouth Uses 2-4 word ins to babble and Babbles with inf Knows opposite (hot/cold, big/small) Uses exclamations, such as "oh + oh!" Starts to make !

€ 443-908-0420 / 609-214-3685 @www.studmonkedtech.com Redtech@infojiniconsulting.com Figure 31 Sample showing ECD message

and organizing events in the park

- Dialogue with caregivers via specifically designed questionnaire and aesthetically designed outreach material (Banner/ Poster, Leaflets for distribution- if required)
- Using Social Media Platforms for sharing Feedback
- Organizing events during certain intervals, as appropriate for each project, in the form of musical and playing activities and/or singing and dancing competitions to raise awareness of the project's objectives and increase the visibility for the same to the intended audience
- Managing, IPC, FGDs and Counselling sessions for sensitizing, the ECD benefits and understanding the importance and advantages of AWC, Outdoor visits

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### Priority Behaviour 1 – Safety

Caregivers' perceptions, attitudes, and beliefs significantly impact children's outcomes. If caregivers feel unsafe while using the streets, they are less likely to let children move independently or venture out with them. Cleanliness, safe vehicle speeds, street design, and the safety provided by an active but not overly crowded sidewalk or public space are important factors that influence a caregiver's perception of safety.

## Location 1– Entry point to the CPZ



S. No	How might we statement (based on RBA insights)	Potential design-based solutions	Potential SBC-based solutions
1.	How might we ensure that young children and their caregivers feel safe in accessing the entry point to the CPZ?	a. Defined sidewalks and carriageway b. To re-develop the safety provisions on the speed breaker	a. Attractive message of welcoming and father and mother inclusivity, respect for children in particular
2.	How might we ensure that young children and their caregivers feel safe while moving in and around the entry point to the CPZ?	a. <b>Space prioritization</b> for parking and hawking zone for free flowing of traffic and managing encroachments	a. Campaign to sensitize encroachers/trespass ers

### Location 2- Intersection outside Hanuman Park entrance

Connections between nerve cells in the brain are formed every time a child interacts with their environment or other people. The brain is at its most flexible in the first five years of life, making this a critical period for learning and growth. Welldesigned streets encourage these everyday experiences to invite more meaningful interactions and social connections among children, caregivers, and their environments.



S. No	How might we statement (based on RBA insights)	Potential design- solutions	pased Potent	tial SSBC-based solutions
1.	How might we make the intersection adjoining Hanuman Park in Ashok Nagar CPZ safe for young children and their caregivers?	<ul> <li>a. Improvement ir road width and geometry</li> <li>b. Speed calming measures</li> <li>c. Road signages</li> <li>d. Way finders Material differe for road finishes junctions</li> </ul>	bik Fa b. IPC an c. For Pro	ampaign to sensitize cers/motorists especially thers, and elder brothers C sessions with caregivers ad community members rmation of the Child otection Committee to cuss the safety concern ad provide solutions.
2.	How might we ensure that young children and their caregivers feel safe while accessing the junction adjoining Hanuman Park in Ashok Nagar CPZ?	<ul> <li>a. Safe sidewalks/walks</li> <li>b. Cover drains all path, which en safety of young</li> </ul>	vays ca pro ong the sat ures the sid	apacity building of iregivers and service oviders on the usage of fe crossings and using ewalks
3.	How might we ensure that young children	a. Safe sidewalks/walkv		ampaign to promote clusive neighbourhood on

and their caregivers do not	b.	Improved journey experiences through,		gender Sensitization
take alternate routes to access Hanuman Park in Ashok Nagar CPZ?	c.	place-making, engaging wall art and child-friendly signage Cover drains along the path and Attractive way finders and vibrancy in the road	b.	Sensitize vendors to minimize encroachment on roadside

### Priority Behaviour 2 – Playfulness

Play is essential to children's development because it increases physical activity, develops motor skills, and encourages socializing and creativity. Streets provide opportunities to bring learning and play into children's everyday lives, whether walking along a sidewalk or waiting at a transit stop. Unstructured play comes from purposeful interactions with children's everyday environments and builds imagination, cognitive development, and resilience by allowing children to take the lead and make decisions.

## Location 1– Hanuman Park



S. No	How might we statement (based on RBA insights)	Potential design-based solutions	Potential SBC-based solutions
1.	How might we make Hanuman Park in Ashok Nagar CPZ a safe outdoor play space for young children and their caregivers?	a. Keeping the park stray-free Maintaining the park with proper cleaning and taking care of hygiene	<ul> <li>b. IEC material to display on the walls</li> <li>c. Sensitize by doing wall art, adequate lighting and putting messages on the adjoining park wall</li> </ul>

2.	How might we encourage young children and their caregivers to visit Hanuman Park in Ashok Nagar CPZ regularly?	<ul> <li>a. The entrance will be welcoming and vibrant</li> <li>b. ITC-friendly furniture with proper shading space</li> </ul>	<ul> <li>c. Building capacity of caregivers and showcasing the advantage of outdoor play areas for young children</li> <li>d. ITC-friendly elements will be introduced</li> </ul>
3.	How might we ensure that Hanuman Park in Ashok Nagar CPZ encourages young children and their caregivers to engage in play activities?	a. Engaging in the floor and wall games, which encourages them to come to the park often	a. Dialogue with caregivers and the local community to increase the number of park visits
4.	How might we encourage fathers of young children to visit Hanuman Park in Ashok Nagar CPZ regularly with their children?	<ul> <li>a. Dedicated sidewalls for a stroller which eases the father to carry the baby and</li> <li>b. Developing community space, where fathers can interact with each other.</li> </ul>	<ul> <li>a. Campaign to sensitize fathers that how it as important for a child to have both parents participating in the early childhood development</li> <li>b. Dedicated meetings for especially fathers to participate (subject base meetings) to motivate them to understand the role of the father</li> </ul>
5.	How might we encourage caregivers of young children to advocate outdoor play – encourage other caregivers to visit Hanuman Park in Ashok Nagar CPZ regularly with their children?	a. The elements should include safe and socially interactive pathways, and joyful, green and playful designs on streets, which will improve the journey experience for young children and their caregivers	b. Socio-emotional Developments (Join attention and social interactions) to make them aware of the advantage of engaging children with outdoor play

### Priority Behaviour 3 – Accessible

Young children are accompanied by caregivers. They may be in strollers or carried by their caregivers, or walk holding hands or cycle side by side, allowing communication and connection between children and caregivers. Children's spontaneous play also requires more space. Caregivers may restrict safe roaming distances or playing, running, or jumping on narrow sidewalks, while wider sidewalks and car-free areas allow children more freedom to play and develop independence.

### Location 1– Hanuman Park



S. No	How might we statement (based on RBA insights)	Potential design-based solutions	Potential SBC-based solutions
1.	How might Hanuman Park in Ashok Nagar CPZ be accessible for	a. Adding ramps along with the steps inside the park to access raised footpaths	c. Awareness discussions with caregivers or community stakeholders about the shorter distance of each ITC destination
	all?	b. Replacing the turnstile gate with a regular entry to ensure accessibility for everyone	

# 10 Design Concept

# 10.1 Learnings from Semi-Permanent Implementation

### What worked well:

The Hanuman Park periphery has been re-developed, and the damped walls refurbished this has been well acknowledged by the community and thrown light on the need for more such child-friendly spaces in Udaipur. Moreover, it served as an important example for the city to restore existing urban spaces and city parks that can be revived by doing small interventions to promote Urban95 principles.

The intervention has also been successful in increasing awareness among children and their caregivers on how a journey experience can be created as vibrant and engaging for young minds.

Introducing of traffic calming measures reduced traffic speed as well as people started using Zebra crossing at junctions

### Scope for improvement:

The neighbourhood community continued to dispose of garbage in the nearby dumping zone despite advocacy and awareness attempts to promote garbage disposal in Nigam garbage vans.

### Recommendations for the next phase of the project:

- 1. Building the capacity of caregivers and showcasing the advantage of outdoor play areas for young children
- 2. Improvement in the road geometry and drain cover along the path with attractive way finders and vibrancy on the road
- 3. To scale up media visibility of such events for wider dissemination of ECD and social behaviour change objectives
- 4. From the experience gained from the semi-permanent Interventions conceptual design have been prepared for taking up the permanent development of the spaces in the CPZ
- 5. A detail project report will envisage design elements, dedicated space marking, furniture, lights and necessary landscape to have a vibrant space for the young children and their caregivers.
- 6. Traffic calming measures were highlight appreciate at the junctions by the community, this encourages safe and secure crossing.
- 7. Active/painted facades across the streets of the Ashok Nagar, will make it engaging for young children and making an enjoyable experience while walking in the neighborhood.

# 10.2 Defining Vision-setting outcomes

Based on the findings of surveys and behavioural analysis, the **conceptual design** is derived for **600m radius** of Ashok Nagar, Hanuman Park being the centroid and anchor institute for the same. As is evident from the surveys, currently the site lacks interaction and engagement of any kind which is due to the absence of activities which promote engagement. The tactical (temporary) design interventions focus on introducing temporary elements like way finders, painted sidewalks, engaging activities, etc. to start developing a sense of child-friendliness in the neighbourhood.

Even after the presence of a huge park in the neighbourhood, it is not being used to its full potential. The young children in the vicinity restrict their playing activities to the porch of their houses which certainly limits their interaction with other children and overall learning and development which is required at that age.

Hence the design targets Hanuman Park to highlight it to increase its usage, both quantitatively and qualitatively. It focuses on **increasing the safety, accessibility, and playful** nature of the site. Along with the park, all the approach roads are also planned to have way wayfinding elements which will not only increase access to the park, but also make the site more walkable.

Based on these design elements, a certain behavioural change is expected as an outcome wherein the caregivers start using the ITC destinations more frequently, prefer walking as a mode of commute, and overall help in achieving a thriving neighbourhood through increased interactions leading to a stronger community and making it playful and lively wherein the children prosper leading to their early childhood development.

## ECD will be promoted through the following elements:

Supporting healthy brain development in a child's earliest years sets a strong foundation for later in life, providing the building blocks for educational achievement, economic productivity, responsible citizenship, lifelong health, strong communities, and successful parenting of future generations.

The environment where infants and young children spend time can greatly influence their daily experiences and contribute to the overall health and well-being of both children and their caregivers. Alongside housing, healthcare facilities, daycare, schools, parks, and playgrounds, streets offer a critical spatial opportunity to provide safe, healthy, and stimulating environments that can support healthy brain development.

- 1. Safe and interactive pathways ROADS AND STREETS
- 2. Socially interactive, joyful, and playful DESIGNS ON ROADS AND WALLS
- Dedicates area helps to spend more time EXCLUSIVE PLAY AREA IN THE PARK
- 4. Gross motor skills (Play in Sandpits, walk, run, jump, tot lots etc)

- 5. Cognitive Development GREEN AND VARIOUS MATERIAL FINISHES
- 6. Socio-emotional Developments (seating and interacting with other kids and their caregivers) SEATING AREAS IN ROAD CORRIDORS IN THE PARK
- 7. Creative development INNOVATIVE DESIGN THEMES

10.2.1 Age-Appropriate Design Solutions:

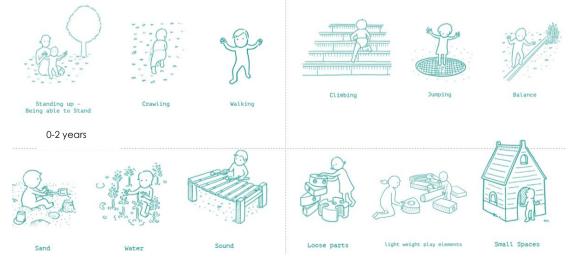
When we think of young children, we do consider the first 1000 days of their development including pregnant and lactating women. At the time of pregnancy, if a woman gets better accessibility, safety, health-nutrition, and care-related information-reference, etc. at home and neighborhood, then she creates a better tomorrow, which directly affects the unborn child.

Young Children below **0** Years – Considering the **age-appropriate provisions** for the pregnant women/ caregiver safe accessibility has been considered as a major design thought through having proper provisions of ramps in the sidewalks of the street network, low raised sidewalks for safe accessibility and mobility, covered drains, and low heighted steps while accessing the ITC facilities in the neighborhood.

Young Children **0-2 Years** – Babies who are in the arms of caregivers, crawling, and about to start walking with the support of caregivers, and as they grow, they tend to walk faster, touch, sense, and jump. (these are the elements which are being reflected in the design proposed). To attract the attention of the toddlers, their engagement with the vibrant colours and pictorial depictions have been considered in the conceptual design.

**Young Children 3-5 Years** - Young children who can play various engaging games, ride bicycle, run, jump and climb is more fascinating to them, in the neighborhood and ITC destination. Also with such curiosity, it is envisaged that creating interactive, safe, and inclusive spaces and related elements along the streets and ITCN Institutions in the neighborhood. This shall help to motivate the children and their caregivers to focus on the ECD and extend attention towards behaviour change to spend time outdoors.

The above ideations has been utilized while finalizing the conceptual design and SBCC Interventions and can be referred in the subsequent chapter.



3-5 years

Figure 32 - Source -Playground Ideas, Superpool, BvLF

# 10.3 Neighbourhood Concept and Spatial Planning

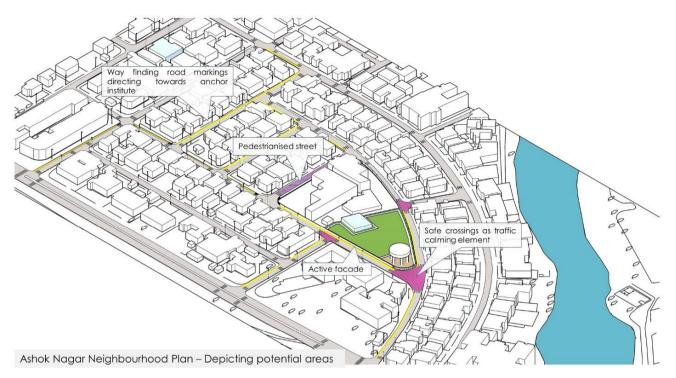


Figure 34 Isometric view of Ashok Nagar Neighborhood – Depicting potential areas and highlighting key proposed solutions

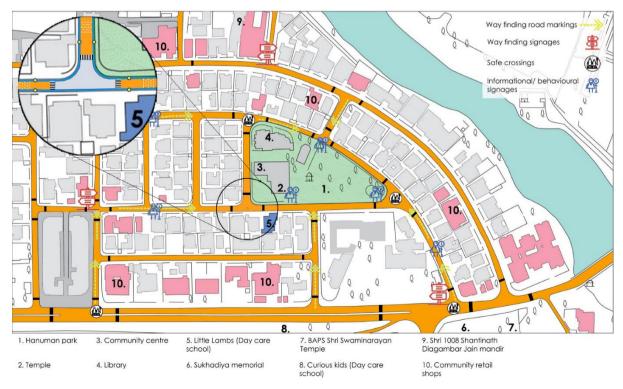


Figure 33 Ashok Nagar Street Network - Conceptual Proposal



Figure 37 Details of proposed plan

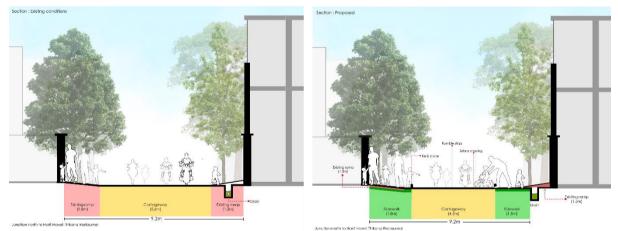


Figure 36 Existing & Proposed Street Section for 9.2m ROW

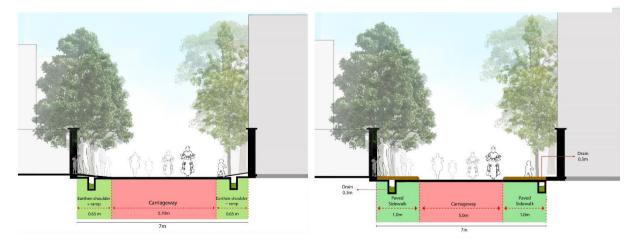


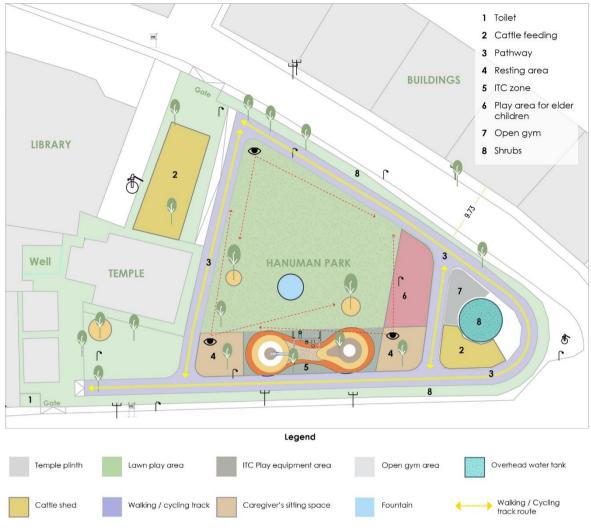
Figure 35 Existing & Proposed Street Section for 7m ROW

### Key Features

- Proposing road safety elements/traffic calming measures like zebra crossings, rumble strips, and traffic calming measures
- Proposing sidewalks on both sides of the street throughout the Child Priority Zone to promote safe walkability
- Adding way-finding signages and road markings to help young children and caregivers easily navigate towards the anchor institute and other ITC destinations in the zone

### **Proposed ITC Indicators:**

STREETS	HANUMAN PARK	UTILITIES
Footpath	Camera monitoring	Drinking water facility
Cycle stand	Ramps for ITC	Dustbins
Ramps for ITC	Benches	
Side-walk games	Lighting	
Surface material and textures	ITC playful furniture	
Planters	Natural play elements	
Seating along planters	Surface material and textures	
Rumble strips		
Benches		
Safety signage for traffic		
Safe crossings		
Active façade		
Public art		
Wayfinding signages for destination and utilities		



# 10.4 Anchor Institute Concept and Zoning



## **Key Features**

- Glancing into the design approach of anchor institute- Hanuman Park
- Dedicated play area for ITC inside the park
- Engaging floor games, geometric patterns, and active facades as sidewalks to make the park more accessible and increase footfall
- Cycle stands and dedicated parking spaces to resolve the issue of unorganized parking
- Introducing shared streets to increase engagement between caregivers and children of the neighbourhood



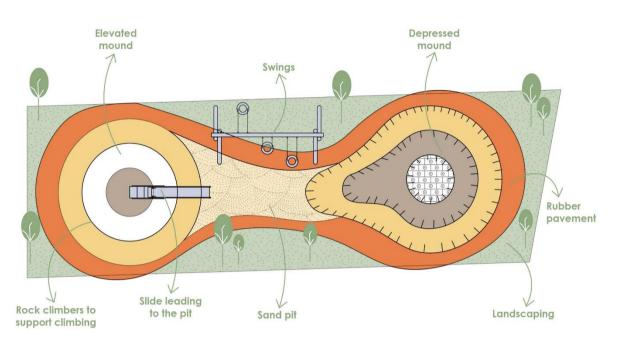


Figure 40 Conceptual Plan for Dedicated Children Zone

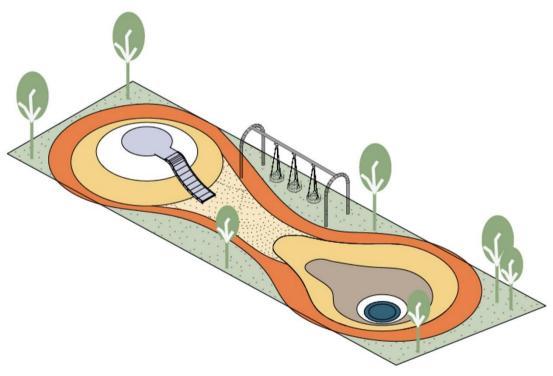


Figure 39 Natural play elements, toddler swings, sandpits and rolling ground



Figure 41 Visualising the dedicated children zone in the park

# ECD will be promoted through:

Young children (0-2 years) and caregivers interact with each other through facial expressions, gestures, talking, making sounds, and smiling. These "serve-and-return" interactions are essential to reinforcing the wiring of the brain in the earliest years. By providing inviting and high-quality public spaces, urban streets can foster these critical interactions and support relationship-building between young children and their caregivers.

- 1. Engaging/interactive games are park
- 2. Cognitive Development (understanding of shapes, colours, numbers, alphabets, different figures/puzzles etc.)
- 3. Cognitive Development (Imagination, creativity, engaging environment)
- 4. Socio-emotional Developments (Join attention and social interactions)
- 5. Safe, Green, Engaging, and Socially Interactive
- 6. Visual perception
- 7. Environmental. Influences.
- 8. Art and Craft
- 9. Try out new ideas and ways of doing things
- 10. Practice and improve social skills
- 11. Build vocabulary and memory

# 11 Project components

# 11.1 Site cleaning

Currently, the site has a lot of debris, **unpaved patches** and a few spots that are zones of **garbage dumping**. The first step would be to clear out all the excessive things and materials from the site and to have the site ready for the next steps.

# 11.2 Drain maintenance

The streets of Ashok Nagar have drains running on both of their sides. These drains are not maintained and have debris, garbage and tree litter filled in them that clog the drains and make them a breeding spot for mosquitoes. The first step here would be **unclogging the drains and repairing the damaged parts of these drains with plastering wherever required and checking their existing slope**, and if required, fixing them.

# 11.3 Drain covering

The next step would be to **cover these drains with Ferro cement drain covers**. This would allow the water to pass through the drains and keep them clear form the garbage and debris falling into them. These drain covers can be removed for maintenance.



Figure 42 - Drain cover

# 11.4 Introduction of sidewalks

Ashok Nagar's streets are narrow with most of the space encroached by parked vehicles and extended ramps. This gives no space for a pedestrian to walk on the street safely. Introduction of sidewalks with varying widths ranging from 1m (for narrow streets) to 1.8m (for wider streets). These sidewalks would be provided on either side of the street, with interlocking paver blocks on the top and kerb stones on the edge. It would be at a height of 150mm from the street level, restraining the possibility of vehicular parking.

These sidewalks would be ITC friendly with **colourful interlocking paver blocks and floor games pattern painted on them**, making them visually appealing for young children and safe for the pedestrians.

Artistic paintings in the form of way finders towards the Anchor institute would also be painted on these sidewalks. This would help the caregivers and young children to identify the way towards the anchor institute on their own, making the way towards the anchor institute by engaging and creating a cognitive development activity.



Figure 45 Extended ramps and on street parking encroaching the walking space for pedestrians



Figure 43 Sidewalk games

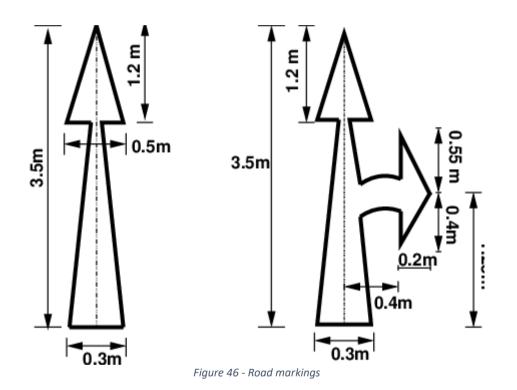


Figure 44 Wide and accessible sidewalks in Bogota, Columbia

## 11.5 Street Markings

As Ashok Nagar's streets are having variable sizes and multiple nodes, these streets become unsafe in terms of predicting the incoming traffic. For this, the street requires demarcation and dedicated zones for pedestrian and vehicular markings, that depict the upcoming turns for the next lane and makes the streets safer for the pedestrians. These street markings would indicate an incoming vehicle about the turns that street has, allowing it to slow down before the turn arrives, making the chances of an accident low.

These markings would include arrows on street painted with thermoplastic paint that makes it permanent and visible from far.



## 11.6 Traffic calming elements

Ashok Nagar's streets require traffic calming elements to make the streets ITC friendly. These traffic calming elements would make the vehicle slow down before approaching nodes and various ITC destinations and the ITC Anchor institute as well. For this, various types of traffic calming elements would be used such as - rumble strips, zebra crossings, tabletops, road signages and reflector signages.

i. **Rumble strips** – 5 strips of these rumble strips of thermoplastic paint with 7mm thickness would be painted before each node of Ashok Nagar, making the vehicle slow down before approaching the node as well as creating friction with the strips to reduce the speed.

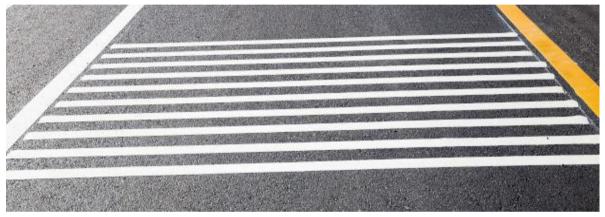


Figure 47 7mm thermoplastic rumple strips

ii. **Zebra crossings** – Zebra crossings would be painted on each node after the rumble strips to give the pedestrians a safe crossing path and install a habit to use zebra crossings while crossing streets and roads.



Figure 48 Zebra crossing for safer movement across the street

iii. Tabletops - On larger nodes and junctions where there is a higher rate of incoming traffic, tabletops would be installed to help reduce the speed of the incoming traffic as well as giving a crossing route for pedestrians as well, where they don't have to change levels again and again while crossing the road.



Figure 49 Tabletop crossing

i. **Road signages and reflector signages** – Road signages and reflector signages would be installed at key junctions and nodes, as well as near the ITC destinations and ITC Anchor institute to create awareness as well as create a cautionary notification about these spaces where the incoming traffic should take extra care while driving. Signages depicting Child friendly zones, ITC destinations, slow down signs, Zebra crossing ahead signs and speed limit signs would be installed throughout the neighbourhood.



Figure 50 - Street signages

## 11.7 Installing ITC-friendly furniture near the anchor institute

The street near the anchor institute requires ITC friendly furniture. Furniture like ITCfriendly benches and cycle stands are required outside the anchor institute. This would help change the time spent outside the anchor institute while approaching it and make it more efficient for the caregivers to come and visit it regularly.

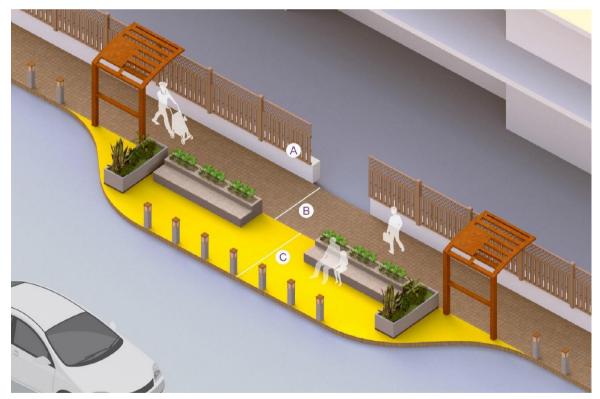


Figure 51 ITC friendly furniture

# 11.8 Creating a dedicated ITC-friendly play area within the anchor institute

The park is usually occupied by children of age 10-15 years who play cricket, taking up the majority of the park and the pockets are shared by children aged 0-5 years and their caregivers.

The issue here with the park is the invisible competition for space between these 2 age groups where the older group takes up most of the space within the park.

Thus, to create an ITC-friendly anchor institute that helps in their Early Childhood Development, a separate zone must be created within the park that is specifically dedicated to the children of age 0-5 years, with dedicated play equipment and an interactive zone with sand mounds where these young children can play and learn.

The inclusion of a separate zone for Early Childhood development gives a scope for the young children to be in the natural environment of the park yet have their own private space where they can play, learn, and interact with other children of the same age and create a social bond as well. Nearby spaces have been allocated as caregivers' sitting spaces where the caregivers can sit in proximity to their children while the child plays on their own. This gives a sense of comfort and safety, both to the child as well as the caregiver.

## 11.9 ITC-friendly sand pits

The separate play area would include a sandpit area that would have a combination of a pit as well as a mound with landscaping surrounded by EPDM flooring. This would create an experience of diversified material usage that would create a new learning and playing experience for young children. This space would let their imagination be explored and create a space for physical, mental, social, and emotional development.

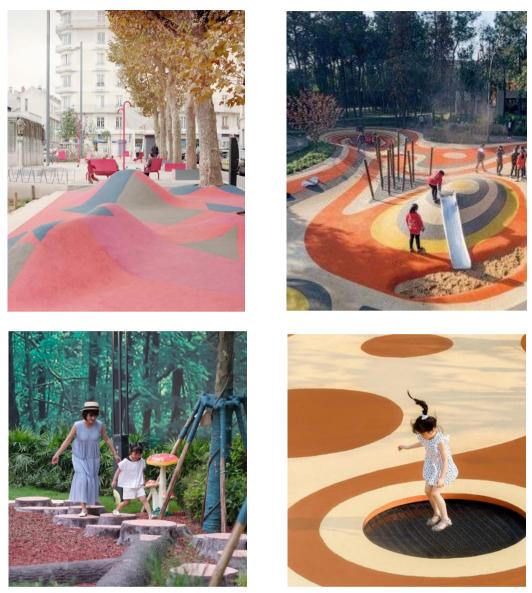


Figure 52 ITC friendly play area & design elements across best practises BvLF

# 11.10 Age-appropriate Active façade focusing different age group learnings

The learning level of 0 – 5 years children varies according to their age. Different types of active fences can be used for children of different ages in the CPZ area.

Young children (0-2 years) and caregivers interact with each other through facial expressions, gestures, talking, making sounds, and smiling. These "serve-and-return" interactions are essential to reinforcing the wiring of the brain in the earliest years. By providing inviting and high-quality public spaces, urban streets can foster these critical interactions and support relationship-building between young children and their caregivers.





Figure 53 - Wall Painting as a form of engaging and active facade

### 11.11 ITC-friendly furniture within the anchor institute

The anchor institute requires ITC-friendly furniture near the play area. Furniture like ITC-friendly benches is essential for caregivers to sit in a range where they feel secure for their child as well as are also comfortable spending time inside the anchor institute.





## 11.12Addition and maintenance of the plantation around the anchor institute

The existing plantation around the anchor institute requires maintenance and additions of a few floral species and trees within the park. Maintenance in terms of trimming the overgrown plants and removing weeds from the plants and grasses is required. Regular watering is also included in this.



Source: Planter Near Vidya Bhawan School

Figure 55 - Planters

## 11.13Creating ITC-friendly walkways inside the anchor institute

Currently, the walkways inside the anchor institute are high and broken. These walkways must be remade as per the designed sections provided, keeping in mind the height and material of the walkway and the new layout.

# 11.14Repairing and beautifying the boundary walls of the anchor institute

The anchor institute's boundary walls are broken and old. These walls require maintenance and beautification to make them more attractive for ITC from outside the park.

Walls need to be repaired wherever there is seepage and broken plaster with cracks. Artistic paintings would be done on these walls with ECD paintings and informative graphics making the approach engaging, fun and attractive for ITC.

The dampness of the boundary wall will be repaired and painted along the park and colourful painting an engaging facades roe b developed.



Figure 56 - Existing facade of the street leading to the Anchor institute

## 10.14Drinking water facility

The anchor institute is a park where there is a high rate of physical activity involved. Thus, it needs to provide free and clean drinking water for the child to stay hydrated while playing. maintenance of available drinking water facility at the anchor institute. Giving clear sidewalks direction towards water facility.

The current coniditon of the walkway towards the facily needs improvement, so the are is being maintaine and kept hygienic at all times.

## 11.15Social Behavioural Messages through Wall art/ Signages

With children younger than 2 years of age, it is necessary to give messages related to the behavior to be done inside the house and outside the house, in the neighborhood, on the street. These messages may be related to the behavior of caregivers with children.





Figure 58 - Signages for safe crossing

# 10.15 Operation and maintenance of park and facilities provided in the anchor institute (Hanuman Park)

Operation and maintenance of the park and all the new facilities provided should be taken care of while implementing and operating the park.

Term (DLP	ns & Condition for Oper	ation & Maintenance (O&M) and Defect Liability Period nsory Park at Gulab Bagh to keep the park in well
S/n	Particulars	Operation & Maintenance (O&M)- 0- 5 years from date of Completion of the Contract
1a		Regular watering of Green Areas/ Elements- Lawns, Mounds, Shrubs, Hedging, Tress, Saplings & other plantations
1b		Regular cutting and pruning of plantation- grass, shrubs, saplings, tress etc.; using mechanical and manual means as deemed fit for their healthy growth;
1c		Periodic use of required Manure, Insecticides & Pesticides, Chemical Fertilizers 'Urea' & Chemical Fertilizers 'DAP' as deemed fit for healthy growth of all the green elements of the park- lawns, mounds, shrubs, saplings, tress etc.
1d	Upkeep & Maintenance	Regular upkeep & maintenance of the park & daily cleaning (twice a day) to keep the park clean, with all the necessary resources
1e		Periodic cleanliness and uprooting of unwanted weeds and wild bushes within the park
1f		Collection & disposal of all the waste material as per the direction of Engineer in charge.
1G		Replacing dead planters. shrubs, saplings, trees with the same size, shape and/ or age etc. in absence of regular upkeep and/ or for any other reasons
		Regular O&M of the Water body including Fountain and its ancillary parts (submersible pumps, filtration plant, pipes),
S/n	Particulars	Defect Liability Period (DLP)- Period- 0- 5 years from date of Completion of the Contract
1a	<b>Replacing/ Repairing</b> Repairing/	Repairing/ replacing 'Walking tracks and Circulation area' made out of different material- mix of natural and artificial material
1b	replacement of all the items being built, installed as a part of this contract, including but not limited to	Playing & other equipments- slides, all side fencing, lights poles & its ancillary infrastructure (Electrical board/ unit, wires/ cables, switches etc.), pre cast RCC benches. and any element installed/ build as a part of this contract

# 12 Implementation plan

## 12.1 Proposed Design for the Child Priority Zone

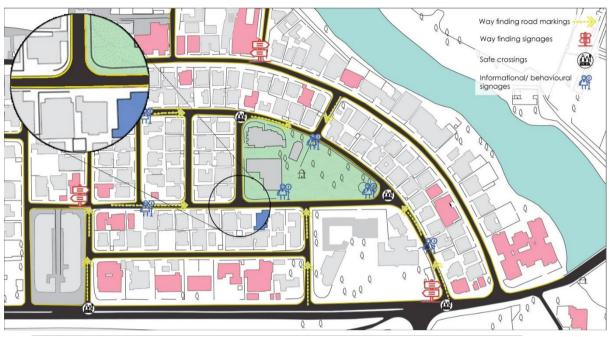


Figure 50 Proposed Street network design

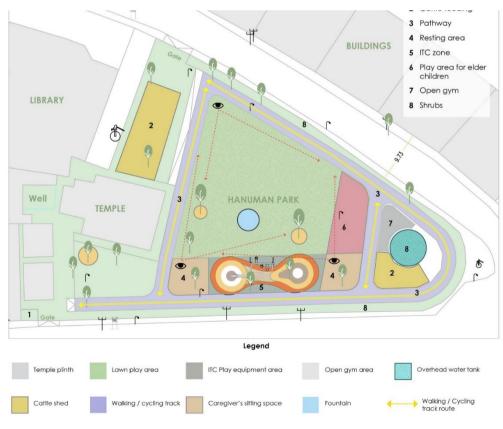


Figure 51 - Proposed plan for the anchor institute (Hanuman Park)



Figure 59 Axonometric view of the proposed design for the junction near the anchor institute



Figure 60 View of the proposed design for the junction near the anchor institute from a height of 95cm



Figure 61 Proposed sectional view of the street besides the anchor institute



Figure 62 - Hanuman Park 3d view



Figure 63 Proposed dedicated play area



Figure 64 Proposed pathway inside the park

# 13 Social Impact Assessment (SIA)

Given that **Child Priority Zone** being a new and concept-based facility to be built in the city and country for the first time, the social impacts of the implementation are envisaged.

Located in ward no. 61, Ashok Nagar is one of the oldest neighbourhoods of Udaipur city. It consists of HIG and MIG residential use along with commercial use.

The community is very active and well-engaged in the social development of the neighbourhood. There are creches, day schools and childhood hospitals available in the neighbourhood, which attract high footfall of young children and their caregivers in and around Ashok Nagar.

Given the existing scenario, developing the neighbourhood as a child priority zone will offer the following benefits to the residing and neighbouring children and caregivers:

- a. Increasing engagement and interaction amongst children and caregivers in the neighbourhood
- b. Providing a stimulating and active atmosphere to the children which will impact their physical and mental growth and development

# 14 Environment Impact Assessment (EIA) and Management Plan

The on-ground construction activities for executing the proposed design shall incur few negative environmental impacts as with all other project of similar stature, hence it is imperative to take suitable mitigation measures to avoid/ reduce/ negate/ curb/ mitigate these impacts by taking necessary steps in line with applicable local standards and norms.

Moreover, prior information shall be provided to all the neighbouring residents regarding the upcoming construction activities for them to take precautionary measures from their side as well such as avoiding this route from their daily walking, jogging route, carrying and wearing masks and/ or covering other body parts (if allergic to dust and other construction material), be away from construction site or activities etc.

A plan has been developed listing the potential impacts, and appropriate mitigation measures against the same and has been explain in the belowmentioned table. UMC shall be in the loop of any unforeseen situation onconstruction activities start by joint site visits and monitoring by on regular intervals.

S/n	Potential Impacts	Mitigation Measures
1	Earthwork excavation, refilling, handling and transportation of construction materials (like sand and aggregate), producing large volumes of dust	<ul> <li>Cover (by tarpaulins) or damp/sprinkle down excavated, construction material (aggregates, loose soil etc.) while loading, unloading, levelling and on a requirement basis</li> <li>Cover (by tarpaulins) the same while transportation of the same</li> <li>Transportation of material mostly during non-operational hours</li> </ul>
2	Possibility of water collecting in the void created by excavation and/ or construction activities	Creation of a temporary drain on-site connecting the same to the nearest drain during construction activities
3	On-site construction activities, especially excavation might cause noise and vibrations	<ul> <li>Utilize modern vehicles and machinery to limit noise and exhaust emissions</li> <li>Such activities are to be scheduled during non-operational hours</li> </ul>
4	Damage to existing on-site (underground) infrastructure	<ul> <li>As such nothing has been found on site, however imperative to confirm the location of underground infrastructure/utilities (in any) before the start of work</li> <li>Alternate arrangement of the same</li> </ul>
5	Paintworks	• To use very low-VOC paints, acrylic or latex paints, and recycled water-based paint. Avoid oil-based paints because of their high VOC content, as well as paint from old cans that may contain mercury or lead.
5	Construction workers and garden users at risk from any on-site accident(s)	<ul> <li>Following standard and safe construction practices</li> <li>Excluding garden users from the site by enclosing, and barricading the construction area</li> <li>Providing workers with appropriate Personal Protective Equipment (helmet, hand gloves, boots, masks, safety hoists when working at height, etc.) as per set standards</li> <li>Follow standard practices of safety checks as prescribed before the use of equipments such as cranes, hoists, etc.</li> </ul>

# 15 Institutional Setup- Role of UMC and Operational and Management (O&M) Strategies

UMC, being the custodian of Ashok Nagar has been kept in loop since the project inception, i.e., from site finalization to design proposal and other stages via meetings/ discussions etc. Moreover, as the project is nearing on-ground implementation, it become more important to involve identified UMC Champion as mentioned in **Table below** more and on fa request basis for their continuous support in tendering, on- ground implementation and moreover O&M of the project as well, after completion on-ground implementation. This shall also help in long-term sustainability and scalability of ECD interventions in the city.

S/n	UMC Champion & Designation	Role
1	Superintending Engineer (SE)	Head of Technical Wing and the Senior most
2	Executive Engineer (EE)	Approval of DPR/TD
3	Executive Engineer (EE)	Approval of DPR/TD
4	Assistant Engineer (AE)	Approval of BOQ

As a part of project and Ashok Nagar being a busy neighborhood, it is imperative that an operational and management plan shall be prepared and put in place not only for long term sustainability of the same but also for replicating the same in other part of the city by UMC and/ or by other development agencies of Udaipur.

O&M of such specialized facility(ies) needs specialized O&M, as traditional O&M practices might not be useful and helpful, thus needing extra care in form of specialized/ skilled human resources as well. Given the above scenario, multiple options/ practices are thought of as explained below.

- a) Having the Annual Maintenance Contract (AMC) for minimum 5 years (extendable on need basis) included in tender conditions with the enabler that selected agency/ contractor shall not only take care of O&M of this newly constructed facility but also train/ capacitate the UMC existing staff & other additional staff (if required), enabling UMC staff to take care of this new facility after the completion of contract period in a way that it should be taken care of;
- b) Opening this facility for O&M by private agencies (corporate houses, big businesses, industrialists etc.) under widely followed practice in the city, known as 'Adopt the Park' scheme under their Corporate Social Responsibility (CSR) in exchange of branding opportunities.

However, the same shall be opened only to suitable agencies having suitable/ proven experience of maintaining such kind of facility elsewhere in the state or at country.

For the effective monitoring of the Project and to observe the Behavioral change in the users with respect to ECD, PMU in coordination with UMC will do joint site visits every fortnightly for atleast a year or so to check for any errors and laxity on the contractor part and the things right.

# 16 Project Timeline

c	Dest	ACTIVITIES .		Apr	-23			May-23			Jur	-23			Jul-23				Aug-23				Sep-23				
5.no	Project Milestones	ACTIVITIES .	WK-1	WK-2	WK-3	WK-4	WK-1	WK-2	WK-3	WK-4	WK-1	WK-2	WK-3	WK-4	Wk	-1 W	<-2 W	K-3 W	K-4	WK-1	WK-2	WK-3	WK-4	WK-	1 WK-2	WK-3	WK-4
1		<ul> <li>a) Deputing of labour and material on site</li> <li>b) Site study and understanding of the drawings with UMC Engg and PMU Team</li> </ul>																									
									-	<u> </u>		-				_		_	_						_		<u> </u>
2		a) Correcting the geometry on site b) cleaning of drains and checking of leakage c) Startting of Drainage Plaster									_				_									_			
							_				_				_	_		_	_						-		
3	Correcting of Bitumen on the road edges	a) Road repairing and maintainence													_				_								
						_													_								
4	Starting Sidewalks	<ul> <li>a) Laying of concrete</li> <li>b) installation of paver block and Ferro cover on drains)</li> <li>c) laying of any electrical cable wherever necessary</li> </ul>													I												
5		<ul> <li>a) At all major junctions, table tops are to be constructed</li> </ul>																									
																			_								
6	Installation of Fabricated	a) Road marking and safety signages to be installed b) Installation of Cycle Stand																									
																			_					_			
7		<ul> <li>a) Boundary Repairing and MS grill installation</li> <li>b) Paint and putty work, wherever applicable</li> </ul>																									
							_													_							
8	Thermoplastic Paint	a) Rumble strips b) Zebra Crossings c) Junction Crossings																									
9	Handing Over of Site	Completion of all the work as per the drawing issued																									
																			_								

# 17 Way Forward

- 1. Child Priority Zone be inclusive of child safety and security in terms of infrastructure, which will, also have an impact on social behavioural changes that will create a safer environment
- 2. Interventions supporting child safety and security in terms of social behaviour and infrastructure are required
- 3. According to the findings, and stakeholder/community meetings the it was suggested to redesigns and organizing the children play area of the park to increase ITC's footfall
- 4. Interventions for engaging people for longer period needs to be addressed. As a result, interaction, and engagement of children with ITC's and natural environment would be promoted
- 5. Dedicated play area in the neighborhood/anchor institute for development of children gross motor skills and early childhood development
- 6. Things that enhance the experiential qualities of the space should be incorporated into the design, hence increasing the footfall.
- 7. Creating a sustainable and scalability model for the city, which can be replicable at any ward level in the city

# 18 Scope of Work

## 18.1 Scope of Works Required for the Implementation

### 18.1.1 Civil Works required at Area level: 300m radius

1. **Site cleaning** in CPZ- Hanuman Park and additional bitumen cleaning over the edge of the road where required – 1600sqm (0.16 Hectare).

#### 2. Hanuman Park Boundary wall

- B. **Cement Punning** for the CPZ Hanuman Park boundary wall
- C. Water Proofing cement Paint for Old work and new paint work for the park boundary wall
- D. Painting on **MS grill** over boundary wall 225 sqm

#### 3. Sidewalks

A. **Repairing of drains** in 300m radius of CPZ-Ashok Nagar, which includes plastering and maintaining adequate drain slope. – 1920 Sqm (total length including both sides are 1600m or 800m each side of the road.

B. Providing **Ferro cement drain covers** on the raised sidewalks over the repaired drains, where the drain covers is not existing. – 1600m or 960 Sqm

C. **PCC** 1:3:6 for sidewalks with 20 mm aggregate nominal size.

D. **Interlocking pavers blocks** with Kerbs stone at the edge and fixing of tactile tiles for construction of sidewalks having varied widths of 1.0m & 1.8m. in the length of 1600m or 1328 sqm (Tactile tile to be laid on 1.8m width of walkway only)

E. **Tactile Tiles** – 300mm Width for 1600m length on 1.8m wide sidewalk

F. **Kerbstone** – 250mm high kerb stone on 1.8m wide sidewalk up to length of 1600 m

#### 4. ITC Friendly Furniture

- a. Bench with bamboo and concrete finish
- b. The base of the bench would be in concrete finish with total number of 7 benches in Hanuman Park
- 5. **Polished stone** for steps, risers and ramps wherever appliable in and around hanuman park
- 6. **Neighbhourhood Exterior wall Painting** of required shade along the ITC destination walls and painting letters and figures of ECD messages in around the park
- 7. Thermoplastic layer for markings along the roads along the neighborhood roads
  - a. **Rumble strips** 7.5mm thk (in three layers of 2.5mm thk. Each) on 6 neighborhood junctions
  - b. Thermoplastic layer along the **road edge and directional markings** (2.5mm thk) 1636m length.

- c. **Zebra crossing** size of each strip is 3m x 0.5 m and thickness of 2.5mm at 6 Junctions
- Supply and fixing of retro- reflectorized signages and reflectors boards on main intersections, in the radius of 300m radius of CPZ, for traffic calming measures and road safety – 30 nos (60cm Equilateral Triangle & 60cm Circular).
- 9. Information board regarding park usage and description of child friendly elements in and around hanuman park. 4nos.
- 10. Bollards at major intersections (6nos on each junction).
- 11. MS Cycle stand total 12 nos. providing at the gates of Hanuman Park.
- 12. Supply and filling with locally available **river sand**.

Part – B (NON SOR Items).

- 13. Aerosol Spray Paint on the floor for way finders and floor games on the sidewalks and minor intersections for engaging young children.
- 14. Providing and fixing of **plastic dustbin** at major intersections 20nos.
- 15. EPDM flooring for dedicated children play area in CPZ Hanuman Park.

#### 18.1.2 Electrical Works

- 1. Provision of **wire** subs of 6.0 sqmm of 200m length for connection/changing of the non-function wire and lamps of the existing street light at neighbourhood.
- 2. Providing 20nos of LED light luminaire 60 Watts on bracket Pole. These are to be provided where lights are missing in the erected light poles in the CPZ neighbourhood.

#### 18.1.3 Horticulture Works

- 1. Supply and stacking of good earth along the boundary wall of CPZ Hanuman park of 216 cum
- 2. Preparation of Mound for children play area of varied size with area of 270 cum
- 3. Providing and fixing of various trees and shrubs Erythina Indica 30 nos.
- 4. Providing, fixing and maintain carpet grass over quantity of 360 sqm.
- 5. Supply the following plants at the hanuman park, which will be stacked by park Gardner:
  - a) Mimusops elengi (Maulsri) 30 nos.
  - b) Bauhinia blakeana (Arckid) 30 nos.
  - c) Foxtail Palm 30 nos.
  - d) Fishtail Palm 30 nos.
  - e) Gulmohar (Delonix regia) 30 nos.
  - f) Jacaranda mimosifolia (Neelli Gulmohar) 30 nos.
  - g) Shrubs and climnbers Tecoma Capensis 250 nos
  - h) Clerodendron inermiid 50 nos.
  - i) Hamelia patens (Firebush, Thal Kamal) 50 nos
  - j) Nerium oleander 50 nos.

# 19 BOQ- Quantities & Estimation

#### **ABSTRACT OF THE COST** NAME OF WORK: DEVELOPMENT OF ASHOK NAGAR NEIGHBHOURHOOD S.No. PARTICULARS **ESTIMATE COST** 1 **CIVIL WORKS** 67,05,243 2 ELECTRICAL WORKS 1,04,420 3 HORTICULTURE 7,79,106 Total Amount for Part 1, 2 & 3) in Rs. 75,88,769 Operation & Maintenance @ 10% of the Total Cost 4 83,47,646 Grand Total in Rs. 83,47,646

		UDAIPI	UR MU	NICIPAL CO	ORPORATIO	N				
			ABS	TRACT OF C	OST					
		Name of Work: -Rea	develo	opment wor	rks of Asho	ok Nagar	Roads			
S.No.	RUIDP SOR-2022	ITEM DESCRIPTION	No s	UNIT	Length (m)	Width (m)	Heig ht/ Dept h (m)	QTY	RATE	AM OUN T in Rs
1	2.3.1	Site Clearing 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	1600	2		0.32	38600	12,3 52
2.1	32.9	Hanuman Park Boundary Wall - Neat cement punning	-	Sqm	330	-	2.4	792.00	37	29,3 04
2.2	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	330	-	2.4	792.00	53	41,9 76
2.3	32.33.1	Finishing walls with water proofing cement paint of required shade : - New work (Two or more coats applied @ 3.84 kg/10 sqm).	-	Sqm	330	-	2.4	792.00	56	43,9 56
2.4	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	250	-	0.9	225.00	84	18,9 45

	1			1	1	•	1	r	1	
		On steel surface								
3.1	32.1.1	Sidewalk - Repairing Drain Cement plastering including T&P, scaffolding, material and complete labpour, including cost of water, curing, racking of joints etc. with 12 mm cement plaster of mix : - 1:4 (1 cement : 4 fine/ coarse sand)	-	Sqm	1600	1.2	-	1920.00	150	2,88, 000
3.2	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	1600	0.6	-	960.00	1520	14,5 9,20 0
3.3	11.1 & 11.1.2	Sidewalk & Hanuman Park- 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	1700	1.2	0.1	204.00	4535	9,25, 140

- 1411.00	855	12,0 6,40 5
		6,40
		5
- 480.00	2199	
		10,5
		5,52
		0
	480.00	480.00 2199

		<b>.</b>	r	1		1	1	1		
3.6	10.1	Sidewalk - Kerb Stone Providing and fixing precast cement concrete M-20 grade (Using mechanical Concrete Mixer) kerb stone top and bottom width 115 and 165 mm respectively, 250 mm high on 150 mm thick PCC M-10 grade foundation as per design, including fixing at site as per clause 408 of MoRT&H Specification including all material, labour, machinery,lighting,guardi ng and maintenance of diversion.	-	m	1600	-	-	-	254	4,06, 400
4.1	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	24	0.75	-	18.00	526	9,46 8
4.2	13.4 & 13.4.6	Bench - Concrete (seating) Providing, laying and compacting plain/ reinforced cement concrete of specified grade in foundation/ levelling course/ pile cap using concrete mixer and vibrater complete including cost of form work, as per drawing and technical specifications and as per clause 1100, 1500,1700,2100 of MoRT&H specification including all scaffolding material, labour, machinery	7	CUM	3	0.75	0.1	1.58	5990	9,43 4

	1		-	1	L	<b>L</b>	L			
4.3	13.4 & 13.4.7	Concrete Base Providing, laying and compacting plain/ reinforced cement concrete of specified grade in foundation/ levelling course/ pile cap using concrete mixer and vibrater complete including cost of form work, as per drawing and technical specifications and as per clause 1100, 1500, 1700, 2100 of MoRT&H specification including all scaffolding material, labour, machinery	21	cum	0.75	0.1	0.45	0.71	5990	4,24 5
4.4	13.4 & 13.4.6	Floor Conc. Providing, laying and compacting plain/ reinforced cement concrete of specified grade in foundation/ levelling course/ pile cap using concrete mixer and vibrater complete including cost of form work, as per drawing and technical specifications and as per clause 1100, 1500,1700,2100 of MoRT&H specification including all scaffolding material, labour, machinery	7	cum	4.5	2.25	0.1	7.09	5600	39,6 90
5	PWD BSR- 2019/11.3 9.3	20mm thick <b>polished</b> <b>stone for steps risers</b> , skirting, dados wall & pillars laid on 12 mm thick base of CM 1:3 & jointed with grey cement incl. rubbing & polishing Nimbahera Stone	-	Sqm	100	0.6	-	60.00	835	50,1 00
6.1	33.68 & 33.68.2	Exterior Wall of Neighbhourhood/ITC Destinations Finishing walls with textured exterior paint of required shade : Old work (One or more coats) applied @ 1.82 Itr/10 sqm		Sqm	250	-	2.1	525.00	100	52,2 38

					1	1		0	I	
6.2	10.7 & 10.7.1	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)	50 00	Cm. Height per letter	-	-		5000.00	2	7,75 0
7.1	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	1620	0.15		243.00	382	92,8 26
7.2	10.8	For edge line of the road on both sides and road markings 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.	-	Sqm	1636	0.15	-	245.40	383	93,9 88

		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.								
7.3	10.8	For Zebra Crossing at 6 Junctions 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	432	0.3		129.60	382	49,5 07
8.1	10.9.2	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 <b>75</b> 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 <b>60 cm equilateral triangle</b>	15	Each	-	-	-	15.00	2510	37,6 50

8.2	10.9.3	60 cm circular (material and fixing as above 10.9.2)	15	Each	-	-	-	15.00	3370	50,5 50
9	10.1	For Informative Boards - 4 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.	4	Each	1.5	0.75		4.50	9510	42,7 95
10	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.	10 8	Each				108.00	1723	1,86, 084

11	29.32	<b>Cycle Stand</b> 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	12	KG	-	-	-	200	88	17,6 20
12	4.12	Child Play Area in CPZ - Hanuman Park Filling with locally available river sand at all levels including watering ramming consolidating and dressing complete including cost of sand.	-	cum	28	5	0.6	84	966	81,1 44
		Total Amount of Part A								
										62,1 3,52 3
		PART B								
12	Non SoR Item	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	50	10	-	500.00	410	2,05, 000
13	Non SoR Item	Providing and fixing plastic dustbin of set (wet and dry) of min. 100 litre volume fixed with steel frame in good quality and specifications, complete in all respects and as per the direction of Engineer incharge.		Each	-	-	-	20.00	2500	50,0 00

14	Non SoR	EPDM FLOORING:-EPDM	 SQM	22	4	-	88.00	2690	
	Item	Providing and fixing							2,36,
		25mm thick Styrene							720
		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				1			
		by E-in-C and it should be							
		laid Concrete The glue							
		used should beof (1). PU							
		Binder, it's glue which							
		gives bonding to							
		Rubberand 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							
		Total Amount of Part B							
									4,91,
									720
		Grant total of Part A + Part							
		В							67,0
									5,24
				1		1	1	1	3

		UDAIPUR MUNICIPAL	CORPO	RATION								
	ABSTRACT OF COST Name of Work:- Redevelopment works of Ashok Nagar Roads (Electrical Works)											
Name												
S.No.	RUIDP SOR- 2022	ITEM DESCRIPTION	UNIT	QTY	RATE	AMOUNT in Rs						
		Part C - Electrical Work										
1	E040500 & E040502	Supply & drawing <b>Wiring</b> for sub mains as per PWD specification for electrical Works with ISI marked (IS:694), 1100 Volts grade PVC insulated flat twin core sheathed solid aluminium conductor with 10 SWG G.I. Support wire duly clipped including all as per pre-approved by Engineer in charge, making connections, as required. OEM Must have its own in house NABL lab setup for all testing facilities for wires. For additional technical parameters of products/ work refer Annexure "A" attached with this BSR . 6.0SQMM	М	200.00	56	11,200						

2       E181300 & E181304         2       E181300 & E181304         2       E181300 & E181304    ADC12 material with heat dissipation fins on housing with UV stabilization report submitted for UV cover ) and secondary lens on each LED & should be SMD type . The System level Luminaire efficacy >=120 Im/ wt with High Power LEDs is to be used and potted driver must be potted & has a unique BIS R number with Input Voltage AC 120 to 270 V AC with High voltage Cutoff @>=300 V AC and Auto resetting Safety, Input Frequency 50Hz±3% Power Factor >0.95 driver Efficiency >85%, THD(I) <10% Humidity 10% to 90% RH Working Temp -5C to 45C . driver current <1000mA shown in LM79 report. The luminaire shall be BIS certified and T.C. certified. Life Expectancy Equal or more than 50000 burning hrs with Minimum 70% lumen maintained, colour Rendering Index >70 and CCT 5700K+355K. Surge protection shall be min ≥ 4 KV internal and min 10 KV external. driver should be Phase to phase protection of 440 V for 4 Hrs. Manufactures Word Mark/ Name Engraved/ Embossing on die cast housing to allow traceability/authenticity. Fixture shall be AS PER	IOS	20.00	4661	93,220
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		•	•	
	IS 10322 Compliance.			
	LED Light fixture 60 Wat			
	Creation of Dout			
	Grant total of Part C			1,04,420
	<b>. .</b>			1,04,420

#### UDAIPUR MUNICIPAL CORPORATION

#### ABSTRACT COST FOR HORTICULTURE BOQ FOR ASHOK NAGAR AND HANUMAN PARK

#### Name of Work:-Redevelopment works of Ashok Nagar Roads

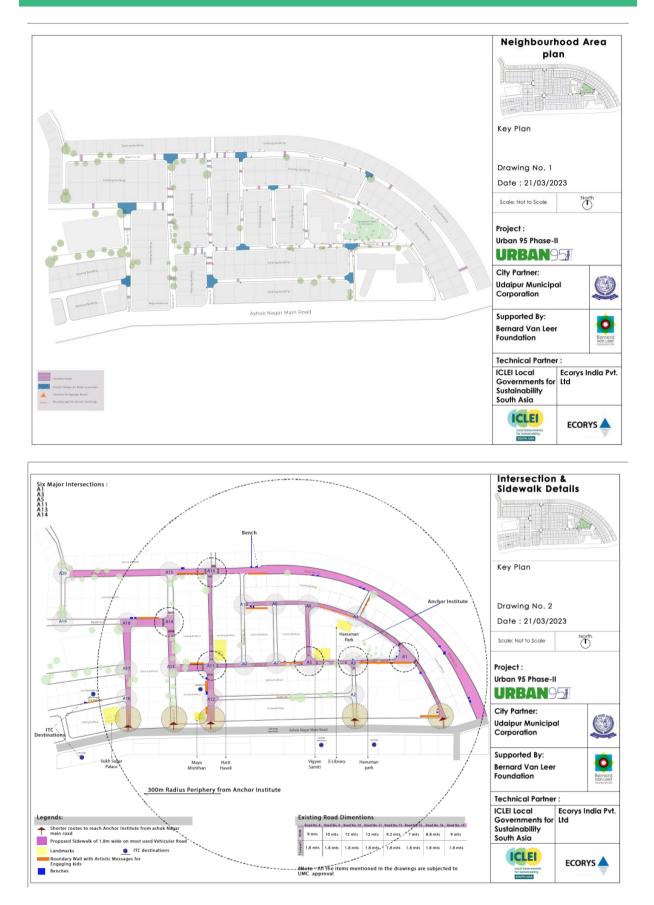
S.No.	RUIDP SOR- 2022	ITEM DESCRIPTION	No.s	UNIT	Length (m)	Width (m)	Height/ Depth (m)	QTY	RATE Rs	AMOUNT Rs
1	39.3	Along the Boundary wall of CPZ Park Supply & Stacking good earth at site complete including loading unloading & transporation etc	-	Cum.	200	1.2	0.9	216.00	206	44,496
2	39.2	Preparation of mounds of various size and shape by available excavated/surpl us/earth in layers not exceeding 20 cm in depth, breaking clods, watering of each layer, dressing etc.lead upto 50 meters and lift upto 1.5 m as per direction of officers in charge.	-	Cum.	30	12	0.75	270.00	239	64,530

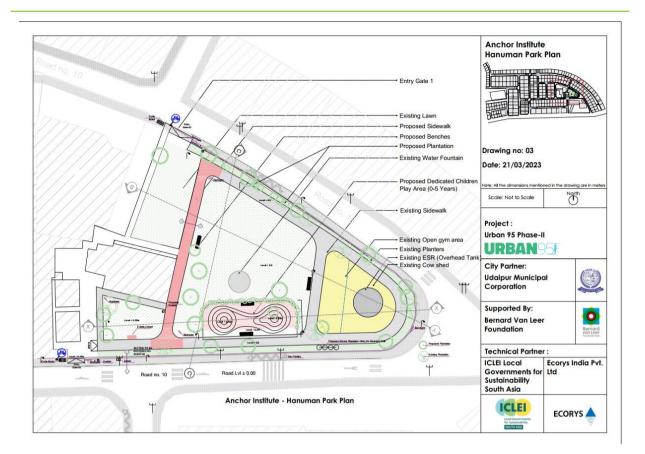
3	39.45.	Suuply & Fixing of	30	EACH	-	-	-	30.00	1990	
-	6	Tree								59,700
	-	The rate of the								,,
		following item								
		include for								
		supply of plants								
		as specified ,								
		transportation to								
		site, excavation								
		of pits as follows :								
		$-1.2 \times 1.2 \times 1.2 \text{ m}$								
		for trees								
		Supply and								
		planting								
		following species								
		best quality								
		container grown								
		healthy trees of 3								
		mt. min. height,								
		well established								
		& free from								
		disease at site in								
		1.20 m dia holes,								
		1.20 m deep dug								
		in the ground,								
		mixing the soil								
		with decayed								
		farm yard/sludge								
		manure,								
		backfilling the								
		hole watering								
		etc as required								
		Avenue Trees -								
		Erythina indica								
4	39.13.	Suuply & Fixing	-	Sqm	30	12	-	360.00	928	
	1	Lawn								3,34,080
		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								

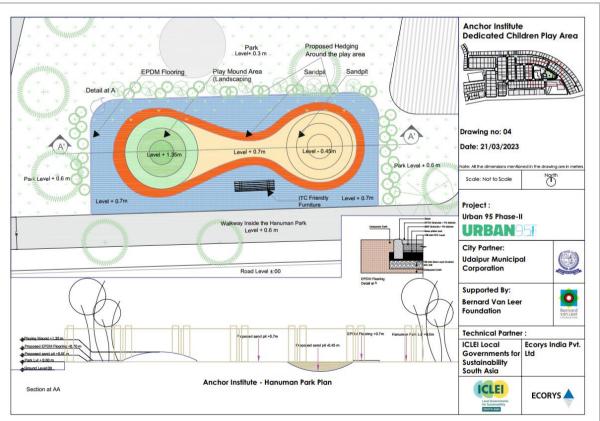
		•	-		-					
		fit for moving including supplying good earth if needed.(The good earth shall be paid separately) - In rows 5 cm apart in either direction (in median area)								
5.1	10314	<b>Supply -</b> Mimusops elengi (Maulsri)	30	EACH	-	-	-	30.00	120	3,600
5.2	39.45. 5	Bauhinia blakeana (Arckid)	30	EACH	-	-	-	30.00	1230	36,900
5.3	PWD- SOR- 2017/1 0210	Foxtail Palm	30	EACH	-	-	-	30.00	1100	33,000
5.4	PWD- SOR- 2017/1 0209	Fishtail Palm	30	EACH	-	-	-	30.00	300	9,000
5.5	39.44. 2	Gulmohar(Deloni x regia)	30	EACH	-	-	-	30.00	997	29,910
5.6	39.44. 4	Jacaranda mimosifolia (Neelli Gulmohar)	30	EACH	-	-	-	30.00	828	24,840
5.7	39.42. 2	Shrubs , Climbers & Specimen Plants The rate of the following item include for supply of plants as specified , transportation to site , excavation of pits as follows : - 0.6 x 0.6 x 1.0 m	250	EACH	-	-	-	250.00	396	99,000

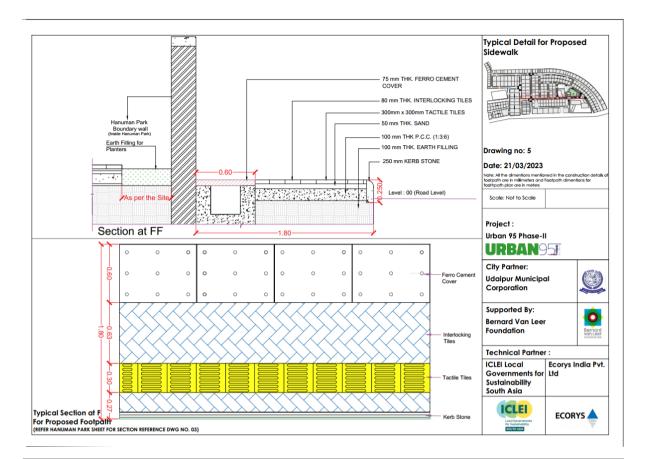
5.8	39.42.	for large shrubs & planters Supply and planting following in poly bags / earthen pots well branched, well established & free from disease of 900 mm min. height plants at site in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, backfilling the hole watering etc as required - The canopies of shrubs should touch each other at the time of installation <b>Medium Size</b> <b>Shrubs - Tecoma</b> <b>capensis</b>	50	EACH				50.00	396	
5.8	39.42. 3	inermii	50	EACH	-	-	-	50.00	396	19,800
5.9	39.42. 5	Hamelia patens ( Firebush, Thal Kamal)	50	EACH	-	-	-	50.00	365	18,250
6	PWD- SOR- 2017/1 0393	Nerium oleander	50	EACH	-	-	-	50.00	40	2,000
		Total Amount								7,79,106

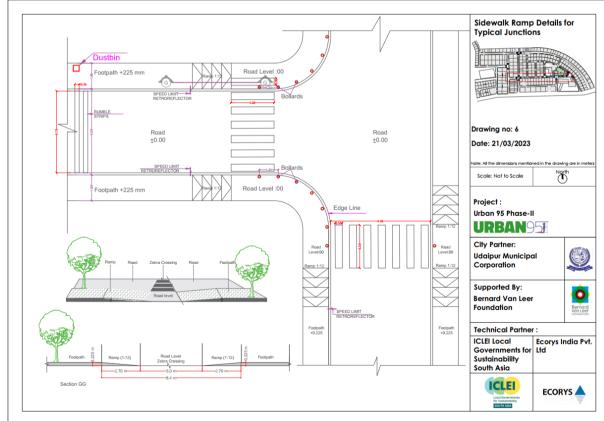
# 20 Detail Drawings

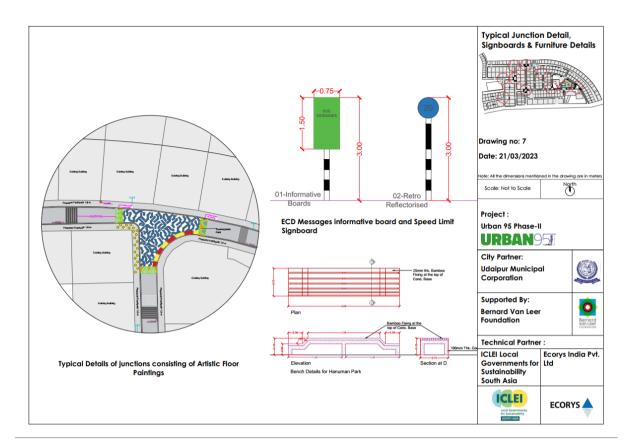


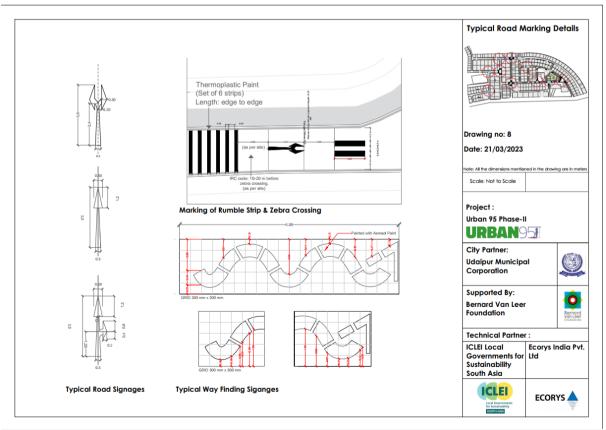












### Annexure -01 for Post Impact Assessment Survey

## बच्चों के साथ पार्क आये केयरगिवर्स के साथ सर्वे प्रपत्र

S/n	A. सामान्य
1	मोहल्ले नाम:
2	वार्ड नंबर:
3	पार्क का नाम:

S/n	B. पार्क अथवा गार	ईन सम्बंधित	
1	आपके घर से पार्क आ कितना समय लगता है		5 मिनट से कम <b>b) 5-10</b> मिनट c) 10-15 मिनट d) 15-20 मिनट e) 20-30 मिनट f) 30 मिनट से अधिक
2	आमतौर पर आप हफ्ते	ने में कितनी बार	पार्क या खेल मैदान आते हैं ?
3	आमतौर पर आप पार्क ?	<sup>5</sup> कब आते हैं	
	आमतौर पर वे पार्क	सोमवार से शुक्रवार शनिवार-	5 मिनट से कम b) 5-10 मिनट c) 10-15 मिनट d) 15-20 मिनट e) 20-30 मिनट f) 30 मिनट से अधिक 5 मिनट से कम b) 5-10 मिनट c) 10-15 मिनट d) 15-20 मिनट
4	में बच्चे कितना समय बिताते हैं?	रविवार या अवकाश के दिन	e) 20-30 मिनट f) 30 मिनट से अधिक
5	क्या आप घर से पार्क तक पैदल चल कर जाते हैं ?	हाँ	नहीं
6	यदि हाँ, तो आप घर से रास्ते के अनुभव को क चाहेंगे ? (1-बहुत बेकार, 2- बेव साधारण 4- अच्छा 5	या रेटिंग देना नर <b>3 –</b>	6
7	हाल ही में पार्क के आ में कुछ नवाचार किये आपको लगता है कि इ रास्ते के अनुभव में सुध	गए हैं. क्या इस से आपके	अनुभव सम्बन्धी चर्चा के बिंदु: 1. बच्चों की जिज्ञासा और उनकी रूचि में बदलाव 2. पार्क तक आने के लिए पैदल चलने के दौरान अनुभव 3. पार्क तक आने के लिए वाहन से यात्रा के दौरान अनुभव 4. अन्य

	यदि हा हो विस्तार से व	बताएं.							
8	अगर आप पार्क तक व हैं तो इन नवाचारों के पैदल आना पसंद करें	बाद क्या आप	अनुभव सम्बन्धी चर्चा के बिंदु: (वो क्या तत्व हैं जो उन्हें पैदल या साइकिल पर आने को प्रेरित करते हैं)						
		फुटपाथ नहीं	फुटपा	ग आधा अधूरा है	पर	पर्याप्त सफाई नहीं			
		ट्राफिक बहुत ज्यादा	चोरी/ डर	लूटपाट का	आवारा मवेशी	ट्रा	फेक बहुत	ज्यादा	
9	यदि नहीं तो क्या कारण है ?	लगातार चलने वाली निर्माण सम्बन्धी गतिविधियाँ	प्रदूषण	। (कोई खास !	प्रकार का- बताएं )	अ	य -		
		कामकाजी है, इतना वक़्त नहीं मिलता	आराम	/आसानी रहत	ता है				
10	घर से पार्क आते समय चलने के दौरान सुरक्षा रखते हुए कृपया 1-5 दीजिये. (1-बहुत बेकार, 2- बेका	को ध्यान में के बीच रेटिंग	5 Excell ent	4 Good	3 Satisfa ctory	2 poor	1 Very Poor	Reason for selection	
	4- अच्छा 5- बेहतर ) जब आप घर से पार्क	तक आते हैं. तो	्यनः	। धत सम्बर	 भी चर्चा के बिं	<u> </u> दि:			
11	रास्ते में चलने के दौरा साथ क्या करते हैं?		<ul> <li>उनके साथ बातचीत, कहानी सुनाना</li> <li>आसपास के रंग/ चित्र/वस्तुओं पर आधारित बातचीत</li> <li>कुछ नहीं- चलने पर ध्यान केन्द्रित/ बच्चे के साथ ज्यादा बातचीत नहीं करते</li> </ul>						
12	क्या पुराने अनुभवों और हाल ही में हुए नवाचार के बाद इसमें कोई बदलाव आया है ? यदि हाँ, तो किस प्रकार का, कृपया बताएं.								
13	बच्चे/ बच्चों के साथ नियमित रूप से जुड़ना और खेलना क्यों महत्वपूर्ण है ?								
		ᠴᡶ᠋ᡜ᠂᠋ᡥ᠇᠂᠇ᠴ᠇᠆᠇	<del>- 11 - 11 - 1</del>	चिग नगर	ᡨᠬᡰ᠊ᡱ᠂				
14	क्या किसी प्रकार का कोई और सुझाव, जो हमारे लिए उपयोगी है ?								