



# JAJPUR AREA-BASED DEVELOPMENT (ABD) PROJECT

KUSUMA ROAD: CULTIVATING SUSTAINABLE GROWTH & CULTURAL

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## 1. INTRODUCTION

The town of Jajpur, situated in the Jajpur district, Odisha, stands as a testament to a rich and diverse artistic heritage. Over the course of history, Jajpur's art, culture, and landscape have intertwined, giving rise to a remarkable tapestry of civilization. Recognizing the significance of this cultural legacy, the Jajpur Area-Based Development (ABD) Project preserves and promotes the town's heritage while fostering sustainable growth.

The ABD project, encompassing Kusuma Road from Collectorate Chhak to Kusuma Chhak, has been selected as the demonstration area. This area has been experiencing rapid growth and serves as a crucial hub within Jajpur City. It's central location with prominent landmarks such as Kusuma Pond, Indoor Hockey Stadium, the proposed City Centre, and Prashasan Bhawan makes it an ideal focal point for showcasing the effectiveness of strategic interventions. This report outlines the objectives, interventions, and proposed strategic initiatives undertaken within the chosen ABD area – Kusuma Road.



Map 1: Site Context – Kusuma Road and its surroundings  
Source: UN-Habitat



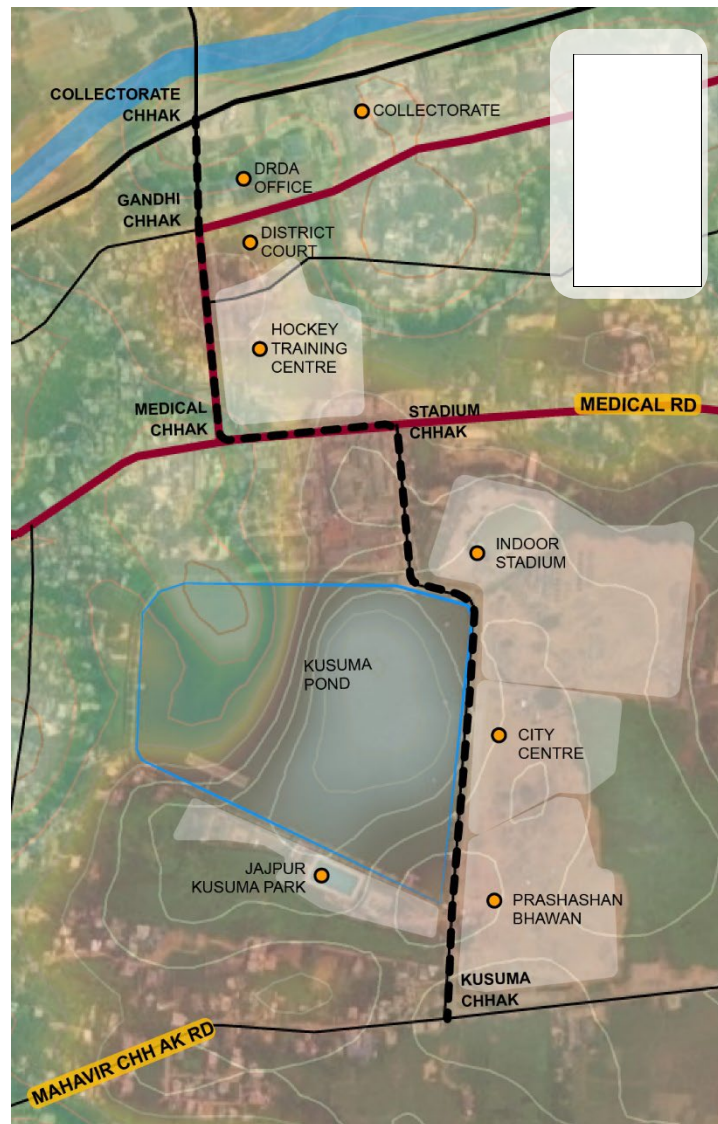
Figure 1: Kusuma Road  
Source: UN-Habitat

## 1.1. SITE CONTEXT

Kusuma Road serves as a pivotal transportation corridor within the city, seamlessly extending from SH56. With approximately 1.28 kilometers, this thoroughfare connects Collectorate Chhak to Kusuma Chhak. Initially, it functions as a State Highway for the first 300 meters before assuming the role of an entrance gateway to Kusuma Pond. Kusuma Road exhibits a wide range of right-of-way (ROW), from 7 meters to 20 meters.

In the middle of the administrative and commercial hub with the presence of District Court, Indoor Stadium, Kusuma Pond and City Centre, the road attracts a substantial number of visitors and consequently contributes to the heavy flow of private vehicle traffic.

In terms of topography, the road displays a visible downhill inclination towards the south, gradually transitioning into a depression. The elevation remains relatively consistent from Collectorate Chhak to Medical Chhak, with intermittent depressions observed near Gandhi Chhak. However, there is a notable decrease in elevation from 20 meters at Medical Chhak to 14 meters at Kusuma Chhak.



Map 2: Site Contour Map  
Source: UN-Habitat

## 1.2. EXISTING CONDITIONS

As evident, Kusuma Road serves as a significant corridor within the city. Most of the institutional and administrative uses in the city are concentrated within a radius of 1km of this road, leading to a higher traffic movement. Understanding the current state of Kusuma Road is essential in formulating effective strategies for its enhancement. The detailed analysis of the existing condition of Kusuma Road is as follows:



Figure 2: Drone shot of Kusuma Road near Medical Chhak  
Source: Google Earth

ST.	ROW	CHARACTERISTICS OF THE AREA
A-A'	<b>Range:</b> 9m – 18m <b>Length:</b> 130m	The corridor overlaps with SH 56 Inequitable distribution of road space Mixed Traffic:
A'-B	<b>Range:</b> 18m – 15m <b>Length:</b> 250m	<ul style="list-style-type: none"> <li>o Vehicular movement (passer-by)</li> <li>o High Demand Area – Hockey Training Centre   Administrative Buildings</li> </ul> No pedestrian facility is present
B-C	<b>Range:</b> 12m – 18m <b>Length:</b> 155m	Regional Level Activities – District Hospital High Parking Demand Autorickshaw Movement – Parking and Pick-up & drop-off No pedestrian facility is present
C-D	<b>Range:</b> 7m – 10m <b>Length:</b> 200m	High Parking Demand Areas – Entry to Kusuma Pond, District Hospital No pedestrian facility is present
D-E	<b>Range:</b> 20m <b>Length:</b> 550m	No shaded area near Kusuma Pond for public Demand for more public spaces No pedestrian facility is present No architectural character of the area



Map 3: Zoomed in view of the Site diving it into stretches  
 Source: UN-Habitat

Overall, the following issues are crucial to create a more equitable, safe, and accessible environment on Kusuma Road.

**a) Inequitable Distribution of Road Space:**

The existing conditions of Kusuma Road indicate an inequitable distribution of road space. The varying right-of-way measurements, ranging from 7 meters to 20 meters, suggest an uneven allocation of space for different road users. This disparity can lead to congestion, inadequate space for pedestrians, and limited opportunities for alternative modes of transportation. Additionally, the varied RoW along Kusuma Road contributes to bottlenecks and traffic congestion, further leading to delays and reduced vehicle/ pedestrian capacity.



Figure 3: Existing Street section highlighting inequitable distribution  
 Source: UN-Habitat

**b) Lack of Safety and Accessibility:**

The road's current state raises concerns about safety and accessibility. Inadequate pedestrian facilities, such as sidewalks and crosswalks, can pose risks to pedestrians, particularly in areas with heavy traffic flow. The absence of proper accessibility measures, such as ramps for people with disabilities, further exacerbates the issue, hindering inclusive mobility.

**c) High Parking Demand:**

Kusuma Road experiences high parking demand due to its role as an economic hub and its proximity to popular attractions, such as the Kusuma Pond and District Hospital. The existing street parking situation is characterized by disorganization, leading to further congestion, obstruction of traffic flow, and inconvenience for both motorists and pedestrians.



Figure 4: High parking demand near District Hospital  
Source: UN-Habitat

**d) Lack of Place Identity:**

Kusuma Road, despite its significance as a transit corridor and economic center, lacks a distinctive place identity. The absence of architectural features, public art, or unique urban design elements fails to create a sense of place, diminishing the overall attractiveness and character of the area.

**e) Need for Utility Infrastructure Upgradation:**

The existing utility infrastructure along Kusuma Road may require upgrading to meet the growing demands of the area. Adequate provisions for underground utilities are crucial to support the diverse amenities and services housed along Kusuma Road.



Figure 5: Overhead Electrical Wiring along Kusuma Road  
Source: UN-Habitat

## 2. DESIGN FRAMEWORK

As part of the redesign strategy, Kusuma Road is envisioned to create a transformative urban space that embodies connectivity, livability, and sustainability. It will be a vibrant corridor that harmoniously integrates various modes of transportation, prioritizes safety and accessibility, embraces green infrastructure, and fosters a sense of place identity. Kusuma Road will serve as a model for innovative urban design, enhancing the quality of life for residents and visitors while promoting sustainable and inclusive growth. The overarching objective of Kusuma Road will be:

- **Multi-Modal Integration:** Design Kusuma Road to accommodate multiple modes of transportation, such as pedestrians, cyclists, public transit, and private vehicles.
- **Safety and Accessibility:** Prioritize incorporate inclusive design elements to ensure accessibility for all users.
- **Sustainable Design:** Promote energy efficiency, use environmentally friendly materials, and minimize the road's environmental impact.
- **Place Identity and Aesthetics:** Create a distinct sense of place and identity for Kusuma Road that celebrates the local heritage and creates a visually appealing streetscape.
- **Flexibility and Future Growth:** Design Kusuma Road with flexibility in mind to accommodate future growth and changing needs.
- **Low Maintenance Design:** Strike a balance between cost-effective design and the long-term performance and safety of the road to achieve a successful design outcome.

### 2.1. DESIGN PRINCIPLES

Realizing a streetscape design for transforming Kusuma Road into a more efficient, safe, and aesthetically pleasing thoroughfare, enhancing the overall experience for motorists, pedestrians, and the surrounding community, will require the following four (4) principles. These principles will help shape the future of Kusuma Road by bringing together an array of transportation services, amenities, and urban design enhancements that encourage economic development.



#### 1. REALLOCATION OF RIGHT OF WAY



#### 2. GEOMETRIC RECONFIGURATION



#### 3. COMPREHENSIVE PARKING MANAGEMENT



#### 4. PUBLIC PLAZAS



#### 5. GREEN BOULEVARD

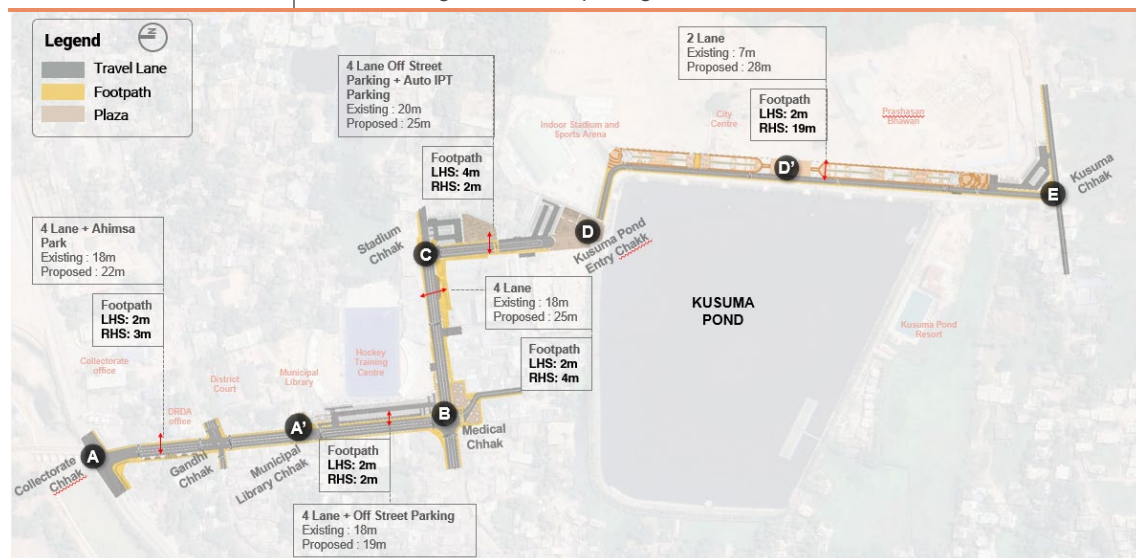
### 3. DETAILED DESIGN STRATEGIES

#### 3.1. PRINCIPLE 1: REALLOCATION OF RIGHT OF WAY

The principle optimizes the utilization of Right of Way to provide equal space for movement and safe access to all users, including pedestrians, cyclists, and vehicles. The objective is to ensure that the street design provide an inclusive environment for all social groups of ages and abilities. That implies considering technical aspects to make the roads more inclusive (tactile walking indicators, ramps and curb cuts, accessible pedestrian signals, etc.) and functional aspects (more vegetation to reduce noise and urban heat island, more child-friendly spaces close to social facilities, etc.). Public toilets (male, female, and universally accessible gender-neutral toilets), nursing rooms, and drinking water amenities are also included in the new design.

#### Proposed Interventions:

COMPONENT	INTERVENTIONS
<b>1. FOOTPATH</b>	
<p><b>A-A'</b>: 2m on one side &amp; 5m on the other side</p> <p><b>A'-B</b>: 2m on both sides</p> <p><b>B-C</b>: 2m on one side &amp; 5-8m on the other side</p> <p><b>C-D</b>: 2m on both sides</p> <p><b>D-E</b>: 2m on one side &amp; 16m on the other side</p>	<ul style="list-style-type: none"> <li>• Providing a minimum of 2m wide sidewalks with high quality porous pavers that are durable for pedestrian traffic while allowing water to absorb &amp; recharge the groundwater</li> <li>• Shade trees with 50-foot spacing</li> <li>• Protective bollards at crosswalks</li> <li>• Pedestrian scale lighting with common theme</li> <li>• Themed street signage including informational and directional signage</li> <li>• Pedestrian 'bulb-outs' at intersection and mid-block pedestrian crossings</li> <li>• Corner crossing design for handicapped accessibility</li> <li>• Family of themed site furnishings: pedestrian lights, benches, trash cans, planters, etc.</li> </ul>
<b>2. TRAVEL LANES</b>	
<p><b>A-D</b>: 4 lanes divided with a 1m wide median</p> <p><b>D-E</b>: Pedestrian-only Street with 2 lanes for the movement of emergency vehicles</p>	<ul style="list-style-type: none"> <li>• Modify the existing lane widths to 3 m to have a positive impact on street safety without impacting traffic operations</li> <li>• Markings indicate lane divisions and speed limits and provide direction arrows for through traffic</li> <li>• Stop lines marked typically 20 cm or wider, placed at least 1.5 m back from the pedestrian crossing</li> <li>• Retroreflective markings or flashing lights to enhance crossing visibility at night</li> <li>• Speed controls with a maximum speed limit of 35 km/h</li> <li>• 1m wide raised center median with native trees in the median to add shade and character to the streets</li> <li>• Street lights at 30m spacing</li> </ul>



Map 4: Proposed reallocation of Right of Way  
 Source: UN-Habitat



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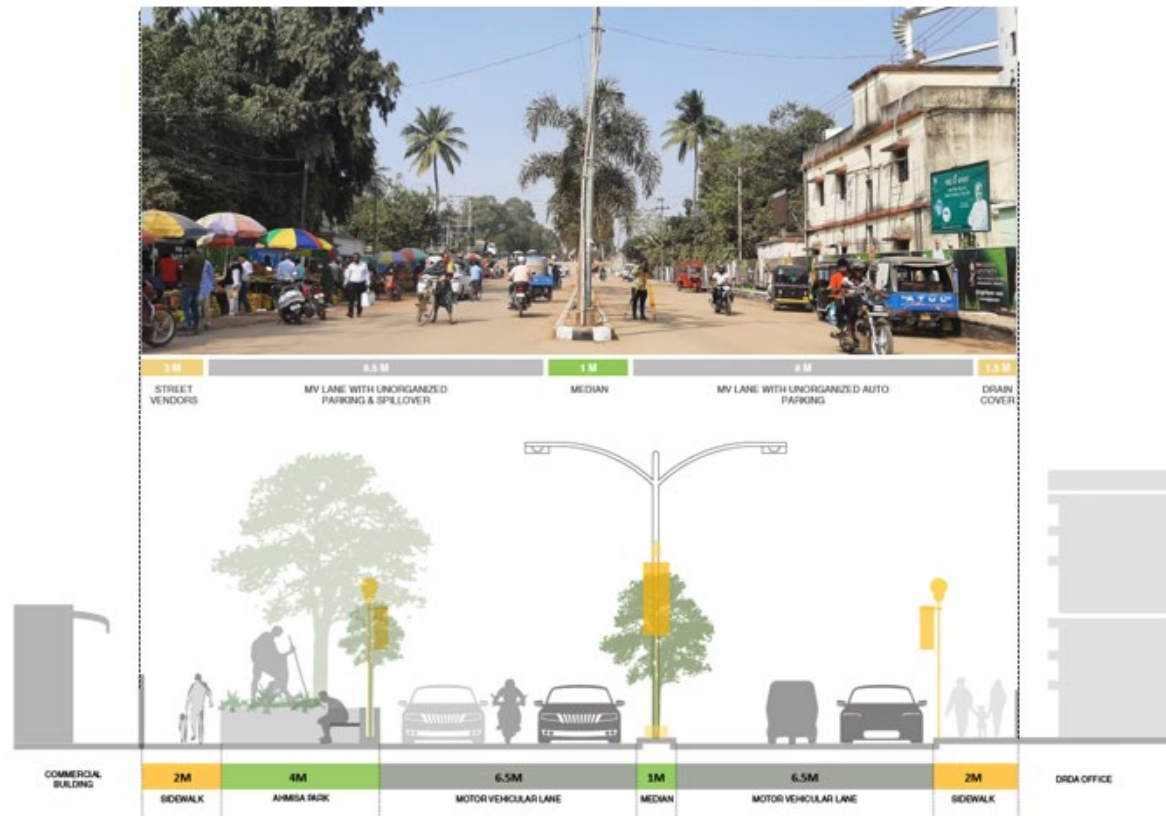


Figure 6: Existing (Above) & Proposed (Below) Street Section for A-A': Collectorate Chhak – Municipal Library  
 Source: UN-Habitat



Figure 7: Existing (Above) & Proposed (Below) Street Section for A'-B': Municipal Library – Medical Chhak  
 Source: UN-Habitat

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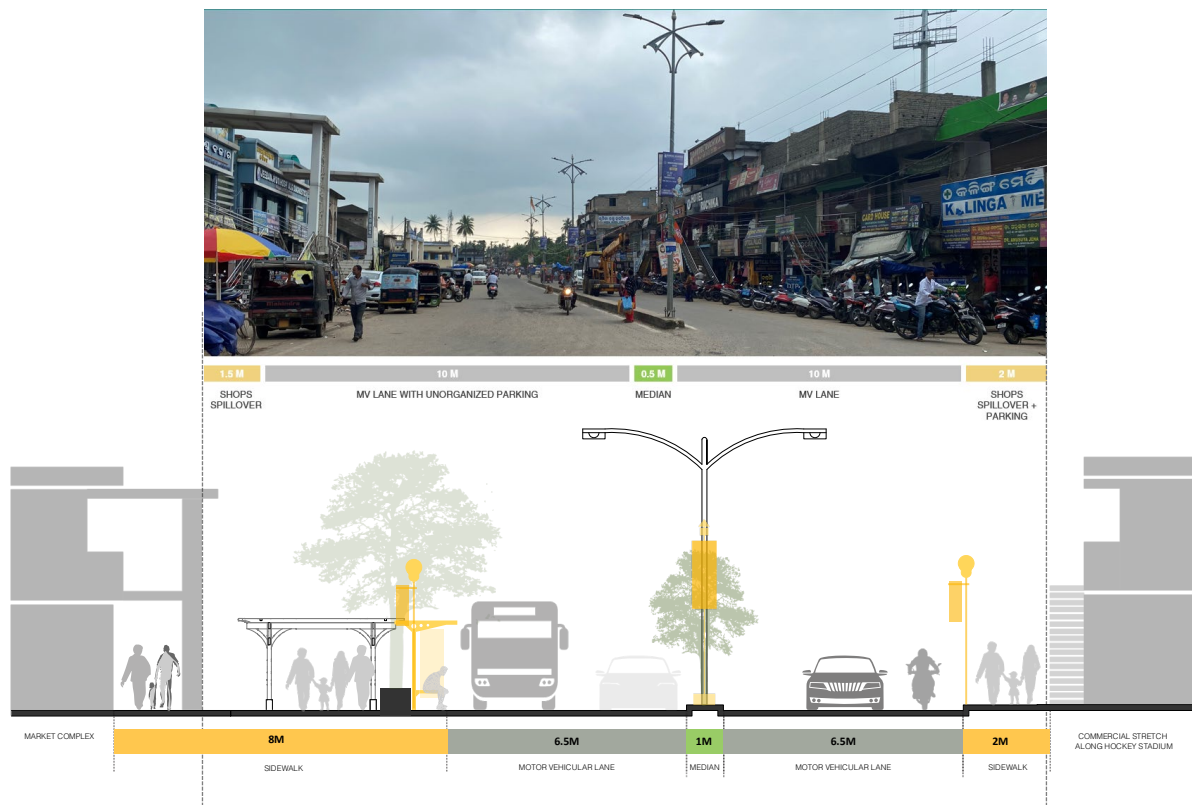


Figure 8: Existing (Above) & Proposed (Below) Street Section for B-C: Medical Chhak – Stadium Chhak  
 Source: UN-Habitat



Figure 9: Existing (Above) & Proposed (Below) Street Section for A'-B: Municipal Library – Medical Chhak  
 Source: UN-Habitat

### 3.2. PRINCIPLE 2: GEOMETRIC RECONFIGURATION

There are two major junctions along Kusuma Road – Gandhi Chhak and Medical Chhak and it is imperative to re-evaluate the design of intersections to enhance their safety and functionality. The principle focuses on designing the intersection such that it improves visibility, have clear delineation of crossing points, and incorporates efficient traffic management techniques. The redesign of intersections along Kusuma Road also aligns with the broader vision of creating a street network that prioritizes safety, accessibility, and user experience. Through thoughtful and well-executed design, the intersections are transformed from critical points into vibrant spaces that enhance the overall livability and attractiveness of the area.

Apart from Intersection improvements, to enhance pedestrian crossings and ensure a safer environment for pedestrians, the implementation of crosswalks and table top mid-block crossings has also been proposed.

**Proposed Interventions:**

COMPONENT	INTERVENTIONS
<b>GANDHI CHHAK</b>	<ul style="list-style-type: none"> <li>• Simplified the geometry of the complex intersections to increase legibility, uniformity, and safety such that the opposite legs of the intersection have improved sight lines and visibility.</li> <li>• Aligned the streets to meet a 90-degree angle as much as possible.</li> <li>• Maintain view corridors and sight lines for legibility and wayfinding.</li> <li>• Retained the existing RoW for the road to Kianali Chhak.</li> <li>• Extended the median and reduced the turning radius to 3M-6M at the turns to create compact intersection</li> <li>• Added pedestrian crossings closer to the intersection to enable pedestrians to cross in a shorter time</li> <li>• Added pedestrian ramps and refuge areas at crossings</li> <li>• Transitioned into a signalized intersection with optimized timing based on the traffic flow</li> </ul>
<b>MEDICAL CHHAK</b>	<ul style="list-style-type: none"> <li>• Introduced a roundabout (13m wide) with a raised island and art installation which enhance the traffic calming effect and beautify the street.</li> <li>• Minimized intersection size by adding curb extensions and plazas</li> <li>• Reorganized the existing roads with equal MV lanes on each side of 14M</li> <li>• Maintained the entry to the district hospital with a plaza space to curb the traffic</li> <li>• Reconfigured it into a signalized intersection for safe move movement with optimized timing based on the traffic flow</li> <li>• Added pedestrian crossings closer to the intersection to enable pedestrians to cross in a shorter time</li> <li>• Added pedestrian ramps and refuge areas at crossings</li> </ul>

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Figure 10: Existing (Left) & Proposed (Right) safe intersection design for Gandhi Chhak  
 Source: UN-Habitat



Figure 11: Existing (Left) & Proposed (Right) safe intersection design for Medical Chhak  
 Source: UN-Habitat

### 3.3. PRINCIPLE 3: COMPREHENSIVE PARKING MANAGEMENT

The predominant presence of district hospital, shopping and commercial centers with high parking demands has resulted in congestion and hindered the smooth flow of traffic along the main roads. Additionally, the upcoming services, such as the proposed Stadium, City Centre, and Prashashan Bhawan along the stretch, will lead to an increased demand for parking facilities. To address the growing demand and address the pressing need for organized parking, a comprehensive parking management strategy has been proposed. This strategy aims to provide off-street parking facilities capable of accommodating a significant number of vehicles. The proposed parking strategy considers four off-street parking facilities strategically placed along the stretch.

Furthermore, the availability of appropriate parking spaces for auto-rickshaws, taxis, and other intermediate public transport (IPT) vehicles is essential to support the efficient and organized operation of these services. Recognizing the significance of IPT in providing first and last-mile connectivity and reducing vehicular congestion, the detailed design for Kusuma Road includes dedicated parking spaces for these modes of transportation as well.

#### Proposed Interventions:

COMPONENT	PARKING	INTERVENTIONS
NEAR HOCKEY STADIUM	2W: 110 4W: 72 AUTO: 28	<b>Stormwater Management:</b> The parking areas are designed to incorporate sustainable stormwater management practices. Techniques such as permeable paving and bio-retention basins are employed to capture and treat stormwater runoff, reducing the strain on the local drainage system and minimizing the risk of water pollution.
STADIUM CHHAK	2W: 77 4W: 81 AUTO: 20	<b>Energy Efficiency:</b> Energy-efficient lighting fixtures, such as LED technology and solar powered lights are used to illuminate the parking areas, reducing energy consumption and greenhouse gas emissions. <b>Bicycle Parking and Electric Vehicle Charging:</b> To encourage sustainable modes of transportation, dedicated bicycle parking facilities and electric vehicle charging stations are integrated into the parking areas.
PRASHASAN BHAWAN	2W: 22 4W: 38 AUTO: 08	<b>Wayfinding and Signage:</b> Clear and effective wayfinding signage is implemented within the parking areas to guide users efficiently to available parking spaces. <b>Landscaping and Green Space:</b> The design of the parking areas includes the incorporation of green spaces and shaded trees to improve microclimate conditions, and provide a pleasant environment for users. <b>Accessibility and Universal Design:</b> The parking areas are designed to ensure accessibility though ramps and universal design principles are met, promoting inclusivity and equal access for all.



Figure 12: Parking Area near Hockey Stadium  
 Source: UN-Habitat



Figure 13: Parking Area near Stadium Chhak  
 Source: UN-Habitat

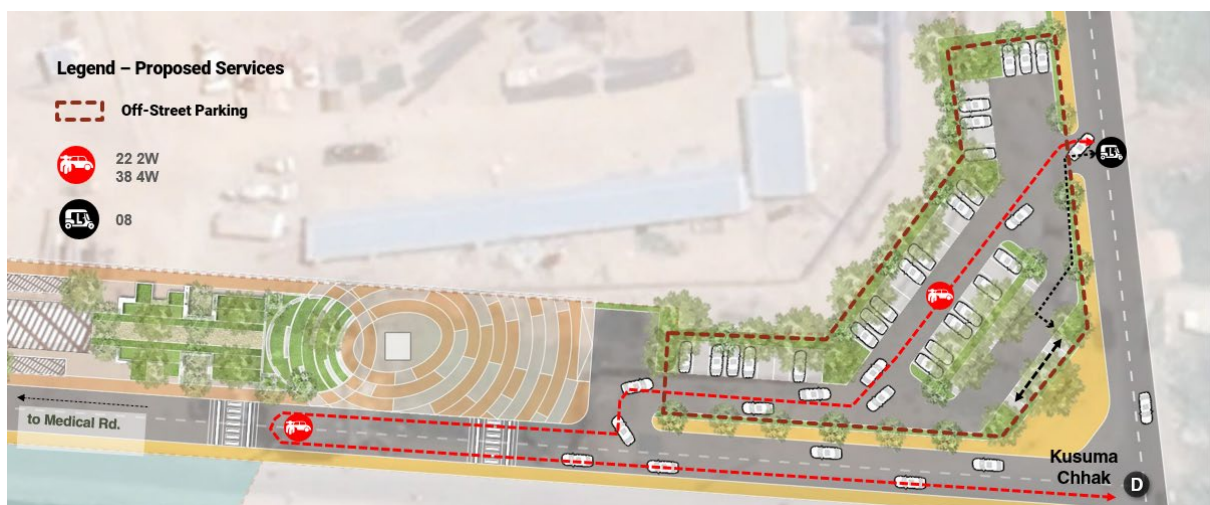


Figure 14: Parking Area near Prashasan Bhawan  
 Source: UN-Habitat

### 3.4. PRINCIPLE 4: PUBLIC PLAZAS

Kusuma Road serves as a vital transit corridor within the city, experiencing high volumes of pedestrian and vehicular traffic. The introduction of public plazas along Kusuma Road addresses the need for dedicated public spaces where residents and visitors can gather, relax, and engage in various activities. Further, public plazas contribute to the creation of a unique sense of place and identity for Kusuma Road. By incorporating distinctive design elements, cultural references, and local artwork, these plazas become focal points that celebrate the history, heritage, and character of the surrounding area. There are three plazas proposed at Kusuma Road addressing the need for inclusive, accessible, and vibrant public spaces that enhance the overall urban experience.

#### DESIGN INTERVENTIONS

Overall, the design of the public plazas at Kusuma Road aims to create visually appealing, functional, and culturally significant spaces. These designs consider the local context, heritage, and community needs to provide attractive gathering places that enhance the overall experience for residents and visitors alike. The proposed design interventions for public plazas include:

- **Design for Accessibility:** The public plazas are designed to be accessible to people of all ages and abilities. Provision of ramps, handrails, and smooth pathways to facilitate easy movement and inclusivity have been considered in the design.
- **Landscape Design:** The design creates a visually pleasing environment by incorporating greenery, trees, and well-maintained green areas. Use of native plants and sustainable landscaping have been adopted to promote biodiversity and reduce water consumption.
- **Seating and Gathering Spaces:** Ample seating areas in the plazas have been encouraged for social interaction and relaxation. Elements like benches, green mounds, and shaded areas have been added to accommodate different preferences and activities.
- **Art and Sculptures:** The design brings together the artistic elements such as sculptures, statues, and installations that reflect the local culture, history, and identity of Jajpur. These art pieces serve as focal points and enhance the aesthetic appeal of the plazas.
- **Vendor Spaces:** Designated spaces for street vendors within the plazas have been considered. Vendor pavilions are designed that are aesthetically pleasing and provide functional amenities for vendors. This helps in creating a vibrant and organized street vending experience.
- **Public Facilities:** Parking & public plazas include public amenities such as restrooms, drinking water fountains, and waste disposal facilities to enhance the convenience and comfort of plaza visitors.
- **Lighting and Safety:** Special focus on lighting in the plazas has been considered to enhance safety and security, especially during evening hours. The lights also utilize energy-efficient lighting solutions that create a welcoming ambiance while minimizing energy consumption.
- **Environmental Sustainability:** The plazas integrate sustainable design practices, such as using recycled materials, incorporating rainwater harvesting systems, and utilizing renewable energy sources for lighting or water features.

### AHMISA PARK

The plaza is envisioned as a linear park along Kusuma Road, serving as a tranquil green space that provides a buffer from the traffic lanes. The focal point of the park is a statue of Mahatma Gandhi, placed on a pedestal at a circular vantage point. Surrounding the statue, seating areas with stone benches are planned, providing visitors with a place to rest and reflect. Additionally, smaller green spaces within Ahmisa Park will feature four sculptures related to Mahatma Gandhi, symbolizing his principles and contributions - Charka (spinning wheel), Glasses, Salt, and Rupee Note.



Figure 15: Proposed Design for Ahimsa Park  
Source: UN-Habitat

### TUSSAR PARK:

The place aims to become a significant city marker for Jajpur, celebrating the region's identity and historical heritage. The park will showcase the renowned Gopalpur tussar, a fabric with a Geographical Indication (GI) tag. Through sculptures and artwork, Tussar Park will offer a glimpse into the artistic process and the machines used in the production of tussar fabric, highlighting the craftsmanship and cultural significance of the industry.



Figure 16: Proposed Design for Tussar Park  
Source: UN-Habitat



**KUSUMA POND ENTRY PLAZA:**

The Kusuma Pond Entry Plaza is designed to create a welcoming and visually appealing entrance to the popular Kusuma Pond. Drawing inspiration from the traditional Ikkat pattern, the floor pattern at the entry plaza will feature a design that showcases the rich heritage of the region. The plaza also includes vendor pavilions with a uniform design that will provide a designated space for vendors, ensuring a cohesive and organized street vending experience. Furthermore, the seating area around the plaza will be integrated into the design, strategically placed around trees to provide shade and a comfortable resting place for visitors.



Figure 17: Proposed Design for Kusuma Pond Entry Plaza  
Source: UN-Habitat

### 3.5. PRINCIPLE 5: GREEN BOULEVARD

The concept of the Green Boulevard at Kusuma Road is centered around sustainable and low-carbon development, incorporating elements of green infrastructure, landscape design, and the integration of both active and passive spaces. The design strategies for the Green Boulevard align with these concepts and aim to create a resilient and environmentally-friendly public space.

Overall guiding strategies for the Green Boulevard include:

- **Low Carbon Development:** The concept of low carbon development takes a proactive approach by prioritizing climate considerations alongside development planning. It recognizes the urgent need to reduce greenhouse gas emissions and mitigate the impacts of climate change while promoting sustainable and inclusive development. This concept rethinks traditional development practices and seeks to integrate climate action into various aspects of infrastructure, policy, and spatial planning. The design strategies in the design include:
  - Energy-efficient Lighting along the boulevard, such as LED lights, to minimize energy consumption and reduce carbon emissions.
  - Solar Panels on rooftops on vendor kiosks within the boulevard to harness renewable energy and reduce reliance on traditional power sources.
- **Sponges and Green Infrastructure:** The concept of Sponges refers to the integration of natural and man-made elements that help absorb, store, and manage excess water in urban areas. It aims to address the challenges of urbanization, such as flooding and water scarcity, by mimicking the functions of natural ecosystems and creating resilient, water-sensitive cities. Design elements included in the Green Boulevard along Kusuma Road includes:
  - **Rainwater Harvesting:** Incorporate rainwater harvesting systems along the boulevard to capture and store rainwater for irrigation purposes, reducing the reliance on municipal water supply.
  - **Permeable Pavement:** Utilize permeable pavement materials that allow rainwater infiltration into the ground, reducing stormwater runoff and supporting groundwater recharge.
  - **Bioswales:** Integrating bioswales as the central element of the Green Boulevard to capture and filter stormwater runoff. These vegetated areas help slow down water flow, remove pollutants, and recharge groundwater aquifers.
- **Landscape Design:** One of the essential components of the Green Boulevard is its landscape planning that focuses on creating functional, aesthetically pleasing, and sustainable outdoor spaces. It involves the thoughtful arrangement and design of natural elements, such as plants, trees, water features, and hardscapes, to enhance the visual appeal, ecological value, and functionality of an area. The design includes:
  - **Native Plant Selection:** Native plant species to promote biodiversity, improve resilience to local climatic conditions, and reduce water consumption.
  - **Tree Canopy:** A well-distributed tree canopy along the boulevard to provide shade, improve air quality, and create a pleasant and inviting atmosphere.
  - **Green Open Spaces:** Ample green open spaces with grass, shrubs, and flowers, providing opportunities for relaxation, recreation, and social interaction.
- **Active and Passive Spaces:** The Green Boulevard strikes a balance between active and passive spaces to cater to the diverse needs and preferences of the community. The Boulevard provides opportunities for active engagement and passive relaxation, allowing individuals to choose the type of space that aligns with their desired activities and moods. The design includes:

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- **Active Spaces:** Walking and cycling paths, outdoor fitness equipment, and sports facilities, to encourage physical activity and a healthy lifestyle.
- **Passive Spaces:** Seating areas, quiet gardens, and meditation zones, that offer opportunities for relaxation, contemplation, and stress relief.

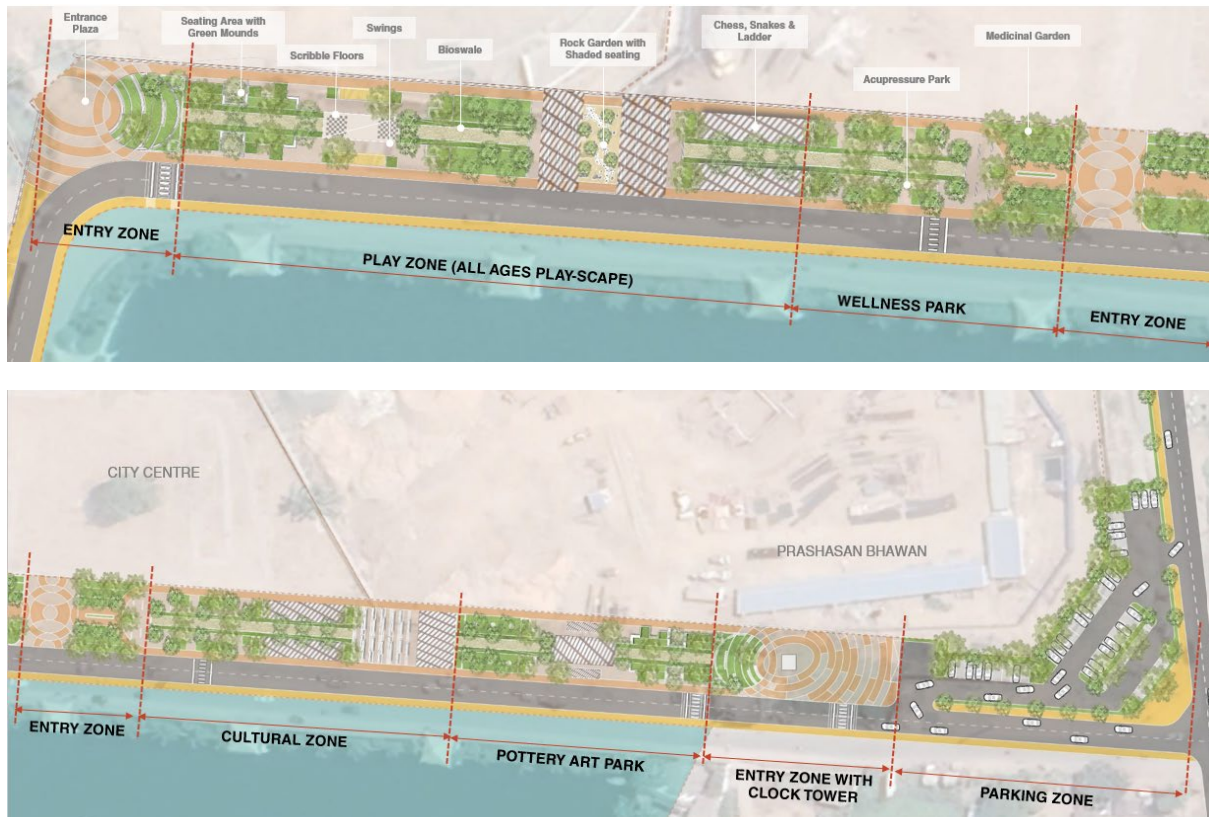


Figure 18: Master Plan for the proposed design for Green Boulevard (Top image: Part plan from Indoor Hockey Stadium to City Centre & Bottom Image: City Centre to Prashasan Bhawan)  
 Source: UN-Habitat



Figure 19: Proposed top view showcasing area between Indoor Hockey Stadium to City Centre  
 Source: UN-Habitat

## DESIGN INTERVENTIONS

The Green Boulevard design aims to create a vibrant and multi-functional space that caters to various age groups and interests. It combines elements of nature, play, wellness, culture, and art, providing an inclusive and engaging environment for the community to enjoy and connect with. The entire area is divided into zones, following are the design details:

### 1. Entry Zone

The Green Boulevard's entrance plaza, located in front of the Indoor Hockey Stadium, sets the tone for a welcoming and engaging experience for visitors. The design of the plaza focuses on creating a vibrant and inviting gathering space that seamlessly integrates with the surrounding landscape. The plaza features stepped seating, which not only provides functional seating areas but also acts as a focal point for social interaction and community gatherings. The stepped design allows for flexible seating arrangements and can accommodate a large number of people, creating a dynamic and lively atmosphere. In addition to the seating area, a special pavement design can be employed has been created to highlight the entrance plaza and create a seamless transition with the footpath. The material palette and patterns for the plaza not only enhance the aesthetics but also guide visitors toward the entrance.



*Figure 20: Proposed view of Entrance Plaza*  
Source: UN-Habitat

## 2. Play Zone (All Ages Play-scape)

Following the entrance plaza, Green Boulevard features a Play Zone that offers a diverse range of recreational activities for people of all ages. This Play Zone provides opportunities for active play, exercise, and relaxation in a natural and engaging environment.

One of the key components of the Play Zone is the outdoor gym, providing a dedicated space for exercise and fitness. The gym is equipped with a range of fitness equipment, allowing visitors to have a healthy and active lifestyle while enjoying the green surroundings. Adjacent to the outdoor gym, green mounds are incorporated, creating a visually appealing landscape while providing seating areas for relaxation and socializing. These mounds offer a unique experience, allowing visitors to enjoy the natural environment from different vantage points and interact with others.

A designated play area for kids is included within the Play Zone, featuring age-appropriate equipment and structures. This area is designed with safety in mind, offering a secure and stimulating environment for children to climb, slide, swing, and explore. It encourages imaginative play and physical development, fostering a sense of joy and adventure. To nurture creativity, a scribble wall is incorporated, providing a space for artistic expression. Visitors, especially children, can freely draw, write, and leave their creative marks on the wall, adding a touch of personalization to the Play Zone.

For younger visitors, sand pits are included to ensure a safe and enjoyable play experience. These sand pits provide opportunities for sensory play, building sandcastles, and engaging in cooperative play with peers. Careful attention is given to maintaining cleanliness and safety within the sand play area. In addition, a rock garden is integrated into the Play Zone, offering a tranquil space with an array of natural rock formations. The rock garden serves as both a visual attraction and a place for relaxation, providing shaded seating areas where visitors can unwind, read, or simply enjoy the peaceful ambiance.

The zone ends with chess and snakes & ladder boards that are built into the flooring, allowing visitors to engage in friendly games and strategic challenges. These interactive game elements provide opportunities for intellectual stimulation and social interaction among visitors of all ages.



Figure 21: Proposed view of children play Area  
Source: UN-Habitat

### 3. Wellness Zone

Following the Play Zone, the Green Boulevard features a serene Wellness Zone, designed to promote mental well-being and provide a tranquil escape from the bustling urban environment. This zone offers various elements that contribute to relaxation, rejuvenation, and a connection with nature. One of the key features of the Wellness Zone is the acupuncture walkway. The walkway is designed with soft and smooth river rocks or cobblestones, strategically placed to stimulate pressure points on the soles of the feet. Walking on this acupuncture path can provide therapeutic benefits, such as improved blood circulation, stress relief, and overall wellness. Visitors can enjoy a leisurely stroll along the walkway, experiencing the healing effects of reflexology.

Adjacent to the acupuncture walkway, a Medicinal and Herb Garden is incorporated, showcasing a diverse range of plant species known for their therapeutic properties. The garden features indigenous medicinal plants and herbs of the region, carefully selected for their ecological significance and healing properties. Informational tags are placed alongside each plant, giving visitors knowledge about their traditional uses, health benefits, and cultural significance.

The herbal garden leads to the entry plaza that sets the tone for the entrance to the City Center, creating a welcoming experience for visitors. One of the key design elements that enhances the aesthetics and ambiance of the plaza is the special paving pattern. The pavers are strategically laid out to direct visitors' attention towards key focal points or to create a sense of movement and flow throughout the space.

### 4. Cultural Zone

The cultural zone, an extension of the herbal garden and acupuncture park, is a dedicated space that celebrates the rich cultural heritage of the region. It provides an immersive experience for visitors to engage with various forms of art, tradition, and local craftsmanship. One of the key elements within this zone is the acupuncture walkway, which offers a unique sensory experience while promoting wellness and relaxation.

Alongside the acupuncture walkway, a gallery is incorporated within the cultural zone. The gallery serves as a platform to showcase local artwork, traditional crafts, and cultural artifacts. It provides an opportunity for artists and artisans to exhibit their creations and for visitors to appreciate and learn about the region's artistic expressions. The gallery within the cultural zone can feature diverse art forms, such as paintings, sculptures, ceramics, textiles, and more. It can be designed with flexible display spaces to accommodate rotating exhibitions, allowing for a dynamic and evolving showcase of local talent. The cultural zone with its acupuncture walkway and gallery creates a harmonious blend of wellness, cultural exploration, and artistic appreciation.



Figure 22: Proposed view of Wellness Zone  
Source: UN-Habitat

## 5. Pottery Art Park & Exit Plaza

Adjacent to the cultural zone, the Green Boulevard features a dedicated Pottery Art Park and Sculpture Garden, offering visitors a unique and immersive experience with art and craftsmanship.

The Pottery Art Park is a vibrant space where visitors can witness the art of pottery firsthand. It provides a platform for local potters to showcase their skills and engage with the community. The zone can feature pottery workshops, demonstration areas, and display spaces where visitors can observe the pottery-making process and even try their hand at creating their own pottery pieces.

Complementing the Pottery Art Park is the sculpture garden, an outdoor space adorned with captivating sculptures. The garden showcases a diverse range of sculptures, highlighting various artistic styles and themes. Visitors can stroll through the garden, appreciating the craftsmanship and creativity of the sculptures while immersing themselves in a serene and visually stimulating environment. The sculptures can be made from various materials, such as stone, metal, or wood, adding texture and depth to the artistic landscape.

As visitors reach the end of Green Boulevard, they are welcomed by the exit plaza, which serves as a transition space from the boulevard to the surrounding area. At the heart of the exit plaza stands a landmark clock tower, serving as a visual axis and a focal point for orientation. The clock tower not only provides the functional purpose of displaying the time but also adds a touch of architectural beauty and significance to the plaza. It becomes a memorable landmark that visitors can identify and associate with the Green Boulevard and the overall cityscape.



Figure 23: Proposed view of Pottery Art Park & Clock Tower  
Source: UN-Habitat

## 4. MATERIAL TOOLKIT