Portfolio
selected works | 2012-2019
Pranshul Dangwal
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<th>Professional work</th>
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<td>03 residential Skyscraper, New Delhi fifth year Architectural Thesis</td>
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<td>02 S.L.M.G. Beverages Campus, Lucknow</td>
<td>04 revival of Chowk Bazaar, Bhopal fourth year Urban Design studio</td>
<td>06 Waterfront Redevelopment ISOLA Landscape Trophy, 2016</td>
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I.I.T. GANDHINAGAR
RESEARCH PARK & SPORTS AREA

Area: 400 acres
Type: Professional | Institutional
Duration: January 2017-Ongoing

Role: I have been singlehandedly working on this project since the time I joined SJA Consultants, after constant reviews and discussions with Mr. Yogesh Kapoor (Principal Architect- MSYK Design) and Mr. Saket Jain (Partner- SJA Consultants). I have been involved in designing, coordination, creating working and presentation drawings, 3D models, estimates. I specifically handled Research Park (93.74 acres) and Sports Area (33.15 acres). All the data used in the portfolio has been solely made by me.

Project architect: Mr. Saket Jain (mail@sjaconsultants.com)

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Research Park

- Area: 93.74 acres; includes Ravines, Roads, Amphitheatre, Entrance Court.

Sports Area

- Area: 33.15 acres; includes Ravines, Roads, Sports Field.

The project showcases the Landscape design for the open spaces (non parcel building areas) at IIT Gandhinagar campus. The Landscape design was an integral part of the campus Master Plan, integrating the buildings and features of the campus together and establishing a planned system of open spaces and vegetation that responds to the existing landscape qualities of the site. Landscape is often a neglected element in large institutional projects, but at IIT GN a conscious decision was made to use the landscape as a central unifying element.

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01 Hydrology
Identifying the natural drainage through Site and hence protecting the Ravines for an interrupted flow of water throughout the year. High Flood Level +65.

02 Buildable Land
Buildable Land is identified at least 4-5mt. above HFL i.e at Level +70. Additional 5mt. setback is taken so as to prevent any sinking, thus providing a safety margin for stability of buildings.

03 Buildable Area
Possible Buildable Areas are identified that would provide maximum Ground Coverage. The smaller parcels are identified for Services.

04 Ravine Engineering
Ravines are stabilised through slopes of 1:2 and 1:3 and provision of check dams at every 1m drop in gradient and Planting in ravine bed to impede flow of water and allow siltation.

05 Plots Formation
Final Plots are a combination of Green Area and Buildable Area. They are laid with due access from the Road with Right of Way of 16m. Drainage network along Roads and Plots are worked to send the final discharge towards Ravine.

06 Services
Provision of drainage chutes at 90m interval along slopes are also given.

- Electrical Trench (below Pathway, along Road)
- Fresh Water Line
01 Entry Point 1
The main gate complex is designed as a landmark when seen from the highway. It extends over a length of 50 m and is set from the main road by 20 m to provide for visitors parking and waiting spaces.

02 Amphitheatre
Amphitheatre has been designed for multiple purposes - events, performances, street plays, and cultural events. Designed as a garden with trees within the Amphitheatre itself, as well as grass strips between each row of seats, making the space ideal for morning walks.

03 Water Gates
The Inflow and Outflow Points are provided with Water Gates so as to facilitate free flow of water to Sabarmati River through natural track (Ravines). Constructed out of RCC Columns and M.S. Grill, they are sturdy against the strong currents of river.

04 Check Dams
Constructed out of stone boulders, check dams at regular interval in Ravines would facilitate the Recreational zones by tapping the rainwater flowing through Ravines. These artificial small lakes would further help in rejuvenating the groundwater table.

05 Right of way
It consists of a 7m wide Tremix Carriage-way, 2m wide pedestrian pathway, drains and green areas to plant shrubs and trees for avenue effect. A conscious effort is taken to design roads on areas of cut (rather fill) to maintain the stability.

Legend
- 7m wide Carriage-way
- Reclaimed plateau at +70.0
- Buildable Land within 5m safety setback on plateau +70.0
- Stabilised Grass in slope (1:2, 1:3)
- Ravine
- Stone Pitching
- Pathways
- Gabion walls
- Green belt
Legend
- Entrance Arcade (Buildable Area)
- Gardens/ Lawns
- Stabilised Grass in slope/ Mounds (1:4)
- Pathways
- Water Body

Plan - Entrance Court

Elevation

Planting
Native shrubs pruned as 2'-6" high hedge adds visual delight. A mix of Flowering trees and non-flowering trees adds beauty and softens the hard-scape of Buildings. More trees like Ficus infectoria, Acacia nilotica, Butea monosperma add aesthetics and are native to the site.

View
Overall view of Entrance arcade from Approach Road

Plan
Typical Layout of Column for Entrance arcade

View
A conscious effort has been taken to maintain the axis for Arcade and Landscape feature for a visual effect.
S.L.M.G. BEVERAGES CAMPUS
LUCKNOW, UTTAR PRADESH

Area: 23.12 acres
Type: Professional | Industrial
Duration: January 2019-April 2019
Role: I have been singlehandedly working on this project directly under Mr. Sachin Jain (Partner- SJA Consultants). I have been involved in designing, creating presentation and working drawings for the same. All the renders, plans, sections and their corresponding details has been made by me. The tree and shrub species were worked after diligent research and discussion with the Principal Architect.

Project architect: Mr. Sachin Jain (mail@sjacconsultants.com)

Existing Features
Area: 13.09 acres; includes Buildings and road.

Scope of work
Area: 10.03 acres; includes Parking for trucks, Charbagh, Amphitheatre, redesigning Entry Gate, Planting in Green patches.

The project showcases the Landscape design for the open spaces (non parcel building areas) at SLMG Beverages campus, Lucknow. The Landscape design was a challenge since site is located in the Industrial Area, so special care had to be taken to select plant species that are native yet sturdy to survive harsh conditions.
**AMPHITHEATRE SECTIONS**

**01 Material Plan**
- 40mm thick Red Sandstone Paving
- 40mm thick Dholpur Stone Paving
- 40mm thick Kota Stone Paving (Bands/ Shrub edging)
- 10mm thick Handmade Porcelain Tiles
- 60mm thick Shot-blasted Concrete Pavers (Dark Grey)
- 60mm thick Shot-blasted Concrete Pavers (Light Grey)
- 60mm thick Shot-blasted Concrete Pavers (Red)

**02 Lighting Plan**
- Post Top Light @10-15m c/c (Pathways)
- Uplighters (Planters/ below Trees)
- Step Lights @3m c/c (Amphitheatre)
- Under Water Light (Water Bodies)

**Legend (for sections)**
- 40mm thick Red Sandstone Paving
- 20mm thick Red Sandstone Cladding
- RCC work

**Shrubs**
Native shrubs pruned as 2’-6” high hedge acts as screen, that could **survive the harsh conditions** of Industrial Area and add aesthetics to the Amphitheatre.

**Detail 1**
Paving pattern for Tread

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<tr>
<th>115</th>
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<th>75</th>
<th>230</th>
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<tr>
<td>100</td>
<td>300</td>
<td>75</td>
<td>90</td>
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**Detail 2**
- 100mm thick PCC (1:2:4) - below Paving
- 100mm thick PCC (1:4:8) - for Footing
- 230/345mm thick Sub-surface Brickwork
- 75mm thick Hardcore

**Section A**
- Stage
- Pathway
- Seat
- Seat
- Seat
- Seat
- Planter

**Section B**
- Planter
- Pathway
- Steps
- Steps
- Steps
- Stage
- Pathway
- Steps
- Steps
- Steps
- Pathway
- Planter

- N.G.L.
- +800
- +650
- +350
- +1250
- +1550
- +1850

- 0 0.5 1.0 2.0M
- 0 0.1 0.2M

- 420
- 300
- 75 75 90 49 49
- 115
- 100
- 345
- 420
Palm

Sturdy and Native Palm Trees that could survive the harsh conditions of Industrial Area, thereby providing aesthetics.

Section C

Legend

- 40mm thick Stone Paving
- 20mm thick Dholpur Stone Bench
- 20mm thick Kota Stone Cladding
- 100mm thick PCC (1:2:4) - below Paving
- 100mm thick PCC (1:4:8) - for Footering
- RCC work
- 230/345mm thick Sub-surface Brickwork
- 75mm thick Hardcore

01 Large Trees
Dense and evergreen species are used so as to provide shade and act as partition between Carriage-way and Charbagh.

02 Medium-sized Trees
Ever-green species of Flowering nature to add aesthetics and maintain the visual connectivity with other Landscape features in Charbagh.

03 Small Trees
Flowering Trees to add colour, fragrance and vibrancy in areas for social gathering.
RESIDENTIAL SKYSCRAPER, NEW DELHI
FIFTH YEAR ARCHITECTURAL THESIS

Area: 14.11 acres
Type: Academic | Individual work
Duration: IX Semester, July 2016-November 2016
Guide: Dr. Jagdish Singh (jagdishsingh@gmail.com)

Observations
High acoustic zone near Entry due to the presence of a Metro Station and a Primary Road connecting the site. Dense plantation is suggested to mitigate the effects of Acoustics.

Scope of work
Area: 15 acres allotted under official Master Plan of Delhi 2021 for the construction of a High-rise Residential Building under the Transit Oriented development.

Disintegrating Form
Core
Inner Facade: Curtain Wall
Floor Plates
Combined Structural System
Mega-columns & Core
Outer Skin

Legend
1. Entry/ Exit
2. Shopping centre
3. EWS Housing
4. Tower 1
5. Tower 2
6. Primary school
7. Play Courts
8. Reflecting Pool
9. Swimming Pool
10. Playground
11. Community Green
12. 'Tetris' Park
13. Green Belt
14. Swing Area
15. Four-wheeler Parking
16. Two-wheeler Parking
17. Bus Parking
18. Park

Site Area: 14.11 acres (57912 SQM.)
FAR: 3  Total Built-up of Site: 173736 SQM.
EWS Provision (15% of FAR): 26060.6 SQM.
Setback: 15m (Frontage) & 9m (remaining sides)
Number of Dwelling Units: Tower 1: 418, Tower 2: 396
**Entry Foyer**
Floor Plate - 50mx50m
Includes Reception, Community Hall, Play Area, Security Room, Offices

**Amenity Area**
Floor Plate - 50mx50m
Includes Club House, Gym, Yoga and Meditation studio, Tennis Courts

**Type 1 (Studio Apartments)**
Floor Plate - 50mx50m
No. of Floors: 8
No. of dwelling Units: 16/Floor

**Type 2**
Floor Plate - 45mx45m
No. of Floors: 10
No. of dwelling Units: 8/Floor

**Type 3**
Floor Plate - 40mx40m
No. of Floors: 10
No. of dwelling Units: 6/Floor

**Type 4**
Floor Plate - 35mx35m
No. of Floors: 20
No. of dwelling Units: 4/Floor

**Type 5**
Floor Plate - 25mx25m
No. of Floors: 10
No. of dwelling Units: 3/Floor

**Type 6**
Floor Plate - 20mx20m
No. of Floors: 20
No. of dwelling Units: 2/Floor

**Legend**
- Central Core
- Entry Foyer
- Amenity Floor (2nd Floor), Refuge Area & Sky Lobby
- Service Floor
- Parking
- Type 1 (Studio Apartments)
- Type 2 (2BHK & 3BHK)
- Type 3 (2BHK & 3BHK)
- Type 4 (4BHK)
- Type 5 (3BHK & 4BHK)
- Type 6 (2BHK & 3BHK)

**Floor to Floor Height**
- Entry Foyer - 7600mm
- Amenity Floor - 3900mm
- Habitable Floors - 3900mm
- Service Floor - 4000mm
- Sky Lobby - 3000mm
- Basement - 3200mm

**Paved Area**
Inter-speared with Grass

**Section 1**
Landscape Section through 'Tetris' Park

**Section 2**
Typical Section through Tower 1

**Details**
Tower 1
350M
0 10 20 40M
Tower 2
317M
REVIVAL OF CHOWK BAZAAR, BHOPAL
FOURTH YEAR URBAN DESIGN STUDIO

Area: 2 acres (approx.)
Type: Academic | Individual work
Duration: VIII Semester, January 2016-April 2016
Guide: Dr. Krishna K Dhole (kkdhole@gmail.com)

The aim of the exercise was to efficiently manage the issues at site and fulfilling the basic needs. Improve pedestrian experience. Design interventions to decongest the area and accommodate hawkers who form an important part of the urban scenario. To enhance the visual experience where the rich built heritage features become more prominent. To revive the tangible and intangible heritage which give identity to communities and conserves the authenticity of their neighbourhoods and enhance the value of culture. To encourage functionality and legibility of street and to ensure that the sense of formal sector is maintained while maintaining the informality inherent and associated with the site.

01 Hawkers
They are an integral part of the space selling fruits, vegetables, decorative items, etc. They form informal segment with no proper infrastructure.

02 Eateries
At night, the Central Area between the Jama Masjid and the Jain Temple gets transformed into a food junction. Lack of infrastructure adds to the problem.

03 Electrical & Metal
Famous for Hardware, the main problem associated includes Parking for loading and unloading of goods.

04 Jewellers
The precinct around Jama Masjid is a famous hub for jewellery manufacture and retail. Problems include inaccessible pathways, encroachment and lack of adaptability with time.

05 Textile
Owing to Chowk Bazaar being a hub for Textiles, it experiences a high footfall of people. This high density of Traffic and Parking becomes an issue.

06 Residential
Chowk Bazaar follows an interesting Mixed Land Use Pattern with the Ground Floor acting as Commercial units and Upper floors as Storage/Residential units. Utter disregard to heritage structure can be seen.
The Buildings need a facade treatment to maintain the harmony with traditional architectural features. Introduction of Terrace garden to increase green cover has been suggested.

**Micro Level Design**

- Chandani terraces with traditional parapets
- Daalan verandas facing the courtyard
- Jaalis perforated, ornamental stone panels

**Central Area**

The area has been redesigned with a mix of Sitting Spaces and Formal spaces for both Hawkers and Food Vendors.

**Strategy**

To form pockets where consumers can come and interact with hawkers without hindering the general circulation.

**Masjid Precinct**

The encroachments done by the shopkeepers on the road are taken away and the illegal extension hence restored as portico streets.

**Evolution of Street Buildings:** The buildings are designed in the form of light well so as to allow the day light to reach the ground in streets and provide ventilation.

**Proposed Street Section**

Public open spaces have been refurbished with the existing built environment to promote a good recreational space in the market.

**Existing Vehicular movement**

The extensive use of traditional features give a harmonious setting. These pockets can serve as a space for informal meetings, learning, celebration and eateries.
PAHAL: A MASSIVE SMALL CHANGE
UNIVERSITY OF WESTMINSTER 2016 | TOP 5
Citation: Community awareness and participation
Area: 0.30 acres (approx.)
Type: Competition | Team of 4
Duration: August 2015-January 2016
Role: My role in the team involved managing and co-ordinating with different stakeholders and government officials to pitch ideas. A lot of Research, regular site visit to analyze, study, and document human porosity and effects of natural aspects on site and subsequently producing necessary drawings and views. The final design solution is a collaborative effort of our team.

The fate of Shahpura Lake hangs delicately between its identity as an oxidation pond (as suggested by BMC officials) and an overly polluted lake which caters to more than 1,200 lacs people. No matter what it is identified as, the water level has degraded to a state where it has both direct and indirect impact on human health.

To make matter worse it is surrounded by disused public spaces with untapped potential. The site in particular, Moonwalk, is a linear patch infamous among people owing to gender insensitivity and anti-social activities taking place due to dark until pathway.

The aim was to create a public space through community participation thus spreading awareness and invoking a sense of belongingness.

A Entrance Court
B Bridge (3m x 51m)
C Central Area (20m x 18m)
D 3m wide Pathway

A Entrance Court
Issues of litter, lack of focal interest to draw crowd, old paint peeling off.

B Bridge
Used as a view point to appreciate beauty of lake, the area needed sun shades and cleaning.

C Central Area
Informal sitting on railings due to absence of benches. Has potential to become a gathering space.

D Pathway
Unkempt, no benches, lack of shades to protect from sun and rain.

01 Documentation
- Character, Nature of the site
- Activities
- Intra Space Problem
- Inter Space Context

02 Planning
- Zoning
- Developing relation between surrounding and activities
- Triangulation (psychology)
- Rectification and finalization

03 Psychology
- Learning by observing
- Basic pattern of sun
- Maintaining the local character

04 Stakeholders
- Capital Project Administration
- Bhopal I-Clean Team
- Residents nearby

05 Healing
- Cleanliness drive by I-Clean and college students
- Informal brick masonry workshop for students and residents nearby
- Bamboo workshop and plantation drive
Space Making by Community

1. Extensive Cleaning and reconditioning drive in association with I-clean Team, students & residents nearby.

2. Informal brick masonry workshop, to construct sitting areas, done by students and residents nearby for space making.

3. Bamboo workshop for students & residents to create sun shades using recycled wood.

Scan QR Code to watch the video of the process.

Place making is a continuous process which if done with community participation invokes a sense of ownership. Design is an unending process and the ‘Transformation’ was visioned in a way that it changes after a period of time in conjunction with the activities and footfall associated with the site. Thus, the space becomes adaptive and sustains in a long run.

HEALING

82% 0% 0% 2%

based upon a sample space of 50 people

TRANSFORMATION

38% 28% 20% 10% 4%

based upon a sample space of 50 people
WATERFRONT REDEVELOPMENT
ISOLA LANDSCAPE TROPHY | TOP 5

Area: 4.85 acres (with Catchment Area: 19.75 acres)
Type: Competition | Individual work
Duration: November 2015-January 2016
Role: I worked singlehandedly on this competition organized by NASA India. The competition aimed to identify a heritage site which needed immediate attention and intervention to protect its identity as well as find modern, adaptive solutions to its problem. A lot of Research; regular visit to site to analyze, study, and document human porosity and natural aspects; designing, presenting drawings were involved in this project.

1. **Benazir Palace**
   It was the summer palace built for the Begum and is an excellent example of passive thermal control. The three terraced lakes help in the cooling of the palace.

2. **Taj Mahal**
   It was used as the royal residence for the Begum of Bhopal. One can see a curious mix of Islamic and Hindu architectural elements.

3. **Taj-ul-Masjid**
   Built on a hillock on the south of Motia Talab, it is the largest mosque in India. The mosque and its activities permit one to look beyond the tangible sphere of architecture.

Motia Talab* is the Uppermost of the Three Terraced Lakes created in the Shanjahanabad area of Bhopal. The Three Lakes are dependent on the surface run-off water from the seasonal rains with water from one cascading into the next. They provide passive cooling for the Benazir Palace and surrounding areas and hence, till date, holds great climatic importance.

**THE PROCESS**

1. **Developing a Vision**
   Though situated amidst the most opulent heritage of the city, the Motia Talab is a neglected and disused waterfront. The vision is the revival and modernization of the existing. The available open spaces on the site lie bare and are not used to full potential. The aim of the 5 STEP APPROACH is to revitalize these spaces by changing their non-functionality into cultural and social precincts that appeal to the mass.

2. **Analysis**
   The activities had to be proposed keeping in mind that they would develop a sense of belongingness towards the site among the existing users and at the same time attract more people.

   - **Existing Activities**
   - **Proposed Activities**

3. **Zoning**
   Dividing the site into different zones in terms of their level of interaction with the lake and hence assigning the existing and proposed activities to different spaces has been done through two stages.

* Talab is an Urdu word for Lake
04 Integrating spaces
If the activities are not somehow interlinked, they will eventually end up as isolated zones and eventually lead to the loss of character of the place.

By subtly interlinking the destination along and around the waterfront in such a manner that one activity does not allow the other to fade out and avoid further decentralization. The interlinking will be both physical and visual.

05 Sustainability
The redeveloped will uphold itself for years to come because of its unique moral fiber and adaptability with time.
A proposal must be issued to the tourism dept. to renovate the Taj Mahal palace as a heritage hotel, and Benazir Palace, into a cultural centre.
The Architecture, in conjunction with Landscape around the Motia Talab, are sure to prove beneficial for a long-term sustainability and future use of the waterfront.

THE PROPOSAL

A The Steps
The terrace farming inspired design makes it possible to place different activities at different levels without breaking the visual connectivity. The water channels give a sense of peace and calm, connectivity and visual delight.

B The Spine
The three leveled zones demarcate the top level, i.e. the road from the mid level i.e. the multipurpose zone housing hawkers zone, sitting area and green spaces. Further, the third and the lowermost level as pedestrian pathway or jogger's lane.

C The Central Area
The heritage structure conglomerates with contemporary construction for cafe, library and art gallery. A Floating Deck has been meticulously designed keeping in mind the PUBLIC, INTERACTIVE and a RECREATIONAL space.

D Entry
Use of arches, motifs and brackets so as to create harmony with heritage structures has been consciously thought of.