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ITO SKYWALK NEW DELHI

Ar Goonmeet Singh Chauhan

Fact File

Principal Architect	▶ Ar Goonmeet Singh Chauhan
Design Team	▶ Ar Anuj Prabhakar Team
Length of skywalk	▶ 525 m (approx..)
Length of FOB	▶ 60 m
Structure	▶ Steel
Flooring	▶ Granite
Amenities	▶ CCTV, WiFi, 20 passenger lifts, solar panels, security
Photography Credits	▶ Andre J Fanthome



The unique criss-cross boot-lace trusses make the skywalk instantly recognisable from a distance.

The newly-minted ITO Skywalk, a foot-over-bridge in New Delhi, connecting four principal streets offers a ground-breaking solution to decongest and facilitate safe and seamless pedestrian flow amidst the heart of the city. Roughly 535 metres long, it spans across Sikandra Road, Mathura Road, Tilak Marg, and Bahadur Shah Zafar Marg, while catering to the ITO as well as Pragati Maidan Metro stations.

Being Delhi's longest skywalk, this integrates numerous nodes in one of the busiest stretches of the metropolis that sees office goers commute to various corporate and government buildings in the vicinity such as the ITO, Police Headquarters, PWD Headquarters, GST Office, Supreme Court, DDA Vikas Minar, Lady Irwin College amongst others.

The project defies the solidity of the surroundings and is conceived as a serpentine tube, coiling around major intersections. The program called for a unified response to the area's burgeoning commuter concerns, especially at the ITO Crossing and the 'W'- Point Junction, which sees maximum pedestrian traffic throughout the day. A network of public transport systems including the two metro stations, Tilak Bridge Railway Station and various DTC bus stops are major hubs that mobilize traffic flow in the area, especially during rush hour. The design paradigm traced this flow and came up with a safety mechanism in the form of a skywalk at 'W'- Point and a foot-over-bridge at Hans Bhawan. The skywalk was designed to not just fulfil its utilitarian purpose of serving as a medium of mobility, but also to establish itself as a landmark within the city.

ITO Skywalk's reticulated profile boasts of state-of-the-art facilities; its instantly recognizable silhouette features structural, criss-cross boot-lace trusses that are covered with tensile fabrics. The structure incorporates steel members, with all junctions (except Supreme Court and Railway Colony Junction) being constructed in RCC and clad in red Agra stone in adherence to the context. The Supreme Court and Railway Colony junctions are conceived in the form of octagonal units with steel crowns, featuring granite flooring and S.S. glass railings. The tensile fabric roofing is an ingenious intervention, fulfilling both functional and aesthetic requirements. Concepts unique to the design are glass lifts at every junction displaying sensitivity to the needs of women and differently abled; as well as public wi-fi and surveillance systems for additional safety.

Landscape and lighting have been thoughtfully integrated with the design, as patches of green coalesce with a combination of functional and facade lighting, rendering the over-bridge aesthetically appealing, yet economical. Emphasis has been laid on the tensile fabric roofing and steel structure, highlighting their form through strategic installation of lighting fixtures, while making them vandal-proof. The under deck has also been lit up with LEDs that provide a sense of height for the stream of vehicles passing below. Challenges included circumventing the various existing underground services during the foundation work and bending the structural tubular members into the proposed form to enable assembly. Additionally, maintenance of smooth traffic flow



Multiple walkways come together and meet at this octagonal structure.



The ITO Skywalk solves the problem of pedestrian movement at one of the busiest nodes in New Delhi, and its unique form is a design and engineering marvel that acts as a significant landmark in the city.



The winding walkway appears to be floating above the high-traffic junction.



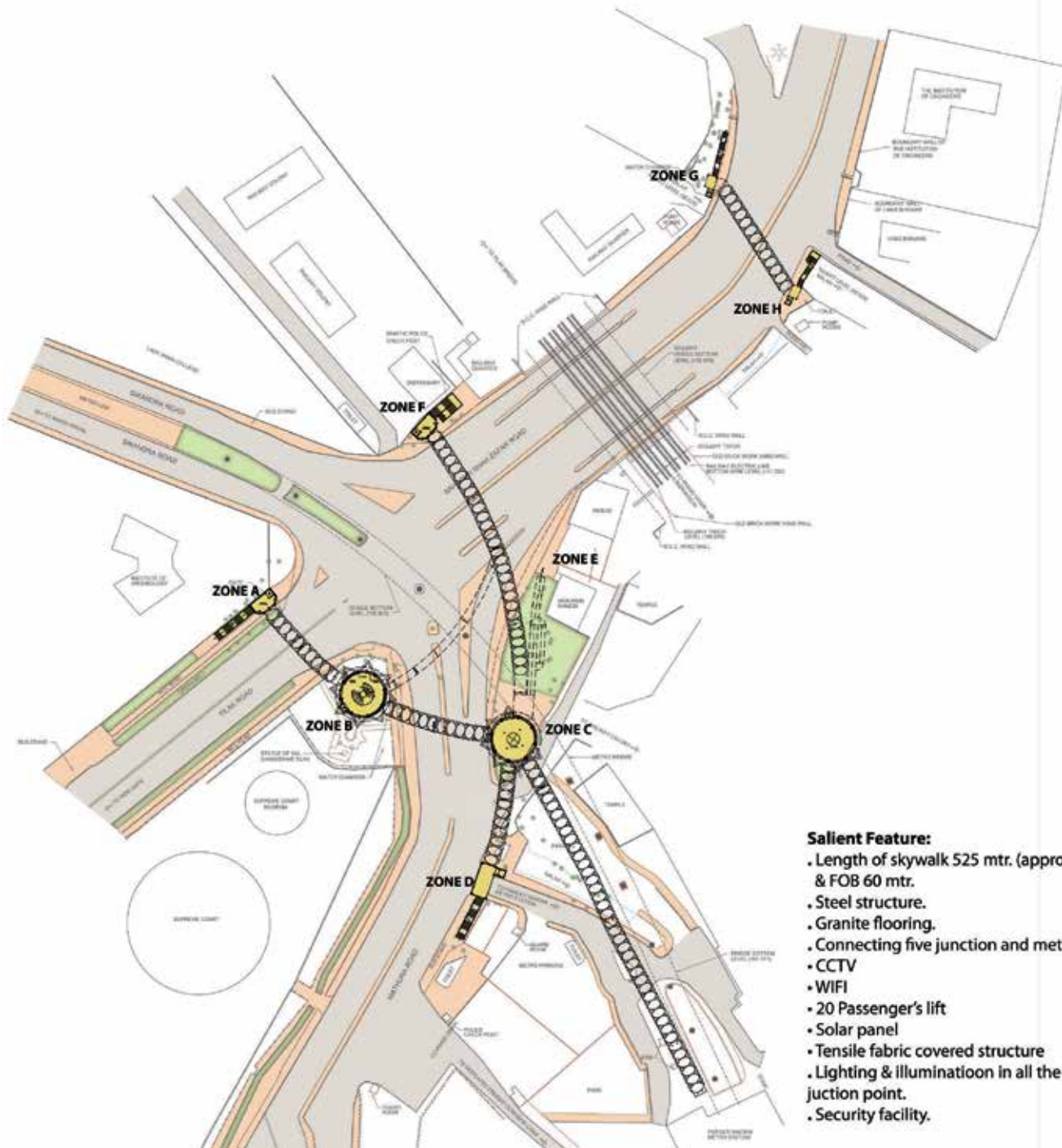
The octagonal unit consists of steel crowns and uses granite flooring and S.S. glass in the railing.



The criss-cross boot lace trusses are covered with tensile fabrics, resulting in the unique silhouette of the skywalk.



The skywalk and a landscaped footpath create a pedestrian-friendly environment at one of the busiest nodes in Delhi.



- Salient Feature:**
- . Length of skywalk 525 mtr. (approx.) & FOB 60 mtr.
 - . Steel structure.
 - . Granite flooring.
 - . Connecting five junction and metro station.
 - . CCTV
 - . WIFI
 - . 20 Passenger's lift
 - . Solar panel
 - . Tensile fabric covered structure
 - . Lighting & illumination in all the FOB & junction point.
 - . Security facility.

Planning of the ITO Skywalk



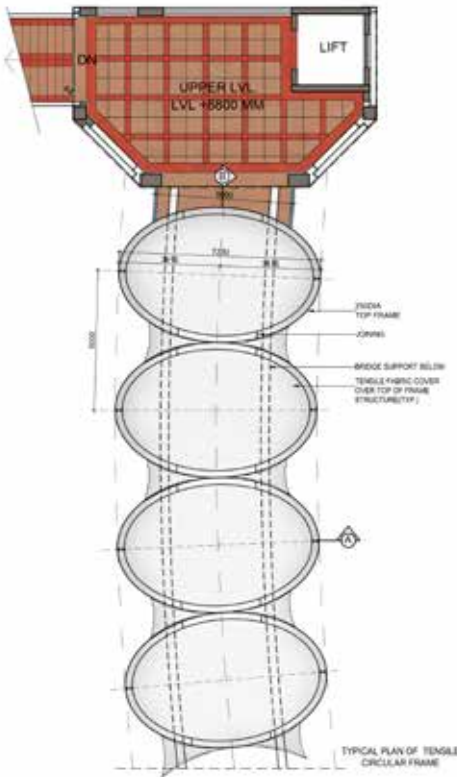
ELEVATION OF JUNCTION & BRIDGE NEAR ASI

Elevation



ELEVATION OF PLAZA

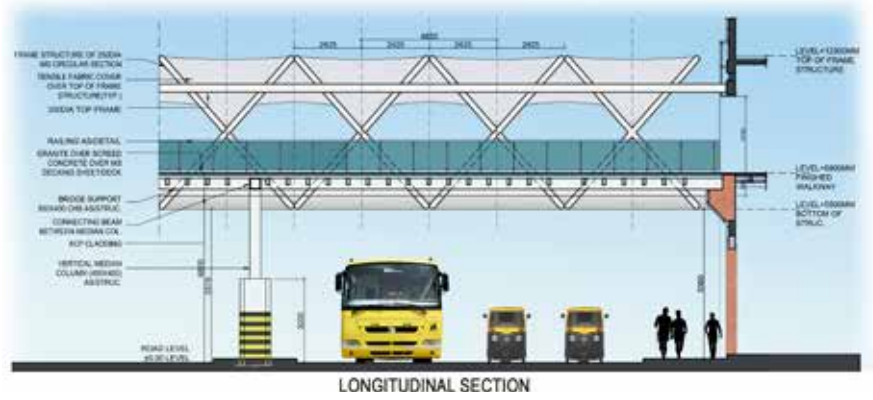
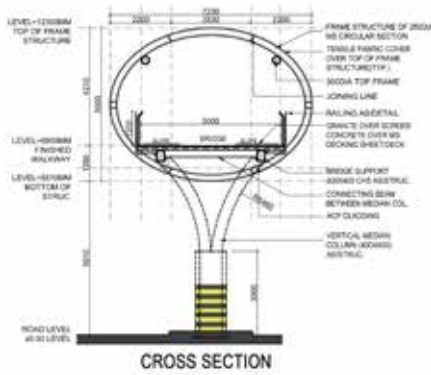
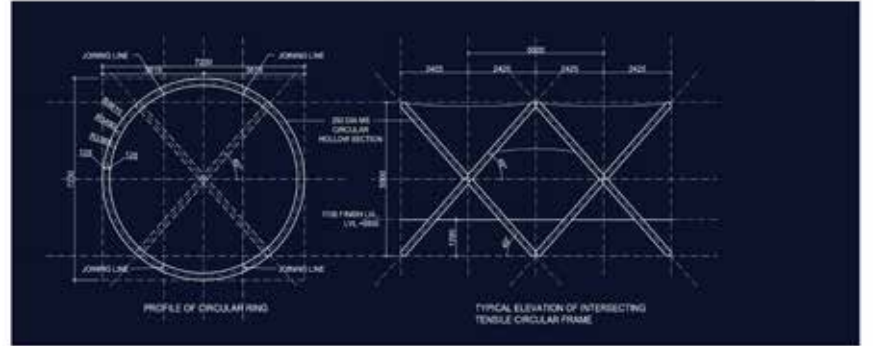
Plaza



CONCEPT EVOLUTION



STRUCTURAL GEOMETRY



Railing detail

during the deck launching and extreme weather conditions also hampered the execution of work.

The ITO Skywalk has been an endeavour to impinge positively upon the existing character of the neighbourhood that it serves, aiding hundreds of thousands of citizens daily. By creating a physical configuration towards the mobility infrastructural network to provide commuters with a connectivity of a sustainable alternative network, a better reach is enabled amongst the cross junctions in the busy ITO neighbourhood of the dense metropolis city of New Delhi. Solutions such as the Skywalk are seen as not just modes of commutes, or to generate ephemeral experiences through spaces, but more so as contributions to the architecture, public infrastructure and the urban context in which they thrive.



Ar. Goonmeet Singh Chauhan is an architect, urbanist, author and a futurist who has worked on large-scale projects that have become landmarks across major cities pan India. Chauhan has won many accolades for his works including the Outstanding Papers and Design Works at UIA Seoul Congress in 2017 and the IndeXcellence Awards in 2019. He is founder and partner of Tevatia, Chauhan and Sharma Architects as well as Design Forum International.