Update on the Elevated Road between Basaveshwara Circle and Hebbal

1.0 Project is not hurried

The tender for carrying out detailed project report for the project (elevated road from Highgrounds to Hebbal) was called by BBMP in 2010. M/s STUP Consultant Pvt Ltd was awarded the assignment. Subsequently, as per the then Government directive, the project in question was required to be taken up by BDA. Pursuant to this, BDA went ahead with carrying out Detailed Project Report for the project. At every stage in the project, opinion of Technical Advisory Committee was taken and included in the project. BDA had discussions with other stake holders like BBMP, Traffic Police Department, BWSSB, BESCOM, BSNL and Railways during preparation of the project report. After detailed and several rounds of discussions, the tender documents were prepared and tender for the project was called.

2.0 Transparency in Tender Proceedings

Global tender for the project was invited through e-procurement web-site of the Government of Karnataka on 29/08/2015. As per the tender notifications, opportunities were also given to agencies who have executed similar nature work anywhere in the world. They were also permitted to associate with Indian partners (Joint Venture) for better implementation of the project. There were 19 contractors along with few foreign companies participated in the pre bid meeting. The very fact that 19 contractors from India and abroad showed interest in the project itself is a testimony to the transparency of the tender. Further, being a very important and prestigious project well experienced and financially sound parties with experience in implementation of such projects in urban conditions were invited through open tendering process. Two major contractors namely M/s L&T Ltd and M/s Navavuga Engineering Company Ltd who have wide experience in implementation of similar infrastructure works submitted the bid for the project. M/s L&T Ltd was lowest based on the tender process.

3.0 Lack of public consultation and secrecy

On 24-05-2016, in the Vision Group meeting, Hon Chief Minister outlined about ambitious new projects such as elevated road from Basaveshwara circle to Hebbal flyover, elevated corridors for which tenders are being floated and work being taken up a the earliest possible. There were no adverse comments against the projects.

The Bangalore Development Authority has issued Press release on 27.06.2016 inviting suggestions on this project from experts and interested persons either by contacting or through email. Accordingly, 299 suggestions have been received through emails. Out of which 73% have opined in favour of implementing flyover project. The remaining persons have requested to identify alternative route, conventional concrete method and to exhibit detail project. All the requests have been examined. DPR is also being shared.

4.0 Shifting of Traffic Congestion to CBD

The present scenario is that substantial traffic entering Chalukya circle is from Maharani College direction, Race course road direction and Rajbhavan side.

It is not shifting of congestion. There are entry and exit ramps planned at different locations along the length of the flyover which will dissipate the traffic at various exit points along the route.

We have proposed up and down ramp between Maharani College underpass and AG office so that traffic can use the flyover without getting stopped at Chalukya junction. Like-wise, up and down ramp is proposed on Rajbhavan side so that through traffic towards Hebbal/ city need not come towards Chalukya junction. Even it is proposed to have 4 level grade separated system (underpass, surface level, flyover 1st level and flyover 2nd level) wherein the traffic is regulated and streamlined to make an exit to required destination. We have also provided down ramp for traffic from Hebbal towards Jayamahal and at Vasanthanagar main road to distribute the exit traffic. As far as Race course road is concerned, down ramp is provided for traffic from Hebbal towards Race course road (this will avoid traffic congestion at Kumarakrupa road junction). Traffic going towards airport from Race course road will not come towards Chalukya junction in any case. The project also includes underpasses at Chalukya junction (for traffic from Chalukya junction towards Vasanathanagar) and from Miller road towards Race course road to integrate with underpass proposed from Rajbhavan road towards race course road.

5.0 Compensatory action for Tree cutting

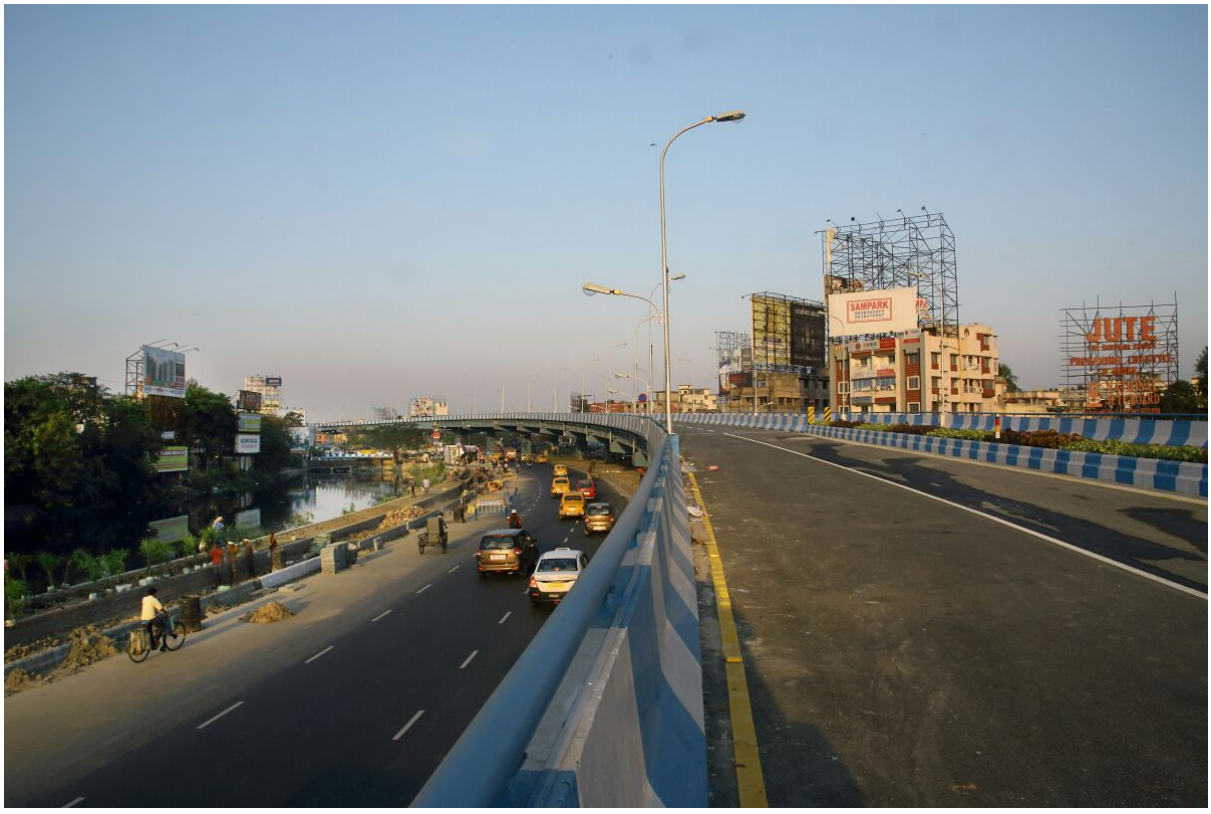
BDA has already proposed to plant 60,000 numbers of trees of 45 varieties in lieu of 812 trees to be removed in the project area. List of various species of trees proposed to be planted is attached. BDA will also take steps to transplant some of the existing trees wherever feasible.

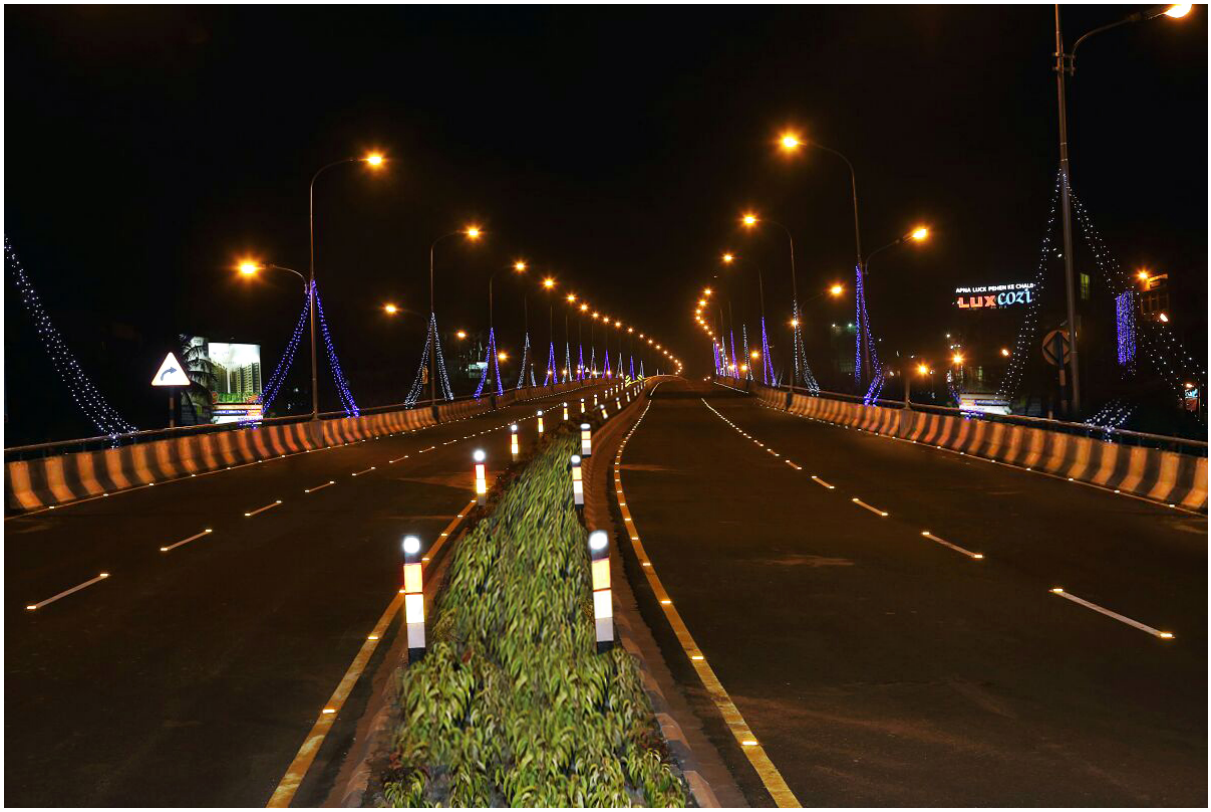
6.0 Option - Steel v/s Concrete

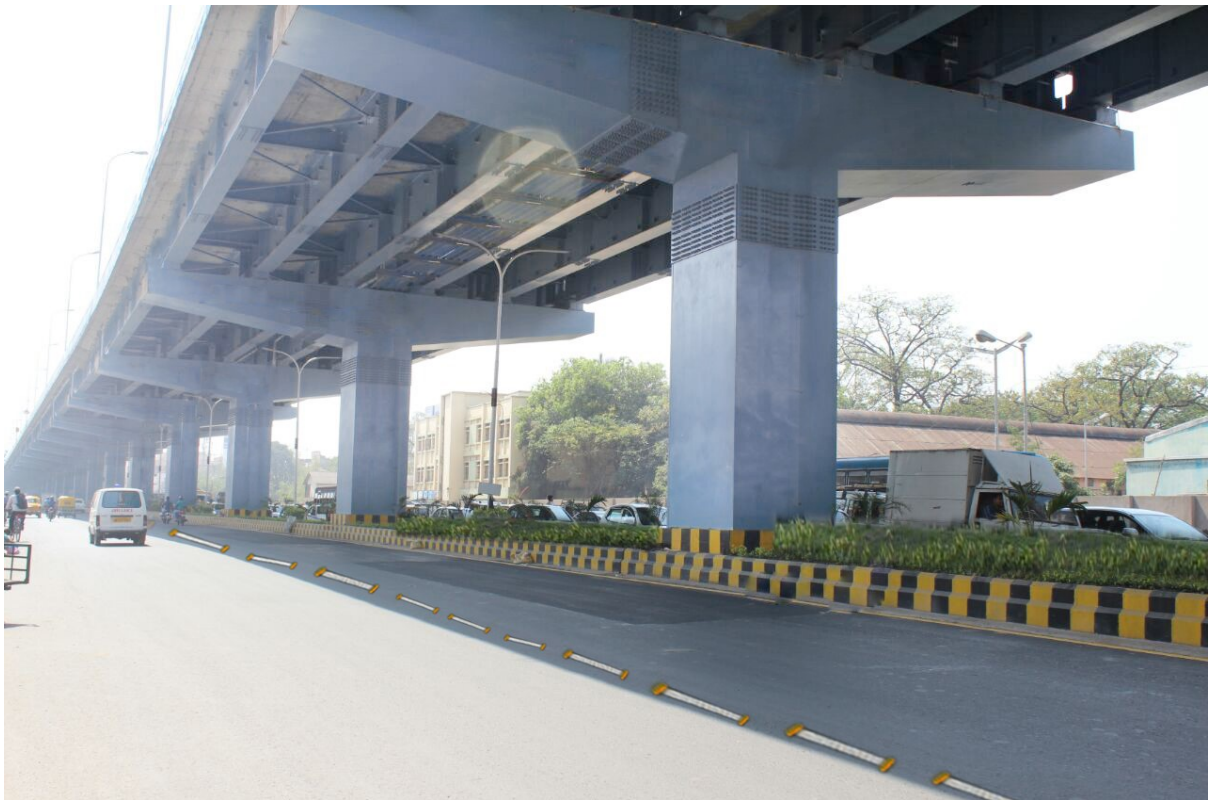
The existing road between Rajbhavan/Chalukya junction up to Hebbal is main spine for airport bound traffic. Hence, this road cannot be blocked for traffic movement at any point of time or the construction activity should be carried out with minimum disturbance to road users. Steel structure has more service life than concrete structure. Steel structure is prefabricated in fabrication yard and placed in-site after pier is erected. Even the pier / column are with structural steel and pre-fabricated, brought to site in pieces and assembled in-site after pile cap is constructed. The weight of the superstructure is in order of 10 to 15T in steel as against 70T to 100T in case of concrete. This implies that the foundation can be prepared with less space (lesser width of pile cap) and extent of barricading is also less when compared to concrete flyover. Normally, steel structures are very effective in heavy traffic congested areas than the concrete flyover. This causes least inconvenience to the existing traffic and hence it is a better option. The riding quality and comfort for road users, whether steel or concrete flyover remains the same.

7.0 Aesthetics

Steel flyovers have been successfully implemented in other countries like Malaysia, Korea, China and USA. In India, steel flyovers are in use in Kolkata. Photos of the Kolkata flyover are shown below for illustration. It is proposed to have even better appearance for flyover from Basaveshwara circle to Hebbal.

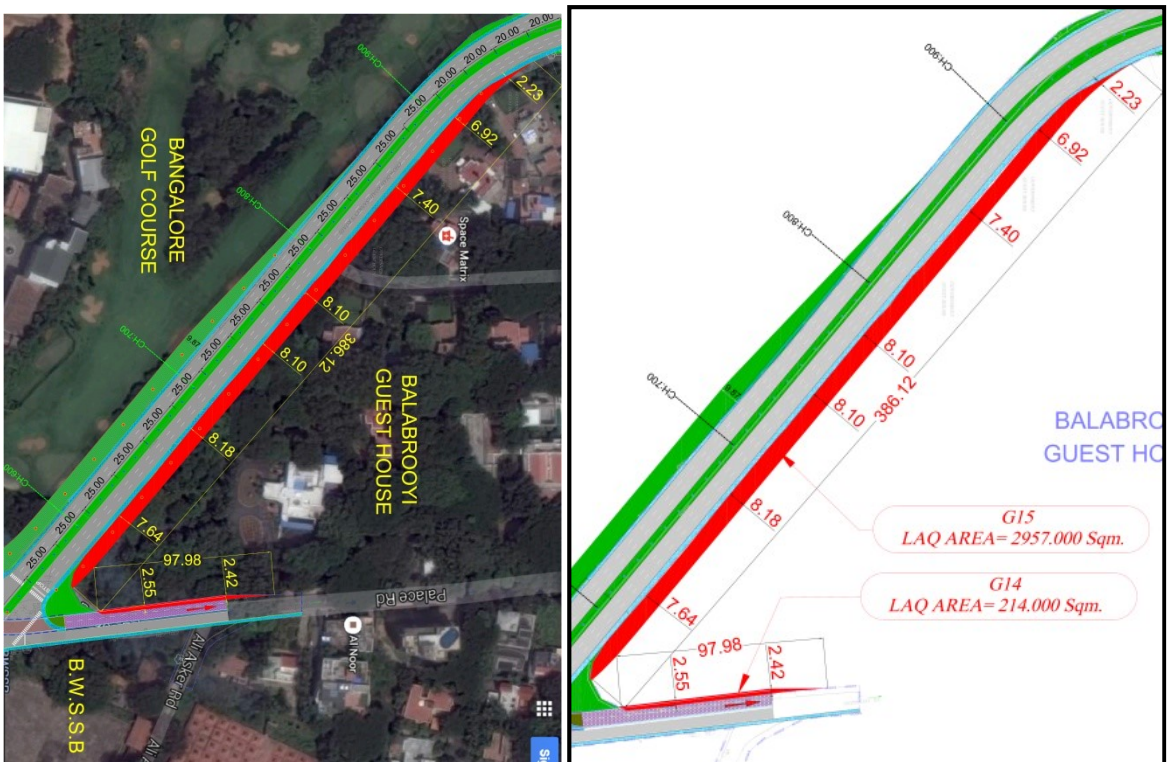






8.0 No damage to Heritage buildings

The Heritage buildings and other important buildings in the area include Carlton House, Balabrooie Guest House, Vidhanasoudha, Rajbhavan etc. None of these buildings will be destroyed. Only a portion of compound wall of Balabrooie Guest House will be demolished and reconstructed in the original pattern. The distance between the proposed flyover edge and Balabrooie mainbuilding is around 70 feet. Part plan showing extent of proposed flyover w.r.t Balabrooie guest house is given below.



9.0 Reasonableness of Project Cost

There is a notion that the project cost is for only 6.68 Km of the flyover. Actually, the total cost of the project includes main flyover, up and down ramps, 3 underpasses, surface level road, drainage system, illumination and traffic safety appurtenances. The breakup of length is as follows:

Flyover Description	**Length in Mtr**
Main Flyover	6687
Maharani College Up Ramp	1035
Maharani College Down Ramp	1111
VidhanaSoudha Down Ramp	378
Race Course Down Ramp	344
Vasanthanagar Road Down Ramp	330
Mekhri Circle Down Ramp	489
Mekhri Circle Up Ramp	435
Jayamahal Road Down Ramp	325
Length of Flyover	**11134**
Underpass Description	**Length in Mtr**
Chalukya Junction Underpass	870
Millers Road Underpass	285
Cunningham Road Underpass	235
Length of Underpass	**1390**

DPR for the project was prepared by consultant M/s STUP consultant Pvt Ltd., Bangalore. The estimated cost of the project was 1350 Crores as per the PWD Bangalore circle 2014-15. Two years have lapsed and therefore there is an increase in project cost based on RBI indices and updated SR. The project cost had to be updated for the present year since the estimate was based on schedule of Rates of 2014-15 which was considered at the time of inviting tender. Besides this, certain other components like additional Tax implications (which are Revenue to state Govt.) were not earlier considered. The VAT of 5% on raw steel was considered in the estimated cost whereas 14.5% is levied on fabricated steel. The contractor has to pay at the rate of 14.5%. The labour cost has gone up by 43%. The cost of fuel and electricity has also increased. As a result, machine operating cost is increased. Hence, the cost is reasonable and there is no deliberate attempt to inflate the project cost.

10.0 Public Transport v/s Private Transport

The proposed elevated road from Basaveshwara circle to Hebbal is not a stand-alone project. The Comprehensive Traffic & Transportation Plan (CTTP) 2011 has suggested amongst other improvements to provide signal free travel for passengers from city centre to BIAL with provisions of flyovers at junctions to provide seamless travel along this route. Considering the learning from the construction of flyovers at short lengths, it is proposed to construct continuous elevated road (covering 9 junctions between Basaveshwara circle and Hebbal) instead of flyovers at short lengths.

CTTP-2011 is the guiding document for planning and preparation of various mobility solutions for the city. CTTP has extensively looked at various options including Metro, BRTS, flyovers, road improvement schemes etc.

The larger mobility plan includes elevated North-South and East-West corridor (undertaken by KRDCL). This flyover is a sub-set of the larger plan.

In addition, following are some of the major infrastructure projects planned, many of which are public transport based:

- Metro connectivity to Airport via Nagawara
- 65 Km long Peripheral Ring Road to connect the NICE road
- Metro along the ORR from Silk Board to K R Puram
- 72 Km long Phase II Metro to connect Whitefield, Gottigere, Kengeri, Nagwara etc. to the network.
- Addition of buses to the BMTC bus fleet.

Even though metro connectivity is being planned for KIAL, one cannot ignore road based public and private traffic. For city like Bangalore with traffic of around 60 Lakh, various modes of transport are required. That is exactly what is being done now. Metro as well as an elevated road are being planned and implemented.

11.0 Is it a VIP Road? It is a road for the common citizen

The road section between Chalukya circle and Hebbal has 9 major intersections. They are Chalukya junction, Millers road, Highground Police Station, Kumarakrupa junction, Cauvery theatre junction, Mekhri circle, Sanjay Nagar junction, CBI junction and Hebbal. Nearly a million people traverse this road alignment daily. Traffic details at each junctions in terms of number of Passenger Car Vehicles are given below:

Junction	Daily Traffic, PCU	Peak hour traffic, PCU
Basaveshwara circle	235769	19675
Miller road junction	78650	6286
Highgrounds junction	183941	17857
Kumarakrupa road junction	229378	18038
Cauvery theatre junction	207947	15080
Mekhri circle junction	294639	22898
Sanjaynagar road junction	219424	19261
CBI junction	187250	13153
Hebbal flyover & junction	343505	23799

Out of the total traffic plying on this section, around 45% of the traffic is a passenger car (taxi or personal vehicle) which has originated beyond Chalukya junction and destination is beyond Hebbal flyover. The surface level road which is generally 3 + 3 lane has generally not changed and cannot be expanded horizontally or additional Lane cannot be added due to adjoining buildings all along this stretch. The increase in traffic and peak hour traffic has often led to traffic congestion.

While on the other side of Hebbal, NHAI has already constructed 6 lanes Flyover with 6 lane surface level road and 2+2 lane service road. The road section from NHAI flyover (which is 6 lanes) will suddenly get bottled up as it reaches Hebbal (2 lanes) while coming from Airport direction towards the city. Often traffic queue and piling up is seen between Mekhri circle and Hebbal section.

Through traffic (traffic going towards airport from CBD and vice-versa) is segregated from local traffic with this flyover. This increases the existing road capacity.

The road below the flyover will be used for local traffic. There will be a relief in surface level traffic when through traffic is segregated. This flyover is not only

a connectivity to the Airport, but also will be used by people commuting between city / CBD and areas like Devanahalli, Yelahanka and surrounding localities around Hebbal.

12.0 Additional Information

a) Detailed Project Report uploaded

b) Traffic simulation – with and without flyover uploaded