## <u>Delhi Development Authority</u> (Work Advisory Board)

No: WAB 1(76) Vol.42/Secy./II/2018/561

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Dated: 20/02/2018

Sub: Minutes of the 2nd WAB (2018) meeting held on 15.02.2018 at 11.00 A.M in the Conference Hall, 1st floor, B-Block, Vikas Sadan, INA, New Delhi.

Minutes of 2<sup>nd</sup> WAB (2018) meeting held on 15.02.2018 at 11.00 A.M in the Conference Hall, 1<sup>st</sup> Floor, B-Block, Vikas Sadan, INA, New Delhi, are enclosed here with for favour of information & necessary action.

Encl:- As above

(N.K. Gupta )
Secretary (WAB)

### In Circulation to:

i) Chief Engineer (HQ), DDA.

### Copy to:-

- i) Sr. PS to VC, DDA for kind information of the latter.
- ii) AD to EM, DDA for kind information of the latter.
- iii) Sr. PS to FM, DDA for kind information of the latter.
- iv) Chief Engineer (QAC), DDA for kind information.
- v) Chief Account Officer, DDA for kind information.
- vi) Chief Engineer (NZ), DDA for kind information.
- vii) Chief Engineer( Dwk), DDA for kind information.
- viii) Chief Engineer( East), DDA for kind information.
- ix) Chief Engineer (South), DDA for kind information.
- x) Chief Engineer (Elect.), DDA for kind information.
- xi) Chief Engineer (Rohini), DDA for kind information.
- xii) Commissioner (Planning), DDA for kind information.
- xiii) Chief Architect, DDA for kind information.
- xiv) Sr. AO (Works) III, for kind information.
- xv) Director(Works), DDA for kind information.

Secretary (WAB)

### CONFIDENTIAL

### <u>DELHI DEVELOPMENT AUTHORITY</u> (WORKS ADVISORY BOARD)

No. WAB1 (76)/Vol.42/Secy./II/2018/

Dated:

Subject:

Minutes of the 2<sup>nd</sup> WAB (2018) meeting held on 15.02.2018at 11.00 AM in the VC's Conference Hall, 1<sup>st</sup> floor, B-Block, Vikas Sadan, INA, New Delhi. The

List of officers, who attended this meeting.

# Present(S/Shri)

1.	UdaiPratap Singh	Vice-Chairman	Chairman
2.	Jayesh Kumar	Engineer Member	Member
3.	K. Vinayak Rao	FM	Member
4.	Santosh Kumar	CAO	Member
5.	A.K. Singh	CE(QAC)	Member
6.	N.K. Gupta	EO-III to EM	Secy. (WAB)

## Others (S/Shri)

1.	Ajay Gupta	CE(NZ)
2.	S.N. Singh	CE(Dwk)
3.	Sanjeev Kr. Arya	CE(East)
4.	Ramesh Kumar	CE(South)
5.	Chandu Bhutia	Addl. Commissioner(Planning)
6.	H.K. Bharti	Director (Planning)
7	Anil Rehki	Director (Works)

The following agenda items were discussed.

1. Revised Agenda Item. /Director(Works)

**Subject:** New Housing Projects at various locations of Dwarka, Rohini, North, South & East Zone.

The agenda note presented & submitted by Director (Works) with six proposals.

### i. Use of Technology for construction of New Houses

As per MOUD OM F. No. 28012 /7 /2016-W-3 dated 28 /12/2016 it is mandatory to use three new and emerging technologies in all projects across the country w.e.f. 01.04.2017.

- (a) Monolithic Concrete Constructions system using Aluminium Form Work
- (b) Industrialized 3-S system using cellular light weight concrete slabs & precast columns (Precast/Prefab)
- (c) Monolithic concrete construction system using Plastic- Aluminium Formwork

It was informed that so far the technology at S.No. (a) is in use in DDA. Also (b) in its modified form, i.e. "Industrialized 3-S system using cellular light weight concrete slabs/ precast RCC slabs, precast columns, precast beams with or without precast shear wall. (Precast/Prefab)" is in use in DDA. (c) has so far not been used in DDA.

It was earlier proposed to use either (a) or (b) for construction of new housing for which tenders are to be invited as they are in use in DDA.

Since all the three technologies are notified by the MoUD, it is now proposed that new houses can be constructed by using any one of the above stated technologies mentioned at (a), (b), (c) & modified form of (b).

It was informed that DDA is already constructing houses with Industrialized 3- S technology with precast RCC slabs, columns, beams and shear wall wherever required. After due deliberations, WAB accepted the proposal for construction of proposed houses by using anyone of the technology i.e. (a), (b), (c) & modified form of (b).

### ii. Grouping of works in packages: -

As already apprised that the A/A & E/S of seventeen works to be executed in different zones of DDA was accorded in May 2017 by Competent Authority. It is proposed that to facilitate the bidders to create infrastructure required for new and emerging technologies & to attract a healthy competition among the bidders the sixteen works shall be grouped

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in 12 packages costing from Rs164.20 Crore to Rs.753.91 Crores. This grouping has been proposed keeping in view the minimum requirement of quantum of works for adopting new technologies.

# **DETAILS OF PACKAGES**

283 Nos. Houses Pocket b	oximately 255 Nos. of Three BHK, One BHK and 230 Nos. of EWS (on Design & Build Model) in etween Vegas Mall and MIG Flats, I, Dwarka C/o Three BHK 208 Houses, One	Rs. 27223.41 lacs	Dwarka	Rs 272.23
(i)				Rs 272.23
	BHK 100 Houses and 115 EWS Houses on Design & Build Model) in Sector-19 B ,Dwarka.	Rs. 18282.04 lacs	Dwarka	Rs 252.27
(ii)	C/o 194 Flats in Pocket-4, Sector- 14, Dwarka ( <i>On Design and Build Model</i> )	Rs. 6945.58 lacs	tud pest poduli pitros	
C/o 150 Three BHK, 220 Two BHK and 116 EWS Houses (on Design and Build Model) adjoining to Pocket-D-7 & D-8, Vasant Kunj		Rs. 21194.92 lacs	South	Rs 211.95
(i)	C/o 76 Three BHK, 111 Two BHK and 58 EWS Houses (on Design and Build Model) adjoining to Pocket D-6, Vasant Kunj.	lacs	South	Rs 164.20
(ii)	Group Housing (C/o 40 Nos. Three BHK with Servant Room and 60 Nos. Two BHK) Design & Build Model Adjoining to Community Hall at Masoodpur	lacs	OH Dog	1 810 ET 1 810
	EWS Ho adjoinin (i)	Model)  C/o 150 Three BHK, 220 Two BHK and 116 EWS Houses (on Design and Build Model) adjoining to Pocket-D-7 & D-8, Vasant Kunj  (i) C/o 76 Three BHK, 111 Two BHK and 58 EWS Houses (on Design and Build Model) adjoining to Pocket D-6, Vasant Kunj.  (ii) Group Housing (C/o 40 Nos. Three BHK with Servant Room and 60 Nos. Two BHK) Design & Build Model Adjoining to	C/o 150 Three BHK, 220 Two BHK and 116 EWS Houses (on Design and Build Model) adjoining to Pocket-D-7 & D-8, Vasant Kunj  (i) C/o 76 Three BHK, 111 Two BHK and 58 EWS Houses (on Design and Build Model) adjoining to Pocket D-6, Vasant Kunj.  (ii) Group Housing (C/o 40 Nos. Three BHK with Servant Room and 60 Nos. Two BHK) Design & Build Model Adjoining to Community Hall at Masoodpur	C/o 150 Three BHK, 220 Two BHK and 116 EWS Houses (on Design and Build Model) adjoining to Pocket-D-7 & D-8, Vasant Kunj  (i) C/o 76 Three BHK, 111 Two BHK and 58 EWS Houses (on Design and Build Model) adjoining to Pocket D-6, Vasant Kunj.  (ii) Group Housing (C/o 40 Nos. Three BHK with Servant Room and 60 Nos. Two BHK) Design & Build Model Adjoining to Community Hall at Masoodpur

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5	(i) C/o 304 Du's on Plot between Harward School and Shiv	Rs. 4457.08 lacs	East	Of this No
	Mandir at PreetVihar	lacs	Noble	
	(ii) C/o 705 EWS EWS Houses at Khichri Pur Resettlement Colony between Block No. 5 & 8 -	Rs. 10681.61 lacs	East	90-00
	including all Civil Works,	ed the lane of the	olais Be tan Desi	
	Internal Development, Horticulture and Internal	Library Barrier Carps	f nativité	Rs 194.01
	Electrification work on design and Built Basis.	ora 100 mig so	10 TO	
	(iii) C/o Multi-storey Housing behind 1350 LIG houses at	Rs. 4263.64 lacs	East	
	KondliGharoli. Subhead- C/o 88  Dus at KondliGharoli behind  1350 LIG Unit- all civil work,	nn astron	n Cha	
	internal development,	mental and a	MIT THE	
	work on design and built basis.	Tabuly History		
6	C/o 75 One BHK (Type-II), 307 Two BHK (Type-III) and 455 Two BHK (Type-IV), 447	Rs. 70984.41 lacs	North	Rs 709:84
	Three BHK (Type-V) and 481 EWS (Type-I) Houses (On Design & Build Model) earmarked in Pocket-8, Sector-A1 to A4, Narela.	LL JUNG BOOK ALL DESIGN PARTS IN	in est a bett a sanv (s	
7	C/o 95 One BHK (Type -II), 518 Two BHK (Type-III), 217 Three BHK (Type-V) and 311 EWS (Type-I) Houses (on Design and Build Model) earmarked in Pocket-10, Sector A1	Rs. 45134.38 lacs	North	Rs 451.34
Q	to A-4 Narela.	Hart whole	Build Internal	
8	C/o 75 One BHK (Type-II), 308 Two BHK (Type-III) and 489 Two BHK (Type-IV), 480 Three BHK (Type-V) and 518 EWS (Type-I) Houses (On Design & Build Model)	Rs. 75391.03 lacs	North	Rs 753.91

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	Narela.	is bined the		
9	C/o 536 Three BHK, 804 One BHK, 502 EWS Houses (On Design and Built Model) at Pkt-GH-2, Sector-29, Rohini.	Rs. 64740.38 lacs	Rohini	Rs 647.40
10	C/o 318 Nos, Three BHK, 476 Nos. One BHK and 298 Nos. EWS House (On Design and Build Model) at Sector-11 Extn. Rohini.	Rs. 38533.37 lacs	Rohini	Rs 385.33
11	C/o 352 Three BHK, 526 One BHK and 329 EWS House's (on Design and Build Model) in Pocket -GH-3, Sector-29, Rohini.	Rs 42255.81 lacs	Rohini	Rs 422.56
12	C/o 168 EWS Houses and 505 One, Two & Three BHK Houses at Vacant Plot at Mandawali/Fazalpur near Saraswati Kunj Appartments.	Rs. 18151.96 lacs	East	Rs 181.52

It is proposed that in case of packages consisting of multiple works, the E.E. handling largest component of the work shall be the Nodal officer for the purpose of inviting tenders, although each component will be operated by the respective E.E.

**Note**: One work for Construction of 20 MIG Houses at Ashok Nagar Faiz Road costing Rs 3.70 crores has not been considered in the proposed packages.

WAB was apprised that as the technologies to be used in construction of houses are new & emerging, it is possible that companies having experience of work of big magnitude might not be available. Hence in order to achieve wider & competitive bidding 12 packages have been proposed. Moreover, the packages are as per jurisdiction of zonal Chief Engineer's for ease of implementation.

After due discussions & deliberations, WAB approved to the above proposal recommended by Director (Works)

### iii. Eligibility Criteria

The eligibility criteria to be adopted for deciding similar nature of work was discussed in the WAB meeting on 31.01.18. It was earlier discussed that for wider participation and to get competitive bid similar nature of works to be considered completed works using either conventional technology (Cast-in-Situ) or any of the new & emerging technologies (as per MOUD circular). It was felt necessary because not many agencies having requisite experience of completing large value works through new technology may be available.

WAB was informed that after due discussions & deliberations with Chief Engineer's the eligibility criteria is proposed to be modified as under:

- (i) Experience of having successfully completed works during last seven years ending previous day of last date of submission of application
  - (a) Three works of RCC framed structure of G+6 or more storeys, each of value not less than 40% of the estimated cost put to tender Or
  - (b) Two works of RCC framed structure of G + 6 or more storeys, each of value not less than 60% of the estimated cost put to tender

    Or
  - (c) One work of RCC framed structure of G + 6 or more storeys of value not less than 80% of the estimated cost put to tender,

All amounts rounded off to a convenient figure.

- (ii) Agency should have completed single work of G + 6 or more storeys amounting to at least 40% of estimated cost put to tender in the last seven years with the technology proposed to be used by the agency for construction of new houses.
- (iii) The agency should also have completed at least one work with minimum one basement.

The above conditions will ensure greater competition and also ensure that agencies having experience in relevant technology are qualified.

After due discussions & deliberations, the board agreed to the proposal and conditions shall be incorporated in the bid document accordingly.

### (iv) No bidder shall be awarded more than two packages.

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Keeping In view of the large size of packages, earlier it was felt that if a single agency takes up a number of works, he may not be in a position to complete the works in time. Therefore it was also proposed to restrict the number of packages that can be awarded to a single agency. Now that the packages have been reorganized and there are 12 packages, (instead of 5 packages proposed earlier), there would be wider competition and restriction of two packages may be done away with.

(v) WAB was informed that creation of escrow account for each package will ensure that payments made towards particular contract/advances granted for a particular contract are spent by the contractor on the same work. This will ensure faster progress of work as well as stop diversion of funds for other purposes by the contractor. It was explained that a similar arrangement exists in large value contracts of PWD, Delhi.

After discussions WAB agreed that this arrangement for escrow account be suitably incorporated in the bid documents.

## (vi) One-time approval of architectural plans by screening committee

The Board was apprised that to minimize the time in approval of Architectural plans, it is proposed that the plans shall be put up to the screening committee for approval after receiving the approvals from DUAC, CFO, AAI, DPCC, etc, The plans shall be submitted to local bodies after due scrutiny by Architect wing of DDA.

After due deliberations & discussions, the WAB agreed to the proposal.

## (vii) Development control norms

It is proposed that development control norms for EWS shall be kept same across all the packages. However, norms for other categories of flats shall be adopted as already approved by the screening committee.

After due discussions & deliberations, the board agreed to the proposal & instructed that the area of EWS flat shall be adopted as per approval in 355<sup>th</sup> screening committee meeting item no. 09/2018 in case of North Zone.

Sd/-(Santosh Kumar) Chief Account Officer

Sd/-(A.K. SINGH) CE (QAC)

Sd/-(Jayesh Kumar) EM/DDA

Sd/-(K.Vinayak Rao) FM/DDA

Sd/-(UdaiPratap Singh) Vice Chairman/DDA

## DELHI DEVELOPMENT AUTHORITY **EM's OFFICE**

No. EM 5(2)89/New Housing Project(WAB)/2018

Subject:

New Housing Projects at various locations of Dwarka, Rohini, North, South &

East Zone.

Please find enclosed herewith approved decision of WAB for favour of information and necessary action.

Encl: As above stated.

#### Copy to:-

- Sr. PS to VC, DDA for kind information of the latter. i)
- AD to EM, DDA for kind information of the latter. ii)
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- Chief Engineer (QAC), DDA for kind information. iv)
- Chief Account Officer, DDA for kind information. V)
- vi) Chief Engineer (HQ), DDA for kind information.
- Chief Engineer (NZ), DDA for kind information. vii)
- Chief Engineer (Dwk), DDA for kind information
- viii) ix) Chief Engineer (East), DDA for kind information
- Chief Engineer (South), DDA for kind information. X)
- Chief Engineer (Elect.), DDA for kind information xi)
- Chief Engineer (Rohini), DDA for kind information xii)
- Commissioner (Planning), DDA for kind information. xiii)
- Chief Architect, DDA for kind information. xiv)
- Sr. AO(W)-III/ DDA, for kind information. XV)
- xvi) Director (Works), DDA for kind information.

#### DELHI DEVELOPMENT AUTHORITY



Subject: New Housing Projects at various locations of Dwarka, Rohini, North, South & East Zone.

In the WAB meeting held on 15.02.2018 the following decision relating to use of new technology for construction of Houses was taken in accordance with the directions issued by MoUD:

### Use of Technology for construction of New Houses

- 1. As per MOUD OM F. No. 28012 /7 /2016-W-3 dated 28 /12/2016 it is mandatory to use three new and emerging technologies in all projects across the country w.e.f. 01.04.2017.
- (a) Monolithic Concrete Constructions system using Aluminium Form Work
- (b) Industrialized 3-S system using cellular light weight concrete slabs& precast columns (Precast/Prefab)
- (c) Monolithic concrete construction system using Plastic-Aluminium Formwork It was informed that so far the technology at S.No. (a) is in use in DDA. Also (b) in its modified form, i.e. "Industrialized 3-S system using cellular light weight concrete slabs/precast RCC slabs, precast columns, precast beams with or without precast shear wall. (Precast/Prefab)" is in use in DDA. (c) has so far not been used in DDA.

It was earlier proposed to use either (a) or (b) for construction of new housing for which tenders are to be invited as they are in use in DDA.

Since all the three technologies are notified by the MoUD, it as now proposed that new houses can be constructed by using any one of the above stated technologies mentioned at (a), (b), (c) & modified form of (b).

- 2. It was informed that DDA is already constructing houses with Industrialized 3- S technology with precast RCC slabs, columns, beams and shear wall wherever required. After due deliberations, WAB accepted the proposal for construction of proposed houses by using anyone of the technology i.e. (a), (b), (c) & modified form of (b).
- 3. Accordingly, tenders have been invited by various zones and Pre-Bid meeting were held on 08.03.2018. The clarifications to the querries received during the Pre-Bid meeting are being finalized & are likely to be uploaded by 26.03.2018.
- 4. In the meanwhile MoHUA have issued OM dated 20.03.2018 for adoption of New and Emerging Technologies in construction works undertaken by CPWD, DDA & NBCC. In

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the OM it has been made mandatory for CPWD, DDA & NBCC to use the following technologies in all their projects irrespective of location & project cost.

- a) Monolithic concrete construction system using Aluminium Formwork
- b) Monolithic concrete construction system using Plastic-Aluminium Formwork
- Expanded Polystyrene Core Panel System c)
- d) Light Gauge Sheet Framed Structures (LGSF)
- Industrialized 3-S System using RCC precast with or without shear walls, columns, e) beams, Cellular Light Weight Concrete Slabs/Semi-Precast Solid Slab
- f) Speed Floor System
- Glass Fibre Reinforced Gypsum (GFRG) Panel Building System g)
- h) Factory Made Fast Track Modular Building System

A copy of the OM dt 20.03.2018 is placed below.

- 5. In view of the directions of the Ministry the additional five technologies viz
- (i) Expanded Polystyrene Core Panel System, (ii) Light Gauge Sheet Framed Structures (LGSF), (iii)Speed Floor System, (iv) Glass Fibre Reinforced Gypsum (GFRG) Panel Building System, (v)Factory Made Fast Track Modular Building System have to be incorporated in the NIT. In addition the modified technology "Industrialized 3-S System using RCC precast with or without shear walls, columns, beams, cellular Light Weight Concrete Slabs/Semi-Precast Solid Slab" will also have to be incorporated in the NIT.

To incorporate the above stated five technologies and to modify the technology of Industrialized 3-S system the NIT needs to be modified and pre-bid meeting needs to be held again after due publicity.

The proposal for incorporating the additional technologies as above is approved through circulation accordingly necessary modification in the NIT may be made, however other conditions as approved in WAB meeting dt. 15.02.2018 shall remain unchanged.

> (SANTOSH KUMAR) CAO/DDA

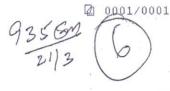
(JAYESH KUMAR) EM/DDA

(A.K. SINGH) CE(QAC)

FM/DDA

## one copy sent to ce (Ha)

F.No.28012/7/2016-W-3 Government of India Ministry of Housing and Urban Affairs (Works Division)



Nirman Bhawan, New Delhi Dated: 20.03.2018

#### OFFICE MEMORANDUM

Sub:- Adoption of New & Emerging Technologies in construction works undertaken by CPWD, DDA and NBCC - regarding.

In continuation of this Ministry's O.M. JS/Works/OM/2016 dated 30.05.2016 and O.M. No.28012/7/2016-W-3 dated 28.12.2016 it has been decided that CPWD, DDA & NBCC may adopt the following technologies, which have been validated by Building Materials and Technology Promotion Council (BMTPC) under the Ministry of Housing and Urban Affairs, in all their projects irrespective of location and project cost:

- a. Monolthic concrete construction system using Aluminium Formwork
- b. Monolithic concrete construction system using Plastic Aluminium Formwork
  - c. Expanded Polystyrene Core Panel System no four u
  - d. Light Gauge Sheet Framed Structures (LGSF)
- e. Industrialized 3-S System using RCC precast with or without shear walls, columns, beams, Cellular Light Weight Concrete Slabs/Semi-Precast Solid Slab
  - f. Speed Floor System
  - g. Glass Fibre Reinforced Gypsum (GFRG) Panel Building System
  - h. Factory Made Fast Track Modular Building System.
- As decided earlier, in case, it is not found feasible to implement these provisions in particular project, specific permission should be accorded by DG, CPWD/CMD, NBCC/Vice Chairman, DDA respectively on case to case basis, with detailed justification.
- 3. The aforesaid modern technologies may be incorporated as per the Schedule of Rates (SoR) issued by CPWD. Further, in future, new emerging technologies, as validated by BMTPC and for which DG, CPWD has issued the SoR will also be included in the list. For this purpose, DG, CPWD is authorized to issue directions in continuation of this Office Memorandum.
- This has the approval of Hon'ble HUAM.

(J. Roy Chowdhurl) Deputy Secretary (Worlys) Tel. no. 23062425

To

- 1. Director General, CPWD, Nirman Bhawan, New Delhi.
- Vice Chairman, DDA, Vikas Sadan, INA, New Delhi-110023
- Chairman-cum-Managing Director, NBCC Limited, NBCC Bhawan, Lodhi Road, New Delhi-110003

Copy to:

- PS to HUAM.
- 2. Sr. PPS to Secretary (HUA)
- 3. PS to all ASs/JSs in MoHUA