

**Directorate General of Works
Central Public Works Department**

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Office Memorandum

Sub: *Preparation of statement containing brief activities of Ministry of Urban Development & Poverty Alleviation for the year 2003-04.*

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In pursuance of the above mentioned OM material for preparation of the document is sent herewith.

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Director (S&D)**

To

Dy. Secretary (Coord.)
Min. of UD&PA
Nirman Bhawan

Copy for information to DS(W&UT), Ministry of UD&PA

Director(S&D)

CENTRAL PUBLIC WORKS DEPARTMENT

The Central Public Works Department (CPWD) is the principal agency of the Government of India for creation and maintenance of all Central Government assets excluding those belonging to Railways, Defence, Communication, Atomic Energy, Airports (National and International) and All India Radio.

CPWD was created in July 1854 when the then Governor General, Lord Dalhousie, decided to set up a central agency for execution of 'Public Works'. The Ajmer Provincial Division was the first to be created and it executed many works including famine relief. However, CPWD was formally created in its present form in 1930.

CPWD has completed 150 years of its service to the nation in the year 2004-05.

The Central Public Works Department handles a wide range of projects like housing and office complexes, hospitals, workshops and factories, hostels and hotels, food grain storage structures, roads, national highways, bridges and flyovers, airports, computer centres, environmental and other utility services. It also executes border fencing, flood lighting and road projects in difficult terrain and under hostile conditions along the Indo Pak and Indo-Bangladesh border. It is an organisation which can render the most comprehensive services in the field of planning, designing, construction and maintenance management, for all civil engineering projects with total quality assurance and full accountability.

Over the years the department has created structures with engineering excellences, which are still being used. It has to its credit construction of a number of prestigious buildings like Rashtrapati Bhawan, North Block, South Block, Parliament House, Vigyan Bhawan and many multi storeyed office and residential structures all over the country. It has also developed infrastructure for sports, education, agriculture etc. It is actively involved in providing facilities for the Central Para Military Forces. Department has also executed many overseas works such as construction of embassies and hospital buildings in various countries and roads & bridges in Nepal. Presently it is executing works in Afghanistan for the Ministry of External Affairs.

Involvement of CPWD with a project starts from the stage of selection of site, carrying out geo-technical investigations, collection of field data, assisting the client in analyzing their requirements, preparation of architectural, structural, electrical, air conditioning and landscape designs and drawings, undertaking construction management including quality assurance and continuing its responsibility through post completion maintenance management etc.

The Department is moving forward in the field of construction by developing innovative techniques and adopting state of the art technologies. The Technology Application and Development Cell (TAD Cell), established to identify and select new materials and technologies, encourage use of environment friendly construction materials and technologies works in close liaison and co-ordination with research organizations. Certification of use of a material on CPWD works is a valued achievement by manufacturers.

CPWD is also playing a major role towards sustainable development of human settlement. It has developed expertise in rehabilitation and repair of structures which are facing distress and is imparting its expertise to many organizations and assisting them in rehabilitating structures in distress. A manual for Repair and Rehabilitation of Buildings has been brought out by the department.

CPWD has well documented specifications for works and schedule of rates, which are updated from time to time, to keep pace with latest technologies and market trends. These publications are followed by various construction organisations both in public as well as private sector. Besides this, the department brings out a number of manuals for assisting in execution of projects. Guidelines for designing buildings for elderly and disabled people, manual of rain water harvesting etc. published by CPWD have been found very useful by everybody. CPWD also has a well established process of execution of works and detailed guidelines are laid down for each step involved so as to ensure transparency and uniformity of operation.

The Department also assists the Income Tax Department in implementation of Direct Tax Law in so far as they relate to immovable properties. The Civil Construction Unit of the Ministry of Environment is also manned by CPWD engineers. Similarly the Andaman and Nicobar Islands have also encadred a post of Chief Engineer with CPWD to help manage their PWD. CPWD also takes up works of Public Sector Undertakings and Autonomous bodies, State Governments, Universities etc. as Deposit works.

CPWD is an organization which has expertise in all facets of construction activity. The presence of highly qualified architects, civil engineers, electrical engineers and horticulturists ensures that the projects entrusted to CPWD by the clients get to be handled in a comprehensive and professional manner.

Establishment

The CPWD has Director General Works as its head. Jurisdiction of the department is divided into seven regular Regions. The Director General Works is assisted by Additional Directors General (Works) for effective control of works and in administration matters. Its field units are located all over India to take up construction and maintenance works even in the remotest parts of the country. Through its countrywide network of planning and construction units, it is in a position to undertake the all works entrusted to it.

The department has a decentralized system of working, which provides for better & easily accessible service as the units are placed close to work centers. Autonomy, in most areas, has been given to the regional units headed by ADGs. The jurisdiction of various regions is as below:

ADG (Strategy & Planning) (Headquarter – Delhi)

ADG(S&P) is in-charge of establishment and administrative functions of the department. There are two Chief Engineers (CEs) and two Directors looking after administrative functions relating to personnel matters, vigilance, systems & development assisting the ADG. In addition ADG(S&P) is also incharge of the New Delhi Region. There are three regular zones looking after VVIP areas and the three major Central hospitals under this region. Chief Architect(NDR) provides the architectural support to these zones.

ADG (Technology Development) (Headquarter – Delhi)

ADG(TD) is incharge of functions relating to Designs, Contracts, Standards & Specifications, Quality Assurance and Consultancy Services. ADG(TD) also heads the Delhi Region. There are two Civil & one electrical zones in the Region.

ADG (Northern Region) (Headquarter – Delhi)

ADG(NR) is responsible for the works under Northern Region. There are four CEs(Civil), one CE(E) and one Chief Architect in this Unit. Zones are located at New Delhi, Chandigarh, Lucknow and Jaipur. Northern Region encompasses the states of UP, Punjab, Haryana, Himachal Pradesh, Rajasthan, U.T. of Chandigarh, Uttaranchal, J&K and the National Capital Region.

ADG (Western Region) (Headquarter – Mumbai)

ADG(WR) is responsible for works under Western Region. Jurisdiction of the region covers the states of Maharashtra, Madhya Pradesh, Chattisgarh, Goa, Gujarat, and Union Territory of Dadra and Nagar Haveli. There are three CEs (Civil), one CE(E) and one Chief Architect under this unit who have their headquarters in Mumbai, Bhopal and Nagpur.

ADG (Eastern Region) (Headquarter - Kolkatta)

ADG(ER) is responsible for works under Eastern Region. Jurisdiction of the Region covers the states of West Bengal, Bihar, Jharkhand, Sikkim, Orissa and all the North Eastern States. There are three CEs(Civil), one CE(Electrical) and one Chief Architect in this Unit with headquarters at Kolkatta, Patna and Shillong.

ADG (Southern Region) (Headquarter – Chennai)

ADG(SR) is in-charge of works in Southern Region covering the States of Tamil Nadu, Andhra Pradesh, Karnataka, Kerala, Union Territory of Pondichery, Andaman & Nicobar and Lakshdweep. There are three CEs(Civil) and one CE(Electrical) in this unit having headquarters at Chennai, Bangalore and Hyderabad.

Engineer-in-Chief (PWD-Delhi) (Headquarter – Delhi)

The public works of National Capital Territory of Delhi are handled by Delhi PWD under the Engineer-in-Chief, PWD. The E-in-C (PWD) reports to Govt. of NCT Delhi for day-to-day and other administrative functions and is assisted by four Chief Engineers. All the engineering posts are encadared in CPWD and all technical functions relating to quality assurance, vigilance etc. are performed by CPWD.

ADG (Border) (Headquarter- Delhi)

There is one post of Additional Director General for coordinating the activities of various organisations involved i.e. CPWD, Assam PWD and Border Roads Organisation in construction of Border Fencing, Roads and Lighting Systems along Indo-Bangladesh and Indo-Pak Borders. Five CPWD Zones, three civil and two electrical, are engaged exclusively for these works.

ADG (Architect)

The ADG(Arch.) exercises technical control on all the four Chief Architects. He is also advisor to Ministry of UD&PA on matters of Architectural Planning within the country and for Indian Embassies in other countries.

ADG (Training)

There is one post of ADG (Training), which looks after the training needs of the workers and officers in the department and carries out the important task of human resource development. The department has a full fledged Training Institute located at Ghaziabad, apart from Regional Training Centres at Delhi, Mumbai, Chennai and Calcutta.

SPECIALISED UNITS

To achieve excellence in its operation, CPWD has a number of specialized units. These units focus on specific areas. The units are:

- (i) Training Institute
- (ii) Consultancy Cell
- (iii) Central Designs Organisation
- (iv) Computer Cell
- (v) Standards and Specifications
- (vi) Technology Application & Development Cell
- (vii) Techno-legal Cell
- (viii) Quality Assurance Wing
- (ix) Landscape Horticulture Unit
- (x) Architectural Documentation Centre
- (xi) Central Laboratory

Central Design Organisation

Central Design Organisation(CDO), is a specialised unit of CPWD. It was formed in the year 1969 for the specific purpose of developing expertise in design of complex structures. It has following four units each headed by a Superintending Engineer:

- (i) Design Unit
- (ii) Computer Cell
- (iii) Repair & Rehabilitation Unit
- (iv) Technology Application & Development Cell

Besides carrying out design of complex structures it is now also spearheading computerization of the department. Introduction of a computerized personal information system, project review system has been done by CDO in 2004-2005. Adoption of new materials and new construction techniques, material testing, soil investigations, repairs and rehabilitation of structure in distress, development of soft ware etc are areas in which the CDO is leading the way.

Contracts, Standards and Quality Assurance Unit

This unit has four branches. Functioning of each branch is as under:-

(i) Contract and Manual Unit

This unit is responsible for registration and revalidation of contractors, updation of CPWD works procedures etc. The Works Manual, used for streamlining execution of works is being revised by the Unit to bring it in line with contemporary ways of execution. The Unit continues to update operating procedures and keeps the field units posted through technical circulars.

(ii) Quality Assurance Unit

This unit is responsible for conducting inspection of various construction and maintenance works, issue of Inspection reports for assurance of quality in the works. Regular inspections of major works are carried out by this unit.

(iii) **Techno legal cell**

This unit is responsible for dealing with the arbitration cases, Court cases, and approval of counter statement of facts in the Arbitration cases, other litigation matters and issue of guidelines regarding all the above activities.

(iv) **Standards & Specifications Unit**

This unit is responsible for updating the Specifications of works, issue of guidelines for implementation of specifications, finalizing rates and specifications for new materials, approval of Cost Indices, revision and up dating of schedule of rates etc.

Training Institute

Training programmes for Group 'A' and Group 'B' officers are conducted in the CPWD Training Institute at Ghaziabad. Regional Training centres are located at Delhi, Calcutta, Mumbai and Chennai for group 'B' and 'C' employees of the department. Training of workers and Group 'D' employees is also undertaken at Regional Training Centers located in these metropolitan cities.

Besides short term training programmes, the institute also conducts foundation training programmes for direct recruits group 'A' , (AEEs and Deputy Architects) officers, and Junior Engineers.

Consultancy Services Organisation

CPWD provides consultancy services for various public sector organisations/autonomous bodies, State Governments etc. in planning, design and execution of major building projects, infrastructure works, complex structures and specialised planning and services like air conditioning and electrical installations, project management etc. through its Consultancy Services Organization (CSO).

During the year 2004-05 the CSO has been entrusted a number of prestigious works. Some of them are:

- Planning of major road works under the 'Pradhan Mantri Gramin Sadak Yojna' and the 'Rashtrya Sam Vikas Yojna' for the state of Bihar. Total length of roads entrusted to CPWD is ____ Km.
- Planning, designing and construction of 16 kendrya Vidyalyas located in different parts of the country on behalf of the Kendrya Vidyalya Samiti.
- Planning and designing 'jetties' for the Inland Water Ways Authority at Guwahati and Patna.
- Executing works on behalf of the MEA at Kabul, Afghanistan. Repair and rehabilitation of Habibia School and of the Indira Gandhi Institute for Child Health are in progress. Some more works are in planning stage and are likely to be started next year.

Vigilance

The vigilance Unit of CPWD is headed by a Chief Engineer, who is also the Chief Vigilance Officer of the Department. The activities of the Vigilance Unit include investigation of complaints, enquiries against erring officers and staff, issue of Vigilance Clearance Certificates for service matters, conducting surprise checks on stores and preventive vigilance by suggesting changes in the procedures.

ACHIEVEMENTS

WORKS

- Workload of Rs. 3561 crore was achieved during 2003-2004. Equivalent work load of **Rs.3725 crore** is targeted for achievement during the year 2004-2005. **Refer Annexure-1.**
- **655 number** of General Pool accommodations have been added by CPWD during 2004-05 up to December 2005 and another **555 quarters** will be added upto march 2005. Refer Annexure-2 and 2A.
- **18350 sq.m.** of non residential General Pool Accommodation has been completed during the year upto December 2004. **Another 19806 sq.m.** of area is likely to be added by March 2005. **Refer Annexure-3 and 3A.**
- **86 major works** each costing more than Rs. 2 crore have been started during the year and another **59 works** costing more than rs. 2 crore are likely to be started. **Refer Annexure- 4 and 4A.**
- **205 major works** each costing more than Rs. 2 crore have been completed or will be completed during 2004-2005. **Refer Annexure-5 and 5A.**
- **84 major works** costing more than Rs. 2 crore have been sanctioned during the year 2004-2005. **Refer Annexure-6.**

Achievements of the various **specialized units** of CPWD are given in **Annexure 7 to 11.**

Some of the other important achievements of CPWD during the year 2004-05 are as follows:

- A major drive was undertaken to provide roof top rain water harvesting structures for Govt. buildings in Delhi. In all CPWD has provided this system in 49 buildings so far and work is being carried out in another 15 buildings.
Installation of roof top rain water harvesting systems in all Govt. buildings being designed by CPWD, where it required to prevent degradation of the water table, has now been made mandatory.
- Another area of thrust of CPWD this year has been construction of eco-friendly buildings. Guidelines for using materials such as fly ash and other such products have been issued. CPWD has also propagated the use of fittings and fixtures which consume less energy/water. Copy of guidelines issued in this regard is placed at **Annexure-12.**
- A new office building for the Union Public Service Commission, in New Delhi, has been completed by the CPWD during the year 2004-05.
- CPWD was entrusted the work of constructing jetties on National Waterway-3 by the Inland Waterways Authority of India(IWAI) in Kerala. Terminals at Kottapuram, Aluva Kayankulam, Thirukkunnappuzha, Vaikam,

Cherthala have been completed and handed over. The work involved creating storage facilities, terminals, berthing facilities, protection works etc. Work for IWAI has also been taken up in Patna on national waterway number-1 and in Guwahati on national water way number-3. In addition to these works for permanent jetties at haldia, Kolkatta, Tejpur, Munger etc. are also to be taken up by CPWD.



- **Construction of buildings for SS NIERE project, Jullunder, Punjab**

SSS-NIRE Project, being executed by CPWD is situated in a land area of about 75 acres on Jalandhar-Kapurthala Road. The cost of Phase-1 of the project is about 20 Crores which consist of Institutional Buildings and residential Housing(22 Nos.) having total plinth area of 11000 sqm. Layout of the buildings has been done in such a way so that North South line was perpendicular to axis of the buildings and most of the Buildings are facing south in order to get maximum advantage of solar Energy. Solar passive architecture also includes hyperbolic shells, large windows etc. Generation of electrical energy from photovoltaic cells is also part of the project. Double glazing, roof top thermal insulation has been provide to conserve energy. Rain water harvesting, waste water re-cycling is also provided.



Important events/foundation stone laying ceremonies/inauguration:

The most important even of the year was the culminating ceremony of the 150 year celebrations of CPWD. His Excellency The President of India was the Chief Guest at this ceremony which was held in Vigyan Bhawan on July 19, 2005. Hon. Minister for Urban Development and parliamentary Affairs and Hon. Minister for Telecommunication also graced the occasion. A special day cover was released by the President to mark this historic day.



The President in his address gave CPWD a 10 point mission statement for being followed in the department. These included making eco-friendly buildings, carrying out integrated planning of buildings, making buildings earthquake and fire resistant, energy efficient, disabled friendly, seeking ISO certification etc. The president exhorted the department to share its knowledge with others through annual seminars and introduce e-governance to manage the department in a more efficient manner.

As part of the 10 point mission given by The President of India the CPWD has offered its services to the UGC, KVS and NVS in examining the institutions under them from fire safety point of view. A number of requests have been received from different institutions seeking assistance from CPWD.

The closing ceremony in Vigyan Bhawan was preceded by a cultural evening held in Talkatora Indoor Stadium which was attended by a large section of CPWD officers and staff. On this occasion former CPWD employees from all categories were honored.

As part of the closing ceremony functions were held in many Regional offices where important dignitaries participated.

Inauguration of the Trade centre in Bangalore built by CPWD for ITPO was done by the Hon. Chief Minister of Karnatka on September 26, 2004. The work done by CPWD was widely appreciated by all and it also received excellent press coverage.



A detailed list of important events and activities of the department for the year 2003-04 is given in **Annexure-13**.

Activities in other important areas

Border Roads, Fencing & Flood Lighting Works

The Central Public Works Department is executing the work of Border fencing, flood lighting and construction of Roads along the international borders of the country both in the West and the East. In all 1505 Km of fencing, 233 Km of Road and 1483 Km of flood lighting along Punjab & Rajasthan Border has been completed by CPWD.

Along the Gujarat border 172 Km of road including link road has been completed. 66 Km of fencing and 64 Km of flood lighting and 14 Border out posts have been completed so far.

Along the Indo Bangla border 1591 Km of road, 1090.60 Km of fencing, 14276metrs of bridge length has been completed by CPWD so far.

The maintenance of the infrastructure created along the border in the form of roads, bridges, flood lighting etc. has also been entrusted to CPWD. Special units have been opened in Rajasthan and North East to look after the works.

Details of achievements during 2004-2005 are given in **Annexure-14**.

Construction of residential accommodation for Ministry of Defence

CPWD has been entrusted the work of constructing residential accommodation for the Ministry of Defence at 12 locations in the states of Rajasthan, Punjab and J&K. Detailed Project Reports (DPR) for all 12 stations amounting to Rs. 1138 crore have been sent. Sanction for three locations i.e. Janglote, Jullunder and Sanjuwan have been received. Work for Jangolte has been started and tendering process for the other two stations has been initiated. Sanctions for other stations is awaited.

Citizen Charter

To reflect the commitment of CPWD in the matter of construction and maintenance of Residential and Non-Residential buildings and other service activities following steps have been taken:

- i) Citizen Charter has been formulated and adopted in CPWD.
- ii) The Charter adopted has been put on the CPWD website www.cpwd.nic.in.

Special efforts to introduce transparency through computerisation

Computerisation has been introduced by CPWD in areas like preparation of Architectural Designs, Structural Design & Detailing, Project Planning & Scheduling, Monitoring, Preparation of Schedule of Rates, Tender Justification, Pay Rolls, Personnel Management, Inventory control, Accounting and Budgeting, maintenance management etc. During 2004-05 special efforts were made to introduce web based 'personal information system' and 'progress monitoring system'. Both these services are very user friendly and will usher in availability of real time information about the human resource available in CPWD and the projects being executed by the department.

A fully computerized complaint receiving and monitoring system has been already being used by CPWD in Delhi. The service can be accessed at <http://cpwdsewa.nic.in> .

CPWD Regions have developed their own websites and have posted relevant details. These web sites can be seen at www.cpwdsr.tn.nic.in; <http://cpwdnr.nic.in>; <http://cpwdwr.nic.in> and <http://cpwder.nic.in> .

Activities of CPWD in North East.

CPWD has been executing number of infrastructural works in the North East. The head quarters of the CPWD in this area is located in Shillong. Field offices are located Guwahati, Khatkhati, Shillong, Imphal, Tejpur, Silchar & Agartala.

The works done by the Department cover such diverse sectors such as Education, Health, Sports, Tribal Welfare, Inland Waterway Transport, border

fencing etc. It also plays a major role in executing works for the various Central Police Organisations such as CRPF, BSF, Assam Rifles, SSB, ARC, SIB & SB.

Some of the important works being handled in this region are:

- **Construction of Guwahati Trade centre at Guwahati, Assam**
Construction of a Trade centre for ITPO at Guwahati has been started in December 2004. The foundation stone was laid by the Hon. Chief Minister of Assam on December 13, 2004. Estimated cost of work is Rs. 17 crore.
- **Buildings for Assam University at Silchar**
Building for Library cum computer centre for the University has been completed and handed over to the University.
- **Construction of Mizoram University, Aizwal**
Work for construction of various buildings for the Mizoram University at Aizwal, Mizoram has been entrusted to the CPWD. Total value of work entrusted to CPWD is Rs. 65 crore.

Involvement of CPWD with the Ministry of Tourism

CPWD has taken up in a big way the works related to the Ministry of Art Culture and Tourism in the states of Assam, Bihar, Orissa, Delhi, Rajasthan, Jharkhand, Gujarat, J&K, West Bengal, Karnataka, Kerala, Madhya Pradesh, Rajasthan, Tamilnadu, UP, Uttaranchal, Maharashtra etc. Many works on heritage sites such as Kurukshetra, Red Fort, Chitradurga, Hampi, Konark etc. are being carried out by CPWD.

Total 390 works are being executed by the department. Details are given at **Annexure-15**.