

**Central Public Works Department
Office Memorandum**

No. DG/Maint. Manual 2023/01

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Nirman Bhawan, New Delhi

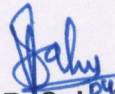
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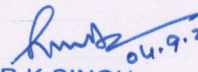
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(V.P. Sahu) 04.09.2023

Superintending Engineer (C&M)

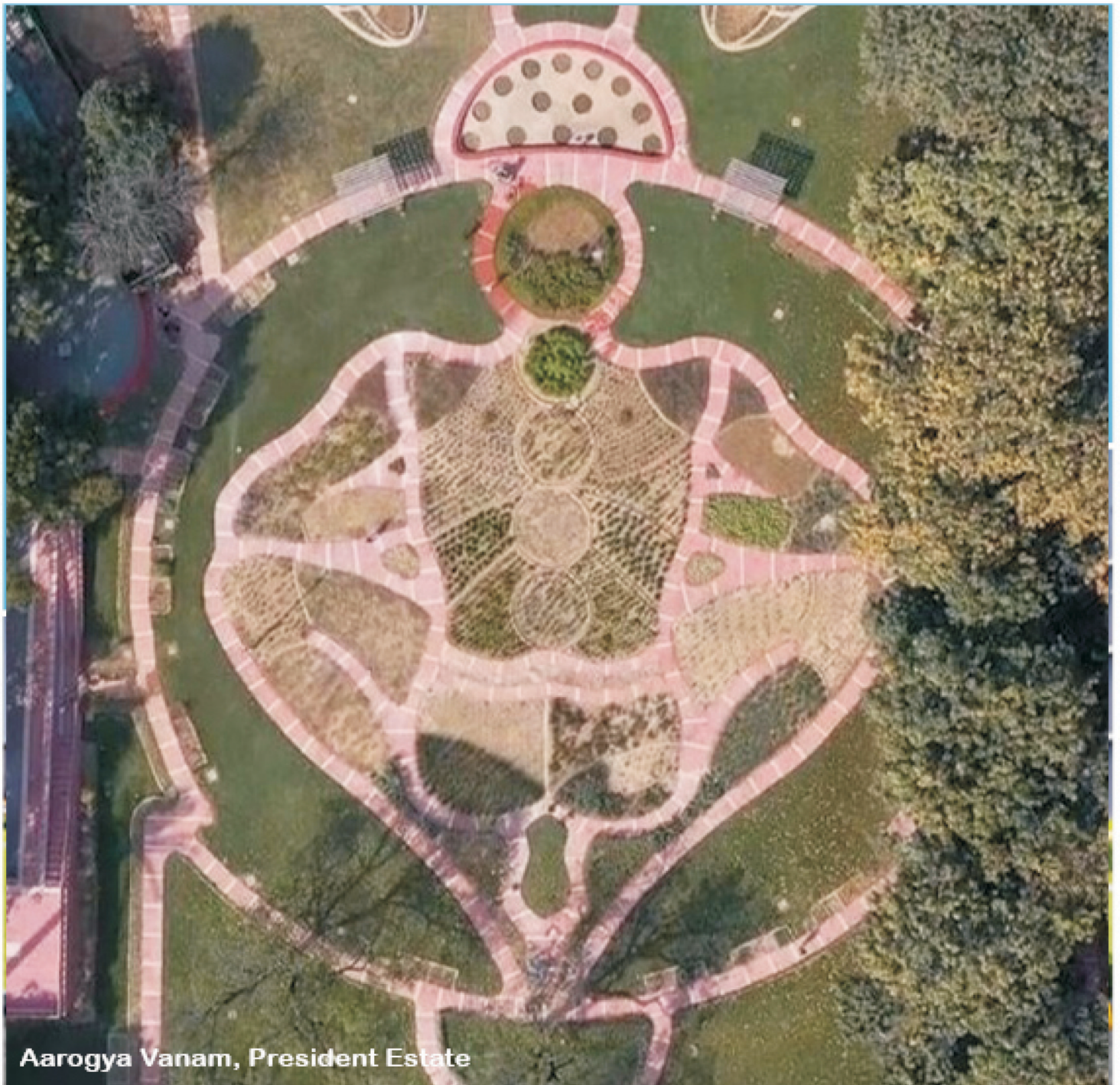
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All CPWD and PWD officers for information and necessary action. (Through CPWD website).


04.9.2023
R K SINGH
EE(Manual)



CENTRAL PUBLIC WORKS DEPARTMENT Maintenance Manual **2023**



Aarogya Vanam, President Estate



सत्यमेव जयते

GOVERNMENT OF INDIA

CENTRAL PUBLIC WORKS DEPARTMENT

MAINTENANCE MANUAL

2023



Published under the Authority of Director General, CPWD, New Delhi

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Whereas every care has been taken to ensure that all relevant and essential provisions required for Maintenance of buildings are incorporated in this CPWD Maintenance Manual 2023 in a simplified and transparent manner, all executing entities referring to are requested to bring it to the notice of the Directorate, if any conflicting provisions/ discrepancies are noticed in the CPWD Maintenance Manual 2023.

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DIRECTOR GENERAL
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Rajesh Kumar Kaushal
Director General



भारत सरकार
Government of India



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FOREWORD

It gives me immense pleasure to note that CPWD Maintenance Manual 2023 is ready for publication. Maintenance Manual was last published in the year 2019. Due to changes in trends of maintenance system and requirement of the users, it was necessary to revise and update the present Maintenance Manual so as to fulfill the maintenance requirements to ensure smooth and satisfactory functioning of the Government buildings.

Over the years, the CPWD Maintenance Manual has served as a guide book for CPWD. This revision of CPWD Maintenance Manual is being brought out by incorporating changes in rules/procedures, yardsticks and frequency of application of finishing items along with useful suggestions made by various field units.

This publication shall be of great help and guidance to the officers engaged in the maintenance works to keep the buildings in habitable condition. It will also help to ensure safety of the occupants or the public at large.

This Manual is the concerted effort of a large number of officers. I would like to express my appreciation of the guidance given by Shri P.B. Singh, SDG (Mumbai) previously ADG (Delhi) Chairman of the Maintenance Manual Committee, Shri Dharmesh Chandra Goel, ADG (Tech.), Shri Prem Mohan, CE CSQ (Civil) and dedicated efforts of Shri V.P. Sahu, SE (C & M), Shri R.K. Singh, EE (Manual), Smt. Mitali Saikia (Architect), Shri Kamal Passi (Asth. Architect) and Shri Brij Mohan Joshi, AE (Manual) in bringing out this Manual.

Place: New Delhi
Date: July, 2023


(Rajesh Kumar Kaushal)
Director General, CPWD



Dharmesh Chandra Goel
Addl. Director General (Tech)



भारत सरकार
Government of India



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PREFACE

Central Public Works Department is maintaining a very large building stock comprising of General Pool residential accommodation and Central Government Buildings. The residential units and office buildings maintained by CPWD are adding regularly with the creation of the new assets. The gigantic task of maintaining these assets is being discharged by CPWD to the satisfaction of the stake holders through its wide and established network.

To meet the challenges effectively and efficiently on maintenance front, CPWD Maintenance Manual was published last in the year 2019. Since then, several changes in rules / procedures have taken place and several initiatives in improving the maintenance have been taken. E-nirmit maintenance module has been included for improving lodging & monitoring the complaints. Yardsticks for civil and horticulture works have been revised due to mechanisation.

To revise the CPWD Maintenance Manual, a Committee under the Chairmanship of Additional Director General (Delhi) was constituted. The recommendations of the Committee were circulated to Field Officers. Suggestions received have been incorporated in the Manual.

This publication shall be of great help and guidance to the officers engaged in maintenance of buildings. I take this opportunity to acknowledge the commendable efforts made by Shri P.B. Singh, SDG (Mumbai) previously Additional Director General (Delhi) who was entrusted the job of revision of the Maintenance Manual 2019. I also express my thanks to entire dedicated team involved in revision of the Manual for their valuable contributions in finalization of the Manual.

Place : New Delhi
Date : July, 2023

(Dharmesh Chandra Goel)
Additional Director General (Tech.)

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CHAPTER 1 MAINTENANCE

1.1 Objectives

Building Repair and Maintenance work is undertaken to keep, restore or improve the facilities of a structure or building which include housekeeping, civil, E&M services, horticulture and landscaping to keep the structure/building in good condition and in currently acceptable standards to sustain its utility and value.

The objective of maintenance is: -

- (i) To ensure safety of the occupants or the public at large.
- (ii) To preserve building and services, in good operating and habitable condition.
- (iii) Where so required to upgrade, renovate, rehabilitate, or retrofit the facilities to improved specifications and standards.

1.2 Maintenance Services

CPWD maintains Central Government assets whose ownership is vested with the Ministry in-charge of Works (Presently the Ministry of Housing and Urban Affairs) and or from funds reflected in its Demand of Grants. It also maintains, at the option of the owning entity and the Department, assets from the funds provided by respective organizations. CPWD takes up maintenance of assets and buildings not constructed by CPWD on the approval of authority prescribed in CPWD Works Manual. Wherever CPWD is called upon to maintain such works, following steps may be taken:

- (i) Detailed inspection may be carried out of the building and services from safety and maintenance view, record kept of the defects and deficiencies, and brought out in the notice of the client in the preliminary estimate with photographs/videos.
- (ii) The client may be encouraged and advised to enter into MoU of a longer period, say 5 to 10 years for taking up its maintenance works alongwith original works also.
- (iii) Structural defects endangering safety to the occupants or the public at large must be taken up as the first priority.
- (iv) Method of comprehensive outsourcing of repair and maintenance should be adopted. In case, the method is not adopted, approval of CE/ADG should be taken.
- (v) Government Authorities entrusting new construction/ up-gradation/ office renovation etc. works may be encouraged and advised to consider entrusting comprehensive maintenance and operation of the facility for 3-5 years in same agreement.

The repair works are classified in under mentioned categories:

1. Day to day repairs/service facilities
2. Annual repairs including preventive maintenance
3. Special repairs

In addition to above the following works are also executed as per guidelines prescribed by Government of India.

- (a) Additions and Alterations Works in the buildings
- (b) Up-gradation (including Retrofitting and Aesthetic Improvement)
- (c) Supply & maintenance of furniture & furnishing articles for Ministers, MPs & Judges of Supreme Court & High Court & other VIPs in Delhi.

1.3 CPWD Citizens' Charter

The Citizens' Charter is placed on the website of the department. The charter shall be prominently displayed in every service centre and office.

1.4 Means of effecting maintenance

1.4.1 Repair estimates

These shall be essentially prepared and sanctioned by the competent authority as per CPWD Works Manual/Delegation of Financial Powers.

1.4.2 Service Centre

CPWD has a network of Service Centres in various Govt. Colonies/ Office complexes as well as web-based portal cpwdsewa.gov.in for receipt and disposal of maintenance complaints.

1.4.2.1 Complaint Register

All complaints received at the Service Centres are noted in physical form of complaint register or online system /E-nirmit and then passed on to respective workers through specific registers/ logbooks/Govt. Building maintenance module.

1.4.3 Modalities of maintenance

The maintenance works are undertaken through one of the following:-

- (i) Work Charged Staff
- (ii) Through Contracts, further classified as:
 - (a) Contracts for specific works
 - (b) Comprehensive Maintenance

Whether the work should be carried out through contract or own work force shall be decided by the Engineer-in-Charge based on the resources available.

1.4.3.1 Through directly employed workers

Departmental workers: Departmental workers are under work charged establishment as their pay, allowances etc. are directly charged to the maintenance work. The existing norms for civil, electrical and horticultural staff employed on maintenance work are given in Annexure 5. Such staff is primarily meant for day to day maintenance.

Where in a subdivision the distance between the farthest buildings is more than 16 K.M. and where not less than 75% of the property is uniformly scattered over large area, 25% weightage may be allowed to all categories of work charged staff over the above yardstick. Engineer-in-charge shall deploy staff judiciously in Rashtrapati Bhawan as no yard-stick is prescribed for its maintenance.

The employment of new work charged staff shall be governed as per the directions and guidelines issued from time to time by the MoHUA/CPWD.

There is a complete ban imposed by the Government on engagement of casual labour through Muster Roll (and through Hand receipt, Work order or in any other form). Therefore, no casual labour should be employed in any form and the directions/guidelines issued by MoHUA/CPWD from time to time shall be followed.

1.4.3.2 Through contracts

The annual repairs, Special repairs and Retrofitting and Up-gradation works are generally carried out through individual contracts or Comprehensive maintenance as per instructions contained in CPWD Works Manual 2022 and as amended from time to time.

1.5 Register of Buildings

- (i) Every division shall maintain a Register of buildings in the prescribed format (at Annexure- 16) uptodate. The Executive Engineer shall certify to that effect at the end of every financial year ensuring that necessary additions in the area and cost in structures are made uptodate. The details of all immovable assets under his/her jurisdiction shall be entered in E-nirmit Asset Register Module.
- (ii) The Superintending Engineer/Chief Engineer during his inspection of the Division Office, should examine this register to verify that it is being posted and maintained uptodate. On similar lines, garden Register will be maintained by Horticulture indicating therein the original works, addition and alteration works and special repairs.
- (iii) Record shall be kept of the quarters upgraded as per the norms of the MoHUA both online and in physical form. The intimation of the quarters upgraded shall be submitted to the Directorate of Estates and the Superintending Engineer/ Chief Engineer.

1.6 Inspection of Buildings

- (i) All Buildings/structures borne on the Register of Buildings / E-nirmit asset register are required to be inspected twice a year by the JE/SOH and once in a year by AE/ ADH to check the visual defects, if any and suggest remedial measures like structural repair, replacement, retrofitting, up-gradation, horticulture works and submit estimates to the EE/DDH.
- (ii) In case of any deficiency/defect is found in the building/structure/ installation/ gardens, necessary reporting should be made to higher authorities. The EE/DDH should inspect it as soon as possible and take further action to remedy the deficiency/defect. He shall bring it to the notice of his Superintending Engineer/ Chief Engineer, cases where he has reasons to doubt the structural soundness of any building/structure/ installations/gardens. SE/CE will take necessary action.
- (iii) In case of any deficiency/defect is found in the important buildings like Prime Minister's house, Cabinet Minister's House, Vice-president's House and houses of other VIPs, report about unsafe condition of the house/installation should always be sent to the SDG/ADG. SE/ CE will send the proposal for repairs or disposal of unsafe building / structure/installation to the Department /Ministry concerned with their recommendations. For disposal of the building / structure/ installation, action for survey report and demolition of such building/ structure/installation should be taken as per provisions of CPWD Works Manual.
- (iv) Once it is decided to demolish such building/structure/ installation, then its maintenance should be stopped by all the wings of CPWD.

1.7 Cleanliness in the Colonies

Cleanliness shall be maintained in the colonies and ensured that malba is collected from the work place and deposited at suitable identified spots, where residents/users do not throw garbage on it. Suitable provision will be made for disposal of malba on continuous basis and not allowed to accumulate / pile up. The arrangements of green and blue dust bins shall be made as per the standard norms. The arrangement for disposal of C&D waste shall be made separately. Wherever compost pits or organic waste converters are installed, it shall be ensured that the same are functional on regular basis and manure obtained from them is utilised properly.

Any leakage from the water supply line, sewers or unfiltered water supply line noticed in the colonies will be repaired immediately. It shall be ensured that sewer lines are not laid over water supply lines and are not in close vicinity due to which there is any chance of getting sewage mixed into potable water.

Water will not be allowed to stagnate on the roofs, courtyards, roadside or any other place. It shall be ensured that before rains, all roofs, drains and rain water harvesting filter media are cleaned properly. All precautions should be taken to keep the colonies neat and clean. In case unhygienic health hazardous conditions are noticed in the portion of areas/service maintained by local bodies, the same will be reported to them and pursued for action. Over-head tanks will be provided with lockable covers and Mosquito proof couplings. The occupants will be advised against storage of water in coolers not in use and apply Mosquito repellents in the Cooler's pads etc. to check spread of Malaria.

1.8.1 Services to be attended by local bodies and CPWD

Till services are not handed over to the local bodies, the same will be maintained by CPWD. Even where the bulk services are not taken over by the local bodies, regular sweeping of roads/ paths and common areas like lawns, parks and back lanes will be carried out by CPWD. All efforts shall be made to hand over the services to be maintained by the local bodies to them as early as possible.

1.8.2 Services to be provided by different disciplines of CPWD

So long as the bulk services in a colony are not handed over to the local bodies and they do not even discharge their responsibilities of cleaning the areas, the Civil wing of CPWD will arrange the cleaning of back lanes, roads/paths and storm water drains. The Electrical wing of CPWD will ensure proper maintenance of electric sub stations, feeder pillars, pump rooms etc. Cleaning of lawns, parks and hedges will be the responsibility of Horticultural wing of CPWD. In case of flooding of the area civil wing of CPWD will take action when bulk services are maintained by the department.

In many Govt. colonies bulk water supply is received by CPWD from local authorities at one point in the colony, say underground sump and then it is distributed through overhead distribution tank to different houses. The pumping of water to overhead tank is done by Electrical Wing of Department. The valves in various distribution lines upto a distance of 50 metre from overhead distribution tank/ pump house will be operated and maintained by Electrical wing of the Department along with pumps and associated equipments. Civil wing will be responsible for laying of water distribution line/ Hydrant, disinfection of stored water before distribution and regular cleaning of OH Tank/ U. G. Sump and also metering of water released /supplied.

1.8.3. Services not within the purview of CPWD

Under mentioned important services do not come under the category of maintenance of non-residential buildings and its services and hence not rendered by CPWD.

- (i) Housekeeping -It is distinctly different from building maintenance. It includes day to day cleaning/scavenging of the areas, which is arranged by user Department. According to Govt. guidelines Coordination Committee is formed by user Departments in case more than one Department/Ministry is located in an office complex and such services are arranged by Coordination Committee.
- (ii) Maintenance of Fire Extinguishers -Whereas maintenance of Fire detection and firefighting equipment/services is within the purview of CPWD, maintenance and re-filling of fire extinguishers installed at various locations in the building is the responsibility of user Department.
- (iii) Security of building -Security of the building is the responsibility of user departments, which is discharged by them directly or through Ministry of Home Affairs.
- (iv) Pest control.
- (v) Monkey menace.
- (vi) Removal of Honey bee hives.

However in case of GPRA / residential buildings sweeping, cleaning, mopping of common areas e.g. staircases, lift lobbies, corridors, terraces etc. shall be the responsibility of CPWD civil wing.

1.9 Monitoring of maintenance

For effective maintenance and achieving desired client satisfaction, monitoring of the maintenance complaints shall be done at various levels. These measures are detailed in a subsequent chapter.

1.10 Encroachment

The role of the CPWD dealing with encroachments is detailed in a subsequent chapter.

1.11 Essential staff quarters

There are essential staff quarters attached to the Service Centre for allotment to the staff responsible for maintenance of the area. Allotment of these essential staff quarters is governed by "Allotment of Government Residences (under the control of Central Public Works Department) Rules, 1981" or as modified from time to time by the Directorate. Allotment of these quarters can be done by the Executive Engineer with the approval of SE/CE. Distribution of essential staff quarters between civil and electrical will be decided by the Chief Engineers/ADGs. An overall view will be taken while allotment to earmark the essential staff quarters at various Service Centres to different tradesmen/officers to ensure that services of all trade officials in different grades but eligible for allotment of quarters is available at the time of emergency. As per allotment rules, the tradesmen/officers will be required to attend emergency complaints, not only at the Service Centre where they have been housed, but anywhere within the division, circle or zone. The rules have to be followed strictly and quarters have to be got vacated from the occupants, who otherwise becomes ineligible on account of transfer to non-essential areas. Seniority of trades-men and officers will be maintained at division level (civil division and in case civil division not available, electrical) for allotment of essential staff quarters. The rules of deducting the license fee as per the guidelines of Directorate of Estates shall be followed.

CHAPTER 2

ANNUAL ACTION PLAN AND RATE CONTRACT SYSTEM

2.1 Annual Building Survey and Program for Repairs

Before the calendar year is completed a survey of the buildings as per the Register of Buildings or otherwise maintained, should be conducted to identify works of repairs, addition and alteration, and up-gradation works required. The Report of the Junior Engineer/Assistant Engineer on the Annual Survey of the buildings should highlight defects of structural nature in the buildings which require personal investigation of the Executive Engineer.

Special repairs required to eliminate leakage and dampness in buildings should be given priority and completed before the monsoon. As far as possible it should be ensured that all other repair works both Civil and Electrical are completed before finishing works are taken up. In case, works are not taken up comprehensively, Executive Engineer/ DDH of respective discipline shall inform others regarding the works being taken up e.g. works taken up by Civil will be informed to Electrical and Horticulture and similarly by others to Civil.

2.2 Annual Action Plan

The Annual Action Plan in the form of Budget Estimate /Revised Budget Estimate indicating the activities of all disciplines shall be prepared considering the availability of funds and likely funds to be made available. The priority of works shall be decided based on the urgency and safety of works as per the fund availability. The Plan shall be approved by the Superintending Engineer/Chief Engineer. The Plan shall be reviewed by the Superintending Engineer/Chief Engineer quarterly based on funds availability and requirements. Addition or deletion of activities can be made accordingly by the Superintending/Chief Engineers.

CHAPTER 3

SERVICE CENTRES

Service Centres shall manage and dispose the complaints lodged online at cpwdsewa Web portal by the users of CPWD maintenance services. For lodging complaints, the allottees could also take assistance of 24X7 Call Centre for which toll free telephone numbers are displayed at each of the Service Centres.

A Junior Engineer/ Sectional Officer/Assistant Engineer is in-charge of a service centre related to their respective disciplines viz. Civil, Electrical or Horticulture. As far as possible, Service Centres shall be combined to cater to the services related to civil, electrical and horticulture disciplines. The service centre shall be attended by a JE / SO (Horticulture)/ AE / ADH every day and by an EE / DDH at least once a week in general and twice a week where the service centre caters to maintenance needs of VIP residences.

The complaints received through cpwdsewa/E-nirmit Govt. Building Maintenance Application Web portal are downloaded by respective Service Centre and allotted online to workman (mason, carpenter, painter, sewer-man, wire-man, beldar, khalasi etc.), who could be departmental or engaged through an outsourcing agency by service Center in-charge through E- nirmit maintenance Application. The allotment/Job Card shall be received by the workman in his hardware device like Mobile phone through E-nirmit Maintenance Mobile Application. For attending the Complaints allotted to him by Service Center in-charge, the workman after visiting the premises shall scan the QR code available at the entrance of the Residential Quarter to verify his presence. During the start of Job, he shall click the photo of the complaint and can request for the needed materials to be issued from Service center Store. The issued materials shall be received and acknowledged by him in his Mobile application to update the Stock inventory of the store automatically. After the complaint is attended, the allottee shall share the OTP received to the workman to acknowledge the complaint has been attended.

The responsibilities of the Service Centres are as under:

Maintenance of premises including the services within it, is detailed as under:

- (i)
 - (a) Water supply system from underground water sump/ tubewell, if maintained by CPWD or ferrule connection (as the case may be)
 - (b) Electric supply from electric meter onwards and all
 - (c) Garden features maintained by CPWD
 - (d) Drainage upto first manhole from appurtenances within the premises
 - (e) Storm water drainage upto first exit point beyond premises at ground level
 - (f) Other services in the premises.

If there is any complaint pertaining to above, the allottees are required to lodge the same on cpwdsewa Web Portal which may be direct or the services of call centre, if any, could be availed on 24 x 7 basis.

- (ii) Bilingual notice shall be placed at prominent place in the service centre indicating the following:
 - (a) Jurisdiction of the service centre
 - (b) Working hours of the service centre

- (c) Services available after working hours
- (d) Complaints related to premises can be lodged on 24X7 basis at
 - (i) Toll Free telephone number 18002664499, 1800114499 (at time of publication).
 - (ii) cpwdsewa Web portal address <http://cpwdsewa.gov.in>
- (e) Time and days of the week on which the EE/SE/CE shall be available at the service centre to hear grievances
- (f) Name, telephone Nos. (official and residential) and e-mail addresses of the CE/SE/ Director (Hort), EE/DDH, AE/ADH/JE/SO(H).
- (iii) Service centre shall have bilingual notice at prominent place indicating up-gradation works as may be admissible in each type of quarters.
- (iv) It shall be the endeavour of the Service Centre:
 - (a) To assign the related worker and attend all the minor and emergent complaints
 - (i) Of normal nature within 24 hours of lodging but during working hours.
 - (ii) Of emergent nature within 1 hour of lodging but during working hours.
 - (b) Classify complaints as emergent/ minor/ major and for major complaints, assign the timeframe for its attendance.
- (v) Officers at all levels shall carry out regular as well as surprise inspections of some of the complaints to check whether these have been attended satisfactorily. It shall be ensured that all repairs and other works are carried out as per the specifications both for works done departmentally and also through contracts. Wherever the quality is not found upto the mark after inspection, the same shall be got redone.

3.1 Online Maintenance Service (cpwdsewa)

For monitoring of complaints related to maintenance of assets being maintained by CPWD, the cpwdsewa portal is being operated. Each service centre has been given ID and password to login-in to the system. The cpwdsewa portal has four main modules.

(A) Resident's Module

Under this module, an occupant can lodge complaint in respect of residential or non-residential buildings being maintained by CPWD either by taking assistance of 24 x 7 Call Centre service or by CPWD sewaapp or by directly logging into cpwdsewa portal. The type of complaints can be selected after logging into cpwdsewa website from the drop down menu shown at left panel of the screen.

The complainants using cpwdsewa portal can select a residential quarter or non-residential building through multiple options e.g. house details, service centre, building name, general search or one's own mobile number as per their convenience. They can also view the detailed list of complaint types in respect of Civil, Electrical and Horticulture all. Against a specific complaint lodged, the residents are allowed to choose their preferred day and time for complaint attendance. Upon submission of needed details, the confirmation screen appears with the Unique Complaint Number, which is auto generated by the system.

The status of a previously lodged complaint can also be known online through multiple options e.g. direct by giving complaint number or by selecting particulars of building/quarter and then the specific pending complaint. The residents can also get the complaint history in respect of their particular quarter during a specified period.

The SMS are generated and sent to the registered mobile of the user at various stages namely making the complaint lodging i.e. immediately after the complaint is lodged, the complaint is assigned to the worker and when the complaint is attended. The user has also been given the option to submit their feedback via SMS. Once the complaint gets attended by the respective CPWD Service Centre, the resident is asked to give feedback in three different modes as under:

- A. Satisfied with the work done;
- B. Not satisfied with the work done; and
- C. Attended but claimed to be not attended by the Allottee.

This feedback is taken automatically through an SMS responded by an user in response to SMS reporting complaint compliance. If not satisfied with complaint compliance, the user has option to re-activate the complaint through Call Centre. Against a re-activated complaint, the worker is required to re-visit and attend the complaint to the satisfaction of the user.

(B) Service Centre Module

This module is created for looking after the complaints handled at the operational level i.e. Service Centre. Each service centre is owned by Junior Engineer/Assistant Engineer and has been allotted a Login ID and Password and when logged-in, it shows online numerical abstract of registered complaints assigned and remaining to be assigned to workers for that Service Centre. This is displayed to all three discipline officers (i.e. Civil, Elect & Hort) in regard to all complaints under that Service Centre. The analysis for benchmarking can also be done for the complaints lodged for selected period.

(i) Responsibilities of the Service Centre:

- (a) Complaint Entry** - Wherever Call Centre Service is not yet activated and/ or where complaints are directly received, these are required to be entered online at the designated service centre. For this purpose, Data Entry Menu is used by Service Centres. There is a provision for lodging single or multiple complaints in the system. Wherever Call Centre service exists, this menu is exceptionally to be used by the service centres.
- (b) Workers' List Update:** Updated list of workers of a particular service centre is used online both for marking their attendance and assignment of complaints by concerned Junior Engineer/Assistant Engineer. It shall be ensured that the list is updated from time to time whenever required.
- (c) Keep Database of Service Centre Updated:**
 - (i) In respect of quarters under the maintenance under its jurisdiction.
 - (ii) Adding/updating the workers list,
 - (iii) Change the password,
 - (iv) Service Centre profile,
 - (v) List of respective maintenance officers, their contact numbers
 - (vi) Information related to allottees.

(d) Updation of Complaints

Soon after the complaint is registered, worker is assigned and complaint reported as attended an online update is done on a REALTIME basis by JE/AE for one's own discipline (i.e. Civil, Elect or Horticulture) . This is done by selecting the various options like:

- (a)** Assign Complaints;
- (b)** Attend Complaints;
- (c)** Convert Complaint to :
 - Disowned by Allottee;
 - Major Complaint;
 - Non-CPWD Complaint;
 - Door Found Locked-1;
 - Door Found Locked-2;
 - Door Found Locked-3;
 - Not Admissible Complaint; and
 - Periodic/Up-gradation Complaint,

Non-updation of status on a REALTIME shall be the responsibility of in-charge of the service centre.

(ii) MIS Reports

Service Centre has been empowered for its own jurisdiction through the cpwdsewa to generate MIS reports in different formats for monitoring and taking corrective actions by the incharge of maintenance. These MIS reports include:

(a) Reports Related to complaints

- (i) Lodged, pending & disposed off
 - On a particular day
 - During a specific period
- (ii) Pending for more than specified number of days,
- (iii) Numerical abstract
- (iv) Status Report

(b) Residents Feedback Reports categorizing as:

- (i) Satisfied with the work done;
- (ii) Not Satisfied with the work done;
- (iii) Attended but claimed to be not attended by the Allottee; and
- (iv) Delay in assigning

(c) Reports Related to Workers

- (i) Assignment, pendency and disposal of complaints.
- (ii) Attendance Report for a specified period.
- (iii) Attended but reported by user as unattended.

(d) List of houses

- (i) Repeatedly lodging same complaints beyond a specified number of repetition.
- (ii) Vacated, occupied during a specified period
- (iii) With period of vacation/ occupation history
- (iv) Occupation/ vacation report. Duplicate, if needed, at any time

- (e) **Non-CPWD complaints identified** helps in analyzing the number of complaints received which do not pertain to CPWD vis-à-vis the total complaints received.
- (f) **Comments of senior officers** on the disposal of complaints, These MIS reports available on the cpwdsewa are self-explanatory.
- (iii) **Bulk conversion to Major Service Requests**
Bulk conversion of the normally registered complaint to major complaint and their bulk disposal can be updated by the service centre in-charge through Bulk Updation option available in the system. Time to time MIS reports are to be generated to review the pendency of major complaints for appropriate action at appropriate level within CPWD.
- (iv) **Inventory of Items Issued Quarter wise**
The AE/JE- in- charge of maintenance of residential accommodation shall maintain and update list of inventory items issued for a particular house and generate reports for the same. Such inventory items are to be maintained and updated in Refx Module ERP.

(C) CPWD Management Module

This module is to provide access to monitor pendency and attendance of complaints. The officers can securely login in the system by using their own Login ID and password. A Dashboard is displayed to CPWD officer as the first Welcome Screen. This indicates Live and online information regarding registration, pendency and disposal of all minor & major complaints.

Reviewing and recording comments against any of the minor or major pending complaints pertaining to all or any of the disciplines viz Civil, Electrical and Horticulture is permitted to concerned CPWD officer with options available in cpwdsewa. There are various sub-menus under this menu where the officers can generate various reports for their monitoring.

Benchmark reports are also generated as per colour coding in respect of complaints attended during the specified period in respect of minor as well as major complaints. Feedback reports can be generated for all service centres for a specified period for further analysis by the management.

cpwdsewa software also periodically generates MIS reports and automatically sends through e-mails. These MIS reports are to be regularly received by the respective officers on daily basis for smooth and effective maintenance management.

(D) Call Centre Module

The call centre on 24 x 7 basis receives all the complaints via toll free numbers. At the call centre, there is a facility of receiving calls and lodging the complaints through the same website <http://cpwdsewa.gov.in> on a Real-Time Basis.

After the complaints are lodged by the Call Centre on to the website, it is attended by the respective service centre. Consequently upon attendance of the complaint, the call centre takes feedback of such attended complaints telephonically to assess the satisfaction level of occupants and assess the efficiency of CPWD team. The feedback report is generated as MIS report which can be seen by respective JE/AE and other officers concerned.

3.2 Disposal of Dismantled Material

Maintenance is a continuous process and lot of dismantled material is generated in this process. Dismantled material shall not be allowed to be accumulated in large quantity or for long period. Survey report of the unusable dismantled material shall be prepared in each quarter or earlier as required.

Dismantled material received after attending the complaint shall be entered into the ERP system by Service Centre in-charge for taking further action.

3.3 Maintenance Stores

The stores are classified into two categories.

(a) **CPWD stores exclusively maintained by JE/AE.**

JE/AE shall prepare in March/September every year a statement showing the items and quantities of stores required by/ surplus at the Service Centre under his charge during the next six months. The Executive Engineer shall review it monthly and ensure availability of stores. Executive Engineer will submit report regarding availability of store on quarterly basis to CE/SE for review.

The required building materials shall be procured by the Divisions concerned at convenient periodical intervals. If such materials are available in GeM, these shall be procured through GeM portal only.

(b) Stores of maintenance contractor.

(i) The stores under the comprehensive maintenance agreement shall be maintained. The agency will keep the required material in the store in quantity and as per quality as directed by the Engineer-in-Charge or his representative.

(ii) The materials to be used under the agreement shall only be kept in the store. All the materials meeting the specifications and agreement conditions, brought by the agency shall be entered in the MAS register as per due procedure. The material kept in the store is the property of the department and the contractor will ensure the safety and security of the materials.

(iii) The materials in the store shall be kept in systematic manner so that it can be inspected and counted by the CPWD staff.

(iv) The contractor will follow all the directions of Engineer-in-Charge or his representative regarding store management and process of issuing the material.

(v) JE/AE will regularly check the store/stores and for any violation by the agency, the necessary action should be taken and the same should be reported to the Executive Engineer.

3.4 Occupation / Vacation of premises

CPWD is the custodian of a large number of Government residential and non- residential accommodations. The Directorate of Estates is responsible for allotment of Government accommodation. The process of occupation and vacation of residential quarters shall be done in the Refx Module of ERP. Due care has to be taken by Jr. Engineer / Assistant Engineer that vacant accommodation is reported to the Directorate of Estates at the earliest. Vacation report of the residences/ office space is to be intimated online through E-nirmit to Directorate of Estates by

in-charge of Service Centre immediately of its vacation along with intimation to AE (Elect) and also to Executive Engineer (Elect) and DD(H) through e-mail to take proper care of the items pertaining to them.

Executive Engineer shall also mention every month to the Directorate of Estates about the quarters that are not yet occupied. Period / date of vacation of these quarters during the month will be intimated to Directorate of Estates.

There is a provision of white-washing / distempering/ plastic emulsion (as per admissibility) on change of tenancy. Executive Engineer should ensure that within the limited time available, the Governments' premises are given required periodical repairs on change of tenancy. Junior Engineer/Assistant Engineer (Civil) will send a copy of Vacation Report of premises to Assistant Engineer (Elect.) through e-mail and also to the Directorate of Estates, indicating clearly the repairs required to be carried out in the premises on change of tenancy and time likely to be taken. The Assistant Engineer (Elect.) shall also inform the Assistant Engineer (Civil), if he has any proposal to carry out electrical works in the premises during the change of tenancy. This helps Directorate of Estates in making allotment offers to the allottees accordingly.

The work of white washing, colour washing, painting etc. and items of inevitable repairs to the building (other than additions / alterations) shall be taken up immediately upon vacation without waiting for the allotment of the residence to the new incumbent. In case up-gradation works are to be carried out, they shall also be taken up simultaneously.

3.5 Review of Performance of Service Centres

The performance of Service Centres shall be reviewed by all officers in-charge of maintenance upto ADG/SDG level periodically so as to make functioning of the Service Centres more responsive to the needs of allottees. The Superintending Engineers/Chief Engineers in respect of each Service Centre under their charge shall review at least quarterly to ensure that the shortcomings noticed in earlier review are attended and system is improved.

The ADGs / SDGs shall also review the service centres through cpwdsewa and otherwise as decided by them from time to time.

3.6 Tasks to be performed by various officers

Duties and responsibilities of various functionaries in the department are prescribed from time to time by the Directorate. The important tasks to be performed by various officers in- charge of the maintenance for satisfactory performance are indicated as under:-

3.6.1 Task of JEs/AEs & SO(H)/ADHs

- (i) The Junior Engineer / SO(H)/AEs/ADHs will display the time chart of his/her availability at the service centre and shall be available for deploying the workers well in time, meeting the allottees and monitoring of complaints.
- (ii) The JE/AE/SO/ADH shall make it a point to review the complaints received through E-sewa/E-nirmit Govt. Building Maintenance Module at least once a day. The JE/AE /SO/ADH shall invariably carry out personal inspections of 25% of the complaints attended to every day to ensure that the work has been carried out satisfactorily. This

check shall cover all trades and all workers. A remark regarding his observations on his personal inspections shall be recorded in the E-sewa/E-nirmit Govt. Building Maintenance Module against the complaints checked by him. If the work has not been carried out satisfactorily, suitable instructions shall be given to the workers for rectification of the defects.

- (iii) While reviewing the complaints online, JE/AE/SO/ADH shall examine if there are complaints of a repeated nature from the same house. Such complaints shall be personally investigated by the JE to examine if there is any slackness on the part of the workers.
- (iv) Complaints of the nature of the special repairs or periodical/up-gradation repairs like white washing, painting, rewiring, which cannot be attended on daily basis shall be transferred in E-sewa/E-nirmit Govt. Building Maintenance Module to the Major complaints or periodical/up-gradation complaints categories as the case may be. Complaints transferred to these categories shall be acknowledged through SMS sent to the complainant intimating the time frame for attending the complaint.
- (v) Complaints which need follow up action / balance work to be done shall be noted in cpwdsewa in the required column. For instance, where repairs to plaster are carried out, it shall be ensured that white washing / distempering is carried out immediately. Like-wise, repairs to wood work need to be followed up with painting and similarly electrical complaints are to be followed up with plastering, white washing etc.
- (vi) Any repair needed subsequent to attending a complaint shall be recorded as a complaint at the Service Centre for taking further action or transferred to the other discipline, if need be. When complaint of a balance work is required to be transferred to another JE/AE of the same discipline or of another discipline, the same shall be done by sending a complaint through NIC e-mail by the transferor JE/AE himself. In all cases cross reference note shall be against the original complaint and the transferred complaint. The use of a complaint transfer memo shall be discouraged as far as possible.
- (vii) The JE / AE / Inspecting officer shall record complaints suo moto as soon as any defect / repair work comes to their knowledge during inspection.
- (viii) An abstract of complaints recorded, attended and balance to be attended is available on E-sewa/E-nirmit Govt. Building Maintenance Module on daily basis. The period of pendency of unattended complaints is also available on E-sewa/E-nirmit Govt. Building Maintenance Module.
- (ix) A complaint assignment slip should be generated through E-sewa/E-nirmit application while assigning a complaint to a worker by JE/AE. The worker shall enter the OTP shared by complainant for confirming the attendance of the complaint.
- (x) The worker shall be asked to report the compliance of a complaint immediately but not later than the evening of the same day.
- (xi) The assignment slip of the workers shall be checked by the JE/AE to ensure the complaints not attended are not shown in the E-sewa/E-nirmit as having been attended to.

- (xii) One of the most important functions of the JE is to hand over / take over possession of the premises. He has to inspect the premises along with the allottee or his authorized representative and hand over the vacant possession of quarters along with fittings and fixtures and obtain the signature of allottee or his authorized representative in occupation report generated online through cpwdsewa/E-nirmit application. On vacation of the quarter also he has to inspect the quarter and take possession of fittings / fixtures available in the quarter and indicate the deficiencies in the vacation report online. The vacation status of the quarter is then automatically transferred to Directorate of Estates through cpwd E-sewa.
- (xiii) To monitor and effectively check on encroachments.

In addition to above, the JE/AE will also perform the under mentioned task regarding establishment matters of workers.

- (i) JE/ SO(H)/AE/ADH shall ensure timely distribution of Duster, Soaps etc., to W. C. Staff and its proper accounting.
- (ii) To ensure effective monitoring of leave accounts of W. C. Staff including whether leave sanctioned, salary paid / deducted.
- (iii) To ensure other proper welfare of W. C. Staff such as timely filling & submission of forms of leave, GPF, HBA, Festival Advance etc. and to keep liaison with division to keep the staff properly informed to avoid roaming of W. C. Staff in Division offices on such petty matters.
- (iv) JE/AE(Civil) will send the vacation/occupancy report online to Directorate of Estates.
- (v) JE/AE (Civil) will inspect the premises at the time of its vacation, co-ordinate with JE(E)/AE (E) and identify the repairs required to be carried out in the premises. He will intimate tentative time involved in carrying out these repairs to Directorate of Estates.
- (vi) During his routine inspection of works, AE (C)/JE(C) will specifically take note of cleanliness, encroachment, general deficiency in maintenance etc. and take immediate remedial measures in this regard.
- (vii) The AE/JE will inform the Residents / RWA regarding progress of works chalked out for the ensuing year.
- (viii) JE/AE will take specific measures to monitor and have effective check on encroachments.
- (ix) JE/AE will monitor the sanction of leave, deduction of pay for un-sanctioned leave, day-to-day items of welfare cases of W. C. Staff etc.

3.6.2 Task of Executive Engineer & DD(H)

- (a) The EE shall also carry out personal inspections of some of the complaints attended other than those checked by the JE/AE at least twice a month. The result of his inspection shall be recorded through comments option in cpwdsewa/E-nirmit application.
- (b) The EE shall log on to the website to review pending complaints regularly and shall examine the records maintained at service centre and worker's diary to have first hand information about the efficiency of the Service Centre.

- (c) The EE shall have periodical meetings with the Residents' Welfare Associations where points of common interest to the residents could be discussed and action programme chalked out.
- (d) EE will send monthly statement to the Directorate of Estates regarding Quarters lying vacant in the month.
- (e) During regular inspection EE will specifically take note of general deficiency in maintenance of the area, cleanliness and encroachment and take immediate action in this regard. As soon as such provision is enabled, before and after photographs of the work shall be uploaded on the website
- (f) Annual works plan shall be prepared by the respective division of all disciplines (Civil, Electrical and Horticulture) before 31st December every year.
- (g) Detailed estimate may be prepared and tenders may be invited upto 15th February according to approved action plan. (OM No. DG/SOP-2022/08 dated 01.12.2022)

3.6.3 Task of Superintending Engineer [also applicable to DOH] and Chief Engineer

The SE/CE shall check and review the complaints through cpwd E-sewa/E-nirmit application and carry out inspection of some of the complaints as frequently as possible for him to check whether these have been attended to satisfactorily. As soon as such provision is enabled, before and after photographs of the work shall be uploaded on the website.

- (i) The SE/CE shall have periodical meetings with the Residents' Welfare Associations either alone or along with the EE and discuss the points of common interest to the residents.
- (ii) SE/CE shall ensure that the annual action plan is prepared and approved and reviewed from time to time as per the funds available and priority of the works.

The SE/CE shall ensure that due attention is being paid to all the aspects of maintenance by conducting random inspections and review meetings.

Drill of maintenance activities to be performed daily, weekly, monthly, annually and periodically by various functionaries is indicated at Annexure-14. This drill of activities will generally be followed by purely maintenance units.

CHAPTER 4

DAY TO DAY AND ANNUAL REPAIRS

4.1 General

All works which require prior A/A & E/S, shall be accorded by the competent authority as per CPWD Works Manual. T/S shall be accorded invariably for all maintenance works keeping in view yardstick, technical requirement and availability of budget.

Colour scheme shall not be changed in heritage buildings without getting approval from the concerned architect/senior architect/chief architect. Any maintenance works required to be carried out in heritage buildings shall be taken up with prior approval of the architect/senior architect/ chief architect. The architect/senior architect shall prepare the drawings and provide details to the engineers and horticulture units in case of such buildings. The architect unit shall take approval of the heritage conservation committee, if required.

4.2 Day to day Repairs

Day to day or routine repairs are the works which are to be attended on the day to day basis such as removing chokage of drainage pipes, manholes, restoration of water supply, removing of leakage from water taps / angle valves / pipe joints / overhead tanks, replacement of faulty water taps / angle valves, PVC connections, waste pipe etc., replacement of broken sanitary fittings / fixtures, providing missing manhole covers / gully trap covers, replacement of broken wall / floor tiles, repairs of doors/windows, replacement of damaged door/window hardware, replacement of glass window panes, curtain rod, patch repair to plaster (less than 2.5 sqm), replacement of faulty switches, sockets, drivers/chocks of fittings (except tube light / lamps), repair of fans, replacement of wiring due to accident etc., watering of plants, lawn mowing ,hedge cutting, sweeping of leaf falls etc. and other minor routine works required for keeping the building functional and habitable condition. These services are provided after receipt of complaints from the users as well as instructions from department's representative and contractor's representative. This does not include annual repair and special repair works.

4.3 Annual Repairs

The works of periodical nature like White washing, colour washing, distempering, painting etc. are called Annual Repair works and these are generally undertaken through system of contracts.

The periodicity of various items of Annual repairs is indicated in Annexure-10. In addition, works such as patch repair to plaster (more than 2.5 sqm), minor repairs to various items of work such as replacement of damaged soil / waste pipe stack, re-plastering in shafts, Gap filling of hedges/perennial beds, Replacement/Replanting of trees, shrubs, painting of tree guards, planting of annual beds and trimming/pruning of plants etc., which are not emergent works and are considered to be of routine type, can be collected and attended to for a group of houses at a time and particular period of financial year, depending upon the exigency. Such works can be done under day to day repair also. The yard stick for annual repairs cover both the above facilities. Guidelines for various provisions to prepare annual maintenance estimates for horticulture works are described in Annexure - 18. Following guidelines shall be followed for planning and execution of Annual repair works.

The total estimated cost of maintenance of a building / structure during a year shall be within the prescribed limits as approved by the Government from time to time, for Annual repairs. The existing permissible plinth area rates for various types of buildings approved for this purpose are as in Annexure - 2. The existing permissible plinth area rates for electrical maintenance are as per Annexure – 2(A). These may be suitably increased by the approved maintenance cost index in the relevant year. Repairs and services cost indices are approved by the Directorate General of works as per details given in Annexure -6 (A&B).

The plinth area rates for electrical maintenance cover only expenditure on maintenance on EI and Fans i/c compound light, Cost for maintenance in night shift, if required, can be added as per actual requirement. Funds will be provided for maintenance of other E&M e.g. Air-conditioning, Pumps, DG sets, Sub-station, Fire Alarm, Firefighting, lifts, transformers etc. services on actual requirement.

The other source of information about the annual repairs is the complaints received from the occupants of the Government buildings and transferred to the registers of special/periodical repairs. These shall also be accounted for while planning for annual repairs.

The programme of annual repairs shall be intimated to the Residents Welfare Associations and they shall be requested to co-operate with the Department in carrying out the programme smoothly.

The entire exercise of finishing under annual repair should be carried out in a professional manner. Before sanctioning of estimate/invitation of tenders, it should be ensured that all defects like dampness of walls, damage to RCC, brick work and plaster are removed in advance so that the building looks renovated and presentable for sufficient time after annual repairs.

Payment for annual repairs will be made on the basis of actual work carried out and in case made based on standard measurement book, it shall be ensured that no work is left and there shall be no slackness of supervision on the part of the Departmental Officers. The JE/AE shall make it a point to physically inspect 100% of the buildings where annual repairs are to be carried out. The EE shall carry out personal inspection to the extent of 25% or as prescribed in CPWD Works Manual.

No work of original construction or complete replacement of components shall be taken up in Annual Repair works.

4.4 Register of periodical repairs

A register/records shall be maintained in form as at Annexure-4. Complaints of periodical nature like white washing, painting etc. which are usually got attended through contractors and cannot be attended to on daily basis are transferred to this register. From this register / records of the particular premises appropriate information shall be passed on to the complainant about the admissibility of the request and the likely time it shall require for the compliance.

4.5 Major Complaints

Complaints of periodic nature like white washing, painting etc and special repairs, up-gradation works, which are usually got attended through contractors and cannot be attended on daily basis are converted into periodic/ up-gradation complaints and major complaints. A time framework for carrying out major complaints shall be fixed by the EE between 45 days to 90 days subject to availability of funds, currency of contracts and other resources.

CHAPTER 5

SPECIAL REPAIR

As the building ages, there is deterioration to the various parts of the building and services and major repairs and replacement of elements become inevitable. It becomes necessary to prevent the structure from deterioration and undue wear and tear as well as to restore it back to its original condition to the extent possible. There are two kinds of special repair- (a) Replacement of various building's elements after expiry of useful life (Periodic special repair work). (b) Major repairs undertaken due to wear and tear of the building. The following types of works in general are undertaken under special repairs: -

- (i) Providing water proofing treatment to the roof.
- (ii) Repair of internal roads and pavements.
- (iii) Repairs/replacement of flooring, skirting, dado and plaster.
- (iv) Replacement of doors, window frames, shutters and fittings.
- (v) Replacement of water supply and sanitary installation like water tanks, WC cistern, wash basins, kitchen sinks, water supply pipes etc.
- (vi) Re-grassing of lawns/grass plots in 5 to 6 years without replacement of earth and in 8-10 years with replacement of earth.
- (vii) Replanting of hedges in 8-10 years.
- (viii) Completely uprooting and removing hedges / shrubbery.
- (ix) Replanting of
 - (a) Rose beds in 6 years.
 - (b) Perennial beds in 6 years.
 - (c) Canna beds in 4 years.
- (x) Shifting of any garden feature from one site to another within building.
- (xi) Electrical Equipments/ Installations after their useful life as given in Annexure -15.

The replacement shall be made only after detailed inspections after assessing the condition of the components where they have outlived their useful life.

The expected economic life of the building under normal occupancy and maintenance conditions is considered to be as below:-

- | | |
|---------------------------------|------------|
| (i) Monumental buildings | 100 years. |
| (ii) RCC Framed construction | 75 years. |
| (iii) Load bearing construction | 55 years. |
| (iv) Semi-permanent structures | 30 years. |
| (v) Purely temporary structures | 5 years. |

The life of the building mentioned above is only indicative and it depends on several factors like location, utilisation, specifications, maintenance and upkeep/caretaking.

Quantum and yard stick of Special Repairs shall be worked out as under :

- (i) Annual yard stick of Special Repairs for various types of buildings are given in Annexure - 2. These yard sticks are suitably increased by approved maintenance cost index approved as per Annexure – 6A. Estimated cost of building repairs shall be within the yard stick.

- (ii) At the beginning of the year, a Survey of the buildings shall be conducted to identify the items of Special Repairs which are required to be carried out. Special repair complaints are also received from Call Centres as major complaints. Special repairs, which are required to eliminate leakage and dampness in the buildings shall be given priority and completed before the monsoon. Special repairs to plastering, replacement of doors and windows and flooring shall be synchronized with the annual repairs so that white washing, colour washing / distemping are carried out systematically.
- (iii) Other sources of information about special repairs are complaints of Special Repairs made by allottees, which are entered in the register of special repairs.

Register of special repairs

This register/records for periodic special repair work shall be maintained in form as at Annexure - 3. Complaints of special nature repairs, which cannot be attended on daily basis, shall be transferred to this register. The special repairs to buildings shall be divided in following Seven groups:-

- (i) Concrete work.
- (ii) Masonry works including plaster, flooring and brick work.
- (iii) Wood work.
- (iv) Steel work.
- (v) Sanitary and Water supply.
- (vi) Water proofing treatment.
- (vii) Electrical wiring and fittings.

Horticulture item of works mentioned in para vi to x

Few pages shall be allotted separately to each of these groups in the register and an index shall be prepared in the beginning of the register. The complaint of special repair nature shall be transferred from the complaint register to the relevant group in this register. All details about the complaint shall be properly filled in the columns of the register.

REGISTER OF SPECIAL REPAIRS Special Repair Group.....

| Sl. No. | Complaint No. | House No./ Locality | Location of Repairs | Approximate Quantity | Repairs required in Schedule of | | | Repairs |
|---------|---------------|---------------------|---------------------|----------------------|---------------------------------|-----------------|-----------------|---------|
| | | | | | Less than 1 month | Within 3 months | Within 6 months | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

Authenticity of Special Repairs

Any work of Special Repair to be undertaken in the division has to be certified by the Executive Engineer. The EE has to verify himself the necessity of undertaking Special Repair to any item of the building. Estimates of Special Repairs of course, will be initiated by Junior Engineer/Assistant Engineer but Executive Engineer before accord of approval at his level or sending it to higher authorities will record in writing in the body of the estimate that the necessity has been verified by him.

There should not be too many estimates for Special Repairs in a subdivision. As far as possible, number of estimates should be restricted to number of identified subheads as indicated in the register of Special Repairs.

When expenditure on Special Repair to a particular building is in excess of the permissible yardstick of Special Repair, the same come under the category of Extra Ordinary Special Repair. Expenditure on Special Repair upto permissible limit can be incurred by the Executive Engineer. Beyond the permissible limit, however, EE has to have the approval of the higher authorities. As a rule, Superintending Engineer/Chief Engineer is empowered to approve the extra ordinary special Repair Estimates within 50% of the permissible limit. Beyond this, approval of ADG would be necessary. ADGs are empowered to approve the extra ordinary Special Repair Estimate to any amount so long as scope of expenditure is to retain the building in its original shape in liveable conditions without carrying out any additions to it and funds availability is ensured.

The procedure of taking up works shall be followed as given in CPWD Works Manual and delegation of financial powers.

CHAPTER 6

ADDITIONS/ALTERATIONS AND UP-GRADATION

6.1 General

All additions and alterations shall be carried out after getting drawings from the architect/senior architect/chief architect. It shall be ensured that no increase in FSI/FAR is carried out without approval of competent authorities.

All such works shall be accorded A/A & E/S of the competent authority.

Up-gradation works not involving increase in FAR/FSI or of rehabilitation/retrofitting nature, up-gradation works approved by the MoHUA from time to time or by the client in case of deposit/authorization works in their buildings may be carried out as per standard architectural drawings available.

All such works shall be carried out following accessibility norms given in CPWD Accessibility Manual.

All additions and alterations/up-gradation works shall be carried out only if permitted from fire safety norms.

No additions/alterations once carried out to any Govt. residence except temporary prefab works purely related to special security aspects shall, however, be removed upon the vacation of these houses by the allottee concerned. “

Under mentioned points shall be observed while carrying out addition/alterations in government buildings:

No addition/alteration shall be carried out to permanent public buildings apart from that given in the OMs issued by MoHUA from time to time, without the concurrence of the Architect/Senior architect/Chief architect in writing.

6.2 Addition/Alteration Works in GPRA Buildings

All GPRA buildings are designed as per the plinth area norms approved by the MoHUA hence no addition/alteration in the plinth area shall be made without approval of the Architect/Senior Architect/Chief Architect and the Ministry. Similarly, no addition/alteration in plinth area shall be carried out in GPOA without approval of the Architect/Senior Architect/Chief Architect and the competent authority.

All additions/alterations which are not covered under up-gradation norms shall only be carried out with the approval of the Architect/Senior Architect/Chief Architect.

6.3 Up-gradation Works

Up-gradation works shall be carried out as per the guidelines issued from time to time by the Ministry of H&UA. A record shall be kept of the items upgraded quarterwise online/offline and once a quarter is upgraded, further up-gradation shall not be carried out without approval of the DG/MoHUA.

Up-gradation head of account is not separately available under 4059 Office hence such works are to be taken up with the approval of authority competent to accord A/A & E/S after getting drawings approved from the architectural unit.

In case, a single tender is invited for repair works and up-gradation works, expenditure on repair works and up-gradation works shall be charged to respective head of accounts.

6.4 Energy Efficiency Measures

Energy efficiency measures like fixing of LED fittings, providing energy efficient fans and air conditioners, solar rooftop panels shall be carried out as per the directions of the Directorate from time to time. As per the present policy, replacement of conventional fittings with LED based lightings has been mandated in all government buildings. Also, all air conditioners in all the government offices shall not be set below 24 degree Celcius.

CHAPTER 7

PREVENTIVE MAINTENANCE

7.1 General

Preventive maintenance is essential to keep the building services in serviceable condition. Preventive maintenance is taken up so that the services or the assets do not fail due to wear and tear and those components and services expected to fail are replaced well in time.

7.2 Periodical Checks

Systematic inspections by all concerned officers are essential particularly of those services and components which are prone to higher wear and tear and nearing to outlive/outlived their life. Thin members, exposed members to severe weathering conditions, members affected by leakage/seepage and members/components affected by water splashes shall also be inspected. The following categories of items also have great significance in preventing maintenance; hence, special attention has to be paid in respect of these items also:

- (i) Cleanliness of roofs, inlet of rain water pipes, khurra, chajja/sunshade top, outlet of rain water pipes, plinth protection and drains minimum twice a year and particularly before monsoon.
- (ii) Cracks on gola and top of parapet
- (iii) Cleanliness and waterproofing of mumty roof
- (iv) Leakage from terrace tanks
- (v) Damage of water proofing due to installation of various services on roof like Dish antenna, solar panels, etc or weed/vegetation.
- (vi) Cracks on grit plaster, spalling of concrete, cladding stone coming out of substrate etc
- (vii) Leakages/seepages
- (viii) Rusting of GI pipes and fittings showing seepage/leakage and crack in CPVC pipe.
- (ix) Shafts for the leakage/seepage
- (x) Sagging false ceiling
- (xi) Termite affected areas and wooden members
- (xii) The cleaning of manholes and sewer lines and checking for rain water getting mixed in sewer lines
- (xiii) Damaged cables & other abandoned service lines
- (xiv) Electrical systems like main boards, DBs, termination, tightening of nut & bolts of bus bar, bus-terminating system etc. should be checked annually.
- (xv) Fire services particularly during hot weather and assessment of electric load due to additional services installed
- (xvi) Whether unprotected heaters in use likely to cause fire incident ?

CHAPTER 8

HORTICULTURE MAINTENANCE

8.1 General

Guidelines for maintenance of buildings and services as contained in CPWD Manual shall be applicable in general for horticulture maintenance also. For horticulture works also, A/A & E/S shall be issued by the competent authority.

8.2 Receipt, recording and attending of Complaints

General system of receipt of complaints as for other disciplines shall be applicable. By and large, the complaints of Horticulture and other disciplines shall be received at the combined Service Centre and shall be recorded in separate Registers for Horticulture, Civil and Electrical disciplines. Horticulture complaints can be received at Seed Bed also. Assistant Director (Hort.) will ensure collection of Horticulture complaints from the combined Service Centre, get these assigned to the workers for compliance and record the complaints pending at the end of the day. The Workers will present their note-books to the Sectional Officer (Hort.)/ADH in the morning and during the day immediately after attending to the earlier complaint assigned to them for getting the new complaints for compliance. They will also report back at the end of the day in the evening with the compliance made.

8.3 Categorization of Works

Horticulture maintenance works will also be categorized as under: -

- (a) Day to day repairs
- (b) Annual repairs/periodical repairs
- (c) Special repairs

Details of above are indicated in Annexure-11.

8.4 Norms

Yardstick for deployment of workers for horticulture maintenance is given in Annexure-5. Various provisions for different types of Residential Bungalows, quarters, open spaces and Non-residential complexes with regard to hedges, trees and plantations etc., are given in Annexure-11. This also serves as the check-list for Inspecting Officers. Provisions to be followed for prestigious office buildings are also given in Annexure-11. List of such prestigious office complexes is given at Annexure-12.

8.5 Survey and inspections

Due emphasis will be laid on carrying out periodical surveys and inspections of the areas, specifically by S.O. (H)/ ADH, with a view to decide the items to be included in the day to day, periodical, special repairs and maintenance. List of items to be included in the inspection of Horticulture works is indicated in Annexure-7.

During their regular inspections, the S.O. (Hort.) and Asstt. Director (Hort.) will verify the actual work done with reference to what is required to be done in particular areas and report their remarks in the check list indicated at Annexure-11. The Inspecting Officers will take note of the difficulties also for remedial action.

8.6 Works Programming

It shall be responsibility of Dy. Director (Hort.) to ensure that requirement of irrigation water is projected properly to his counterparts Executive Engineer (Civil) and Executive Engineer (Elect.), so that they can make arrangements for boring the tube-wells/operationalization of pumps etc. EE(C)/EE(E) shall take necessary action to make water available for horticultural operations. Efforts shall be made to construct Sewage treatment Plants as per the feasibility for the water required for horticulture operations.

Annual action plan as mentioned earlier shall also be prepared and reviewed for horticulture works. A typical format for preparation of the estimates is indicated at Annexure-18. It is only an indicative and will be different for different type of maintenance.

Provisions for indoor plants, cut-flowers, floral decoration etc., are not covered under general maintenance. These are specific requirements of users and concerned Ministries/Departments are to bear expenditure on such provisions. Separate estimates are to be sent on specific demands for such requirements to the users and works executed on receipt of sanctions and funds.

8.7 Monitoring and control

General system of monitoring of complaints like preparing abstract of complaints at the end of day, checking the compliance of the task assigned to the workers from the workers note-book vis-a-vis complaint register, transferring complaints of special repair and periodical repairs to the respective Registers, intimating time-frame for attending the complaints to the users, inspection of complaints attended every day and routine inspections of the area and watch for any unauthorized/illegal activity shall be followed for horticulture works also as for civil and E&M works.

A system of collecting feedback for maintenance of the areas has to be developed for taking action for processing the feedback information. Online reporting system is available in cpwd **E-sewa** website. All GPRA/GPOA campuses are to be made available on cpwd **E-sewa** and other colonies/campuses maintained by CPWD should also made available on cpwd **E-sewa**. Regular meetings with RWAs shall be taken as mentioned for Civil and E&M services. Efforts shall be made to have combined meetings to redress all type of complaints with RWAs.

8.8 Register of works undertaken under special repairs and up-gradation

A record shall be kept of the horticulture works undertaken under Special repairs and up-gradation works of the trees/shrubs planted with the location. In Heritage buildings or spaces, such works shall be carried out with the approval of Architect/Senior Architect/Chief Architect/Heritage conservation Committee.

CHAPTER 9

MAINTENANCE OF VIP RESIDENCES

9.0 General

Definition of VIP Residence: Official Residence of President, Vice President, Prime Minister, Former President, Chief Justice of Supreme Court, Lok Sabha Speaker, Former Prime Ministers, Cabinet Ministers of Union, Leaders of Opposition in Lok Sabha and Rajya Sabha, Deputy Chairman Planning Commission, Judges of Supreme Court of India, Comptroller and Auditor General, Chief Election Commissioner of India, Chairman of UPSC, Deputy Chairman of Rajya Sabha, Deputy Speaker of Lok Sabha, Members of Panning Commission, Ministers of State of Union, Attorney General of India, Cabinet Secretary, Chiefs of Staff, Chairpersons of CAT, Minorities Commission, SC/ST Commission, Chief Justice and Judges of Delhi High Court, Members of Parliament and Other Senior Government Functionaries as appointed from time to time shall be defined as VIP residence.

9.1 Additions/Alterations

In case of Additions/Alterations the guidelines and fixed annual monetary limit/tenure monetary limit for carrying out Addition/Alterations shall be followed as per the approval of MoHUA. These Addition/ Alterations will be carried out accordingly subjected to technical feasibility. Concerned Architect/Senior Architect shall be consulted before taking up addition and alterations.

9.1.1 Constructions in Lutyen's Bungalow Zone area, New Delhi.

Additional construction is allowed to be carried out at the residences of ministers and other VIPs with certain guidelines which includes office accommodation at residence, guard room, toilet, visitors' room, etc. All the VIP residences are generally located in Lutyen's Bungalow Zone (LBZ) area, New Delhi. There are strict restrictions on under taking additional constructions in LBZ area. Therefore, Architect/Senior Architect shall be consulted before taking up any construction in LBZ area.

9.1.2 Up-gradation and Additions/Alterations in Bungalows in LBZ.

Keeping in view the above, the following guidelines for additions and alterations in Bungalows in LBZ area occupied by Cabinet/State/Dy. Ministers/Supreme Court/High Court judges, Secretaries to government of India or as directed by MoHUA are to be observed in consultation with Chief Architect/Senior Architect.

1. Any Construction, security/sentry posts/guard rooms/frisking sheds and other type of changes in the Bungalows shall be made as per LBZ and local body guidelines, with the approval of the Architect/Senior Architect/Chief Architect.
2. To keep the tree studded character of the LBZ, no tree shall be cut and emphasis shall be laid on the plantation of more trees of similar species as existing in the LBZ but with the approval of Chief Architect/Senior Architect.
3. The landscape design of the bungalow plots shall be in consonance with the overall character of the bungalow, and the designs shall be approved by the Chief Architect/Senior Architect concerned.

4. The guidelines for construction in the Lutyen's Bungalow Zone stipulates no additional construction in the Bungalows, hence, additional Constructions shall be made as per guidelines issued by the MoHUA/Directorate from time to time after approval of the drawings from the Architect/Senior Architect/Chief Architect.

Up-gradation/Special Repair;

- (i) The up-gradation of the VVIPs flats/bunglaows shall be taken as per up-gradation scheme notified by the MoHUA.
- (ii) The special repairs can be taken up as per technical requirement.

9.2 Furniture / Furnishings

CPWD procures furniture for supplying to Hon'ble President of India, Vice President of India, Prime Minister, Union Ministers, Judges of Supreme Court, Members of Parliament and other dignitaries entitled to furnished accommodation by specific orders of Govt. of India issued by the MoHUA from time to time. Furniture is also supplied to various Commissions against specific approvals issued for the purpose. Furniture is not supplied to general pool residences.

The furniture procured by department comes under two categories; durable and non- durable. Life span of durable and non- durable furniture has been fixed by the Ministry of Housing & Urban Affairs through WI desk letter dated 9.3.1995 and the same is indicated in Annexure -17.

9.2.1 Maintenance of Furniture

The furniture require day to day repairs to keep it in functional & usable and periodical repairs like painting/polishing, change in upholstery, cushions etc. With constant use, the furniture goes out of circulation and new furniture is required to be replaced after following due procedure of writing off.

Almost all the VIP residences are provided with furniture/furnishings by CPWD. Directorate of Estates lay down guidelines for issue of furniture/ furnishings in the residence of Vice President, Prime Minister, Ministers and MPs. There is limit in terms of monetary value of furniture/furnishings upto which no rent is charged from the VIP and beyond this limit, rent is charged at certain rates.

Yard stick for supplying furniture and furnishings, amount of rent recoverable separately for durable and non-durable furniture as fixed up by Directorate of Estates in respect of VIP residences is given in Table - 3.

**TABLE -3
ENTITLEMENT OF FURNITURE/ FURNISHINGS**

| SI. No. | VIP | Rent Free Limit | Rent of furniture & furnishings |
|---------|----------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Vice President | No limit | Full furniture/ furnishings Rent- free. |
| 2 | Prime Minister | -do- | -do- |
| 3 | Ministers, State Ministers | 2.5 Lakhs 2 Lakhs | @1.9% of cost of furniture per month beyond ceiling limit for durable furniture and 2.9% of cost of furniture for non-durable furniture. |

| Sl. No. | VIP | Rent Free Limit | Rent of furniture & furnishing |
|---------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 4 | Dy. Minister | Rs. 22,500/- | -do- |
| 5 | Chairman, Planning Commission, Election Commission | Rs. 38,500/- | -do- |
| 6 | Member, Planning Commission/ Election Commission | Rs. 22,500/- | -do- |
| 7 | Chairman & Member Other Commissions, i/c UPSC | As per orders of the Commission. The expenditure is to be borne by the Commission. | |
| 8 | M.Ps. | 75,000/- | Rent @ 13.75% of the cost of furniture beyond ceiling, per annum. |
| 9 | Chief Justice of India | 10 Lakhs | Directorate of Estates No. 14011 (1)/2018-Pol.III dt. 07.09.2018 |
| 10 | Judges of Supreme Court of India | 8 Lakhs | -do- |
| 11 | Chief Election Commissioner and other Election Commissioners of India | 8 Lakhs | Directorate of Estates No. 14011 (1)/2018-Pol.III dt. 23.10.2018 |

9.3 Security Works

Security Works are provided on the recommendation of Police (Security Unit). Expenditure on security works is to be incurred by Ministry of Home Affairs. MHA has laid down guidelines for making various security provisions according to the category of security cover provided to the protected persons. These guidelines are of confidential nature and as such cannot be depicted in this manual. Whenever any requisition is received in this regard from police authorities, security provisions are made according to these guidelines.

To avoid delay in providing these facilities, MHA has delegated powers of sanctioning the estimates based on standard guidelines to CPWD officers. Whenever there is a demand for providing security provisions to the protected persons, which are not as per standard guidelines laid down by M/o Home Affairs, facility is provided on receipt of sanction from Ministry of Home Affairs. Plantations of tree shrubs, hedges shall be done with the approval of security unit.

9.4 Arrangements for functions at VIP Residences/Govt. functions

Very often functions are held at the residences of VIPs. In addition, various Govt. functions are also held in important buildings like Rashtrapati Bhawan, Parliament House, Hyderabad House. Special care is to be taken by all disciplines for making arrangements for such functions. A check list

of items in connection with the arrangements for such functions is given at Annexure 9. In general following guidelines shall be followed.

1. The EE(C), EE (E) & DD(H) shall fill up the check list in case of each function and sent one copy to respective SE/CE. This should be done at least one day in advance.
2. At all functions attended by a VVIP, Executive Engineer with his junior staff should normally be present and in case of his inability due to any reason the SE/CE concerned shall be present.
3. At all functions attended by Ministers and other dignitaries, an officer of the rank of AE/ JE from each discipline shall be present and in case of any difficulty the EE shall be available.
4. Against each item in the above check list, the reply should normally be one or more as under :
 - (a) Not required.
 - (b) Arrangement made.
 - (c) Arrangement made checked and found O.K.
 - (d) Yes/No/Not applicable.
5. If the notice of the function is too short, the forms may be filled up by AE but it is his responsibility to inform the EE concerned.
6. Functions held after prior notice shall also be attended by SE/CE at their discretion or if so desired, by the designated officer for the function but shall be inspected by them at least one day in advance.
7. The JE/AE/EE shall check independently and record the time and date.
8. Check list at Annexure 9 should be filled up well before every function and sent to SE/CE.

9.5 Powers to CPWD Officers

For ensuring prompt services to these residences certain powers are given to CPWD officers. The cases beyond the power of CPWD officers are sent by Chief Engineer/ADG to the Ministry. These shall be exercised as per the financial powers approved by MoHUA.

CHAPTER 10

ENCROACHMENT

10.0 General

Encroachment on government land/public premises shall not be allowed to occur. Since CPWD is the custodian of the government buildings and land under the Ministry of Housing & Urban Affairs including the land under roads, parks, toilets, play grounds, situated in government colonies, the responsibility with regard to preventing, reporting and removal of unauthorized construction /encroachments thereon is that of the CPWD. The services like roads, parks, storm water drains which have been handed over to local bodies will come under their purview for taking action regarding prevention and removal of the encroachments. Directorate of Estates, which is the authority for allotment of government premises will receive reports from CPWD regarding unauthorized construction or encroachments by the allottees of general pool residential / commercial premises and would take steps for cancellation of allotments. The responsibility for removal of unauthorized construction/encroachment as also encroachments by the persons other than the allottees vests with CPWD. CPWD is also entrusted with the responsibility for taking action for removal of encroachments or unauthorized construction under common areas such as roads, parks not handed over to local bodies or un-allotted land in government colonies, which cannot be specifically attributable to allottees.

10.1 Responsibility for detection/removal of encroachments

The responsibility for detection/reporting and removal of unauthorized construction/ encroachments in government colonies/government land lies on the authorities as indicated in the Annexure - 8. Ministry of Urban Development has issued comprehensive guidelines for removal/ demolition of unauthorized constructions vide O.M. No. 11010/1/2010-W-1 dt 21.6.2010.

A close watch shall be kept to ensure that encroachments do not take place in the area. Junior Engineer/Assistant Engineer shall be personally responsible for the encroachments taking place in their jurisdictions. Executive Engineers, Assistant Engineers & Junior Engineers in case of transfers, will prepare a detailed note/ list of the encroachments already existing in their areas and action taken/proposed to be taken mentioned clearly in their handing over reports to their successors.

Under-mentioned procedure shall be adopted to prevent further encroachment in CPWD areas and remove the encroachments already taken place.

- (i) Whenever any construction activity going on in the locality is noticed by the J.E/A.E. on their inspection carried out by them on day to day basis, they will verify whether the construction is according to building plans sanctioned by the local bodies. Immediate steps shall be taken to stop or demolish the constructions which are being carried out in the absence of sanctioned building plans.
- (ii) A report will be sent to the Directorate of Estates in case the building activity is within the premises allotted by the Directorate of Estates or in the area appurtenant to the premises allotted by them. For this purpose, area within the compound wall and gate

of the premises will be considered as appurtenant to the premises allotted by the Directorate of Estates. Side by side the matter will also be reported to the Police for immediate prevention of unauthorised construction.

- (iii) Directorate of Estates will, upon receiving such intimation of unauthorized encroachment within premises allotted by him, cancel the allotment and take action to evict the allottee. Whenever such premises are vacated by the allottee, all unauthorized encroachments, structures/additions / alterations etc. shall be demolished by CPWD before the premises are re-allotted by DoE.
- (iv) In case unauthorized construction/encroachment is not stopped/removed by the encroacher, a notice may be issued to him by the Estate Officer of the area under P.P. (Eviction & Unauthorized occupation) Act, 1971. Side by side F.I.R. may be lodged with the police against the defaulter/encroacher.
- (v) Action shall be taken by the Estate Officer under the P.P (E of U.O.)Act 1971 and eviction proceedings will be passed. Consequent upon the passing of the eviction proceedings, Estate Officer i.e. Executive Engineer / DD(H) will approach Special Task Force constituted by Government of NCTD in Delhi and similar mechanisms in other states in consultation with local police and State Government authorities and get the unauthorized encroachments removed.
- (vi) The MoHUA has been declaring EEs/DD (H) of CPWD as Estate Officers from time to time.
- (vii) Govt. accommodation is occupied by the Government Servants, who are governed by the Allotment of Government Residence Rules and allotted by Directorate of Estates. If Government Servant undertakes unauthorized construction as structure / rooms or do some activity which are not permissible, it construe breach of allotment rules and conditions. In such cases Directorate of Estates may cancel allotment of residence and also propose disciplinary action against the delinquent allottee.

It is the responsibility of CPWD to act immediately as and when un-authorized construction/encroachment is noticed. The field officers will not take the plea that said encroachment had already taken place before taking over their duties in the area. It is expected that irrespective of the fact whether the encroachment had taken place during the time of their predecessors or in their own period, they will take action under the rules and directions issued by Government from time to time.

It shall be kept in mind that police on receiving the report regarding encroachment/unauthorized construction may not act at their own. Their duty is to provide protection to the officers of the department against any untoward incidence at the time of removal of encroachments and for that police help can be sought. Arrangement for labour and equipments for demolition/removal has to be made by CPWD.

Divisional officer or his representative A.E/ J.E. may take the help of Demolition Squad of local bodies in case they do not have any arrangements of their own or in case it will take time for them to make arrangement for arranging the demolitions and exigency of job warrants the demolitions to be arranged on emergency basis.

10.2 Removal of Encroachments on Public Land

The responsibility for prevention, detection and removal of encroachments from lawns, parks and other green areas under the maintenance of Horticulture wing of CPWD will be that of Section Officer (Horticulture)/ Assistant Director (Horticulture), and Deputy Director (Horticulture). Their responsibilities will be similar to their counter parts on Civil and Electrical side relating to the encroachment within their jurisdiction. They will also follow the above procedure for prevention, detection, and removal of encroachments.

10.3 Role of local bodies in prevention of encroachment

Local bodies like municipal Corporations, Development authorities play a vital role in prevention of encroachment in the cities. For any construction in the cities, construction plans have to be approved by local bodies. Their inspectors are required to go in their areas on inspections and stop any construction activities going on without any approved plan.

10.4 Government Instructions to local bodies

Ministry of Housing & Urban Affairs has issued under mentioned directions to local bodies NDMC, MCD, DDA and land owning agencies :-

- (i) NDMC, MCD and DDA should set up within their financial resources mobile squads headed by jurisdictional Assistant Engineers in order to conduct spot verification of all ongoing constructions in their respective areas on a day to day basis, with a view to ensuring that these are based on building plans duly sanctioned by the respective local Authorities/bodies. Such inspections should not be confined merely to the lands owned by these bodies but will extend over all public and private lands in their respective jurisdictions;
- (ii) Immediate steps should be taken to stop or demolish the constructions which are being carried on in the absence of sanctioned building plans, Effective liaison with the jurisdiction Police stations should be maintained while carrying out these tasks to prevent any law and order or other untoward problems;
- (iii) The performance of the mobile squads may be reviewed by the District level Special Task Forces set up under the orders of the LG, Delhi in each district;
- (iv) Whenever deemed necessary and specially in cases where unauthorized constructions are not stopped despite issue of a notice, steps should be taken to register FIRs and launch prosecutions against the defaulters/encroachers;
- (v) Special attention will be paid to ensure that parks, green spaces and other public open spaces are not encroached upon even through temporary constructions. Any temporary construction allowed for a specific purpose should be got removed within the allotted time frame in the absence of which action be taken to remove such constructions forthwith at the cost of the party concerned and deduct the expenditure from his security deposit;
- (vi) All land owning agencies should take effective measures including fencing, regular inspection of the land, etc. to protect their lands from future encroachments. Private security agencies may be deployed for this purpose, wherever found absolutely necessary.
- (vii) All land owning agencies should also take necessary protective and preventive measures and ensure that their land is not utilized for dumping garbage and thereby be lost to its regular use.

CHAPTER 11

COMPREHENSIVE MAINTENANCE

11.1 Comprehensive Maintenance

The comprehensive maintenance tender is to be executed through outsource agency. It may include operation of service centres like receipt of complaints, monitoring of complaints, day to day maintenance, Annual Repairs, Special Repairs, housekeeping, security of vacant quarters or of open areas, operation of organic waste converters/STP etc. of civil, electrical and horticulture works. The CE/SE will finalize broad scope/subheads of comprehensive maintenance. Normally up-gradation work may not be included in the comprehensive maintenance. Depending upon situation, such as remoteness of site, small quantum of work, CE/SE may decide to include it as part of comprehensive maintenance tender.

11.2 Scope of Outsourcing work:

- (A) **Day to Day Maintenance:-** The agency will deploy required trained manpower for carrying out day to day maintenance activities under the supervision of supervisors/ engineers. The agency will provide the services of computer literate enquiry operators to man the front offices of the service centres. Enquiry operator will be responsible for receiving the service requests/complaints from CPWD e-Sewa/E-nirmit/IVRS/ various allottees and allotting the same to the workforce and keeping a detailed record of the work done in the website <http://cpwd.sewa.gov.in>. The maintenance activity will be executed as per agreement. A detailed list of items, which will be considered as falling in the category of day to day repairs shall be enumerated and included in the tender.
- For justification of rates at which the work is to be awarded, the requirement of labour shall be assessed on the basis of laid down yardsticks available for maintenance in CPWD and this requirement shall then be rounded off to nearest whole number for provision of manpower which shall be provided.
- (B) **Special Repairs :-** Provision for special repairs shall be made as distinct sub-heads and the items of work required to be executed shall be enumerated. The quantities for these repairs shall be based on an assessment made for the works executed in the preceding years and complaints received.
- (C) **Annual Repair:-** The item of annual repair i.e. white washing, painting etc. shall also be included as distinct sub-head and the quantities for this sub-head shall be based on the yardstick for these items for the buildings.
- (D) **Up-gradation works:-** The items of this sub-head shall be assessed based on Quarters already upgraded and generally upgraded during previous years. The norms of up-gradation shall be as approved by the MoHUA. A record shall be kept of all such upgraded quarters and intimated to Directorate of Estates and SE/CE/ADG online or offline as directed by the Directorate.

11.3 Scope of Comprehensive Maintenance tenders

The NIT approving authorities shall include other sub-heads as required and put conditions based on site requirements and the directions issued from time to time by the Directorate, if any. Time limits of attending the complaints and up-gradation works and provisions of recovery in case of non-compliance by the agency shall be incorporated in the NIT. SE/CE to decide scope of comprehensive maintenance tenders. They may decide on client-wise, head-wise, location-wise or subdivision-wise. Combinations shall be decided by SE/CE on the proposal of EE.

Annexure 1

WORKER'S NOTE BOOK

| S. No. | S.No. of Complaint | Flat/Quarter No. and Colony | Nature of complaint | Details of work done | Balance work, if any | Sign. of worker | Sign. of occupant | Remarks |
|--------|--------------------|-----------------------------|---------------------|----------------------|----------------------|-----------------|-------------------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

Annexure 2**PLINTH AREA RATES FOR CIVIL ENGINEERING MAINTENANCE
As on 01.04.2019**

| S. No. | Category | Service Charges (Rs. Per sqm per year) | Annual Repair (Rs. Per sqm per year) | Special Repairs | | |
|--------|--------------------------------------------------------------------------------|----------------------------------------|--------------------------------------|--------------------------------|---------------------------------|--------------------------------|
| | | | | Age 0-20 years (Rs./Sqm/year.) | Age 21-40 years (Rs./Sqm/year.) | Above 40 years (Rs./Sqm/year.) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | RESIDENTIAL BUILDINGS | | | | | |
| 1. | Type I to V and above | 126.30 | 54.65 | 34.80 | 57.65 | 80.50 |
| 2. | MPs Flats, Ministers Bungalows, Supreme Court and High Court Judges Residences | 252.65 | 109.35 | 45.70 | 76.55 | 107.35 |
| 3. | Hostels | 163.15 | 70.55 | 34.80 | 57.65 | 80.50 |
| 4. | Rashtrapati Bhawan, Vice President House & PM House | Actuals | Actuals | Actuals | Actuals | Actuals |

| S. No. | Category | Service Charges (Rs. Per sqm per year) | Annual Repair (Rs. Per sqm per year) | Special Repairs | | |
|--------|--------------------------------------------|----------------------------------------|--------------------------------------|--------------------------------|---------------------------------|--------------------------------|
| | | | | Age 0-20 years (Rs./Sqm/year.) | Age 21-40 years (Rs./Sqm/year.) | Above 40 years (Rs./Sqm/year.) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | NON-RESIDENTIAL BUILDINGS | | | | | |
| 1. | Normal offices | 144.75 | 62.60 | 59.65 | 99.40 | 139.15 |
| 2. | North & South Block Sectt. | 71.05 | 30.80 | - | - | 99.40 |
| 3. | Parliament House & Parliament House Annexe | 271.05 | 117.30 | 191.85 | - | 191.85 |
| 4. | Supreme Court | 271.05 | 117.30 | 191.85 | - | - |
| 5. | Hospitals | 360.55 | 156.05 | 92.45 | 153.05 | 214.70 |
| 6. | Dispensaries | 360.55 | 156.05 | 92.45 | 153.05 | 214.70 |

NOTES :

1. The above plinth area rates do not cover expenditure on Conservancy charges.
2. These rates also do not include the extra amount admissible for maintenance and repairs in hilly region.
3. The plinth area rates based on year 1979 (available in annexure-5) are duly updated.
4. No provisions on lump sum basis for richer specifications are made in the estimate for maintenance work.
5. Extra provision for specific site conditions in addition to those already covered by various annexures of CPWD Maintenance Manual be made on item rate basis with itemized schedule of measurements and duly indexed DSR rates as per latest cost index. In case, rates of specific items are not available in DSR, market rates be used instead, to frame the maintenance estimate. (SI. No. 4 & 5 added vide OM No. DG/Maintenance Manual 2019/04 dated 16.03.2023).

Annexure 2A**PLINTH AREA RATES FOR ELECTRICAL ENGG. MAINTENANCE**

| S. No. | Category | Rate in Rs. per Sqm. per year for day to day service and repair, maintenance w.e.f. 01.04.2019 | | | |
|--------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------|-------------------|----------------|
| | | Concentrated Groups | | Scattered Groups | |
| | | Age 0 to 10 years | Above 10 years | Age 0 to 10 years | Above 10 years |
| 1 | 2 | 3 | 4 | 5 | 6 |
| | RESIDENTIAL BUILDINGS | | | | |
| 1. | Type I to IV | 69 | 77 | 83 | 93 |
| 2. | Type V and above | 84 | 94 | 101 | 113 |
| 3. | MP Flats, Ministers Bungalows, Supreme Court Judges Residences | 167 | 187 | 200 | 225 |
| 4. | Hostels | 111 | 124 | 133 | 150 |
| 5. | Rastrapati Bhawan, Vice President House & PM House | As per Actual | | | |
| | NON RESIDENTIAL BUILDINGS | | | | |
| 1. | Normal Office/Temporary Office Buildings/Dispensaries | 98 | 110 | 118 | 132 |
| 2. | North & South Blocks. | 84 | 94 | | |
| 3. | Parliament House and Parliament House Annexe | 280 | 314 | | |
| 4. | Supreme Court | 167 | 187 | | |
| 5. | Hospitals | 222 | 249 | 266 | 300 |

NOTES :

- These plinth area rates cover only expenditure on maintenance on EI and Fans i/c compound light. Cost for maintenance in night shift, if required can be added as per actual requirement. Funds will be provided for maintenance of other E&M services e.g. Air Conditioning, Pumps, DG sets, Substation, Fire Alarm, Firefighting, Lifts, transformers etc. on actual requirement.
- The rates do not include the extra amount admissible for maintenance and repairs in hilly region.
- No provisions on lump sum basis for richer specifications are made in the estimate for maintenance work.
- Extra provision for specific site conditions in addition to those already covered by various annexures of CPWD Maintenance Manual be made on item rate basis with itemized schedule of measurements and duly indexed DSR rates as per latest cost index. In case, rates of specific items are not available in DSR, market rates be used instead, to frame the maintenance estimate. (Sl. No. 3 & 4 added as per OM No. DG/Maintenance Manual 2019/04 dated 16.03.2023).

Annexure 3

REGISTER OF SPECIAL REPAIRS

Special Repair Group.....

| S. No. | Complaint No. | House No./ Locality | Location of Repairs | Approximate Quantity | Repairs required in | | | Schedule of Repairs |
|--------|---------------|---------------------|---------------------|----------------------|---------------------|----------------|-----------------|---------------------|
| | | | | | Less than 15 days | Within 1 month | Within 3 months | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

Annexure 4

REGISTER OF PERIODICAL REPAIRS/ AR & MO

| S. No. | Complaint No. | House No./ Locality | Request regarding | | Due/not Due | Date planned for the work | Date of intimation to allottee | Date of completion of work |
|--------|---------------|---------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------|---------------------------|--------------------------------|----------------------------|
| | | | White washing/ Distempering, Fans cleaning, Surface Dressing of lawn Vegetation cleaning etc. | Door/ window Painting, Painting of Fans, D.B Open metal conduits etc. | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

Annexure 5**YARD STICK OF WORK CHARGED STAFF****YARDSTICK FOR CIVIL WORK CHARGED STAFF (RESIDENTIAL BUILDINGS)**

| S. No. | Categories | Building Type | Year of Construction | Plinth area in Sq. ft. |
|--------|------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| 1. | Mason | Type 1,7, 8 MP flats and Officers hostels Type 2-6 | Pre 1947 construction Post 1947 construction Pre 1947 construction Post 1947 construction | 3.00 lakhs 3.75 lakhs 3.75 lakhs 4.50 lakhs |
| 2. | Carpenter | Type 1-3 Type 4-6 Type 7, 8, MP flats & Officers Hostel | | 4.50 lakhs 5.25 lakhs 3.75 lakhs |
| 3. | Plumber | All types | | 4.50 lakhs* * This does not include additional workers on night duty in selected areas. |
| 4. | Sewerman | Type 1-3 Type 4-8 | | 4.50 lakhs@ 6.00 lakhs@ @ This does not include addl. workers on night duty and seasonal Labour for cleaning branch sewers |

Notes:

- (1) One Beldar for each Carpenter and one for each Mason. In addition the strength of Beldar should be 150% above what is worked out on the basis of Carpenters and Masons.
- (2) Mate and Blacksmith - No Mate or Blacksmith should be employed for maintenance of buildings.
- (3) Painter and Upholsterer - No yardstick is prescribed in respect of
 - (i) Painter including Furniture Painter and
 - (ii) Upholsterer.
- (4) Caneman - No Caneman should be employed in any Division, except one in 'B' Division and two in Parliament Works Division for urgent and emergent works. Canning should normally be got done through blind men.

YARDSTICK FOR CIVIL WORK CHARGED STAFF (NON-RESIDENTIAL BUILDINGS)

| S. No. | Category | Parliament House | Other Monumental bldgs. (Plinth Area in sq. ft.) | Hospitals | Other Public Buildings like Schools, Courts Airport Terminal bldgs. etc. (Plinth Area in sq. ft.) | Office Buildings |
|--------|----------|------------------|--------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | Mason | 1 No. | 7.5 lakhs | 2.4 lakhs (Pre 1947 constn.) 3.0 lakhs (Post 1947 constn.) | 4.5 lakhs | 4.5 lakhs |

| S. No. | Category | Parliament House | Other Monumental bldgs. (Plinth Area in sq. ft.) | Hospitals | Other Public Buildings like Schools, Courts Airport Terminal bldgs. etc. (Plinth Area in sq. ft.) | Office Buildings |
|--------|-----------|----------------------------------------------------------------------|--------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------|------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | Carpenter | 1 No. | 11.25 lakhs | 4.5 lakhs | 4.5 lakhs | 7.5 lakhs |
| 3. | Plumber | 1 No. | 11.25 lakhs | 4.5 lakhs | 4.5 lakhs | 5.4 lakhs |
| 4. | Sewerman | 1 No. | 11.25 lakhs | 4.5 lakhs | 9.0 lakhs | 9.0 lakhs |
| 5. | Beldar | Twice the number of workers in the categories of Mason and Carpenter | | | | |

Notes:

- (1) Requisitioned buildings, if used for office purposes may be clubbed with 'Office Buildings', but if used for other purposes such as hospitals, schools etc., these may be clubbed with the respective head.
- (2) For outsourcing of comprehensive maintenance, yardsticks of number of workers shall be 75% for all type of buildings.

YARDSTICK FOR ELECTRICAL WORK CHARGED STAFF

| Type of Buildings | One Wireman for No. of points | Ratio of Wireman to Khallasi | One Painter for no. of points |
|----------------------------------------------------------------|-------------------------------|------------------------------|-------------------------------|
| 1 | 2 | 3 | 4 |
| (I) Residential | | | |
| (1) Type I to IV Qrs. | 3300 | 2:1 | 15000 |
| (2) Type V & above, MPs residences | 3300 | 2:1 | 15000 |
| (3) VIP/Ministers' bungalow | 3300 | 2:1 | 15000 |
| (II) Non- Residential Buildings | | | |
| (1) Monumental bldg. | 2000 | 2:1 | 10000 |
| (2) Multi-storeyed bldgs | 2000 | 2:1 | 10000 |
| (3) Hospital & Laboratories | 2000 | 2:1 | 10000 |
| (4) Schools, Colleges, Single/Double Storeyed Offices/Hutments | 3300 | 2:1 | 10000 |
| (5) Press bldgs., & Workshop | 2500 | 2:1 | 10000 |

For outsourcing of comprehensive maintenance, yardsticks of number of workers shall be 75% for all type of buildings.

YARD STICK FOR HORTICULTURE STAFF**A. MALI**

| Sl. No. | Type of Area | Norms (1 Mali for) |
|---------|---------------------------------------------------------------------------------------------------------------|------------------------------|
| 1 | Hon'ble V P House, PM House, Ministers Houses, MPs Houses, Secretary level and above Govt. Officers Bungalows | 3035 Sqm or 0.75 acre |
| 2 | Residential Flats and Govt. Officers Bungalow | 5058 Sqm Or 1.25 acres |

| Sl. No. | Type of Area | Norms (1 Mali for) |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 3 | Office accommodation | 5058 Sqm Or 1.25 acres |
| 4 | Open spaces | 3.00 acres |
| 5 | Play grounds | 8094 Sqm Or 2.00 acres |
| 6 | Public Parks | 8094 Sqm Or 2.00 acres |
| 7 | Prestigious offices, Samadhies , Kartavya Path, Buddha Jayanti Park, San Martin Park, DDU Park and Other equivalent parks having well developed garden features like lawns, hedge, topiaries, shrubs beds etc. | 4047 Sqm. Or 1.00 acre |
| 8A | ◆ Hedge cutting (Normal Hedge) upto 1.2 mtr. height | 3000 m. |
| 8B | ◆ Hedge cutting (Normal Hedge) above 1.2 mtr. to 2.4 mtr height | 2000 m. |
| 8C | ◆ Hedge Cutting (Designer Hedge/ Edge) | 1500 m. |
| 9A | Potted plants at Nursery | 2000 Nos. |
| 9B | Potted plants in Flats/Bungalow/Offices at ground level | 750 Nos. |
| 9C | Potted plants (Cement) at Nursery and display | 300 Nos. |
| 9D | Potted plants in multistoried Buildings | 250 Nos. |
| 10A | ◆ Topiary upto 1.2 mtr. height | 250 Nos. |
| 10B | ◆ Topiary above 1.2 mtr. height | 200 Nos. |
| 11 | ◆ Kitchen garden | 1000 Sqm |
| 12 | Vertical Garden | 100 Sqm |
| 13 | Trees | |
| 13A | Upto 3 years | 250 Nos. |
| 13B | 3 to 8 years age | 500 Nos. |
| 13C | Beyond 8 years age | 1200 Nos. |
| 14 | Maintenance of Shrubs Plants | 500 Nos. |
| 15 | Sweeping of Kartavya Path Garden area | 1.50 Acre per Sweeper |
| 16 | Sweeping of Public Parks | 1.50 Acre/Per Sweeper |
| 17 | ◆ Supervisor/Chaudhary One Supervisor /Chaudhary over 18 Malis | |

Annexure 6A

**PERFORMA FOR CALCULATION OF MAINTENANCE COST INDEX
REPAIR COST INDEX FOR DELHI WITH 01/04/2019 RATES AS BASE 100**

| S. No. | Description of Item | Unit | Rate as on 01.04.2019 (a) | Weightage (b) | Rates Revision as on -- (c) | Repair Cost index as on-- (bxc/a) |
|--------|--------------------------------------------------|---------|------------------------------|------------------|--------------------------------|--------------------------------------|
| 1. | Aggregate 10 mm & 20 mm average | Cum | 1400.00 | 4.00 | | |
| 2. | Cement | quintal | 503.00 | 9.50 | | |
| 3. | Acrylic Washable Distemper | kg | 50.00 | 17.00 | | |
| 4. | Acrylic Emulsion Paint | Litre | 220.00 | 7.00 | | |
| 5. | Paint (Synthetic enamel) | Litre | 160.00 | 17.50 | | |
| 6. | Fine Sand | Cum | 900.00 | 4.00 | | |
| 7. | Timber (2nd class Teak and Salwood in scantling) | Cum | 69550.00 | 9.50 | | |
| 8. | Beldar | Per day | 584.00 | 21.50 | | (X) |
| 9. | Mason/ Fitter/ Carpenter/ Painter | Per day | 710.00 | 10.00 | | (Y) |
| | Total | | | 100 | | (Z) |

Annexure 6B

SERVICE COST INDEX FOR DELHI WITH 01/04/2019 RATES AS BASE 100

| S. No. | Description of Item | Unit | Weighted Average Rates of Work Charged Staff and Out Sourced Worker as per strength as on 01.04.2019 as base 100 (a) | Weightage (b) | Rates Revision as on -- (c) | Service Cost index as on-- $\frac{(bxc)}{(a)}$ |
|--------|------------------------------|---------|-------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------|---------------------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | Workers | | | | | |
| | (i) Beldar/Unskilled | | | | | |
| | (a) Work Charged | Per day | 1167 | 24 | | |
| | (b) Out Sourced | | 584 | | | |
| | (ii) Mason/Carpenter/Skilled | | | | | |
| | (a) Work Charged | Per day | 1400 | 30 | | |
| | (b) Out Sourced | | 710 | | | |

| S. No. | Description of Item | Unit | Weighted Average Rates of Work Charged Staff and Out Sourced Worker as per strength as on 01.04.2019 as base 100 (a) | Weightage (b) | Rates Revision as on -- (c) | Service Cost index as on-- (bxc) (a) |
|--------|---------------------------------------------------------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------|--------------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | Minimum Wages Mason/Carpenter/ Plumber /Skilled Beldar/Unskilled | Per day | $\begin{array}{r} 710.00 \\ 584.00 \\ \hline 1294.00 \\ \text{Avg} = \text{Rs.}647.00 \end{array}$ | 11.50 | | |
| 3. | Materials | | Material costing for repairs cost index excluding labour component $(Z - (X+Y))$ converting to 100% $\frac{Z-(X+Y) \times 100}{68.5} = P$ | 34.50 | $\frac{PX34.50}{100}$ | |
| | Total | | | 100 | | |

Note:-

- (1) For work charged staff daily rates are average monthly salary/30 (as collected from field units)
- (2) Minimum wages as on 01.04.2019 as per CLC notification no. 1/8(3)/2019/LS-II dated 27.03.2019
- (3) Weighted Average Rates of Work Charged Staff and Outsourced Workers rates shall be considered in the proportion of Work Charged and Out Sourced Staff as the case may be for column No. 4.
For example if there are 80 Nos. Skilled Work Charged Staff @ Rs. 1400/- per day and 20 Nos. Out Sourced Skilled Worker @ Rs. 710/- per day. Then the weighted average rate shall be
= $(80 \times 1400 + 20 \times 710) / 100 = \text{Rs. } 1262/-$ per day.

Annexure 7

(A) INSPECTION OF BUILDINGS (CIVIL)

(a) House No. and Type : (b) Location :
 (c) Date of Last Inspection : (d) Date of present inspection :

| S. No. | Item No. | Needs Repair | | Needs Replacement | | Priority | | | |
|-----------|----------------------------------------------------|--------------|----------|-------------------|----------|----------|-----------|--------|-----------------|
| | | Action | Quantity | Cost | Quantity | Cost | Immediate | Annual | Routine Repairs |
| 1. | Walls | | | | | | | | |
| 1.1 | Cracks | | | | | | | | |
| 1.2 | Repair to plaster | | | | | | | | |
| 1.3 | Repair to brick work | | | | | | | | |
| 1.4 | Dampness | | | | | | | | |
| 2. | Floors | | | | | | | | |
| 2.1 | Cracks | | | | | | | | |
| 2.2 | Settlement | | | | | | | | |
| 2.3 | Slopes | | | | | | | | |
| 2.4 | Skirting cracks | | | | | | | | |
| 2.5 | Dados cracks | | | | | | | | |
| 3. | Doors, Windows, Ventilators & Cupboards | | | | | | | | |
| 3.1 | Glass panes broken | | | | | | | | |
| 3.2 | Panels in shutters broken | | | | | | | | |
| 3.3 | Panels fit improperly | | | | | | | | |
| 3.4 | Improper/missing fittings | | | | | | | | |
| 3.4.1 | Hinges | | | | | | | | |
| 3.4.2 | Handles | | | | | | | | |
| 3.4.3 | Tower Bolts | | | | | | | | |
| 3.4.4 | Aldrops | | | | | | | | |
| 3.4.5 | Floor door stopper | | | | | | | | |
| 3.4.6 | Knobs | | | | | | | | |
| 3.4.7 | Cleats | | | | | | | | |
| 3.4.8 | Hooks & Eyes | | | | | | | | |
| 3.4.9 | Curtain Rods | | | | | | | | |
| 3.4.10 | Stays | | | | | | | | |
| 3.4.11 | Pelmets | | | | | | | | |
| 4. | Roofs | | | | | | | | |
| 4.1 | Leakages/Damp patches | | | | | | | | |
| 4.1 | Water proofing treatment | | | | | | | | |
| 4.2 | Golas | | | | | | | | |
| 4.3 | Khurras | | | | | | | | |
| 4.4 | Brick drip course | | | | | | | | |
| 4.5 | Rain water pipe | | | | | | | | |
| 4.6 | Regrading | | | | | | | | |
| 4.7 | Top Layer of tiles | | | | | | | | |
| 4.8 | Parapet, coping | | | | | | | | |
| 5. | Water Supply & Sanitary fittings | | | | | | | | |
| 5.1 | Leakages in pipe joints | | | | | | | | |
| 5.2 | Functioning of washers | | | | | | | | |
| 5.3 | Functioning of traps in fittings | | | | | | | | |
| 5.4 | Functioning of floor traps | | | | | | | | |

| S. No. | Item No. | Needs Repair | | Needs Replacement | | Priority | | | |
|-------------------------------------------------|-------------------------------------------|----------------|----------|-------------------|----------|------------------------------|-----------|--------|-----------------|
| | | Action | Quantity | Cost | Quantity | Cost | Immediate | Annual | Routine Repairs |
| 5.5 | Functioning of overhead/low level cistern | | | | | | | | |
| 5.6 | Air Locking | | | | | | | | |
| 5.7 | Leakages in pipe joints | | | | | | | | |
| 5.8 | Condition of overhead tank | | | | | | | | |
| 5.9 | Cleaning of overhead tank | | | | | | | | |
| 5.10 | Fittings | | | | | | | | |
| | 5.10.1 | Washbasin | | | | | | | |
| | 5.10.2 | Soap container | | | | | | | |
| | 5.10.3 | Mirror | | | | | | | |
| | 5.10.4 | Glass shelf | | | | | | | |
| | 5.10.5 | Towel rail | | | | | | | |
| | 5.10.6 | Hangers | | | | | | | |
| | 5.10.7 | Sinks | | | | | | | |
| | 5.10.8 | Taps | | | | | | | |
| | 5.10.9 | Pillar cocks | | | | | | | |
| | 5.10.10 | Showers | | | | | | | |
| | 5.10.11 | Cisterns | | | | | | | |
| | 5.10.12 | Ball valves | | | | | | | |
| | 5.10.13 | Seat cover | | | | | | | |
| | 5.10.14 | Steps | | | | | | | |
| 6. | External Services | | | | | | | | |
| 6.1 | Manhole covers | | | | | | | | |
| 6.2 | Covers to gully traps | | | | | | | | |
| 6.3 | Cleaning of manholes | | | | | | | | |
| 6.4 | Plinth protection | | | | | | | | |
| 6.5 | Cleaning of storm water drain | | | | | | | | |
| 6.6 | Approach roads | | | | | | | | |
| 6.7 | Service lanes | | | | | | | | |
| 7. | Finishing | | | | | | | | |
| 7.1 | White washing/colour washing/distemper | | | | | | | | |
| | (a) When was it done last? | | | | | | | | |
| | (b) When is it due? | | | | | | | | |
| | (c) Existing condition. | | | | | | | | |
| 7.2 | Painting | | | | | | | | |
| | (a) When was it done last? | | | | | | | | |
| | (b) When is it due? | | | | | | | | |
| | (c) Existing conditions | | | | | | | | |
| 8. | Common Areas | | | | | | | | |
| 8.1 | Railing to staircase | | | | | | | | |
| 8.2 | Staircase steps | | | | | | | | |
| 8.3 | Staircase nosing | | | | | | | | |
| 8.4 | Shafts | | | | | | | | |
| (B) INSPECTION OF BUILDINGS (ELECTRICAL) | | | | | | | | | |
| (a) | House No. and Type : | | | | (b) | Location : | | | |
| (c) | Date of Last Inspection : | | | | (d) | Date of present inspection : | | | |

| S. No. | Item No. | Needs Repair | | Needs Replacement | | Priority | | | |
|--------------------------------------------|----------------------------------------------------------------------------|--------------|----------|-------------------|----------|----------|-----------|--------|-----------------|
| | | Action | Quantity | Cost | Quantity | Cost | Immediate | Annual | Routine Repairs |
| 1. | Switch Boards | | | | | | | | |
| 1.1 | Regulator | | | | | | | | |
| 1.2 | Switches | | | | | | | | |
| 1.3 | Fixing of tiles | | | | | | | | |
| 2. | Fans | | | | | | | | |
| 2.1 | Canopy fixing | | | | | | | | |
| 2.2 | Speed and noise | | | | | | | | |
| 3. | Socket outlet points and connection | | | | | | | | |
| 3.1 | Tile | | | | | | | | |
| 3.2 | Switch | | | | | | | | |
| 3.3 | Outlet connection if any | | | | | | | | |
| 4. | Fittings | | | | | | | | |
| 4.1 | Reflector | | | | | | | | |
| 4.2 | Louvers/perspex cover | | | | | | | | |
| 4.3 | Suspension rod | | | | | | | | |
| 5. | Exhaust Fans | | | | | | | | |
| 5.1 | Speed and noise | | | | | | | | |
| 5.2 | Louvers | | | | | | | | |
| 5.3 | Connecting wires i/c. ceiling rose | | | | | | | | |
| 6. | Call bells | | | | | | | | |
| 6.1 | Bell push | | | | | | | | |
| 6.2 | Connecting wire | | | | | | | | |
| 6.3 | Ball Buzzer | | | | | | | | |
| 7. | Sub distribution boards/ DB/Main Board | | | | | | | | |
| 7.1 | Switch covers | | | | | | | | |
| 7.2 | Fuse Kit Kats | | | | | | | | |
| 7.3 | Earth connection | | | | | | | | |
| 7.4 | Fuse rating | | | | | | | | |
| 7.5 | Inter connection | | | | | | | | |
| 7.6 | Boards | | | | | | | | |
| (C) INSPECTION OF BUILDINGS/GARDENS | | | | | | | | | |
| (A) | Lawn : | | | | | | | | |
| | (i) Weeding | | | | | | | | |
| | (ii) Patch repair | | | | | | | | |
| | (iii) Renovation | | | | | | | | |
| | (iv) Regrassing | | | | | | | | |
| (B) | Hedge : | | | | | | | | |
| | (i) Gap filling | | | | | | | | |
| | (ii) Replacement | | | | | | | | |
| (C) | Pruning & Trimming : | | | | | | | | |
| | (i) Naturally required pruning | | | | | | | | |
| | (ii) Pruning required for security purpose of building as well as occupant | | | | | | | | |

| S. No. | Item No. | Needs Repair | | Needs Replacement | | Priority | | | |
|--------|---------------------------------------------------------------------|--------------|----------|-------------------|----------|----------|-----------|--------|-----------------|
| | | Action | Quantity | Cost | Quantity | Cost | Immediate | Annual | Routine Repairs |
| (D) | Planting Beds : | | | | | | | | |
| | (i) Needs Replacement | | | | | | | | |
| | (ii) Gap filling | | | | | | | | |
| (E) | U/F Water Supply: | | | | | | | | |
| | (i) Matter to be reported to U/F Water Division after inspection. | | | | | | | | |
| (F) | Rockeries : | | | | | | | | |
| | (i) Gap filling of dead one | | | | | | | | |
| | (ii) Replacement of damaged, weak | | | | | | | | |
| | (iii) Replacement of stones | | | | | | | | |
| | (iv) Thinning, trimming | | | | | | | | |
| | (v) Redesigning of paths, Maintenance of paths | | | | | | | | |
| (G) | Kitchen Garden: | | | | | | | | |
| | (i) Change in site | | | | | | | | |
| | (ii) Plan for planting of vegetables | | | | | | | | |
| (H) | Road Side Plantation : | | | | | | | | |
| | (i) Gap filling Nos. | | | | | | | | |
| | (ii) Trimming, pruning | | | | | | | | |
| | (iii) Tree Guards not required & to be removed/repair/painting etc. | | | | | | | | |
| | (iv) Proposal for new plantation, Digging of holes etc. | | | | | | | | |
| | (v) Misc. | | | | | | | | |
| | (vi) MOU-Detailed report(performance & financial achievements) | | | | | | | | |

Annexure 8

RESPONSIBILITY FOR DETECTION/REMOVAL OF UNAUTHORISED CONSTRUCTIONS

| S. No. | Type of unauthorised construction | Area where it takes place | Responsibility for detecting and reporting /removal | Responsibility for cancellation/eviction proceedings. |
|--------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 1. | Unauthorised construction | Inside a residential quarter/ shop allotted by the Directorate of Estates | C.P.W.D | Directorate of Estates to cancel the allotment & initiate eviction proceedings & evict the person concerned from the premises. |
| 2. | Unauthorised construction | In a lawn/space attached to a specific residential quarter/ shop or by an identifiable allottee/shopkeeper | C.P.W.D | Directorate of Estates to cancel the allotment and initiate eviction proceedings & evict the person concerned from the premises. |
| 3. | Unauthorised construction | On common lawns of residential qtrs/markets not attributable to a specific quarter or a specific allottee and internal roads not handed over to local bodies. | C.P.W.D | C.P.W.D |
| 4. | Unauthorised construction | On open lands which do not form part of open space attached to specific quarters/ shops or which do not form part of common lawns of quarters/markets. | L&DO/C.P.W.D./ Land owning agency. | L&DO/C.P.W.D./ Land owning agency. |
| 5. | Unauthorised construction | Roads/Lands/Open space declared as public streets handed over to local bodies | Land owing agency | Land owing agency |

Annexure 9

TEMPORARY FUNCTION AT VVIP RESIDENCE/OFFICE/HYDERABAD HOUSE/RAJGHAT COMPLEX/PARLIAMENT HOUSE

Ex. Engineer (C) & (E) & Deputy Director (Horticulture) to discuss the arrangement with the designated officer in-charge of the function.

1. Date, time, venue and period of function.
2. Shamiana requirement/open air.
3. Seats/Chairs requirement.
4. No. of Microphones requirement.
5. Microphone stand/Desk/Podium requirement.
6. Lighting arrangement with special fittings, air circulators, pedestal fans.
7. Standby power arrangement.
8. Duplicate source of supply with changeover switch
9. Durries/carpets/pillows/cots
10. Intimation to NDMC/MCD about water continuity.
11. Intimation to NDMC/DESU about electricity continuity and operation of street/road lights wherever necessary.
12. Drinking water arrangement - Cold water/tanker etc., ice requirement, water lines/leakage tests.
13. Catering arrangement.
14. Special electric power for catering purposes.
15. Standby amplifier and mixer with manual change over.
16. Battery operated amplifier(Additional)
17. Whether generator set to be in operation at the time of function?
18. Music/tapes arrangement.
19. Position of loud speakers.
20. Tape recording facilities of the proceedings
21. Video recording requirement.
22. Extra power outlets for A.I.R./Doordarshan.
23. Special enclosures for Press/MPs/Ministers.
24. Power requirement for metal detectors. 'X' Ray machines and locations
25. Flower decoration requirements
26. Bouquet requirements
27. Loose flower petal requirements
28. Security/Safety in case of rain.
29. Security lights, street lights - Status.
30. Whether working and lamps duly replaced wherever required?
31. Any covered area needing temporary air Conditioning/air cooling
32. HT/LT Supply for the function checked for proper operation including terminations/contacts
33. All fuses of right size and category provided in switches/feeder pillars/switch boards/distribution boards including connection.
34. Switches and boards in open area are covered and properly made weather proof.
35. Cables and wires laid overhead or in ground are safe and trip free.
36. Standby generating set supply tested for automatic operation or on load as the case may be.
37. All contacts/switch boards/wires cables/pillars/checked for perceptible heating and remedial action taken.
38. Souvenir to be printed or circulated.
39. Any escort to be arranged.
40. Vehicle to be arranged.
41. Installations checked by any other official
42. Temporary water taps or Urinals (Gents/Ladies) required.
43. Prior intimation to A.I.R./Doordarshan/Press to be given by CPWD/Client.
44. Has security personnel been consulted on the arrangement ?
45. How many hours/day before the actual function all the above arrangements are required to be made ?

- 46. Do you have a list of telephone nos. of office/residence of JE/AE/EE/SE/CE/ADG and DD(H)/AD(H)/other departments like security/client/NDMC/DESU/MCD who are concerned with the function?
- 47. Do you have some emergency wires, cables, spares and lamps for immediate replacement of any item if required?
- 48. Has fire service been informed and portable fire extinguishers provided at site with sand buckets?
- 49. Has First Aid Box for emergency medical aid kept at site?
- 50. Car calling system provided or not?
- 51. Any other service expected by the designated officer for the function?
 - (a) Arrangements as stated above have been made, duly checked and found to be in satisfactory condition.
 - (b) The arrangements have also been checked by.....on.....at.....time and found to be satisfactory.
- 52. Foliage, Seasonal and ornamental potted plants requirements.
- 53. Do you have some emergency backup of Cut flower, loose flower, Bouquet, plants, deployment of extra labour for rearrangement and other horticulture items for immediate replacement of any item if required?
- 54. 55.Do you have arrangement for safeguard /protection of floral decoration in adverse weather condition like severe temperature, rains, wind?

| | | | | | |
|------------|------|-----------|-----|-----------|-----|
| Date/Time. | J.E. | Date/Time | A.E | Date/time | E.E |
|------------|------|-----------|-----|-----------|-----|

Annexure 10**Maintenance Norms/Frequency of Application of Finishing Items and Useful Life of Finishing Civil Items****A. Maintenance Norms/Frequency of Application of Finishing Items**

| S.No. | Item | Periodicity | | | | |
|-------|--------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------|--------------|----------|
| | | Residential Bldg. | Office Bldg. | Hospitals | Laboratories | Schools |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| A. | Civil | | | | | |
| 1. | Painting with plastic/Acrylic Emulsion paint, Acrylic Synthetic enamel paint, Oil bound distemper etc. | 4 years | 3 years | 1 year Corridor O.T. Rooms 2 Years – Other areas | 2 years | 2 years |
| 2. | Painting external surface with exterior emulsion or equivalent paint. | 5 years | 5 years | 5 years | 5 years | 5 years |
| 3. | Painting external surface with water proofing cement paint. | 3 years | 3 years | 3 years | 3 years | 3 years |
| 4. | Cleaning and disinfecting of water storage/distribution tanks, water mains. | 6 months | 6 months | 3 months | 3 months | 6 months |
| 5. | Cleaning of Manholes/Gully chambers and flushing of building sewers. | 1 year | 1 year | 6 months | 1 year | 1 year |
| 6. | Cleaning of storm water drains. | 1 year | 1 year | 1 year | 1 year | 1 year |
| 7. | Polishing wooden doors/windows with spirit polish/synthetic acrylic polish. | 3 years | 3 years | 2 years | 2 years | 2 years |
| 8. | Cleaning and tightening of terminals of DBs, electrical panel etc. | 1 year | 1 year | 1 year | 1 year | 1 year |
| 9. | Premix, semi dense/dense carpeting of roads. | 5 years | 5 years | 5 years | 5 years | 5 years |
| 10. | Collection of water samples for physical, chemical and bacteriological analysis of water. | 6 months | 6 months | 3 months | 3 months | 6 months |
| 11. | Cleaning & Checking of fans (checking of quarter pin, nut bolts, rubber reel, bearing etc.) | 1 year | 1 year | 1 year | 1 year | 1 year |
| 12. | Checking of Floats of overhead water tanks | 1 month | 1 month | 1 month | 1 month | 1 month |
| 13. | Earthing pit checking and earth testing | 1 year | 1 year | 1 year | 1 year | 1 year |
| 14. | Checking of Lightening arrestor | 1 year | 1 year | 1 year | 1 year | 1 year |

Note: Painting work will be done after expiry of the above mentioned period or change of tenancy whichever is earlier.

B. Expected Useful Life of Finishing Civil Items

| Sl. No. | Description of Item | Life in Years |
|---------|------------------------------------------------------------------|----------------|
| 1. | Bathroom: | |
| | (i) Wall tiles | (i) 10 Years |
| | (ii) Floor tiles | (ii) 10 Years |
| | (iii) CP Fittings | (iii) 07 Years |
| | (iv) Bathroom fixtures | (iv) 07 Years |
| | (v) PVC Bathroom fittings | (v) 05 Years |
| 2. | Kitchen | |
| | (i) Kitchen Cabinet | (i) 10 Years |
| | (ii) SS Wire Baskets | (ii) 10 Years |
| | (iii) Granite Stone | (iii) 15 Years |
| 3. | Floor Tiles | 10 Years |
| 4. | Wooden Flooring | |
| | (i) Laminate/Engineered | (i) 10 Years |
| | (ii) Hard Wood Flooring | (ii) 20 Years |
| 5. | Doors & Windows (Wooden, Aluminum & UPVC) | 20 Years |
| 6. | Cupboard/Wardrobe | 10 Years |
| 7. | External Pavement Tiles | 10 Years |
| 8. | Jali | |
| | (i) CC | (i) 10 Years |
| | (ii) GRC | (ii) 15 Years |
| | (iii) IRC fabric | (iii) 10 Years |
| 9. | Temporary security fixtures/Bison board panels/ false ceiling | 10 Years |
| 10. | PGI sheet | 15 Years |

Annexure 11**CHECK LIST/NORMS FOR HORTICULTURE MAINTENANCE**

**Hon'ble VP House, PM House, Ministers Houses, MPs Houses, Secretary level and above
Government Officers Bungalow**

| No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./Frequency Actually done | Comments of Inspection Officer |
|------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------|
| 1 | Irrigation | As per requirement | | |
| 2 | (i) Manuring (ii) Fertilization | Seasonal in winter in summer and rainy season- As per requirement | | |
| 3 | Lawn Mowing Summer Winter Rains | Fortnightly Monthly Weekly | | |
| 4 | Plant Protection | Need Based | | |
| 5 | Pruning & Trimming of Trees/Shrubs Creepers etc. | Yearly/Need base with the permission of Forest department | | |
| 6 | Cultivation & Weeding | As and when required | | |
| 7 | Seasonal Plants Winter Summer Rains | Need Based Need Based Need Based | | |
| 8 | Top dressing with soil & /or manure | Once in a year and it can be done twice in a year as per site requirement | | |
| 9 | Repair & replacement of plants, leveling etc. | As and when required | | |
| 10 | Hedges Cutting Summer Rains Winter | Fortnightly Fortnightly Monthly | | |
| 11 | Any other item (Hort., Civil, Elect., U/F water supply) required for proper maintenance | On need basis | | |

| No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./Frequency Actually done | Comments of Inspection Officer |
|----------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------|--------------------------------|
| 12 | Outdoor potted plants | Need based | | |
| 13 | Indoor potted plants & planters | Need based | | |
| 14 | Planter beds | Need based | | |
| 15 | Ground cover as part of grass | Need based | | |
| 16 | Kitchen garden | Need Based | | |
| 17 | Floral Arrangement | Need Based | | |
| 18 | Special requirement | Need Based | | |
| FOR TYPE V AND ABOVE FLATS DI, DII, CI, CII FLATS | | | | |
| No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./ Frequency Actually done | Comments of Inspection Officer |
| 1. | Irrigation | As per requirement | | |
| 2. | (i) Manuring (ii) Fertilization | Once in a year in winter - as per requirement in summer and rainy season- as per requirement | | |
| 3 | Lawn Mowing Summer Winter Rains | Fortnightly Monthly Weekly | | |
| 4 | Plant Protection | Need Based | | |
| 5 | Pruning & Trimming of Trees/Shrubs Creepers etc. | Yearly/Need base with the permission of Forest department | | |
| 6 | Cultivation & Weeding | As and when required | | |
| 7 | Seasonal Plants Summer Winter Rains | Need Based Need Based Need Based | | |
| 8 | Ground Covers | Need Based | | |
| 9 | Top dressing with soil & / or manure | Yearly | | |

| No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./ Frequency Actually done | Comments of Inspection Officer |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------|--------------------------------|
| 10 | Repair & replacement of plants | As and when required | | |
| 11 | Hedges Cutting Summer Rains Winter | Fortnightly Fortnightly Monthly | | |
| 12 | Outdoor/Indoor potted plants | Need based | | |
| 13 | Any other item (Hort., Civil, Elect., U/F water supply) required for proper maintenance | On need basis | | |
| FOR RESIDENTIAL COLONIES TYPE IV INDIVIDUAL GARDENS ATTACHED TO FLAT | | | | |
| No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./ Frequency Actually done | Comments of Inspection Officer |
| 1 | Irrigation | On visit of Mali | | |
| 2 | (i) Manuring (ii) Fertilization | Once in a year in winter in summer and rainy season- As per requirement | | |
| 3 | Lawn Mowing Summer Winter Rains | Monthly Monthly Monthly | | |
| 4 | Plant Protection | Need Based | | |
| 5 | Pruning & Trimming of Trees/Shrubs, Creepers etc. | Yearly/Need base with the permission of Forest department | | |
| 6 | Cultivation & Weeding | As and when required | | |
| 7 | Top dressing with soil & /or manure | Yearly | | |
| 8 | Repair & replacement of plants | As and when required | | |

| No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./ Frequency Actually done | Comments of Inspection Officer |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------|--------------------------------|
| 9 | Hedges Cutting Summer Rains Winter | Fortnightly Fortnightly Monthly | | |
| 10 | Indoor and Outdoor potted plants | Need Based | | |
| 11 | Seasonal potted Plants | Need Based | | |
| 12 | Seasonal Plants in flower beds | Need Based | | |
| 13 | Any other item (Hort., Civil, Elect., U/F water supply) required for proper maintenance | On need basis | | |
| FOR RESIDENTIAL COLONIES TYPE I to III INDIVIDUAL GARDENS | | | | |
| No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./ Frequency Actually done | Comments of Inspection Officer |
| 1 | Pruning & Trimming of Trees/Shrubs Creepers Etc. | Yearly/Need base with the permission of Forest department | | |
| 2 | Hedges Cutting Summer Rains Winter | Monthly Monthly Monthly | | |
| 3 | Repair & replacement of plants | As and when required | | |
| 4 | Any other item (Hort., Civil, Elect.) required for proper maintenance | On need basis | | |

| FOR PARKS | | | | |
|------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------|
| No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./ Frequency Actually done | Comments of Inspection Officer |
| 1 | Irrigation | As per requirement | | |
| 2 | (i) Manuring (ii) Fertilization | Once in a year in winter in summer and rainy season- As per requirement | | |
| 3 | Lawn Mowing Summer Winter Rains | Weekly Fortnightly Weekly | | |
| 4 | Plant Protection | Need Based | | |
| 5 | Pruning & Trimming of Trees/Shrubs Creepers etc. | Yearly/Need base with the permission of Forest department | | |
| 6 | Cultivation & Weeding | As and when required | | |
| 7 | Seasonal Plants Winter Summer Rains | Need Based Need Based Need Based | | |
| 8 | Top dressing with soil & /or manure | Yearly or as and when required | | |
| 9 | Repair & replacement of plants | As and when required | | |
| 10 | Hedges Cutting Summer Rains Winter | Fortnightly Fortnightly Monthly | | |
| 11 | Ground covers | Need based | | |
| 12 | Planter beds | Need based | | |
| 13 | Annual plantation under Van Mahotsav/Green Action Drive | Once in a year (in monsoon) | | |
| 14 | Any other item (Hort., Civil, Elect., U/F water supply). required for proper maintenance | On need basis | | |

| FOR PRESTIGIOUS OFFICE/COMPLEX | | | | |
|--------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------|--------------------------------|
| No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./ Frequency Actually done | Comments of Inspection Officer |
| 1 | Irrigation | As per requirement | | |
| 2 | (i) Manuring (ii) Fertilization | Seasonal in winter in summer and rainy season- As per requirement | | |
| 3 | Lawn Mowing Summer Winter Rains | Fortnightly Monthly Weekly | | |
| 4 | Plant Protection | Need Based | | |
| 5 | Pruning & Trimming of Trees/Shrubs Creepers etc. | Yearly/Need base with the permission of Forest department | | |
| 6 | Cultivation & Weeding | As and when required | | |
| 7 | Seasonal Plants Winter Summer Rains | Need Based Need Based Need Based | | |
| 8 | Top dressing with soil & /or manure | Once in a year and as per site requirement | | |
| 9 | Repair & replacement of plants, leveling etc. | As and when required | | |
| 10 | Hedges Cutting Summer Rains Winter | Fortnightly Fortnightly Monthly | | |
| 11 | Any other item (Hort., Civil, Elect., U/F water supply) required for proper maintenance | On need basis | | |

| Sl. No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./ Frequency Actually done | Comments of Inspection Officer |
|-----------------------------|---------------------------------------------------|-------------------------------------------------------------------------|------------------------------------|--------------------------------|
| 12 | Outdoor potted plants | Need based as per requirement of site | | |
| 13 | Indoor potted plants & planters | Need based as per requirement of site | | |
| 14 | Planter beds | Need based | | |
| 15 | Rockeries and ground covers | Need based | | |
| 16 | Flower vases and arrangement | Need based | | |
| 17 | Special requirement | Need based | | |
| OFFICE ACCOMMODATION | | | | |
| No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./ Frequency Actually done | Comments of Inspection Officer |
| 1 | Irrigation | As per requirement | | |
| 2 | (i) Manuring (ii) Fertilization | Seasonal in winter in summer and rainy season- As per requirement | | |
| 3 | Lawn Mowing Summer Winter Rains | Fortnightly Monthly Weekly | | |
| 4 | Plant Protection | Need Based | | |
| 5 | Pruning & Trimming of Trees/Shrubs, Creepers etc. | Yearly/Need based with the permission of Forest department | | |
| 6 | Cultivation & Weeding | Need based | | |
| 7 | Seasonal Plants Winter Summer Rains | Need Based Need Based Need Based | | |
| 8 | Top dressing with soil & /or manure | Yearly / Need based | | |

| No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./ Frequency Actually done | Comments of Inspection Officer |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------------------------------|--------------------------------|
| 9 | Repair & replacement of plants, leveling etc. | As per requirement | | |
| 10 | Hedges Cutting Summer Rains Winter | Fortnightly Fortnightly Monthly | | |
| 11 | Any other item (Hort., Civil, Elect., U/F water supply) required for proper maintenance | On need basis | | |
| 12 | Outdoor potted plants | Need based as per requirement of site | | |
| 13 | Indoor potted plants & planters | Need based as per requirement of site | | |
| 14 | Planter beds | Need based | | |
| 15 | Ground Cover | Need Based | | |
| 16 | Special requirement | Need Based | | |
| Notes : | | | | |
| 1 | Where item of work cannot be indicated in terms of numbers /quantity/frequency, it shall be described as satisfactory or unsatisfactory. | | | |
| 2 | Any activity not carried out/material not supplied during the month due to valid reasons /directions, be carried over to the following month. | | | |
| 3 | Above programme cannot be adhered to under conditions beyond control, such as staff on leave, strike, adverse climatic conditions, failure of water supply and availability of funds etc. | | | |

CHECK LIST/NORMS FOR HORTICULTURE MAINTENANCE
FOR VICE PRESIDENT HOUSE/ PM HOUSE / OFFICE
FOR BUNGALOWS PROVIDED WITH ONE OR MORE MALI PER BUNGALOW

| Sl. No. | Item of work | Nos./Qty./Frequency Required | Nos./Qty./Frequency Actually done | Comments of Inspection Officer |
|---------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------|--------------------------------|
| 1 | Irrigation | Daily | | |
| 2 | (i) Manuring | Seasonal | | |
| | (ii) Fertilization | In winter, summer and rainy season - As per requirement | | |
| 3 | Lawn Mowing | | | |
| | Summer | Need based | | |
| | Winter | Need based | | |
| | Rainy | Need based | | |
| 4 | Plant protection | Need based | | |
| 5 | Pruning & Trimming of Trees/ Shrubs, Creepers etc. | Yearly/ Need based with the permission of Forest Department | | |
| 6 | Cultivation & Weeding | As and when required | | |
| 7 | Seasonal Flowers | | | |
| | Winter | Yearly | | |
| | Summer | Yearly | | |
| | Rains | Yearly | | |
| 8 | Top dressing with soil &/ or manure | Need based | | |
| 9 | Repair & replacement of plants leveling etc. | As and when required | | |
| 10 | Hedges cutting | | | |
| | Summer | Need based | | |
| | Rains | Need based | | |
| | Winter | Need based | | |
| 11 | Any other item (Hort., Civil, Elect., U/F water Supply) required for proper maintenance | On need basis | | |
| 12 | Outdoor potted plants | Need based as per requirement of site | | |
| 13 | Indoor potted plants & planters | Need based as per requirement of site | | |
| 14 | Planter beds | Need based | | |
| 15 | Ground cover | Need based | | |
| 16 | Kitchen garden | Need based | | |
| 17 | Flower arrangement in Flower vase and other Floral arrangement. | Need based | | |
| 18 | Special requirement | Need based | | |

Annexure 12**PRESTIGIOUS OFFICES/OFFICE COMPLEXES**

1. Parliament House Complex
2. Supreme Court of India
3. Vice President's House
4. Prime Minister's House & PMO
5. Vigyan Bhawan
6. Hyderabad House
7. U.P.S.C.
8. Samadhies, Kartavya Path
9. Delhi High Court
10. North Block & South Block
11. Memorials
12. PM Museum / Teen Murti House Complex
13. Old Secretariat (Vidhan Sabha)
14. Raj Niwas Secretariat
15. National Gallery of Modern Art
16. National Museums
17. Delhi Secretariat
18. Hon'ble Minister's Offices
19. Any other office declared as prestigious by DG/MoHUA

Annexure 13

DETAILS OF HORTICULTURE WORKS UNDER A SUB-DIVISION

| | | | |
|----------------------|---------------------------------------|-----------|-------|
| NAME OF DIVISION | Total No of Flats (GF) quarters | Nos. | Acres |
| NAME OF SUB-DIVISION | Total No. of Bungalows | Nos. | Acres |
| | No. of trees on Road | Nos. | Kms. |
| | Length of hedges in R. Mt. | Nos. | R.mt. |
| | No. of Parks/open spaces | Nos. | Acres |
| | No. of Seed-beds | Nos. | Acres |
| | Prestigious office complexes | Nos. | Acres |
| | Other office complexes | Nos. | Acres |

| Sl. No. | Item of work | Quarterly Target | Achievements | | | Remarks |
|---------|--------------------------------------------------------------------------------------|---------------------------------------------------|--------------|--------------|-------------|---------|
| | | | First Month | Second Month | Third Month | |
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| A. | MAINTENANCE | | | | | |
| | (i) Manuring | No. of Flats/Bungalows Acres | | | | |
| | (ii) Fertilization | No. of Flats/Bungalows Acres | | | | |
| | (iii) Lawn mowing | No. of Flats/Bungalows Acres | | | | |
| | (iv) Plant Protection | No. of Flats/Bungalows No of times | | | | |
| | (v) Pruning & Trimming | Nos. | | | | |
| | (vi) Hedge Cutting | No. of Flats/Bungalows RMT | | | | |
| | (vii) Seasonal Flowers | No. of Flats/Bungalows sqm | | | | |
| | (viii) Potted plants | Nos. | | | | |
| | (ix) Flower Vases | Nos. | | | | |
| | (x) Planter beds (Perennial) | No. of Flats/Bungalows Acres | | | | |
| | (xi) Floral Decoration in Samadhies/ Special occasions | Nos. | | | | |
| B. | SPECIAL REPAIRS | | | | | |
| | (i) Gap filling of Hedges/Plants | Nos. | | | | |
| | (ii) Replacement/ Replanting of hedges/Plantation of trees/Shrubs | Nos. | | | | |
| | (iii) Plantation under Van mahotsav Programme/Make Delhi Green Programme | Nos. | | | | |

Annexure 14

DRILL OF MAINTENANCE ACTIVITIES

I. GENERAL ITEMS OF MAINTENANCE FOR JE/AE-REQUIRING PLANNING DAILY/WEEKLY/MONTHLY

Applicable for SO(H)/AD(H) Also

| S. No. | ITEM | ACTION BY JE | | | ACTION BY AE | | |
|--------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Daily | Weekly | Monthly | Daily | Weekly | Monthly |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. | Day to Day Complaints | (a) Transfer the complaints of Special Repairs & Periodical Repairs to the respective Registers & send reply to the complainants intimating the time frame to attend the complaints. (b) Check the compliance of task assigned to the workers notebook and complaint register. (c) Prepare the abstract of complaints at the end of day. (d) Review the Complaints Register and identify the complaints of repetitive nature from the same premises. | (a) Prepare an abstract of complaints on the last working day of the week. | | | (a) Forward weekly abstract of pending complaints to EE for taking suitable action with suggestion, if any. (b) Devise ways to attend long pending complaints by redeployment of workers. | |
| 2. | Handing over/ Taking over of vacant premises | Handing over/ Taking over of vacant possession of premises & preparing occupation & vacation report. | | | Send occupation & Vacation Report to DOE, AE(E) & AD(H). | | (a) Intimate the details of vacant quarters to Division Office. |
| 3. | Work plan | (a) Marking Attendance of the workers and Issue of materials | (c) Draw programme of Annual Repairs, Special Repairs & Addition/Alterations works based on monthly/quarterly programme. (b) Review availability of material for contract works. (c) Submit estimates of works required to be carried out. | | (a) Monitoring the attendance of JE/SO(H)/ Other Staff | (a) Send estimate of works cropped up during the week. | (a) Chalk out monthly programme of Additions/ Alterations, Special Repairs & Annual Repair works Section wise. (b) Monthly review/ arrange of material from store etc. (c) Discuss with EE the programme for tendering etc. for sanctioned works. |

| S. No. | ITEM | ACTION BY JE | | | ACTION BY AE | | |
|--------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| | | Daily | Weekly | Monthly | Daily | Weekly | Monthly |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 4. | Inspection. | (a) Personally inspect 25% of the complaints attended everyday. (b) Pay specific attention to cleanliness, encroachments, general deficiency, clearance of construction rubbish in maintenance etc. during his routine inspection of works | | | (a) Pay specific attention to cleanliness, encroachments, general deficiency in maintenance etc. during his routine inspection of works | (a) Personally inspect 10% of the complaints attended other than those checked by JE twice a week (b) Review the records maintained, at service Centre twice a week. | |
| 5. | Additions/ Alterations | (a) List out the cases of Addition/ Alteration work | (a) Send cases of Addition & Alteration works to sub-division along with cost of work to be paid by Allottees. | | (a) Issue acknowledgement for the requests of Addition/ Alteration works | (a) Update the value of Civil and Electrical Addition/ Alteration works carried out in all the premises. (b) Send cases of Additions/Alterations to Division for receiving payment from allottees | |
| 6. | W.C. Staff Liveries & Personal Matters | (a) Complete personnel cases of workers, leaves, GPF, HBA, Festival Advance etc. liaise with Division for welfare of workers | | | | (a) Monitoring of personnel matters and welfare cases of W.C Staff | |

**II. GENERAL ITEM OF MAINTENANCE FOR JE/AE - REQUIRING PLANNING PERIODICALLY
(Applicable for SO(H)/AD(H) Also)**

| S. No. | ITEM | ACTION BY JE | | | ACTION BY AE | | |
|--------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Seasonal | Quarterly | Annual | Seasonal | Quarterly | Annual |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. | Inspection | (a) Inspect the buildings twice a year i.e. in March-April & Sep.-Oct. for identifying items of Preventive Maintenance and Annual Repairs. (b) Inspect buildings & services installations after monsoon for relief and rehabilitation measures. | | (a) Physically inspect 100% buildings for identifying items of Annual Repairs, Special Repairs & Periodical repairs in the beginning of the year. (b) Inspect structures twice a year so as to ensure that these are safe to use. | (a) Inspect the buildings Twice a year i.e. in March-April & Sep.-Oct. for identifying items of Preventive Maintenance. (b) Inspect important buildings & services installations after monsoon for relief and rehabilitation measures. | | (a) Physically inspect 50% buildings for identifying Annual Repairs, Special Repairs Periodical Repairs in the beginning of the year. (b) Inspect structures yearly so as to ensure that these are safe to use. |

| S. No. | ITEM | ACTION BY JE | | | ACTION BY AE | | |
|--------|--------------------------|--------------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Seasonal | Quarterly | Annual | Seasonal | Quarterly | Annual |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2. | Estimation | | | (a) Prepare the estimates for Annual Repairs in the beginning of year, prepare estimate for Special Repairs, Extraordinary Repairs & for maintenance of services | | | (a) Send the estimates for Annual Repairs in the beginning of year, send estimate for Special Repairs, Extraordinary Repairs & for maintenance of services |
| 3. | Material | | | (a) Assess the materials for store once in the month of March | | | (a) Finalise the requirement of materials for store once in the month of March |
| 4. | Reports Returns/ Records | | (a) List out items of dismantled items etc. for write off sanction. | (a) Update Building Register | | (a) Prepare Survey Report of dismantled items etc. | (a) Update Building Register |

III. SPECIAL ITEMS OF MAINTENANCE FOR JE/AE - REQUIRING URGENT ACTION

| S. No. | Item | ACTION BY JE | ACTION BY A.E. |
|--------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 2 | 3 | 4 |
| 1. | V.I.P Maintenance & Functions | <p>(a) Fill up a set of six inspection reports of check list already circulated by SE/ CE every month after inspecting sub-station equipment, generator set, services connections, AC plants, lifts, W/S pumps, Filtration plants, S.I. System, Wetriser, Fire Alarm, Public Address system, C.C.TV, Cable TV, Laundry, kitchen, incinerator equipment etc.</p> <p>(b) JE to be present in all functions attended by Ministers & other dignitaries.</p> <p>(c) Finalize the Capital cost of Furniture on 1st of April.</p> | <p>(a) Send a set of six inspection reports of check list already circulated by every month to division office inspecting sub-station equipment, generator sets, services connections, AC plants, lifts, W/S pumps, Filtration plants, S.I. System, Wet riser, Fire Alarm, Public Address system, C.C.TV, Cable TV, Laundry, kitchen, incinerator, Equipment etc.</p> <p>(b) Fill up the check list as mentioned above well before every VIP function for sending it to SE/ CE.</p> <p>(c) AE to be present in all functions attended by Ministers & others dignitaries.</p> <p>(d) Finalize the Capital cost of Furniture on 1st of April.</p> |
| 2. | New Allotments/Breakdowns | <p>(a) Make house ready for occupation</p> <p>(b) Process estimates for addition/Alteration</p> <p>(c) Process estimates for restoration of services</p> | <p>(a) Send estimates for Addition/Alteration works and co-ordinate these works with his Elect./Civil counter part.</p> <p>(b) Send estimates for restoration of services for Civil/Elect.</p> |

| IV. IMPORTANT ITEMS OF MAINTENANCE FOR EXECUTIVE ENGINEER | | | | | |
|-----------------------------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sl. No. | Item | Daily | Weekly | Monthly | Periodically |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1. | Day to Day Complaints | (a) Review the complaints received through senior officers as well as the complaints pertaining to VIPs | (a) Review the abstract of complaints at least once a week in normal course and twice a week where complaints pertain to VIP. | | |
| 2. | Inspection | | (a) Turn by turn spend half a day in every Service Centre, covering 2-3 Service Centres a week, examine the records, note books of W.C. Staff and review the functioning of the Service Centre. | (a) Inspect the complaints attended, other than those checked by the JE&AE at least twice a month and record results of his inspection in the Complaint Register. (b) Pay specific attention to general deficiency in maintenance of area, cleanliness and encroachment and take immediate action in this regard. | (a) Physically inspect 25% of the buildings for identifying Annual Repairs, Special Repairs and Periodical repairs in the beginning of the year. (b) Physically inspect important buildings once a year to ensure that structures are safe to use and bring to the notice of SE the cases where he has doubts with regard to structural soundness. In case of unsafe VIP residences, EE will send report directly to SE/ CE. (c) Immediately after monsoon, inspect all important structures and users installations for likely damage and relief measures. |
| 3. | Additions/ Alterations | (a) Raise demands with Allottees for payment to be made by them for the cases of Additions/ Alterations. | | | |
| 4. | Estimation | (a) Obtain sanction for new works like Addition Alteration. | | (a) Review requisitions pending for preparing estimates. | (a) Certify the necessity of undertaking Special Repairs work on the estimates initiated by JE/AE. (b) Arrange Technical Sanction for ARMO woks in the beginning of the year. (c) Send estimates for S.R./ EOSR |
| 5. | Work Plan | (a) Review works progress with the AEs. Finalise tenders of sanctioned works (c) Chalk out monthly programme of Additions/ Alterations, Special Repairs and Annual Repair works Sub Division wise. (d) Review sanction of estimates sent. | | | (a) Review requirement of materials (b) Sanction Survey Reports Dismantled/Unserviceable materials. |

| Sl. No. | Item | Daily | Weekly | Monthly | Periodically |
|---------|----------------------------------------------|-------|--------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 6. | Meetings/ Reports/ Returns/ Records | | | (a) Send the monthly returns to circle Office/ Zone Office:- | (a) Have quarterly meetings with the RWA and discuss the issue of general maintenance. (b) Furnish certificate in the Register of buildings at the end of every financial year to the effect that additions made in costs and modification in building/ structure made have been updated. |
| 7. | Handing over/ Taking over of vacant premises | | | (a) Send monthly statement of vacant quarters to DOE | Send Quarterly report of vacant qtrs. to SE/ CE. |
| 8. | VIP Maintenance cost and functions. | | | (a) Sign six sets of check list for sending to SE/ CE every month. | (a) Fix the capital of furniture on April of each year. (b) Fill up the check list well before every function for sending it to SE/ CE. (c) EE to be present with his junior staff in all functions to be attended by VVIP. |
| 9. | W.C. Staff matters | | | Review pending personnel matters related to W.C. Staff and others. | |

V. IMPORTANT ITEMS OF MAINTENANCE FOR SUPERINTENDING ENGINEER/ CHIEF ENGINEER

| Sl. No. | Item | Daily | Monthly | Periodically |
|---------|-------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 2 | 3 | 5 | 6 |
| 1. | VIP Maintenance and Functions | (a) Monitor VIP complaints and the complaints received from senior officers | (a) Review monthly checklist sent by EE | (a) Review the functioning of various services as per details sent by EE before VIP functions. (b) SE/ CE to be present in all functions attended by VVIP in case EE is unable to attend the same. |
| 2. | Meetings | | | (a) Conduct periodical (Six monthly) meeting with Resident Welfare Associations to discuss points of common interest and general performance. (b) SE/ CE should examine Building Register during his inspection to verify that it is upto date. Send Quarterly Report to DOE regarding vacant quarters. |
| 3. | Inspection | | | (a) Review the performance of the Service Centre twice a year. (b) Inspect buildings for structural safety consideration as per intimation by EE. |
| 4. | Work Plan | | (a) Review the works of Addition/ Alterations and Special repair with every Division to minimise the number of complaints. | (a) Review availability of Funds & Expr. quarterly and make proposals accordingly, (b) Review TS periodically. |

Annexure 15

USEFUL LIFE OF VARIOUS ELECTRICAL EQUIPMENTS / INSTALLATIONS ETC.

| Sl. No. | Description of Equipment/ Installation | Life in years |
|---------|---------------------------------------------------------|---------------|
| 1. | 2 | 3 |
| | A. Wiring of Electrical Installations | |
| 1. | Conduit wiring non-coastal area | 20 |
| 2. | Conduit wiring coastal area | 15 |
| 3. | MS Pole | 20 |
| 4. | GI Pole | 25 |
| 5. | Outdoor luminaries | 7 |
| 6. | Indoor luminaries | 5 |
| | B. Fans | |
| 1. | Ceiling Fan AC | 15 |
| 2. | Exhaust Fan AC | 6 |
| | C. External Electrical Lines | |
| 1. | Permanent overhead line on steel / RCC poles | 20 |
| 2. | Underground Cable Lines | 20 |
| | D. Substation Equipment | |
| 1. | Switch gear LT/HT | 20 |
| 2. | Transformers | 25 |
| 3. | Servo voltage stabilizer | 10 |
| | E. Lifts | |
| 1. | Electric Lifts residential complex | 15 |
| 2. | Electric Lifts Office building | 20 |
| 3. | Hospital Lifts | 15 |
| 4. | Escalators | 15 |
| | F. Electric Motors and Pumps | |
| 1. | Electric Motors three phase | 15 |
| 2. | (Diesel) Engine pump upto 10 H.P | 10 |
| 3. | (Diesel) Engine pump above 10 H.P. | 12 |
| 4. | Storm water pump | 7 |
| 5. | Water supply Pump(Centrifugal) | 10 |
| 6. | Sewage Pump | 5 |
| 7. | Diesel Generator set upto 50 KW | 12 |
| 8. | Diesel Generator set above 50 KW | 15 |
| | G. Refrigerators, Coolers & Air Conditioners | |
| 1. | Refrigerators | 6 |
| 2. | Cold storage plant with air-cooled condensing unit | 8 |

| Sl. No. | Description of Equipment/ Installation | Life in years |
|-----------|-------------------------------------------------------------------------------------|---------------------------------------------|
| 1. | 2 | 3 |
| 3. | Desert Coolers (1500-2000 cfm) (Evaporative type) | 4 |
| 4. | Water Coolers | 5 |
| 5. | Window type / Split type Air-conditioning units with air cooled condensers | 7 |
| 6. | Packaged type Air-conditioning units / VRV System with water cooled condensers | 10 |
| 7. | Packaged type Air-conditioning units / VRV System with air cooled condensers | 8 |
| 8. | Central chilled water system of air-conditioning plant with water cooled condensers | 20 |
| 9. | Evaporative type air-cooling plant (upto 25,000 cfm.) | 10 |
| H. | Mechanical Machinery | |
| 1. | Boilers | 15 |
| 2. | Incinerator | 15 |
| I. | Transport | |
| 1. | Motor Car (Diesel/CNG) | 10 or 2 lakh kilometre whichever is earlier |
| 2. | Motor Car (Petrol) | 15 or 2 lakh kilometre whichever is earlier |
| J. | Fire Alarm/ Fire Fighting Equipment | |
| 1. | Fire Alarm System | 15 |
| 2. | Water bases wet riser / sprinkler system | 20 |
| K. | Electronic Equipment | |
| 1. | EPABX System | 7 |
| 2. | Server/ Computer and accessories | 7 |
| 3. | CCTV | 7 |
| 4. | Solar PV Panel | 25 |

Annexure 16

P. W. D. 25.

**State
Branch**

GOVERNMENT OF INDIA
PUBLIC WORKS DEPARTMENT

**Division
Sub-division**

**REGISTER OF IMMOVABLE GOVERNMENT PROPERTIES IN CHARGE OF THE PUBLIC
WORKS DEPARTMENT**

(Central P.W.D Code, Paragraph 120)

| Register No. With Sub-number | Station or locality | Particulars of property | | | Year of construction or purchase and of subsequent additions, etc. | Recorded value | | |
|---------------------------------|---------------------|----------------------------------------------------------------|------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------|----------------------|
| | | Description, with details of every detached structure | Dimensions | Nature and description of the different component parts of each structure | | Original (separately for land) | Subseq- uent additions or reductions | Progressive total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

| Funds from which | | Object of Construction | | Record plants maintained | | | | | (In the case of churches the No. of seats will be recorded here) |
|--------------------------------|------------|---------------------------|---------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------------|-------|--------------------------------------------------------------|--------|---------------------------------------------------------------------------------|
| Constructed or purchased | Maintained | Original | How used at present | Material with dimensions (drawings, mounted etc. or tracing) | Nature of drawings (site elevation, section, etc. | Scale | Name and designation of officer by whom and when | | |
| | | | | | | | Drawn | Signed | |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| | | | | | | | | | |

Annexure 17

LIFE SPAN OF FURNITURE ARTICLES

| S.No. | Type & Name of the item | Life | Remarks |
|-----------|-------------------------|---------|--------------------------------------------------------------------------------------------------------------------|
| A | DURABLE | | |
| I | Heavier | | |
| 1 | Sofa Set | 15 yrs. | |
| 2 | Dining Table | 15 yrs. | |
| 3 | Almirah | 15 yrs. | |
| 4 | Beds | 15 yrs. | |
| 5 | Dressing Table | 15 yrs. | |
| 6 | Side Board | 15 yrs. | |
| 7 | Chest or Drawers | 15 yrs. | |
| 8 | Central table | 15 yrs. | |
| 9 | Book case | 15 yrs. | |
| 10 | Writing table | 15 yrs. | |
| 11 | Easy Chair | 15 yrs. | |
| 12 | Santry Box | 15 yrs. | |
| II | Lighter | | |
| 13 | Chairs | 10 yrs. | |
| 14 | Cabinets | 10 yrs. | |
| 15 | Framed mirror | 10 yrs. | |
| 16 | Peg Table | 10 yrs. | |
| 17 | Stools | 10 yrs. | |
| 18 | Tepoy | 10 yrs. | |
| B | NON-DURABLE | | |
| 19 | Grass matting | 2 yrs. | At the time of change of occupancy or once in two years whichever is earlier. |
| 20 | Chicks | 2 yrs. | -do- |
| 21 | Coir mattress | 2 yrs. | -do- |
| 22 | Jute mattress | 2 yrs. | -do- |
| 23 | Tepoy | 2 yrs. | -do- |
| 24 | Cotton Durries | 5 yrs. | Re-dying as described at least once in three years or change of occupancy at the time of use whichever is earlier. |
| 25 | Cotton Durries | 5 yrs. | -do- |
| 26 | Cane Garden Chairs | 2 years | |
| 27 | Dust bin | 2 years | |
| 28 | Bath tubs | 2 years | |

| S.No. | Type & Name of the item | Life | Remarks |
|----------|-------------------------|----------|------------------------------------------------------------------------------------------------------------------|
| 29 | Folding beds | 2 years | |
| 30 | Foam mattresses | 5 years | Change of tapestry as described or after 2½ years whichever is earlier. |
| 31 | Foam Cushion | 5 years | Change of tapestry as described or after 2½ years which ever is earlier. |
| 32 | Cotton mattresses | 5 years | Regular maintenance includes change of cloth in between as described. |
| 33 | Curtains | 5 years | It may be considered whether it could be made concurrent with term of Lok Sabha / Tenure of the member of LS/RS. |
| 34 | Woollen carpets | 10 years | |
| C | UPHOLSTRY | | |
| 35 | Sofa sets | 3 years | |
| D | DRY CLEANING | | |
| 36 | Sofa | | At the time of change of occupancy or once in a year whichever is earlier. |
| 37 | Sofa chair | | -do- |
| 38 | Dining Chairs | | At the time of change of occupancy or once in six months whichever is earlier. |
| 39 | Cotton Durries | | At the time of change of occupancy or once in a year |
| 40 | Curtains | | At the time of change of occupancy or once in six months whichever is earlier. |
| E | PAINTING | | |
| 41 | Cane garden chairs | | -do- |
| 42 | Tepoy | | -do- |
| F | POLISHING | | |
| 43 | Polishing | | At the time of change of occupancy or once in 2 years which ever is earlier. |

Annexure 18

GUIDELINES FOR VARIOUS PROVISIONS TO PREPARE ANNUAL MAINTENANCE ESTIMATES FOR HORTICULTURE WORKS

| | | |
|---|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Sludge Manure/ Cattle Manure For HORs, GOBs, Type I to VI flats, Samadhis, Offices, Hospitals, Prestigious works, playground etc. | 0.003 cum per sqm. Over the surface i.e 4000 x 0.003 per cum =12 cum per acre. |
| 2 | Good Earth: For HORs, GOBs, Type I to VI flats, Samadhis, Offices, hospitals, Prestigious works, playground etc. | 0.003 cum per sqm over the surface i.e.4000 x 0.003 per cum = 12 cum per acre. |
| 3 | Fertilizers: For HORs, GOBs, Type I to VIII flats, Samadhis, Offices, hospitals, Prestigious works, playground etc. | A) N.P.K. @ 100kgs per acre/year B) Organic Manure, (mixture of manure, Oil cakes, Bone meal, Vermi Compost , Organic Compost, etc. as per specified proportion based on soil test report to be done annually) |
| 4 | Guidelines for Road side plantation Materials required Manure/Sludge/Cow dung Concentrated Organic Manure (Two applications) | @ 5 cum for 100 trees @ 5 cum for 1200 shrubs @ 2 Quintal for 100 trees @ 2 quintal for 200 shrubs |
| 5 | Trees & Shrubs required for mortality replacement 1st 3 Years of plantation Beyond 3 years of plantation | 25% of the total plantation 10% of the total plantation |
| 6 | Replacement of Cement pots | 20% of the total pots |

Annexure 19**MAINTENANCE OF FURNITURE ITEMS IN INSPECTION BUNGALOWS/GUEST HOUSES/HOLIDAYS HOMES**

| Sl. No. | Item | Recommended life | Other recommendation |
|----------------|-----------------------------------|-------------------------|---------------------------------------------------------------------------------------------|
| 1. | Wooden bed | 15 years | To be polished every 3 years |
| 2. | Wooden Sofa | 15 years | To be re-upholstered every 3 years |
| 3. | Wooden chair (General use) | 7 years | To be polished every 3 years |
| 4. | Dining table with chairs | 15 years | To be polished every 2 years. (If chairs are cushioned, to be re-upholstered every 2 years) |
| 5. | Curtains | 5 years | To be washed twice a year |
| 6. | Bed sheet | 2 years | To be replaced after 2 years of use. |
| 7. | Pillow cover | 2 years | To be replaced after 2 years of use. |
| 8. | Pillow | 2 years | To be replaced after 2 years of use. |
| 9. | Towels | 1 year | To be replaced after 1 year of use. |
| 10. | Wooden Almirah | 10 years | |
| 11. | Refrigerator | 8 years | |
| 12. | Window type/Split air-conditioner | 7 years | |
| 13. | Water cooler | 5 years | |
| 14. | Geyser | 7 years | |
| 15. | Fan | 15 years | |
| 16. | Exhaust fan | 7 years | |
| 17. | T.V. | 7 years | |
| 18. | Elect. Kettle | 3 years | |

Annexure 20

CHECK LIST/NORMS FOR CPWD FLORAL TABLEAU, REPUBLIC DAY CELEBRATION

- Preparation of sketches/Design as per guidelines of MoD for approval from expert committee.
- Preparation of 3-D Model as per approved design.
- Preparation of write up in English & Hindi.
- Finalization of Music/Artist as per MoD expert committee.
- Preparation of site in compliance to prevailing security norms for Tableau fabrication.
- Preparation of camp office with computer and internet installation.
- Installation of lighting, CCTV and back up of electricity.
- Collection of Tractor & Trailer from MoD, Rashtriya Rangshala camp.
- Collection of materials for fabrication of Tableau.
- Fabrication of Tableau.
- Making of Videography & Photography.
- Refreshment and Catering arrangement.
- Water proofing of the site of the work.
- Preparation of Security passes from PM security cell for all staff.
- Finalization of flower colour scheme & landscaping with plants.
- Collection of flowers & plants.
- Management & storage of flower.
- Ensure tableau Route clearance from site to Vijay Chowk.
- On 25th January pinning / fixing & arrangement of flower and landscaping with plants.
- Handing over of floral tableau to MoD for RDC Parade on 26th January.
- Dismantling of fabricated floral tableau and handing over Tractor & Trailer to the MoD.

Annexure 21

CHECK LIST/NORMS FOR CPWD - REPUBLIC DAY CELEBRATION

AT PRESIDENTIAL DAIS & ROSTRUM, KARTAVAYA PATH, NEW DELHI

1. Preparation of sketches/Design as per guidelines of MoD for approval from expert committee.
2. Preparation of Security passes from PM Security Cell for all staff.
3. Preparation of Security arrangement at different nurseries to make potted plants for displaying at Presidential DAIS & Rostrum.
4. Arranging and providing of flower petals to Indian Air Force for Aero-Drop.
5. Preparation of flower colour scheme & landscaping with plants.
6. Collection of potted plants at various nurseries.
7. Arrangement of potted plants for display at Presidential DAIS, Rostrum and other places of Kartavya Path.
8. Preparation of flower beds at V-1, V-II, VN 13, 14, 15 enclosures.
9. Shifting of foliage and flower pots at Presidential DAIS, Rostrum and other places of Kartavya Path.
10. Planting of flower beds in the DAIS, Rostrum and other enclosure of Security Zone.
11. On 25th January, pinning/fixing of fresh loose flowers for floral wall & Rostrum.
12. Floral decoration of DAIS, Rostrum & Floral Back Drop Wall.
13. Clearing surplus materials from the site to Nursery.

Annexure 22

CHECK LIST/NORMS FOR INDEPENDENCE DAY CELEBRATION AT RED FORT, DELHI

1. Preparation & submission of sketches/themes for the floral Boards of following areas & incorporating of suggestions/ modifications and final approval of MoD committee.
 - (i) Backdrop wall of guard of Honour Ground (Lahori Gate Side).
 - (ii) Floral mural wall design for the frontage of Red Fort (Gyan path side).
 - (iii) Floral Board left & right side of staircase.
 - (iv) Floral Board in front of VVIP lift.
2. Preparation of site in compliance of prevailing security norms.
3. Preparation of estimates for plants, floral decoration & other related miscellaneous works.
4. Finalization of flower colour scheme and landscaping with plants & flowers.
5. Collection & stocking of plants & flower materials for display purpose.
6. Preparation of list of workers / staffs for security passes from PM security cell.
7. Preparation of list for goods carrier vehicles for security passes from PM security cell.
8. Mobilization of plant materials to Red Fort ceremonial ground from nurseries.
9. Displaying/ grouping of potted plants at various locations of ceremonial grounds (Complete by 13th August).
10. Pining/fixing of arrangement of floral boards on 14th August (evening).



Government of India
Ministry of Housing & Urban Affairs
Central Public Works Department
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