

GOVERNMENT OF INDIA

CENTRAL PUBLIC WORKS DEPARTMENT

MAINTENANCE MANUAL

2019



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

INDEX

CHAPTER		PAGE NO.
1.	MAINTENANCE	
1.1	Objectives	1
1.2	Maintenance Services	1
1.3	CPWD Citizens Charter	2
1.4	Means of Effecting Maintenance	2
1.4.1	Repair Estimates	2
1.4.2	Service Centre	2
1.4.2.1	Complaint Register	2
1.4.3	Modalities of Maintenance	2
1.4.3.1	Through Directly Employed Workers	2
1.4.3.2	Through Contracts	3
1.5	Register of Buildings	3
1.6	Safety of Buildings	3
1.7	Cleanliness in the Colonies	3-4
1.8.1	Service to be Attended by Local Bodies and CPWD	4
1.8.2	Services to be Provided by Different Disciplines of CPWD	4
1.8.3	Services not Within the Purview of CPWD	4-5
1.9	Monitoring of Maintenance	5
1.10	Encroachment	5
1.11	Essential Staff Quarters	5
2.	ANNUAL ACTION PLAN AND RATE CONTRACT SYSTEM	
2.1	Annual Building Survey and Program for Repairs	6
2.2	Annual Action Plan	6
3.	SERVICE CENTRES	7-8
3.1	Online Maintenance Service (cpwdsewa)	8-11
3.2	Disposal of Dismantled Material	11
3.3	Maintenance Stores	11
3.4	Occupation / Vacation of Premises	12
3.5	Review of Performance of Service Centres	12
3.6	Tasks to be Performed by Various Officers	12
3.6.1	Task of JEs/AEs (also applicable to SO(H))	12-14
3.6.2	Task of Executive Engineer (also applicable to DD(H))	14 -15
3.6.3	Task of Superintending Engineer (also applicable to DOH/Addl.DOH) & Chief Engineers	15
4.	DAY TO DAY AND ANNUAL REPAIRS	
4.1	General	16
4.2	Day to Day Repairs	16
4.3	Annual Repairs	16-17
4.4	Register of Periodical Repairs	17
4.5	Major Complaints	17

5.	SPECIAL REPAIR	18-20
6.	ADDITIONS / ALTERATIONS / UPGRADATION	
6.1	General	21
6.2	Addition/Alteration Works in GPRA Building	21
6.3	Up-gradation Works	21-22
6.4	Energy Efficiency Measures	22
7.	PREVENTIVE MAINTENANCE	
7.1	General	23
7.2	Periodical Checks	23
8.	HORTICULTURE MAINTENANCE	
8.1	General	24
8.2	Receipt, Recording and Attending of Complaints	24
8.3	Categorisation of Works	24
8.4	Norms	24
8.5	Survey and Inspections	24
8.6	Works Programming	25
8.7	Monitoring and Control	25
8.8	Register of Works Undertaken under Special Repairs & Up-gradation	25
9.	MAINTENANCE OF VIP RESIDENCES	
9.1	Additions / Alterations	26
9.1.1	Constructions in Lutyen's Bungalow Zone Area, New Delhi	26
9.1.2	Upgradation and Addition/Alterations of Bungalows in LBZ	26
9.2	Furniture / Furnishings	27
9.2.1	Maintenance of Furniture	27-28
9.3	Security Works	28
9.4	Arrangements for Functions at VIP Residences / Govt. Functions	28-29
9.5	Powers to CPWD Officers	29
10.	ENCROACHMENT	
10.1	Responsibility for Detection/Removal of Encroachments	30-31
10.2	Removal of Encroachments on Public Land	31-32
10.3	Role of Local Bodies in Prevention of Encroachment	32
10.4	Government Instructions to Local Bodies	32
11.	COMPREHENSIVE MAINTENANCE	
11.1	Comprehensive Maintenance	33
11.2	Scope of Outsourcing Work	33
ANNEXURES		34-76

CHAPTER 1 MAINTENANCE

1.1 Objectives

Building Repair and Maintenance is work 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 conditions 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 conditions.
- (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 & 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 organisations. 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 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.

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) Upgradation (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 net work 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 and then passed on to respective workers through specific registers/logbooks.

1.4.3 Modalities of maintenance

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

- (i) Work Charge 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 Upgradation works are generally carried out through individual contracts or outsourcing of comprehensive maintenance.

1.5 Register of Buildings

- (i) Every division shall maintain a Register of buildings in the prescribed format (at Annexure- 16) upto date. 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 up to date.
- (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 up to date. On similar lines, garden Register will be maintained by Horticulture indicating there in 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 Director of Estate and the Superintending/Chief Engineer.

1.6 Safety of Buildings

- (i) All Buildings/structures borne on the Register of Buildings are required to be inspected twice a year by the Junior engineer/Assistant Engineer in-charge to ensure that the building/structure is safe for use. In case of electrical and other installations, the Junior Engineer (Electrical)/Assistant Engineer (Electrical) should inspect the same and record a certificate to that effect.
- (ii) In case of any deficiency found in the structure/installation necessary report should be made to higher authorities. The Executive Engineer should inspect it immediately and further action taken to remedy the defects. The Divisional officer will also inspect important buildings /Gardens once a year. 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 and the latter will take such action, as he considers necessary.
- (iii) In case of any deficiency found in the important buildings like Prime Minister's house, Cabinet Minister's House, Vice-president's House and houses of other V.I.Ps, report about unsafe condition of the house should always be sent to the Chief Engineer/ADG/DG, who will send it to the Department /Ministry concerned directly or through the Ministry with his recommendations and proposals for repairs, if any for disposal of the building or proposal of demolishing such unsafe structure.). Action for survey report and demolition of such buildings should be taken as per provisions of CPWD Works Manual.
- (iv) Once decided to demolish, Electrical and Horticulture wings should be informed to stop its maintenance.

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 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 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 fire fighting equipment/services is within the purview of CPWD, maintenance and 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.

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 (Civil or Electrical). 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 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 Director of Estate 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 upgradation 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 indicating the activities of all disciplines shall be prepared considering the fund availability, likely 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 Centre.

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 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. The printed slips of allotment with details of complaint and the complainant are handed over to the worker concerned for getting the needed materials issued from the Service Centre Store and attending to the complaint.

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
 - (a) Toll Free telephone number 18002664499, 1800114499 (at time of publication).
 - (b) 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 up to 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 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 lodges 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, the 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/Upgradation Complaint,

Non updating of status on a REALTIME shall be the responsibility of incharge 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 engineers/horticulture officers 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 taken 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.

(C) CPWD Management Module

This module is to provide access to monitor pendency and attendance of complaints. The officers can securely log 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.

3.3 Maintenance Stores

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/Superintending Engineer/Chief Engineer shall review it quarterly and ensure availability of stores. Procurement action shall be broadly classified as below:-

(i) Items like bricks, aggregates, sand, paints, distemper, cement paint, sanitary fittings, GI, CI and SCI pipes valves, glass panes etc. shall be procured by the Divisions concerned at convenient periodical intervals. If such materials are available in GeM, they shall be procured through GeM portal only.

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. 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 cpwdsewa 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 (E) 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 upgradation 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 incharge of maintenance upto ADG 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 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 [also applicable to 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 cpwdsewa at least once a day. The JE/AE 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 cpwd sewa 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/upgradation repairs like white washing, painting, rewiring, which cannot be attended on daily basis shall be transferred in cpwd sewa to the Major complaints or periodical/upgradation 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.
- (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 cpwdsewa on daily basis. The period of pendency of unattended complaints is also available on cpwdsewa.
- (ix) A complaint assignment slip should be generated through cpwdsewa while assigning a complaint to a worker by JE/AE. The worker shall be instructed to write / get written by the occupant in the appropriate columns of the assignment slip the details of work done by him and the balance work, if any. He shall also get the signature of the occupants.
- (x) The worker shall be asked to report the compliance of a complaint immediately but not later than the evening of the same day. They shall also submit their assignment slip to the Service Centre in the evening after day's work.
- (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 cpwdsewa 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. On vacation of the quarter also he has to inspect the quarters and take possession of fittings / fixtures available in the quarters and indicate the deficiencies in the vacation report online. The vacation status of the quarter is then automatically transferred to Director of Estate through cpwdsewa.

(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. 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 Estate.
- (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 [also applicable to DD(H)]

- (i) 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.
- (ii) The EE shall log on to the website to review pending complaints everyday and shall examine the records maintained by the Enquiry Clerk, the notebook maintained by the workers and to have first hand information about the efficiency of the Service Centre.
- (iii) 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.
- (iv) EE will send monthly statement to the Directorate of Estate regarding Quarters lying vacant in the month.
- (v) 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.

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

The SE/CE shall check and review the complaints through cpwdsewa 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 could be discussed and action programme chalked out.
- (ii) The SE/CE shall ensure that the materials are available to carry out the maintenance work by the workers.
- (iii) 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 of any type shall be accorded A/A & E/S by the competent authority wherever any expenditure is involved. These include day to day maintenance, annual repairs, special repairs, upgradation works and additions and alterations.

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, repairs to faulty switches, watering of plants, lawn mowing ,hedge cutting, sweeping of leaf falls etc. These services are provided after receipt of complaints from the users to call centres and from call centres to Service Centres and in the case of Service Centre not attached to Call Centre, from users at the respective Service Centres. These are generally attended by departmental workers or workers engaged by the outsourcing agencies.

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 applying finishing item for a building has been laid down by the Government. The periodicity is two years for white washing and colour washing and three years for painting. The periodicity of various items of Annual repairs is indicated in Annexure-10. In addition, works such as patch repair to plaster, minor repairs to various items of work, replacement of glass panes, replacement of wiring damaged due to accident, replacement of switches, sockets tiles, 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. 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.

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

This register 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, upgradation works, which are usually got attended through contractors and cannot be attended on daily basis are converted into periodic/ upgradation complaints and major complaints. A time framework for carrying out major complaints shall be fixed by the EE between 45days to 90days 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 conditions to the extent possible. The following types of works in general are undertaken under special repairs: -

- i. Provision of water proofing treatment to the roof. All the existing treatments known are supposed to last satisfactorily only for a period of about ten years.
- 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, pipes etc. The life of GI pipes shall be considered as 25 years.
- vi. Re-grassing of lawns/grass plots in 5 to 6 years without replacement of earth and in 8 to 10 years with replacement of earth.
- vii. Renovation of lawn in 4 to 6 years as per site requirement.
- viii. Replanting of hedges in 8-10 years.
- ix. Completely uprooting and removing hedges / shrubbery.
- x. Replanting of
 - (a) Rose beds in 5-6 years.
 - (b) Perennial beds in 5-6 years.
 - (c) Canna beds in 1-2 years.
- xi. Shifting of any garden feature from one site to another within building.
- xii. 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) The amount of Special Repairs is permitted to be carried forward up to five years wherever considered necessary.

- (iii) 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.
- (iv) 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 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 xi

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 up to 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 UPGRADATION

6.1 General

All additions and alterations shall be carried out after getting drawing 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.

Upgradation works not involving increase in FAR/FSI or of rehabilitation/retrofitting nature, upgradation works approved by the MoHUA from time to time or by the client in case of deposit/authorisation works in their buildings may be carried out as per standard architectural drawing available.

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

All additions and alterations/upgradation 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.

Additions/Alterations in Horticulture work shall be taken up after getting A/A & E/S of the competent authority and availability of the funds.

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

6.3 Upgradation Works

Upgradation 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 upgradation shall not be carried out without approval of the DG/MoHUA. All the services, Civil and Electrical, which have completed their life shall be replaced and record shall be maintained.

Upgradation 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 upgradation works, expenditure on repair works and upgradation 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 Celsius.

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
- (ix) Shafts for the leakage/seepage
- (x) Sagging false ceiling
- (xi) Termite affected areas and wooden members
- (xii) The cleaning of manholes and sewer line and checking for rain water getting mixed in sewer lines
- (xiii) Damaged cables & other abandoned service lines
- (xiv) Electrical systems like main boards 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 horticultural 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. SO/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 Categorisation of Works

Horticulture maintenance works will also be categories as under: -

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

Details of above are indicated in Anenxure-11.

8.4 Norms

Yardstick for deployment of workers for horticultural 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/operationalisation 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, cutflowers, 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 unauthorised/ 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 cpwdsewa website. All GPRA/GPOA campuses are to be made available on cpwdsewa and other colonies/campuses maintained by CPWD should also be made available on cpwdsewa. 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 upgradation

A record shall be kept of the horticulture works undertaken under Special repairs and upgradation works of the trees/shrubs planted with the location. It shall be ensured that the plants/trees survive and as such maintenance of the same shall be taken care with. Trees/Plants which are planted near to foundation of the buildings and in open areas/parks shall be planted in such a way that neither they damage the foundation nor are required to be fell down due to redevelopment of the area. To ensure this, advice of the architectural unit shall be taken particularly in case of trees. 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

General

For VIP residences, CPWD Works Manual/SOPs shall be referred. The VIP residences shall be as per CPWD Works Manual or as approved by the MoHUA from time to time.

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 Upgradation and Addition/Alterations of 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.

The guideline 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 .

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. Director of Estate 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 up to 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 Director of Estates in respect of VIP residences is given in Table - 3.

TABLE -3
ENTITLEMENT OF FURNITURE/ FURNISHING

Sl. No.	VIP	Rent Free Limit	Rent of furniture & furnishing
1.	Vice President	No limit	Full furniture/ furnishing 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.
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.P.s	75,000/-	Rent @ 13.75% of the cost of furniture beyond ceiling, per annum.
9.	Chief Justice of India	5 Lakhs	Directorate of Estate No. 1401 1(4)/91-Pol.IV, dt. 27.2.96.
10.	Judges of Supreme Court of India	4 Lakhs	-do-

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 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(Civil). EE(E) shall, in addition, send one copy to SE(E)/CE(E) concerned. 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(C) and SE (E)/CE(E).

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

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 unauthorised 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 Estate, which is the authority for allotment of government premises will receive reports from CPWD regarding unauthorised 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 unauthorised 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 unauthorised 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 unauthorised construction/encroachments in government colonies/government land lie on the authorities as indicated in the Annexure - 8. Ministry of Urban Development has issued comprehensive guidelines for removal/demolition of unauthorised constructions vide O.M. No. 11010/1/2010-W-1 dt 21.6.10.

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.

Director of Estate 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.

- (iii) In case unauthorised 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 & Unauthorised occupation) Act, 1971. Side by side F.I.R. may be lodged with the police against the defaulter/encroacher.
- (iv) 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/c 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.
- (iv) The MoHUA has been declaring EEs/DD (H) of CPWD as Estate Officers from time to time.
- (v) **Govt. accommodation is occupied by the Government Servants, who are governed by the Allotment of Government Residence Rules and allotted by Directorate of Estate. 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 Estate 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 direction issued by Government from time to time.

It shall be kept in mind that police on receiving the report regarding encroachment/unauthorised 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 Sectional

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 round 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 jurisdictional 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 unauthorised 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 vacated 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; and
- (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, where ever found absolutely necessary.
- (vii) All land owning agencies should also take necessary protective and preventive measures and ensure that their land is not utilised for dumping garbage and thereby be lost to its regular use.

CHAPTER 11

COMPREHENSIVE MAINTENANCE

11.1. Comprehensive Maintenance :- An allottee faces difficulty and inconvenience if many agencies work in a quarter and it also creates co-ordination problem. Hence, it has been decided to take up work of comprehensive maintenance in which outsourcing is taken up for day to day maintenance, Annual Repairs, Special repairs and upgradation works of civil, electrical and horticulture works by a single agency. The works of housekeeping, if carried out by CPWD will also be included in the same tender. Operation of service centre like receipt of complaints, monitoring of complaints and security of vacant quarters or of open areas, if carried out by CPWD and all other allied works, operation of organic waste converters etc. are also to be included in comprehensive Outsourcing. Directions contained in Circular no. F. No. 18/1/2013-W1/Part-II/DG/73 dt. 14.03.2019 shall be followed in comprehensive maintenance.

11.2 Scope of Outsourcing work:

- (A) Day to Day Maintenance:-** The single agency for carrying out day to day maintenance activity through the deployment of required trained manpower under the supervision of a supervisor/engineers. The agency will also provide the services of computer literate enquiry operators to man the front offices of the service centres. It will be responsible for receiving the service requests from CPWD e-Sewa/IVRS/ various allottees and allotting the same to the workforce and keeping a detailed record of the work done in the computerized maintenance service of CPWD being run at the website <http://cpwd.sewa.gov.in>. The maintenance activity will include the cost of material required for attending of day to day complaints. 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.
- (B) Special Repairs :-** Provision for special repairs and addition/alterations shall be made as distinct subheads and the items of works 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 subhead and the quantities for this subhead shall be based on the yardstick for these items for the buildings.
- (D) Upgradation works:-** The items of this subhead shall be assessed based on Quarters already upgraded and generally upgraded during previous years. The norms of upgradation shall be as approved by the MoHUA. A record shall be kept of all such upgraded quarters and intimated to Director of Estate and CE/ADG online or offline as directed by the Directorate.

The NIT approving authorities shall include other subheads 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 upgradation works and provisions of recovery in case of non compliance by the agency shall be incorporated in the NIT.

Annexure 1

WORKERS 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**

Sl. No.	Category	Service Charges (Rs. Per sqm per year)	Annual Repair (Rs. Per sqm per year)	Special Repairs		
				Age 0-20 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
1.	RESIDENTIAL BUILDINGS Type I to V and above	126.30	54.65	34.80	57.65	80.50
2.	M.Ps 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 Presidents House & PM's House	Actuals	Actuals	Actuals	Actuals	Actuals

Sl. 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

CPWD Maintenance Manual 2019

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 Maintenance Manual 2019) are duly updated upto 01.04.2019.

ANNEXURE 2 (A)

Plinth Area Rates for Electrical Engg. Maintenance

Proposed Provision					
S. No.	Category	Rate in 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
	RESIDENTIAL BUILDINGS				
1.	Type I to IV	69	77	83	93
2.	Type V and above	84	94	101	113
3.	M.Ps Flats, Ministers Bungalows, Supreme Court Judges Residences	167	187	200	225
4.	Hostels	111	124	133	150
5.	Rastrapati Bhawan, Vice Presidents House & PM's 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

- Note: 1. 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 e.g. Air Conditioning, Pumps, DG sets, Sub station, Fire Alarm, Fire fighting, Lifts etc. services on actual requirement.
2. The rates do not include the extra amount admissible for maintenance and repairs in hilly region.

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/ARMO

Sl. 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/ Distempereing, 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	4	8	9

1.	2.	3.	4.	5.	6.	7.
4.	Sewerman	1 No.	7.5 lakhs	3 lakhs	6 lakhs	6 lakhs
5.	Beldar	Twice the number of workers in the categories of Mason and Carpenter				
<p>* Requisitioned buildings, if used for office purposes may be clubbed with 'Office Buildings', but if used for other purposes such as hospitals, schools etc., they may be clubbed with the respective head. For outsourcing of comprehensive maintenance, yardsticks of number of workers shall be 75% for all type of buildings.</p> <p style="text-align: center;">YARDSTICK FOR ELECTRICAL WORK CHARGED STAFF</p>						
Type of Buildings			Wireman/One per point	Ratio of Wireman to Khallasi		Painter one per point
1.			2.			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
(6) 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.	H.M. Houses and officers entitled to free accommodation			0.75 acre		
2.	MPs accommodation and Govt. officers bungalows.			1.25 acres		
3.	Flats			1.35 acres		
4.	Permanent office accommodation			1.25 acres		
5.	Open spaces			3.00 acres		
6.	Play grounds			2.00 acres		
7.	Public Parks			2.00 acres		
8.	Prestigious works/Rajpath/C-Hexagon			1.00 acres		
9.	Hedge cutting			10000 Running ft.		
10. A	Potted plants (Earthen) at Nursery			2000 plants		
10. B	Potted plants (Earthen) in Flats/Bungalow/Offices			750 plants		

10C	Potted plants (Cement) if permitted	300 plants		
10D	Potted plants (Cement) in multistoried Buildings if permitted	250 plants		
11.	Mowing of lawn	*15 acres		
Sl. No	Type of Area	Norms (1 Mali for)		
12.	Trees	No. of trees	Slow growing trees	Fast growing trees
		250	Upto 4 yrs. old	Upto 3 yrs. old
		300	4-8 yrs.	5-6 years
		1200	Beyond 8 yrs.	Beyond 6 yrs.
13.	Maintenance Shrubs Plants	500 Nos.		
14.	Rajpath Cleaning & Sweeping			
	A. Rajpath and C- Hexagon	1.50 Acre/Per Sweeper		
	B. Rajpath beyond the Canal	1.75 Acre/Per Sweeper		
15.	Sweeping of Public Parks	1.50 Acre/Per Sweeper		

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

(Ratio of Sr. Malis to Malis - 1:3)

* These works have already been included in the above works and therefore no separate staff is to be provided for these works unless at the places where only hedge cutting work/mowing of lawns is to be performed.

B. CHOUDHARY :

One Choudhary over 18 Malis/Sr. Mali

<p style="text-align: center;">ANNEXURE 6 (A) Performa for Calculation of Maintenance COST INDEX Repair Cost Index for Delhi with 01/04/2019 rates as base 100</p>						
S. N.	Description of Item	Unit	Rate as on 01.04.2019 (a)	Weight-age (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 6 (B) Service Cost Index for Delhi with 01/04/2019 rates as base 100						
Sl. 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)	Weight age (b)	Rate Revision as on (c)	Service Cost index as on— <u>(bxc)</u> (a)
1	2	3	4	5	6	7
1.	Workers (i) Beldar/Unskilled a) Work Charged b) Out Sourced (ii) Mason/Carpenter/Skilled a) Work Charged b) Out Sourced	Per day Per day	1167 584 1400 710	24 30		
2.	Minimum Wages Mason/Carpenter/Plumber /Skilled Beldar/Unskilled	Per day	710.00 <u>584.00</u> <u>1294.00</u> Avg = Rs.647.00	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
= (80x1400+20x710)/100 = Rs. 1262/- per day.

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) Existing conditions							
	(c) When is it due.							
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.	Action	Needs Repair Quantity	Cost	Needs Replacement Quantity	Cost	Immediate	Priority 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 & Training :**
 - (i) Naturally required pruning
 - (ii) Pruning required for security purpose of building as well as occupant

- (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	Dte. of Estate 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 board	Land owing agency	Land owing agency

Annexure 9

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

- Ex. Engineer (C) & (E) 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 change over 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 generating 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. Loss 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
- 52. 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.

Date/Time.	J.E.	Date/Time	A.E	Date/time	E.E
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Annexure – 10

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.	3 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.	Painting steel water tanks inside with bitumastic paint.	3 years	3 years	1 year	2 years	2 years
8.	Polishing wooden doors/windows with spirit polish/synthetic acrylic polish.	3 years	3 years	2 years	2 years	2 years
9.	Cleaning Electrical installation, fans etc.	1 year	1 year	1 year	1 year	1 year
10.	Premix, semi dense/dense carpeting of roads.	5 years	5 years	5 years	5 years	5 years
11.	Collection of water samples for physical, chemical and bacteriological analysis of water.	6 months	6 months	3 months	3 months	6 months

Annexure 11

CHECK LIST/NORMS FOR HORTICULTURE MAINTENANCE

FOR BUNGALOW PROVIDED WITH 1 OR MORE MALI / PER BUNGALOW

No.	Item of work	Nos./Qty./Frequency Required	Nos./Qty./Frequency Actually done	Comments of Inspection Officer
1	Irrigation	Daily		
2	(i) Manuring (ii) Fertilization	Seasonal in winter in summer and rainy season- As per requirement		
3	Lawn Moving Summer Winter Rains	Fortnightly Monthly Weekly		
4	Plant Protection	Need Based		
5	Pruning & Training. of Trees/Shrubs Creepers etc.	Yearly/Need base with the permission of Forest department		
6	Cultivation & Weeding	As and when required		
7	Seasonal Flowers Winter Summer Rains	Yearly Yearly Yearly		
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		

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	(Only for bungalows of Ministers, MP's and Judges and other officers who are provided with rent free furnished accommodations but there is variation for individual occupants.		
17	Special requirement	in case of VVIP's residences.		
FOR BUNGALOWS ONE MALI FOR MORE THAN ONE BUNGALOW				
No.	Item of work	Nos./Qty./Frequency Required	Nos./Qty./ Frequency Actually done	Comments of Inspection Officer
1	Irrigation	Daily		
2	(i) Manuring (ii) Fertilization	Seasonal in winter summer and rainy season- As per requirement		
3	Lawn Mowing Summer Winter Rains	Fortnightly Monthly Weekly		
4	Plant Protection	Need Based		
5	Pruning & Trg. of Trees /Shrubs Creepers etc.	Yearly/Need base with the permission of Forest department		
6	Cultivation & Weeding	As and when required		
7	Seasonal Flowers Winter Summer Rains	Yearly Yearly Yearly		

8	Top dressing with soil & /or manure	Once in a year and 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	Outdoor potted plants	Need based		
12	Indoor potted plants & planters	Need based		
13	Planter beds	Need based		
14	Ground cover as part of grass	Need based		
15	Kitchen garden	(Only for bungalows of Ministers, MP's and Judges and other officers who are provided with rent free furnished accommodations but there is variation for individual occupants.		
16	Any other item (Hort., Civil, Elect., U/F water supply) required for proper maintenance	On need basis		
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	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 Moving Summer Winter Rains	Fortnightly Monthly Weekly		
4	Plant Protection	Need Based		
5	Pruning & Trg. 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, leveling etc.	As and when required		
9	Hedges Cutting Summer Rains Winter	Fortnightly Fortnightly Monthly		
10	Outdoor/Indoor potted plants	Need based		
11	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 FLATS				
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 Moving Summer Winter Rains	Monthly Monthly Monthly		

4	Plant Protection	Need Based		
5	Pruning & Trg. 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, leveling etc.	As and when required		
9	Hedges Cutting	Fortnightly		
	Summer	Fortnightly		
	Rains	Fortnightly		
	Winter	Monthly		
10	Indoor and Outdoor plants	Not applicable		
11	Any other item (Hort., Civil, Elect.,) 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 & Trg. of Trees/Shrubs Creepers Etc.	Yearly/Need base with the permission of Forest department		
2	Hedges Cutting	Monthly		
	Summer	Monthly		
	Rains	Monthly		
	Winter	Monthly		
3	Any other item (Hort., Civil, Elect.,) required for proper maintenance	On need basis		

FOR OPEN SPACES/PARKS IN RESIDENTIAL COLONIES				
No.	Item of work	Nos./Qty./Frequency Required	Nos./Qty./ Frequency Actually done	Comments of Inspection Officer
1	Irrigation	Daily		
2	(i) Manuring (ii) Fertilization	Once in a year in winter in summer and rainy season- As per requirement		
3	Lawn Moving Summer Winter Rains	Fortnightly Monthly Weekly		
4	Plant Protection	Need Based		
5	Pruning & Trg. of Trees/Shrubs Creepers etc.	Yearly/Need base with the permission of Forest department		
6	Cultivation & Weeding	As and when required		
7	Seasonal Flowers Winter Summer Rains	Wherever feasible		
8	Top dressing with soil & /or manure	Yearly		
9	Repair & replacement of plants, leveling etc.	As and when required		
10	Hedges Cutting Summer Rains Winter	Fortnightly Fortnightly Monthly		
11	Annual Tree plantation under Van Mahotsav Programme	Once in a year (in monsoon)		
12	Any other item (Hort., Civil, Elect.). 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	Daily		
2	(i) Manuring (ii) Fertilization	Seasonal in winter in summer and rainy season- As per requirement		
3	Lawn Moving Summer Winter Rains	Fortnightly Monthly Weekly		
4	Plant Protection	Need Based		
5	Pruning & Trg. of Trees/Shrubs Creepers etc.	Yearly/Need base with the permission of Forest department		
6	Cultivation & Weeding	As and when required		
7	Seasonal Flowers Winter Summer Rains	Yearly Yearly Yearly		
8	Top dressing with soil & /or manure	Yearly		
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.) required for proper maintenance	On need basis		
12	Outdoor potted plants	Need base as per requirement of site		

13	Indoor potted plants & planters	Need base as per requirement of site		
14	Planter beds	Need based		
15	Rockerries	Need based		
16	Flower vases	Need based		
FOR OTHER OFFICES				
No.	Item of work	Nos./Qty./Frequency Required	Nos./Qty./ Frequency Actually done	Comments of Inspection Officer
1	Man Power	As per Yard Stick		
2	Irrigation	As per turn		
3	(i) Manuring (ii) Fertilization	Seasonal in winter in summer and rainy season- As per requirement		
4	Lawn Moving Summer Winter Rains	Fortnightly Monthly Weekly		
5	Plant Protection	Need Based		
6	Pruning & Trg. of Trees/Shrubs Creepers etc.	Yearly/Need base with the permission of Forest department		
7	Cultivation & Weeding	Need based		
8	Seasonal Flowers Winter Summer Rains	Yearly Yearly Yearly		
9	Top dressing with soil & /or manure	Yearly / Need based		
10	Repair & replacement of plants, leveling etc.	Half Yearly		
11	Hedges Cutting Summer Rains Winter	Fortnightly Fortnightly Monthly		

12	Any other item (Hort., Civil, Elect.) required for proper maintenance	On need basis
13	Outdoor potted plants	Need base as per requirement of site
14	Indoor potted plants & planters	Need base as per requirement of site
15	Planter beds	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 nos./qty./frequency of work not supplied / executed during this month due to valid reasons / directions, to 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.
- 4 Green grass can only be maintained & not the lawns. Weeding beyond a particular stage is possible and Malba' be treated as part of grass.

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

Sl. No.	Item of work	Nos./Qty./Frequency Required	Nos./Qty./Frequency Actually done Officer	Comments of Inspection
1	Irrigation	Daily		
2	(i) Manuring	Seasonal		
	(ii) Fertilization	In winter, summer and rainy season - As per requirement		
3	Lawn Moving			
	Summer	Need based		
	Winter	Need based		
	Rainy	Need based		
4	Plant protection	Need based		
5	Pruning & Trg. Of Trees/ Shrubs Creepers etc.	Yearly/ Need base 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 base as per requirement of site		
13	Indoor potted plants & planters	Need base 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 & Annexe
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
9. Delhi High Court (PWD)
10. North Block & South Block
11. Memorials
12. Teen Murti House
13. Old Secretariat (Vidhan Sabha)
14. Raj Niwas Secretariat (PWD)
15. National Gallery of Modern Art
16. National Museum
17. 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. MAINTENACNE						
(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 & Trg.	..... 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	No. of Flats/Bungalows				
	(Perennial)	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					

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)**

S.No.	ITEM	ACTION BY JE			ACTION BY AE		
		Daily 3	Weekly 4	Monthly 5	Daily 6	Weekly 7	Monthly 8
1	Day to Day Complaints	<p>(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.</p> <p>(b) Check the compliance of task assigned to the workers notebook and complaint register.</p> <p>(c) Prepare the abstract of complaints at the end of day.</p> <p>(d) Review the Complaints Register and identify the complaints of repetitive nature from the same premises.</p>	<p>(a) Prepare an abstract of complaints on the last working day of the week.</p>		<p>(a) Forward weekly abstract of pending complaints to EE for taking suitable action with suggestion if any.</p> <p>(b) Devise ways to attend long pending complaints by redeployment of workers.</p>		
2.	Handing over/ Taking over of vacant premises	<p>Handing over/ Taking over of vacant possession of premises & preparing occupancy & vacation report.</p>			<p>Send Occupancy & Vacancy Report to DOE, AE(E) & AD(H).</p>		<p>(a) Intimate the details of vacant quarters to Division Office.</p>

S.NO. ITEM		ACTION BY JE			ACTION BY AE		
		Daily	Weekly	Monthly	Daily	Weekly	Monthly
1	2	3	4	5	6	7	8
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) Chalkout 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.
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.	

S.No.	Item	Action by JE			Action by AE		
		Daily	Weekly	Monthly	Daily	Weekly	Monthly
1	2	3	4	5	6	7	8
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))**

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 CE(E)I every month after inspecting sub-station equipment, generating sets, 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 CE(E)I every month to division office inspecting sub-station equipment, generating 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 CE(C) & CE(E).</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 works</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 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.

S.No.	Item	Daily	Weekly	Monthly	Periodically
1	2	3	4	5	6
6.	Meetings/Reports/ Returns/Records			(a) Send the following monthly returns to circle Office:- • MIS-M-1-EE • MIS-M-2-EE • MIS-M-3-EE	(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 S.E.
8.	VIP Maintenance cost and functions. 1st			(a) Sign six sets of check list already circulated by CE(E) for sending to CE(C) and CE(E) every month.	(a) Fix the capital of furniture on April of each year. (b) Fill up the check list already circulated by CE(E) well before every function for sending it to CE(C) & CE(E). (c) EE to be present with his junior staff in all functions 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					

S.No.	Item	Daily	Monthly	Periodically
1	2	3	4	5
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 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 should examine Building Register during his inspection to verify that it is upto date. Send Quarterly Report to DOE regarding vacant quarters.
4.	Inspection			(a) Review the performance of the Service Centre twice a year and send reports to CE. (b) Inspect buildings for structural safety consideration as per intimation by EE.
5.	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.	Switchgear 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
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	10

	cooled condensers	
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 (<i>Diesel/CNG</i>)	10 or 2 lakh kilometre whichever is earlier
2.	Motor Car (<i>Petrol</i>)	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 GOVERNMENT OF INDIA **Division**
Branch PUBLIC WORKS DEPARTMENT **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)	Subsequent 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 (drawing, 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.	
19	Tepoy	10 yrs.	
B NON-DURABLE			
20	Grass matting	2 yrs.	At the time of change of occupancy or once in two years which ever is earlier.
21	Chicks	2 yrs.	-do-
22	Coir mattress	2 yrs.	-do-
23	Jute mattress	2 yrs.	-do-
24	Tepoy	2 yrs.	-do-
25	Cotton Durries	5 yrs.	Redying as described at least once in three years or change of occupancy at the time of use whichever is earlier.
26	Cotton Durries	5 yrs.	-do-
27	Cane Garden Chairs	2 years	
28	Tepoy		At the time of occupancy or six months, whichever is earlier
29	Dust bin	2 years	
30	Bath tubs	2 years	
31	Folding beds	2 years	
32	Foam mattresses	5 years	Change of tapestry as described or after 2 ½ years which ever is earlier.

S.No.	Type & Name of the item	Life	Remarks
33	Foam Cushion	5 years	Change of tapestry as described or after 2 ½ years which ever is earlier.
34	Cotton mattresses	5 years	Regular maintenance includes change of cloth in between as described.
35	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.
36	Woollen carpets	10 years	
C UPHOLSTRY			
37	Sofa sets	3 years	
D DRY CLEANING			
38	Sofa		At the time of change of occupancy or once in a year whichever is earlier.
39	Sofa chair		-do-
40	Dining Chairs		At the time of change of occupancy or once in six months whichever is earlier.
41	Cotton Durries		At the time of change of occupancy or once in a year
42.	Curtains		At the time of change of occupancy or once in six months whichever is earlier.
E PAINTING			
43	Cane garden chairs		-do-
44	Tepoy		-do-
F POLISHING			
45	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/Cow dung Manure For HORs, GOBs, Type I to VI flats, Samadhis, Offices, Hospitals, Prestigious works playground	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 :0.003 per cum = 12 cum per acre.
3	Fertilizers: For HORs, GOBs, Type I to VI flats, Samadhis, Offices, hospitals, Prestigious works playground etc.	Area : Four applications (Nov., Dec., Jan., & Feb.) 10 gms. Per sqm. for garden area i.e. 0 gms. per sqm. $\frac{4000 \times 40}{1000} = 160 \text{ kgs. per acre.}$ DAP:DAP, Bonemeal, Oilcake, Agro &etc. combined @ 100kgs per acre i.e. 1 quintal per acre.
4	Empty Earthen Pots (a) HORs etc. (b) Parks etc.	@Rs. 2000/-per acre/year Rs. 1100/- per acre/year
5	Cement Pots (a) HORs etc. (b) Parks etc.	Rs. 800/- per acre/year @ Rs. 400/- per acre/year
6	Roses (a) HORs	Rs. 1400/-per area per year.
7	Shrubs. Trees, Fruit Plants, other plants HORs/GOBs etc	Rs. 1000/- per acre/year
8	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
9	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