

WORKS MANUAL

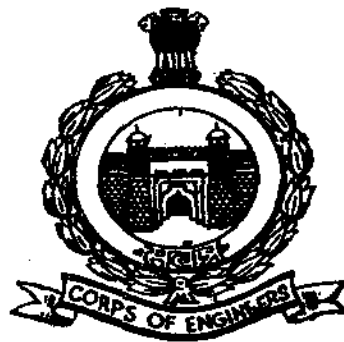
**(A Compendium of Guidelines, Instructions,
Policy Issues and Procedures)**

for

KENDRIYA VIDYALAYA SANGATHAN

WORKS

MES



1997

**Engineer-in-Chief's Branch
Army Headquarters
Kashmir House, DHQ Post Office
New Delhi-110 011**



मेजर जनरल को ति चारी
निर्माण कार्य महानिदेशक
Maj Gen CT Chari
Director General of Works
Tele : 3016708

सेना मुख्यालय
प्रमुख अभियन्ता शाखा
कश्मीर हाऊस
डी एच ब्यू पी ओ, नई दिल्ली-११० ०११
Army Headquarters
Engineer-in-Chief's Branch
Kashmir House
DHQ PO, New Delhi-110 011

No : A/00054/E2 Army/TC

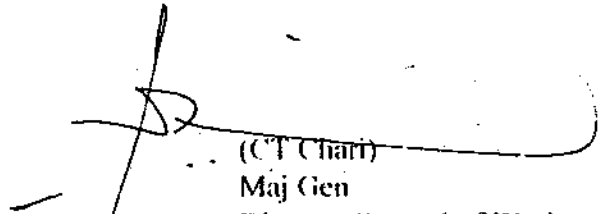
U Aug 97

FOREWORD

MES has been executing a large number of works for Kendriya Vidyalaya Sangathan. Since these are provided as agency services, MES is even more conscious of financial discipline, quality and time. There has been a long felt need for a compendium of guidelines, instructions, policy issues and procedures so that the Client, MES and the Schools understand their respective duties and responsibilities completely. This Works Manual has been brought out to meet this requirement.

In the drafting and publication of this Manual, I wish to acknowledge the generous support and detailed inputs received from Smt Lizzie Jacob, Commissioner, Kendriya Vidyalaya Sangathan and Shri AK Saxena, Executive Engineer, Kendriya Vidyalaya Sangathan. I must also place on record my appreciation of the work done by Shri RK Caplash, Dir Wks (Army) and Lt Col JC Tiwari, SOI Wks who have made this publication possible.

I trust this Manual will help in building better schools for the Kendriya Vidyalaya Sangathan.


(CT Chari)
Maj Gen
Director General of Works

MES (B)

KVS Works Procedure - 1997

1.0 Introduction

- 1.1 MES is one of the major construction agencies of Kendriya Vidyalaya Sangathan (KVS) for construction of campuses of Kendriya Vidyalayas (i.e. school building, staff quarters, ancillary works) besides maintenance and repairs. These works are undertaken by MES as "Agency Services" as per Ministry of Defence, Government of India letter No 125/25/ADM/L&C/888-C/D(GS-II) dated 24 May 1976 as amended from time to time. No departmental charges are to be levied by MES on work of KVS.
- 1.2 While the performance of MES in the execution of KVS works has been good, the present system/methodology needs further streamlining for an efficient management of KVS works within projected time, cost and quality parameters.
- 1.3 A number of policy instructions have been issued in the past by E-in-C's Branch in this regard. However, "KVS Works Procedure-97" aims to consolidate, update and also modify these instructions in order to make them available in the form of a compendium for ready reference and implementation.
- 1.4 These instructions supersede previous policy instructions issued by E-in-C's Branch on the subject vide their letter No A/0054/E2 Army/Tech Coord dated 05 Jan 1990. "KVS Works Procedure-1997" stands approved by Commissioner, Kendriya Vidyalaya Sangathan vide letter 6-18/97 KVS (Works-1) dt. 24 Sep 97.

2.0 Aim

- 2.1 The aim of these instructions is to focus on various policy issues for effective management of Kendriya Vidyalaya works in order to ensure their completion with utmost economy, quality and within prescribed time and cost parameters as envisaged in each sanction letter of the work issued by KVS.

3.0 Transfer of Land

- 3.1 GOC-in-C Commands have been delegated powers to issue orders for transfer of Defence land to KVS on lease for opening Kendriya Vidyalayas vide Government of India, Ministry of Defence, letter No 3(4)/85/1000-B/D(SS-II)/85 dated 15 Jul 1985.
- 3.2 Once the sanction for transfer of land is issued, formal possession of the plot is taken by the Principal and lease deed is also executed which is already standardised by Ministry of Defence.
- 3.3 KVS takes action for planning and construction of permanent school building only after the land has been taken in possession.

4.0 Classification of Works

4.1 KVS works are classified as follows :

- a) **Major Works:** Construction of new school building which could be four types viz; Type A-1 (1 section) or Type-A (2 sections) or Type-B (3 sections) or Type-C (4 sections) depending upon requirements of KVS), staff quarters, additional classrooms, play facilities, cycle stands and other allied campus works and services.
- b) **Minor Works:** Ancillary campus works, addition/alteration to existing buildings costing upto Rs. 2 lakhs.
- c) **Annual Periodical Maintenance:** Annual repairs and maintenance works to be carried out each year. These are to be completed between Apr to Jul every year (i.e. during the summer vacations).
- d) **Day-to-Day Repairs:** Day to day petty repairs, maintenance, replacements etc., to be carried out by Principal KV only after annual repairs are completed by construction agency with separate funds made available by KVS.
- e) **Special Repairs:** As per specific requirements assessed and projected separately by construction agency on as required basis with justification.

4.2 Works at para 4.1 (a) to (c) and (e) will be undertaken by MES whereas 4(d) will be taken up by Principals of the schools under their own arrangements.

5.0 Stages in sanction of KVS Works

The following stages are involved in sanctioning of major works by KVS :-

- Opening of a Kendriya Vidyalaya.
- Transfer and lease of land for Vidyalaya.
- Formal request to CE Zone for preliminary drawings.
- Approval of preliminary drawings by KVS.
- Convening of Board of Officers by Station Commander for finalising all other relevant aspects.
- Submission of approximate estimates (AEs) by CE Zone based on approved BPs.
- Issue of Administrative Approval and Expenditure Sanction (AA & ES) after scrutiny of estimate by E-in-C's Branch and release of first instalment of funds for the start of work.
- Tender action by the construction agency.
- Start of work by the contractor.
- Fund flow for the project based on monthly progress report received from Garrison Engineer (GE).
- Completion of work.
- Handing /Taking over of school project.
- Completion report and settlement of accounts.

6.0 Procedure for Sanction of KVS Works

6.1 The following procedure will thus be adopted for sanction of major works for KVS:-

- a) Sanction for transfer of land to be issued by GOC-in-C Commands and lease deed execution.
- b) Formal request from KVS to concerned CE Zone for preparation of preliminary drawings based on KV school building norms and other guidelines.
- c) Submission of preliminary drawings such as master plan of the proposed campus, line plan etc. to KVS by CE Zone within 3 months. The Master plan should be prepared on proper scale showing plot boundaries and should include provision for all facilities as given in Appendix 'A'.
- d) After approval of preliminary drawings by KVS, preparation of AEs by CE Zone and submission to KVS by CE Zone within three months of approval of preliminary drawings. AEs should include complete facilities for an integrated complex as given at Appendix 'A'. Provision should also be made for all functional requirements as given at Appendix 'B'. However, no provision will be made for air conditioning, water coolers, furniture and incinerators. The estimates be prepared based on current SSR instead of the rates of previous tenders accepted elsewhere in the Zone.
- e) Scrutiny of estimates by E-in-C's Branch.
- f) Issue of Administrative Approval, Expenditure Sanction and release of first instalment of funds by Competent Financial Authority of Kendriya Vidyalaya Sangathan within one month of the receipt of scrutinised estimate from E-in-C's Branch.

7.0 Financial Powers to Sanction KVS Work

7.1 As per KVS letter No 6-27/82/KVS (L&B) dated 20 May 1985 powers for sanction of capital works are as under :-

- | | | | |
|----|--|---|-------------------------------------|
| a) | Commissioner, KVS | - | Works upto Rs. 20 lakhs. |
| b) | Addl. Secretary, Min of HRD & Chairman Works Committee of KVS | - | Works costing above Rs 20 lakhs. |

8.0 Execution of Works

8.1 Sanction along with first instalment of funds

- 8.1.1 With the issue of Administrative Approval and Expenditure Sanction (AA & ES) KVS will also release simultaneously first instalment of funds (i.e. Rs. 20 to 30 Lakhs) for commencement of essential preparatory work, soil investigation, tender action etc.

8.1.2 Further instalments of funds will be released by KVS as per E-in-C's letter No A/0054/E2 Army/Tech Coord dated 05 Jan 90 (**Appendix 'C'**)

8.2 Tender Action

8.2.1 On receiving AA & ES from KVS, CE Zone will prepare detailed drawings and issue tenders for the works at the earliest but in no case **later than six months** from the date of sanction of the project by KVS.

8.2.2 Practice to execute school building project by multiple contract system is to be stopped so as to avoid problems like frequent FCs for a single project, increase in overall cost, slippage of P.D.C., co-ordination problems, delay in completion of project, delay in handing over and settlement of accounts etc.

8.2.3 As far as possible, integrated tenders will be floated for complete project including services.

8.3 Acceptance of Tender

8.3.1 Tenders with total liability within 10% tolerance limit of the amount of AA and ES, can be accepted without reference to CFA (KVS). CE Zone will inform KVS formally about lowest tender accepted, exact percentage of market variation and difference in cost of stores, justification of rates and the overall financial liability of the cost of work over and above AA (i.e. a detailed statement of case) within 15 days of acceptance of the contract. This will enable KVS to arrange for additional finance over and above the amount of AA and ES.

8.3.2 Tenders beyond the tolerance limit of 10% i.e. over and above the amount of AA and ES be accepted only after the financial concurrence (FC) is accorded by CFA (KVS). Cases for FC shall be progressed by CE Zone to KVS on receipt of lowest tender with complete statement of case and justification well in time.

8.3.3 It will, however, be ensured by all concerned that such cases of FC are cleared within validity period of tender so as to avoid retendering and further delays.

8.4 Revised AA & ES

8.4.1 All efforts will be made to ensure that the final cost of work does not exceed the amount of Administrative Approval and Expenditure Sanction by curtailing delays, adoption of cost effective and functional specifications and also curbing escalation to the minimum.

8.4.2 In case where overall anticipated cost is likely to exceed the tolerance limit of 10%, CE should initiate revised AEs well in advance and should not incur any expenditure till revised Administrative Approval is accorded. A statement of case justifying the reasons for increase in cost must accompany the revised AE.

8.4.3 Cases where the final cost of the work exceeds over and above the amount of AA and ES but remains within the tolerance limit of 10%, revised estimate is not to be submitted to KVS. However, a statement of case will be sent by Chief Engineer to Commissioner KVS based on completion cost, giving details of original cost, actual cost of completion and reasons for increase so as to get the balance amount released by KVS.

8.4.4 The actual amount payable as escalation to the contractor in terms of contract agreement/statutory rise should be specifically mentioned while submitting cases referred in paras 8.4.2 and 8.4.3 above.

8.5 Time Schedule

The following time schedule will strictly be adhered to :-

8.5.1 Post AA Plg. - Within six months of issue of AA.

8.5.2 Execution of Project - School Complex - 18 months.
- Staff Quarters - 12 months.

8.6 Monthly Progress Report (MPR)

8.6.1 Monthly progress report of each work as per format at Appendix 'D' will be sent by the GE direct to KVS, so as to reach by 7th of following month with copies to CWE and CE Zone. This will be irrespective of the fact whether work is started or not.

8.6.2 One copy of progress report be sent to Principal of the KV for onward submission to KVS with the desired certificate therein so as to avoid delay in release of funds.

8.6.3 Flow of funds for a project from KVS is based on timely submission of monthly progress report by the GE in the format.

8.7 Quarterly Progress Report (QPR)

8.7.1 A quarterly physical and financial progress report with details of expenditure and liabilities vis-a-vis sanctioned amount for each project as per formats at Appendices 'E1' and 'E2' be submitted by CE Zone to KVS with copy to CE Command and E-in-C's Branch (E-2 Army).

8.7.2 The Quarterly Reports should reach KVS by 15th of Jul, Oct, Jan and Apr showing the position as on the last day of the corresponding previous month.

8.8 Stipulated Date of Completion (SDC)

8.8.1 SDC will be intimated to KVS by CE Zone. Any extension of SDC will be intimated to KVS with detailed reasons immediately after granting such extensions.

MES - (5)

8.8.2 Changes in the SDC due to any other reasons will be promptly informed to KVS by CE Zone with detailed reasons.

8.9 Fund Flow

8.9.1 After the start of work, further instalment of funds will only be sanctioned for release by KVS for each on going project based on monthly progress reports being sent by GE to the KVS.

8.9.2 KVS will ensure that demand draft for the released instalment of fund is sent within 3-4 weeks to the Vidyalaya from the date of sanction to avoid escalation, contractual complications, etc.

8.9.3 To avoid delay in deposit of funds from KVS to Kendriya Vidyalaya and from Vidyalaya to GE's office, KVS shall issue demand draft in favour of GE/AGE (I). The same will be sent to Principal of the concerned Vidyalaya for deposit to MES immediately after it has been accounted for in Vidyalaya accounts.

8.9.4 If funds are not deposited with GE by stipulated dates, CE Zone will inform Commissioner, KVS of possible contractual implications, escalation etc.

8.10 Deviation Orders (DOs)

8.10.1 Not more than five percent of the contract amount should be allocated for DOs, if any, while initiating FC cases.

8.10.2 No changes in the sanctioned scope of work involving financial commitments shall be entertained by MES at the instance of Principal, Kendriya Vidyalaya, local units etc.

8.10.3 In case such works are found essential by Principal, Kendriya Vidyalaya, prior approval of commissioner KVS will be obtained and sent to CEs Zone/GE.

8.11 Monitoring of Project

On sanction and deposit of funds for a Project by KVS, the CE Zone shall issue a detailed planning programme for contract action, finalise the date of commencement of work on ground and the same shall be intimated to all concerned (CE Command, E-in-C's Branch, Station HQ, Principal KV and KVS).

8.11.1 Macro Monitoring at Army HQ Level

Quarterly meeting will be held with Reps of KVS by ADGW (Army) to monitor the progress and remove bottlenecks, if any, during first week of Aug, Nov, Feb and May. This meeting will review progress reports pertaining to all KV works covering Army, Navy, Air Force, Factory, R&D and DAD establishments.

8.11.2 Monitoring at Comd CE Level

A joint BOO, comprising senior rep of CE Command, reps from CE Zone, CWE and KVS will visit site of work every six months and assess the performance, progress and quality and also the problem areas for quick decisions, if any. In addition, CE Command will also evolve suitable monitoring system at their level to ensure that progress is as per schedule and also to ensure quality of construction.

8.11.3 Micro Monitoring

Monitoring on quarterly basis will be done by Chairman, Vidyalaya Management Committee/Station Commander, with user reps and MES staff to review the progress and quality of KV works.

8.12 Completion Report

8.12.1 Formal completion reports certifying completion of entire scope of work, will be submitted by GE to the KV and KVS with copy to CE Zone and CWE within one month of completion of the work as per format at **Appendix 'F'**

8.13 Board of Officers

8.13.1 A Board of Officers will be constituted for handing/taking over assets with rep of Chairman, Vidyalaya Management Committee (VMC) as President and the members/representatives of the following:-

- | | |
|--|------------------------------|
| a) Rep of CWE | - One |
| b) VMC Member | - One |
| c) PTA | - Two [Preferably with |
| d) Parents of students | - Two technical back ground] |
| e) Teachers to be nominated by Principal | - Two |
| f) Reps of GE | - Two |
| g) Principal KV | - (Member Secretary) |

8.13.2 The Board of Officers will carry out inspection atleast a month before the completion. All noted defects will be got rectified by GE before buildings are handed over.

8.14 Final Expenditure Statement

8.14.1 Final expenditure statement after completion of the work bringing out savings, if any, in the project, after necessary payments/adjustments are made, will be submitted by GE as per format at **Appendix 'G'** to KVS with copy to CWE, CE Zone, CE Command and E-in-C's Branch (E-2 Army) duly vetted by audit authorities. Surplus funds will be refunded to KVS immediately.

8.14.2 The settlement of accounts will be done as under :-

- a) **Major Works** - Within **twelve months** of completion of work.
- b) **Minor Works** - Within **three months** of completion.

8.15 Record Drawings / Approved Samples

- 8.15.1 One copy of record drawings after completion of work will be handed over to the Principal of KV.
- 8.15.2 Approved samples, copies of test reports during construction stage will also be handed over to the school for future reference, if specifically asked for.

8.16 Risk and Cost Contract

In cases where the contract is likely to be cancelled and fresh contract action is to be taken against the "risk and cost provision", a detailed statement of case will be sent by CE Zone to KVS before such action. Before accepting risk and cost tender, CE Zone will submit a report to the KVS bringing out amount of lowest tender, total financial liability to accept the lowest tender, the additional funds required over and above the AA amount to complete the work and the probable date of completion

8.17 Arbitration Cases

Wherever arbitration clause of the contract is invoked, KVS be intimated with all details immediately by CE Zone.

9.0 Defect Liability Provisions

- 9.1 One year maintenance guarantee period of contract will be strictly enforced w.e.f. the date of completion of buildings.
- 9.2 Defects in the newly constructed buildings brought to the notice of MES by the Vidyalaya authorities shall be got rectified immediately. A feed back report of the rectification be sent to the Principal, KV and KVS.
- 9.3 On completion of defects liability period, "No defects certificate" will be issued to the contractor only after clearance from the Vidyalaya authorities.

10.0 Quality Assurance

- 10.1 Since the ultimate user of the school building and various facilities in the campus is the child, utmost care and precaution is to be taken to ensure that the work is completed with best quality materials, fittings and fixtures, workmanship etc., and meets the functional requirements of users.
- 10.2 Periodic quality checks will be carried out by GE, CWE and CE Zone during currency of work as per laid down quality checks/instructions.

10.3 In depth quality checks will also be carried out by technical examiners in the same manner as is being done for other Defence works. The defect rectifications, if any, pointed out will be ensured by GE and monitored by CWE and CE Zone.

11.0 Economy Instructions

11.1 While planning and designing the buildings, standard engineering practices are to be followed so that buildings which are constructed are functional with minimum capital outlay.

11.2 While planning and designing school buildings and other allied works, economy should be given due consideration in view of increasing construction costs.

11.3 Senior Architects should ensure that plans for school buildings are prepared strictly in accordance with the plinth area guidelines and floor heights following minimum laid down local bye-laws. Any deviations should be brought to the notice of Chief Engineer and his orders obtained before adopting the same.

11.4 Play ground facilities and site development works should be planned by taking best advantage of terrain so as to avoid excessive cutting/filling of entire area and with proper drainage.

11.5 The specifications at the architectural planning and design stage should be such that these are not on rich side but are functional, durable and economical based on the concept of Life Cycle Costing (LCC).

11.6 Senior Architect should also ensure that desired planning efficiency (ratio of carpet area to plinth area) is achieved.

11.7 The cost of external services and site development works (both B/R & E/M) should be kept minimum and projected as per actual requirements. Layout of internal roads should be economical and functional.

11.8 While preparing preliminary estimates, provisions for extras should be made with utmost care and only those items which are really essential should be included.

11.9 Since KV buildings are not more than 2-3 storeyed, preference should be given to design economic buildings with load bearing walls using local materials instead of going for RCC framed structures.

12.0 Safety Inspection of Building

12.1 Since campuses of KVs are constructed and maintained by MES, it is therefore the responsibility of GE to get these buildings inspected periodically from the angle of structural safety.

12.2 Major defects/deficiencies which affect the structural safety of buildings will be properly inspected and analysed by GE from the safety point of view. A detailed report be sent to Principal KV, KV Sangathan, CWE and CE Zone.

12.3 If these are on account of initial defects in the buildings noticed during maintenance liability period, the same should be got rectified as per procedures, by MES. In case these are on account of passage of time due to a particular reason, the remedial measures may be intimated to KVS, with proper estimate and justification.

13.0 Standardisation of Preliminary Drawings

13.1 Preliminary drawings for different type of school buildings and staff quarters may be standardised for various climatic/geographic regions or zones to ensure uniformity in specifications, quality standardisation and also to save time:

13.2 When standard layouts are prepared these can be routed through CEs Comds and may be sent to E-in-C's Branch to obtain approval of KVS.

13.3 These approved drawings by KVS can be used for similar KVS works assigned to the Zone in future. In such cases, the layout plan (master plan) will be prepared depending upon the location, area and shape of site.

14.0 Scrutiny of Estimates by E-in-C's Branch

14.1 Estimates costing above Rs. 20 lakhs referred by KVS to E-in-C's Branch (E2 Army) shall be scrutinised within a period of one month.

14.2 Wherever additional information is required from CE Zone, the respective Directorates will coordinate with CE Zone to expedite the same within the stipulated time.

14.3 In case the information regarding estimates is not submitted in time by the respective CE Zone, the matter may be brought to the notice of DGW and the estimates may be corrected by the respective Directorate to avoid further delay.

15.0 Maintenance and Repairs

15.1 Proper Attention

15.1.1 It has been reported by KVS authorities that maintenance and repair and also minor works in various KVs are not given adequate attention by GEs. Any delay in commencement, timely completion, poor quality of works etc result in unhygienic environment, problems to the students and staff for effective teaching-learning, lack of safety, reduced life of structure etc., besides bad name to the construction agency. It is, therefore, essential for GEs to give prime importance and top priority to these aspects and undertake such works on priority.

15.2 Annual Repairs and Maintenance

- 15.2.1 KVS vide letter No. F.8-10/95-KVS(W.I) dated 30 Oct 1995 has delegated the financial power for sanction of annual repair works to the Chairman, VMC w.e.f. 01 Apr 96. The funds for the succeeding year will be made available by KVS, through their regional offices, to the Vidyalayas by last week of Mar of each year.
- 15.2.2 Funds for annual repair and maintenance in respect of B/R and E/M works should be worked out separately for each component i.e. school building, staff quarters, etc., based on standard maintenance norms laid down for demanding funds for similar Defence assets. These should be projected to Principal of Vidyalaya by 31 Jan of each year. Principal in turn will project the requirement to KVS by 15 Feb of each year.
- 15.2.3 The funds for annual repairs and maintenance will be deposited by Principal with the MES positively by 15 Apr of each year.
- 15.2.4 There is no provision for revision in cost for these works in the new system, hence GEs should avoid unnecessary correspondence on this account. It is, therefore, essential that annual repair works are completed within the sanctioned allocation and in no case there should be any increase in the completion cost. All efforts will be made to avoid delays, adopt cost effective specifications and economic measures to complete these works as per the priorities fixed by the Vidyalayas within allocated funds..
- 15.2.5 GEs will plan annual repair and maintenance works in such a manner that bulk of the work is completed during **May-June** every year when the school closes for summer vacation.
- 15.2.6 Proper accounting should be done and completion report and final expenditure statement be sent to Vidyalaya authorities by **Oct** every year. Savings, if any, may also be refunded to KVS.

15.3 Day-to-Day Repairs

- 15.3.1 No requirement of funds will be given by GEs for day-to-day repairs, which is now the responsibility of the Vidyalaya after the annual repair works are completed by the MES.
- 15.3.2 Petty day-to-day emergent maintenance like replacement of damaged/missing taps, valves, fuses, chokes, starters, stop cocks, switches etc. will be the responsibility of Principal out of the amount given annually as imprest /contingencies by KVS.
- 15.3.3 This amount will be directly spent by Principal, preferably after annual repair works are completed by MES.

15.4 Annual Maintenance Contracts

15.4.1 Annual maintenance contracts for cleaning of sewage lines, manholes and sewage ponds will be undertaken by Principals with the help of local Cantonment Board through the Chairman, VMC.

15.4.2 Contracts for maintenance of electrical H.T. system, transformer etc. will be given to State Electricity Department by Principal of the Vidyalaya, wherever MES is not available.

15.5 Special Repairs

15.5.1 Special repairs of a particular component/system of building will be taken up as and when it is found essential and justified after proper inspection and assessment made by GE/AGE (I).

15.5.2 Proper estimate with statement of case, including justification in relation to the life of component be sent to Principal for getting funds sanctioned by KVS.

15.5.3 Special repairs be taken up only after the funds are deposited with MES.

15.5.4 All efforts will be made to complete these works within 6-9 months from date of sanction and allocation of funds.

15.6 Schedule of Annual Repairs as Fixed by KVS

- | | | |
|---|---|-------------------------|
| a) Principal to obtain sanction from Chairman, VMC | - | 1st week of Apr. |
| b) Issue of sanction and deposit of funds with MES by the Principal | - | 2nd week of Apr. |
| c) Completion of work | - | 30 Jun |
| d) Submission of completion report and final accounts | - | 31 Oct |

16.0 Minor Works

16.1 Additions and alterations in the existing works of minor nature (new) or ancillary campus works when requisitioned by Principal will be undertaken by MES.

16.2 These will be assessed separately and an estimate alongwith site plan, design details, etc be sent to the Principal of the Vidyalaya for getting the funds sanctioned by KVS.

17.0 Coordination and Liaison

- 17.1 In order to make communication, monitoring and decision making on various projects effective, it is desirable that a close liaison and interaction be maintained at various levels between the MES and the KV authorities.
- 17.2 For reviewing the progress of ongoing works as well as those under planning/sanction, it is desirable that whenever a CE Zone visits Delhi, he should find an opportunity to review the projects under his Zone with the Commissioner. KVS
- 17.3 All communications of urgent nature may be made through speed post/telegrams. The facility of FAX 011-6514179, 6965147 and E-mail (kvsc2@nda.vsnl.net.in) available at KVS Hqrs. may also be used.

18.0 Distribution of the KVS Works Manual

- 18.1 These instructions are being distributed by the E-in-C's Branch to all MES formations upto GE/AGE(I) level and will come into force with immediate effect. These are also being distributed by KVS to all concerned.

Campus Requirements of an Ideal Kendriya Vidyalaya
(Checklist for Master Plan)

- School Building
 - Staff Quarters 21 units (Type I-4 Nos, Type II-8 Nos, Type III-8 Nos, Type IV-1 No)
 - Sports facilities to be earmarked depending upon availability of land.
- a) **Primary** : Play areas with parks open spaces near primary block with play equipments like: plain slides, wave slides, swings, see-saw, horizontal ladders, rings, grand slide, climbing apparatus, merry-go-round etc.
- b) **Middle and Senior Secondary** : Hockey field, athletic track with football field, cricket pitch, volley ball court, basket ball court, badminton court, gymnastics area etc.
- Boundary wall of height 1.5 metres from ground level excluding fencing.
 - Cycle/scooter shed with tubular trusses and AC sheet roofing adjacent to boundary wall near left hand side of the entrance gate.
 - Canteen (kiosk type) with cooking, storage and service counter facilities but without any sitting space, preferably of square or circular shape. The location be adjacent to boundary wall but away from the building.
 - Proper location of tubewell, pump house, overhead tanks, sub-station, septic tanks in the campus without any safety hazards.
 - Two drinking water troughs for Primary and Secondary students with glazed tiles at suitable location outside the building.
 - Economic and functional layout of internal roads and paths to connect various facilities in the campus.
 - Building corner lights, campus security lights around turning points of boundary wall for better illumination, safety, watch and ward etc.
 - Demarcation wall (preferably of 30 cm exposed brick work or grill of height about 45 cm or chain link fencing for distinction of various areas and facilities in the campus.
 - School sign board with KVS emblem in the front side of boundary near entrance gate.
 - A raised platform or stage with tubular truss and CGI sheet roofing for annual day, cultural activities etc.
 - A santry post, preferably portable, near main gate.
 - Garbage bins of suitable size at proper location in the campus.
 - Earmarking plantation scheme, parks and other horticulture works in campus.
 - Area drainage around school building and other open spaces be provided effectively so that water do not stagnate in the campus causing hardship to students during play and their movements
 - The plinth level of the building should be kept higher than the existing level of outside road or with the consideration of economy the campus drainage system be made effective to avoid stagnation of water.

Functional Requirements of School Building Facilities

- All windows on ground floor shall be provided with durable and strong M.S. grills.
- All openings in the building shall be provided with grills/collapsible gates to ensure safety and security.
- The wall between two adjacent rooms i.e. Social Science room & Secondary Class room or Social Science room and Activity room shall be provided with movable partition for seminars and student activities etc.
- The provision for internal electric installation shall be in accordance with IS 8827 - 1978, "Recommendation for Basic Requirement for School Buildings".
- The black board shall be provided with cement concrete as per details given in school building norms. However glass black board can be provided in Laboratories and Computer room.
- Urinals, W.C. and wash basins shall be provided as per IS 8878-1978 at suitable locations in each floor of the block.
- Exhaust fans shall be provided in laboratories, toilets and library.
- Provision shall be made for one or two bath rooms in each block of school building.
- Drinking water taps, 1 for every 50 pupils or part thereof shall be provided by locating suitably in each floor of the block.
- Built-in storage shelves (600mm) with shutters shall be provided on side walls in office, PET, store, N.C.C., book store etc.
- Security light (optimum) with sodium vapour lamps shall be provided at all turning points of main building and boundary wall.
- Space below staircase flight on ground floor may be covered for students' safety and storage.
- Cattle trap shall be provided at the entrance gate of school.
- All corridor openings opposite class rooms on first floor and above shall be provided with economical grills or jalli to prevent students sitting on wall/railing or the top edge of railing be angled.
- Kota stone flooring be provided in corridors, laboratories, toilets, treads/risers of stairs, skirting, dado, window sill etc., in case, no other local economical substitute is available.
- Expansion joints be properly finished to avoid leakage and metal strip fixed in such a manner that it does not come out.
- All MCBs/Distribution Boards shall be provided with locking arrangement at a proper height beyond students' reach.
- Lipped urinals shall not be provided and instead of this stall type urinals will be provided. Flush valve be provided for cleaning with adequate water storage.
- All open drains shall be covered with precast slabs for students' safety and ease of cleanliness.
- Drinking water troughs shall be provided with glazed tiles for ease of cleaning and contrast.
- Stairs shall be provided upto roof level to keep roofs of the building free from vegetation and also for cleaning purposes.
- One H.S. class room be provided with ½ brick partition wall for conducting classes for elective subjects. Black boards will be provided on the opposite main walls.

- In-built tables shall be provided in chemistry laboratory as per the layout given in "KVS School Building Norms". The table top and reagent racks shall be provided only with acid resistant tiles. Provision of pipe line for fresh water/waste water/gas supply shall be made properly keeping in view ease for their maintenance and repairs before floors are laid. Waste water pipes in Chemistry lab should be chemical resistant and of proper quality.
- Provision for PVC flooring, suitable paint on walls, double shutters in windows and doors may be made for computer room. Built in shelves may be provided along the walls for PC's and printer. Adequate provision for light, fans and terminal points for PC's and printer may also be made in computer room.
- The size of Glass panes in the window panels should not be large so as to avoid their frequent breakage and increased maintenance cost.

Army Headquarters
Engineer-in-Chief's Branch
DHQ-PO, New Delhi-110011

A/00054/E-2 Army/Tech Coord

Dated 05-01-1990

**Construction of Central School and Staff Quarters for
Kendriya Vidyalaya Sangathan**

1. The procedure of depositing in advance the full amount of the funds required for construction of building for Kendriya Vidyalaya Sangathan (KVS) was discussed in detail by JS (P&W) in a meeting held in the room of JS (P&W) on 18 Jan 1985. It has been unanimously agreed that funds should be guaranteed and made available by the Ministry of Education (KVS) to the MES in such a manner that MES does not run short of funds to meet their contractual obligation for the works contracted and at the same time there is no blockage of KVS funds with the MES.

2. It was further decided that :-

a) As soon as Administrative Approval of a project is issued by the Ministry of Education they will guarantee funds required for the said work. At the same time an initial deposit of Rs. 5 to 10 lakh i.e. 10% of the estimated cost will be deposited with the MES for preliminary survey, soil investigation etc.

b) The present procedure of furnishing line plan to the KVS before the issue of Administrative Approval will continue.

c) MES will review and indicate every quarter to the KVS the requirement of funds based on the quarterly progress of works. The projections should be made in a manner to ensure that adequate funds are available with the MES so that no contractual obligation of the MES will remain unfulfilled due to shortage of funds.

3. There is at present, delay in finalisation of accounts pertaining to KVS. Chief Engineers will ensure that these accounts are finalised at the earliest and refund if any given to the KVS. KVS will project to E-in-C's Branch cases where there has been delay in finalisation of accounts, at an early date.

4. These instruction will come in force immediately so that the KVS works do not suffer for lack of funds.

Sd/
(SS Viridi)
Brig
DW (Army)
for E-in-C

Copy to:-

1. Ministry of Defence, D(W-II) for information wrt minutes of the meeting held on 18-1-85.
2. DFA. Jt. Secretary, Ministry of Education, Commissioner, KVS, New Delhi.

MES-(17)

**Physical and Financial Progress of Works for the
Month Ending**

1. **Name of Kendriya Vidyalaya** :
2. **Details of Work** :
3. **Amount of AA and ES** :
(KVS Ref No date)
4. **Contract amount(s) and date(s) of acceptance** :
5. **If contract(s) not concluded, likely date of conclusion of contract(s)** :
6. **If work has commenced, date of commencement** :
7. **Stipulated Date of Completion (SDC)** :
8. **Physical progress of work (%)** :
 - 8.1 **Building work** : (Tick appropriate stage of work along with physical progress of work done in % and give remarks, if any).
 - i) Foundation work in progress :
 - ii) Foundation work completed/super structure under progress.
 - iii) Super structure work completed/roofing work under progress.
 - iv) Roofing work completed/fittings & finishing in progress.
 - 8.2 **Internal services**
 - i) Under progress
 - ii) Completed but testing not done
 - iii) Completed and tested
 - 8.3 **External services**
 - i) Under progress
 - ii) Completed but testing not done
 - iii) Completed and tested
 - 8.4 **Any other item of work not covered above**
 - 8.5 **Overall Physical Progress (%)**

9. Fund flow status

| | |
|---|-----|
| 9.1 Total amount released by KVS | Rs. |
| 9.2 Amount actually deposited by the Vidyalaya | Rs. |
| 9.3 Expenditure incurred | Rs. |
| 9.4 Unpaid liability in hand | Rs. |
| 9.5 Total financial liability at present (9.3+9.4) | Rs. |

10. Anticipated expenditure for the next quarter based on present pace of work.

11. Target Date of Completion (TDC)

12. Completion and handing over :-

12.1 Date of completion.

12.2 Date of handing/taking over.

13. If the work has not started so far or stopped reasons thereof

Place :

Date : **(Garrison Engineer)**
Signature

It is certified that the amount shown against Sr. No 9.3 above has been transferred to Head 'Land and Building' by reducing the balance under 'Deposit with the construction agency'

(Principal)
Signature with date

N.B. : This report as on last day of the month be sent by GE direct to K.V.S. Headquarters so as to reach by 10th of next month. One copy be given to Vidyalaya for completing the certificate above and despatch to KVS by the principal concerned .

Physical and Financial Status of the Projects for the Quarter Ending**1. Details of Project**

- 1.1 Name of K.V.
- 1.2 Details of Work
- 1.3 Amount of AA &ES
- 1.4 KVS Sanction No & Date
- 1.5 Amount of Financial Concurrence
- 1.6 Date of Acceptance of Tender(s)
- 1.7 Date of Commencement
- 1.8 Stipulated Date of Completion
- 1.9 Target Date of Completion
- 1.10 Overall Physical Progress(%)

2. Status of Expenditure/Liability

- 2.1 Contract(s) concluded : Rs.
- 2.2 Contract(s) yet to be concluded : Rs
- 2.3 Amount for difference in cost of : Rs.
stores.
- 2.4 Amount for items free for fixing : Rs.
- 2.5 Deviation Orders till date : Rs.

3. Fund Flow Status

- 3.1 Funds released by KVS : Rs.
- 3.2 Funds deposited by Vidyalaya : Rs.
- 3.3 Expenditure incurred upto date : Rs.
- 3.4 Liability in hand :
a) Stores : Rs.
b) Contractors Bills : Rs.
c) Others : Rs.
- 3.5 Total expenditure including liability
i.e. (3.3+3.4) : Rs.
- 3.6 Shortfall (i.e. 3.5 - 3.2) : Rs.(-)

**4. Requirements of funds for the :
next quarter based on the present
pace of work**

Chief Engineer
Zone
(Address)

**QUARTERLY PROGRESS REPORT OF CONTINUING
MAJOR WORKS FOR QUARTER ENDING :**

CE _____ Zone

| Ser No | Name of KV | Description of work : Type of Building, No of Qtrs, Addl Class Room etc. | Amount of AA&ES & Date (Rs. in lacs) | Amount Released by KVS (Rs. in lacs) | Date of Start/Probable date of Start | Stipulated date of Completion |
|--------|------------|---|---|--|--|----------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | | | | | | |

MES- (21)

| Expenditure Incurred | Unpaid Liability in hand | Total Liability (8 + 9) | Physical Progress in % | | Target date of Completion | Remarks/detailed reasons for slippage, if any |
|-------------------------|-----------------------------|----------------------------|------------------------|-----------------------|------------------------------|---|
| | | | In Previous Qtr | During Present Qtr | | |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | | | | | | |

COMPLETION REPORT

01. Name of Work :
02. Amount of AA & ES and Date :
03. Date of Commencement :
04. Date of Completion :
05. Date of expiry of defect liability period :

- (a) Certified that the above work has been completed in all respects as per the sanctioned scope and specifications laid down.
- (b) The handing/taking over note is enclosed.
- (c) Sub-standard/defective work as and when pointed out by K.V./K.V.S. authorities, shall be rectified by us during the defect liability period.

Station :

(Garrison Engineer)

Signature

Date :

Address

FINAL EXPENDITURE STATEMENT
(FOR SETTLEMENT OF ACCOUNT)

1. Name of Vidyalaya :
2. Name of works :
3. AA & ES Amount :
4. KVS Sanction number and date :
5. Total amount deposited by KVS :
6. Final expenditure incurred :
7. Completion cost :
8. Date of final bill :
9. Savings (+)/Excess (-) :
10. If savings, details of DD/Cheque No. vide which
unspent balance sent to KVS :
11. In case of excess :
- a) Within 10% of AA & ES - attach proper
justification for increase in cost itemwise,
deviations, if any, escalation in terms of
contract etc. (A detailed statement of case
be enclosed).
- b) Beyond 10% of AA & ES - attach proper
revised estimate based on completion cost
with full statement of case duly recommended
by CE's Zone and also send one copy of the
same to E-in-C's Branch for scrutiny.

Certified that :-

- a) The work(s) have been completed satisfactorily as per the scope of the estimate/sanction and MES specifications.
- b) Final expenditure is as per completion cost (final bill settled/audited).
- c) All defects pointed out by Monitoring/Inspection Committee have been rectified.

Verified by UA (GE)

(Garrison Engineer)

Signature

Address

Status:

Date :

Countersigned
Principal K.V. _____

MES (-23-)