

SALWAN PUBLIC SCHOOL

Mayur Vihar, Phase-III, Delhi 110096 Tel. No.: 011-35007670 +91 8130307680

Invites pre-qualification applications from reputed and experienced contractors along with profile of the firm, types of projects executed, with cost, in last three years and details of ongoing project, for the execution of the work mentioned below:

Work:

Construction of Approach Road from main gate to main building "Using concrete interlocking paver blocks".

Cost of tender document: Rs.1,000/-

Estimated Cost:

Rs.10.00 Lakhs

Completion Period:

30 Days

EMD:

10,000/- (Rs Ten Thousand only)

For detailed conditions visit the website: www.spsmayurvihar.com
Online applications should be sent within 7 days of publication of the advertisement.

Director Salwan Public School

SALWAN PUBLIC SCHOOL

MAYUR VIHAR, PHASE-III, DELHI-96

TENDER DOCUMENT

FOR

Special Repair to Approach Road from Main Gate to Main Building of Salwan Public School, Mayur Vihar, Ph-III, Delhi-110096

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Notice Inviting Tender

Ref.:	Date:
То	
The Bidder / Tenderer	
	

SUBJECT: SPECIAL REPAIR TO APPROACH ROAD FROM MAIN GATE TO MAIN BUILDING IN SALWAN PUBLIC SCHOOL, MAYUR VIHAR, PHASE – III, DELHI

Dear Sir,

1. Sealed bids are invited by Salwan Public School, Mayur Vihar, Phase — III from the financially sound and technically capable bidder/tenderer to undertake the under mentioned work:-

Name of the Work	Estimated cost put to tender	Cost of tender document	EMD	Completion Period
Special repair to Approach Road from main gate to main building at Salwan Public School, Mayur Vihar, Phase - III	Rs 10.0 Lakhs	Rs 1,000/-	Rs. 10,000/- (Rs Ten thousand only) in the form of DD / RTGS / NEFT in the name of Salwan Public School, Mayur Vihar payable at Delhi	30 Days

Note:

- 1. EMD shall be submitted at the time of submission of tender.
- 2. Cost of Tender is NIL, in case bidder downloads the bid document, prints, binds and submits the bid.

Signature of SPS Mayur Vihar Representative with date

Signature of Bidder or his Authorised Representative with date

INSTRUCTIONS TO BIDDERS

1. Brief Scope of Work. The work involves carrying out Special Repairs to Approach Road from Main Gate to Main Building of Salwan Public School, Mayur Vihar, Phase-III, Delhi -110 096. The existing road is bituminous macadam road requiring repairs and relaying of surface. The selected mode of special repairs is to carry out slope corrections wherever required, filling of undulations by concrete, providing surface and sub-surface drainage, repairs or replacement to side drains, repairs or replacement of kerbstones and matching the final road surface using the M-40 Interlocking Concrete Paver Blocks, with the existing road surface in front of the , Junior Block of SPS MV as per Items specified in the Schedule, Conditions of the Contract, Specifications, complete with drainage, surface and subsurface, rain water disposal drainage, while adhering to local Municipal Laws/authorities, Govt Guidelines / Regulations on safety, labour welfare, pollution control, direction from Health & Sanitation Departments.

2. TIME LINES.

Dates & Time For		Date and Time
Date of NIT & publishing of Instructions to Tenderers, on website	:	10 th Apr 2024 from 3:00 PM onwards.
Last date of Applications for Tenders to be received by SPS, Mayur Vihar	:	17 th Apr 2024 up to 3:00PM.
Tender Document publishing date on Web site.	•	11 th Apr 2024, from 3:00 PM onwards
Tender Document download Start Date	:	11 th Apr 2024, from 4:00 PM onwards
Pre Bidding Meeting (if required by bidders)	:	22 nd April 2024 at 02:00 PM at Site
Bid Submission Date	:	29 th April 2024 Up to 02:30 PM
Date & Time of Opening of Bid		Will be intimated

3. The rates quoted by the contractor in Item Rate Schedules shall be based on Schedule Items of Work, specifications/technical specifications, contract conditions forming part of the tender. The rates will remain firm during the entire duration of the contract. The tenderer shall submit the schedule amount duly signed with date and stamp. The rates quoted by the Bidder/Tenderer should be expressed accurately both in words and figures. GST component shall be extra as per Govt. guidelines.

4. <u>Eligibility Criteria</u>. The tenderer must fulfil the criteria mentioned below and submit the documents in support of the following: -

4.1 Financial.

- 4.1.1 Average Financial Turnover. The bidder/tenderer should have had the average annual financial turnover of Rs. 50 lakhs, on construction works during the immediate last five years ending 31st March, 2023. (Scanned copy of Certificate from Charted Accountant with unique document identification number (UDIN) to be uploaded). The value of annual turnover figures shall be brought to current value by enhancing the actual turnover figures at simple rate of 7% per annum. Year in which no turnover is known would also be considered for working out the average.
- 4.1.2 The bidder/tenderer should not have been barred / blacklisted by the Central Government/State Government, or any entity controlled by it, from participating in any tender, and if the bar subsists as on the Bid Due Date, such bidder would not be eligible to submit the BID.
- 4.1.3 At the time of uploading of bid, the bidder/tenderer shall have also to upload Scanned copy of an affidavit on Non-Judicial Stamp paper of Rs.10/- as under: "I/We undertake and confirm that the subject work of "Special Repairs to, Approaching Road at Salwan Public School, Mayur Vihar, Phase III, Delhi shall not be got executed through another contractor on back-to-back basis. Further that, if such a violation comes to the notice of SPS, Mayur Vihar then I/we shall be debarred for bidding in future forever. Also, if such a violation comes to the notice of SPS, Mayur Vihar before date of start of work, the SPS Mayur Vihar authorities shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee."

4.2 **Technical.**

- 4.2.1 The tenderer should have experience of having successfully executed similar works of value at least Rupees 20 lakhs during the last 06 years ending last day of month previous to one in which tender is invited.
- 4.2.2 Similar Work: Similar work means laying of roads / paths / area or repair maintenance of roads/paths/area with Inter Locking Concrete Paver Blocks.

Note:-

- (1) Salwan Public School, Mayur Vihar reserves the right to verify the works in execution or executed in past by the bidder to ascertain quality and post construction issues.
- (2) Qualified similar works shall be physically inspected by the SPS Mayur Vihar authorities to ascertain the completion, performance on quality of works for finalizing the technical bids.

- (3) The certified value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum (without compounding); calculated from the date of completion to previous day of last date of submission of tenders.
- 4.2.3 The bidder shall disclose Legal Cases / Arbitration pending where the firm or its partners, as a partner or individually are parties or Directors including M.D. is party for and on behalf of Company or individually. The affidavit to this effect will be made on non-judicial paper of appropriate value.

5. **GENERAL.**

- 5.1 Legal status of the firm indicating registration details, partnership deed, power of attorney in case of partnership firm, affidavit in case of proprietorship firm, memorandum and article of association in case of company.
- 5.2 Certified I.T. return for the last 02 (two) years and copy of PAN Card.
- 5.3 Audited Balance Sheet and P/L Statement for last 03 (three) Years.
- 5.4 GST Registration
- 5.5 List of Technical Personnel along with their Qualification & Experience.
- 5.6 Copies of Award Letter / Contract / Work Orders / Purchase Order.
- 5.7 Completion certificate along with performance Certificate and payment certified true copy or any other document evidencing value of completed value of work to be submitted, giving name of work, value of works, completion period etc. The Salwan Public school, Mayur Vihar reserves the right to verify the submitted documents with original at any stage.
- 5.8 Whether the bidder / tenderer is registered with any Govt (Central / State / PSU). If so, then the registration number along with the relevant details shall be submitted.
- 6. Incase of partnership firm, the tender shall be signed by the all partners who shall sign his own name and give the name and address of each partner of the firm and attach a copy of the Power of Attorney with the tender. In case of tender submitted by a company, it shall be signed by its Managing Director or a duly authorized person and shall bear official seal of the company with a resolution authorizing Managing Director to enter into and sign the contract on behalf of the company.
- 7. The bidder/tenderers shall examine carefully the entire tender documents. All costs, charges and connection with preparation of this tender shall be borne by the bidder and the SPS, Mayur Vihar shall not accept any liability / claim whatsoever in this regard.

- 8. The Bidder/Tenderer, at his own responsibility, risk and expense shall visit and examine the site of works, its surroundings and obtain all information that may be necessary for preparing the Bid, before quoting the rates and entering into a contract for the successful execution of the work. No claim on account of any peculiarities of the site conditions, levels, access to the site, space available and the available infrastructure around the site of work or due to any kind of restrictions shall be entertained. Ignorance of site conditions or local information shall not be considered as an excuse for non-performance of the contract. This work shall be executed in existing running / operational school complex and safety of school premises and children is of prime concern. No let out on this account shall be acceptable. Working days and timings may be restricted as per Govt. Guidelines & the timings imposed by school authority. The bidder/tenderer has to erect barricading and take all such further steps including deputing guards to keep the school premises / children for safety and for pollution control.
- 9. During quoting and filling of the rates, bidders must:-
- 9.1 The bidder / contractor shall work out the rates on the basis of specifications specified in Schedules, specifications and CPWD specifications, IRC specifications and fill in against each quoted item, thus the amount drawn and totalled.
- 9.2 Details of the work to be carried out by the contractor are given in the Items of Work i.e. Schedules, specifications and description. Bidders must note that the quantities may vary to any extent and the quoted rates shall remain same irrespective of the quantity of work to be executed.
- 9.3 Bidder's rates in Schedule 'A' shall be deemed to have included for full and entire completion of all works as described herein before and in accordance with good engineering practice and recognized principles.
- 9.4 Bidders shall duly attest all corrections in the tender. Corrections if not attested, may entail rejection of the tender. Tender documents including the drawings, must be submitted along with the tender duly signed on each page. No additions or alterations shall be made in the Drawings, Specifications, Terms and Conditions of Contract and the Tender by the Tenderer and, if made, such Tender is liable to be rejected. Conditional and / or incomplete tender shall be rejected.
- 10. The tender shall remain valid for acceptance for a period of 60 (sixty) days from the date of opening of tender or extended to an unlimited period of time mutually agreed.
- 11. Bidder/tenderers should submit/upload the entire tender document duly signed along with all corrigenda / addendums, if any, published later on, as it is downloaded from the Portal.

12. Salwan Public School, Mayur Vihar reserves the right to: -

- 12.1 Accept or reject any or all the applications/tenders received, at its own discretion, without assigning any reasons whatsoever and the right of accepting whole or part of any tender. Tenders, in which additional conditions have been put forth by the Bidders, shall be summarily rejected.
- 12.2 Postpone/change/cancel the mentioned date, modify the terms and conditions, include new terms and conditions, split and distribute the work amongst more than one agency etc. in the interest of the Project, without assigning any reasons whatsoever.
- 12.3 Ask for further Clarifications / verification etc. anytime, as and when required during the process.
- 12.4 Be at liberty to cancel the Advertisement against the above Notice, anytime without assigning any reason whatsoever.
- 12.5 Right to negotiate and / or reject any or all tenders without assigning any reasons thereof are held reserved by the SPS, Mayur Vihar. All correspondence & negotiations between the parties shall form part of the agreement.

13. **General Guidance.**

- 13.1 Evaluation of tender shall be done on the basis of the hard copies of technical document and the original hard copies of EMD & Cost of Tender as indicated in the NIT. The bidder will also submit the copies of the above documents. However, the Committee will evaluate the technical documents submitted by the due date and time, submitted in a sealed separate envelope titled "Name of Work, and due Date/Time of Submission of Hard copies", to the Tender Inviting Authority/SPS, Mayur Vihar.
- 13.2 The Bidders are requested to deposit Earnest Money (EMD) in form of RTGS / Demand Draft from Nationalized /Scheduled bank, issued in favour of:-

Salwan Public School, Kondli Gharouli Complex, Mayur Vihar, Phase – III, Delhi 110 096

Bank Name : Canara Bank

Branch: Mayur Vihar, Phase-III, Delhi-110096

Account No : 91872140000109

IFSC Code : CNRB0019187

13.3 Tenders not accompanied by Earnest Money are liable to be rejected. The Earnest Money of the unsuccessful Tenderer shall be returned without any interest within 30 days from the date of award of the contract to the successful bidder. The Earnest Money of the successful Tenderer shall be retained towards the Security Deposit.

- 14. Tender submitted along with all requisite documents shall be evaluated by the Technical Committee at its sole discretion of Salwan Public School, Mayur Vihar. If the Bidder/Tenderer gives wrong information in his Tender or creates circumstances for the acceptance of his Tender, the SPS, Mayur Vihar reserves the right to reject such Tender at any stage.
- 15. During scrutiny / issue of Work Order, if it comes to the notice of SPS Mayur Vihar that the credential or any other Papers Found incorrect / manufactured / fabricated, that Bidder/Tenderer will not be allowed to participate in the Tender and the offer will be rejected without any prejudice & no correspondence in this regard shall be entertained. Before issuance of the work order, the SPS Mayur Vihar may verify the credential, other Documents and the works executed. After verification, if it is found that such information / documents submitted is either manufactured or false, in that case, work order will not be issued in favour of the Bidder/Tenderer and EMD shall be forfeited.
- 16. The bidder, whose tender has been accepted shall within ten days of the intimation of acceptance of the tender, hand over to the Director of SPS Mayur Vihar, the Stamp paper of the required value for entering into agreement. Bidder failure to comply with these conditions within the time shall give right to the Owner to revoke acceptance of the tender and forfeit his earnest money, without any further notice to the bidder.
- 17. After acceptance of tender, the successful Bidder shall sign the Contract within ten days from the date of award letter. In case of delay, when the successful bidder does not commence the work on the date mentioned in the award letter for commencement of work, the earnest money shall be forfeited and his bid will be cancelled. In such event SPS Mayur Vihar may negotiate with any of the other Tenderers and award the work.
- 18. Security Deposit shall be deducted at the rate of 5% of the value of work done in RA and final bill. Initial deposit of Earnest Money will form part of the Security Deposit. The security deposit will only be released, without interest, after defect liability period. The Security Deposit will be refunded/returned without interest, after completion of Defect Liability Period of Twelve (12) months.

19. Deleted

20. The Bidder shall be wholly & solely responsible for site & stores safety, to observe all the laws, rules & regulations / guidelines including Building Bye – laws and conditions laid down by MCD, Local Civil Authorities, NGT for pollution Control, Labour Laws, Labour Welfare Laws, Mosquito Control, the Central Govt., Laws / guidelines for safety at construction sites and other administrative authorities. Bidder/Tenderer shall be liable to pay all taxes, royalties, licenses, damages, penalties or any other expenditure of any types arising in respect of execution of the work rates quoted deemed to have been included in the tender.

- 21. The Bidder shall take valid license in his favour under the provisions of the Contract Labour (Regulation and Abolition) Act 1970 before starting the work and nothing shall be paid extra on this account.
- 22. A pre-bid meeting shall be conducted at site with the bidders, owner, Engineer-incharge, Chief Engineer SET or any officials as may be considered necessary. Any clarification in respect of this tender may be obtained from School Engineer (Tel No 98105 60773/ Chief Engineer, SET (94915 34140).
- 23. Desirous bidders may download the detailed Tender Documents from the School's Website at given link i.e. The Tender i.e. https://www.spsmayurvihar.com The duly filled tender along with the prescribed Earnest Money Deposit should be submitted to Salwan Public School, Mayur Vihar on or before time lines mentioned at Paragraph 2 above.
- 24. Applicants may regularly check school website for any further details / corrigendum's etc. All Correspondences and negotiations between the parties shall form part of the agreement.

Director

Salwan Public School Mayur Vihar, Phase – III Delhi – 110 096

TENDER FORM

To

The Director,
Salwan Public School,
Mayur Vihar, Phase-III
Delhi

SUBJECT: SPECIAL REPAIR TO APPROACH ROAD FROM MAIN GATE TO MAIN BUILDING AT SALWAN PUBLIC SCHOOL, MAYUR VIHAR, PHASE-III, DELHI: 110 096

Dear Sir,

I / We do hereby submit my / our bid as detailed in the enclosed schedule for the execution of the work specified hereinafter within the time specified as three months, at the estimated cost specified therein and in accordance, in all respects, with the specifications, design, drawings and instructions supplied by you, which I / we have read very carefully.

(a) Name of the work : Special Repair to Approach Road from Main

Gate to Main Building at Salwan Public School, Mayur Vihar, Phase-III, Delhi

(b) Estimated cost put to tender : Rs. 10.0 Lakhs (approx.)

(c) Earnest Money : Rs 10,000/- in form of NEFT / RTGS / DD

only.

(d) Time for completion : 30 Days

I / we hereby distinctly and expressly declare and acknowledge that before the submission of my / our Tender, I / we have carefully followed the Notice Inviting Tender, Conditions of Contract, Specifications and Drawings and clearly understood all the Conditions of Contract. I / we have also seen the location where the said work is to be executed, carefully noted down the site conditions, constraints of site and working conditions and made such investigations of the work required in regard to the material required to furnish as to enable me / us to complete the work successfully.

Signature of SPS Mayur Vihar Representative with date

Signature of Bidder or his Authorised Representative with date

I / we enclose herewith a Demand Draft No	for Rs/- duly certified
from bank as good for payment as earnest money, wh interest.	nich shall not bear any amount of
Should this tender be accepted in whole or in part, I / we and the Terms and Conditions annexed hereto. If I / v commence the work, I / we understand that the earl forfeited to Salwan Public School, Mayur Vihar. Other retained without interest as Security Deposit as described we also agree to the Security Deposit being deducted fro the Conditions of contract. I / we agree to keep the offer Opening of Tender. I / we also agree to pay Performant Instructions to Bidders.	ve fail to sign the Agreement and nest money shall stand absolutely wise the earnest money shall be in the Conditions of the Contract. I m my / our bills in accordance with open for 90 days from the Date of
	Yours faithfully,
Place:	Signature
Dated:	Name & Address

SCHEDULE OF FISCAL ASPECTS

1. Earnest Money Deposit : Rs 10,000/- (Rupees ten thousand only)

2. Security Deposit : Shall be deducted @ 5% of the value of Work done

in Running Account & Final bill. Initial deposit of Earnest Money will form a part of the Security Deposit. This Security Deposit of 5% will be released, without interest, after Defect Liability

period.

3. Date of Commencement : 10th day from the date of letter of award of

Contract or from handing over of site.

4. Period for completion of work : 30 days from the date of commencement.

5. (i) Liquidated damages for : @ 2% of the contract value for every delay

subjected to maximum of 10% of the contract

value

(ii) Incentive for early

delay/ Non completion of work

completion work

@ 0.50% of the contract value for every fortnight of early completion subject to maximum of 2% of The

contract value

6. Water & Electricity Charges : 0.25% towards water supply and 0.25% in

electricity.

7. Minimum value of work /

frequency for raising running bill

Minimum 3 lakhs / after 15 days of work.

8. Period for honouring interim

bills

2 weeks. However pending verification of bill, adhoc payment up to 50% of work done may be made within seven working days or so, provided measurements have been checked and recorded by Site Engineer / Engineer-in-Charge before the bill is

submitted, purely in the interest of the work.

9. Period for honouring final bill

certificate

90 days

10. Defect liability period : 12 months after completion

11. T.D.S./Works contract : Statutory deductions towards T.D.S. / Labour

Welfare Cess or any other tax as applicable, shall be made from each and every payment as per the

prevailing rules of the Govt. or local authorities.

12. Secured Advance : NIL

ARTICLE OF AGREEMENT

Signature of SPS Mayur Vihar Representative with date

Signature of Bidder or his Authorised Representative with date THIS AGREEMENT is made at Mayur Vihar, Phase – III, Delhi on XXXX APRIL 2024

(For special Repair to Approach Road from Main Gate to Main Building at

Salwan Public School, Mayur Vihar, Phase-III, Delhi)

BETWEEN

A. Salwan Public School, Kondli Gharouli Complex, Mayur Vihar, Phase – III, Delhi acting through its authorised signatory the Director (hereinafter referred to as the **"Owner" or SPS Mayur Vihar,** which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns of the **"FIRST PART"**

AND

B. M/s XXXXXXXXX Contactor, Office at 00000 Floor, 000000 Road, Gurugram-122001, GSTIN No 00000000000000000, having its registered office at xxxxxxxxxxxxxxx, New Delhi-110 001 through its authorized signatory Mr AAAAAAAAAAAA (hereinafter referred to as "Contractor") which expression shall, unless repugnant to the context or meaning thereof, include its successors and administrators of the "SECOND PART".

WHEREAS, SPS, Mayur Vihar is desirous of **carrying out** Special Repair of Approach Road from Main Gate to Main Building at "Salwan Public School, Mayur Vihar, Phase – III, Delhi" as per Terms and Conditions of the Agreement, Items of Works specified in schedule, Specifications, Contract Drawings and as per Good Engineering Practices to be executed under the guidance of Engineer-in-Charge deputed by the Owner.

AND WHEREAS in order to enter into contract, the Notice Inviting Tender (NIT) was published in newspapers on ______, for Repair and Re- Development of Approach Road from Main Gate to Main Building at Salwan Public School, Mayur Vihar. Tender was issued on XXXX Mar 2024. Site has been visited, Tender Notice, Instructions to Bidders, Tender Form, Conditions of the Contract, Specifications and drawings have been carefully studied by the tenderer/contractor and signed by the tender/contractor and subsequently the rates of items have been quoted duly signed by or on behalf of the tenderer.

AND WHEREAS, the bids of all bidders were opened on XXXX April 2024. The quote of M/s XXXXXXXXX for Rs X,XX,00,000.00 (Rs XXXX Crores XXXXX Lakhs) was the lowest. Consequent thereto, the bid documents were placed before a committee duly constituted by the School / Trust for making recommendation on the merits of the bids submitted.

AND WHEREAS, the Trust/School Authorities/Committee after perusal of the bid documents, recommended the award of the contract to M/s XXXXXXXXX, whose bid is the lowest (Rs XXXXXXXX Lakhs) and who has means to execute the assignment.

Pursuant to the recommendations, a Letter of Intent dated XXX March 2024 was issued to M/s XXXXXXXXXXXXXXXXX, who accepted the same unequivocally and agreed to execute the works shown in the said drawings, described in the said schedules and specifications, and as per the said submitted / agreed priced bid (all together hereinafter referred to as the "Conditions"), and as set out in the contract and terms and conditions forth here-in-after.

AND WHEREAS, the contractor has agreed to deposit the Security Deposit (5%) of Running Account Bill to be deducted from each Running Account Bill, which shall be released, without interest, after Defect Liability Period, subject to satisfactory performance of building without complaints/defects.

NOW THIS AGREEMENT WITNESSETH AND IT IS HEREBY AGREED AND DECLARED AS FOLLOWS:

- 1. In this agreement words and expression shall have the same meaning as are respectively assigned to them in the conditions of contract hereinafter referred to.
- 2. The following documents shall be deemed to form and be read and construed as part and parcel of this agreement viz.
 - (a) The Tender Document comprising Tender Notice, Instruction to Bidders, Tender Form, Items of Work as specified in the schedules, Article of Agreement, Conditions of the Contract, Brief Specifications of the Work, Appendices, and Amendment No XX dated XX AAAA 2024 to the tender document.
 - (b) Letter No NIL from the Contractor dated XX AAA 2024, in response to the Tender Enquiry.
 - (c) Letter of Intent (LOI) and its acceptance thereof.
 - (d) All the correspondence/proceeding of meetings till finalization of work.

- (e) Letter of acceptance from Contractor dated xx April 2024.
- (f) Letter dated
- 3. The scope of work shall be to carry out Special Repairs to Approach Road from Main Gate to Main Building at Salwan Public School, Mayur Vihar, involving as per the Items of Work specified in the Schedules, Conditions of the Contract, Specifications complete with rain water disposal, drainage while adhering to local Municipal Laws/authorities, Govt Guidelines / Regulations on and with safety, labour welfare, pollution control, direction from Health & Sanitation Departments.
- 4. The Contractor has satisfied himself as to the nature of the site, inspected / visited the site before tendering, assessed the local facilities as well as access to site, quantum of work and all matters affecting the entire execution and completion of the works.
- 5. In consideration of the payments to be made to the Contractor for the work to be executed by him, the Contractor hereby covenants with the Owner that the Contractor shall and will duly provide, execute and complete the said works as per Terms & Conditions of the Contract, perform all other acts and things in the Contract mentioned or described or which are to be implied there from or may be reasonable, necessary for the completion of the said works and at the times and in the time bound manner subject to the terms and conditions or stipulations mentioned in the Agreement.
- 6. In consideration of the due provision, execution and completion of the said works, the OWNER does hereby agree to pay to the Contractor for the work actually done by the contractor as per the actual measurement of the work done as accepted by the OWNER and CONTRACTOR as per the provisions of the Contract.

7. THE CONTRACTOR FURTHER UNDERTAKES THAT:-

- (a) The work shall be completed well within stipulated time of 45 months and to the best of quality as per terms and conditions set forth in the Contract Documents. As per good / standard engineer best practices.
- (b) The contractor has fully read and understood all the terms and conditions of Tender/Contract Documents.
- (c) That the Contractor shall work in close liaison / co-ordination with other agencies working at the site and nothing extra / damages shall be paid / payable on account of damage / delay / non-performance of any external agency.
- (d) The Contractor shall be wholly & solely responsible to observe all the laws, rules regulations including Building Bye laws and conditions laid down by Municipal Corporation of Delhi (MCD) and other Local Civil Authorities, or the Central Govt. and other public authorities; and that the Contractor shall be liable to pay all types of taxes, octroi, sales tax, royalties, licenses, damages, penalties of all types arising in respect of execution of the work.

- (e) The Contractor shall take adequate protective measures to ensure that the excavation operations or any construction work do not damage the structure of the School property. Contractor shall ensure adequate protection measures, safe and correct order of construction.
- (f) The Contractor shall be responsible for Terms and Conditions of services of the labour and other staff employed / engaged / deputed at site as per rules applicable in the State including pay & allowances, salaries, wages, C.P.F., Insurance, compensation and medical facilities etc. The Contractor shall take valid license in his favour under the provisions of the Contract Labour (Regulation and Abolition) Act 1970 before commencing the work. He shall not be paid any extra amount on any account.
- (g) It shall be the risk and sole liability of the Contractor for injury, mishap caused, if any, to any person at the works site including Civil / Criminal liability, if any; and that the OWNER shall not in any way be responsible or liable.
- (h) The Contractor shall indemnify and protect the OWNER and his employees or agents from any losses, claims, demands, payments, suits, actions, recoveries and judgments of every nature and description brought or recovered against him by reason of any act or omission by the said Contractor, his agents or employees in execution of the work, in guarding of it, and / or by any reason of alleged patent infringements.
- (i) Any material or workmanship not approved by the Engineer-in-Charge / Authorized Representative of the OWNER or would be removed from the Site within 48 hours and work re-done to the satisfaction of Engineer-in-charge failing which the Owner may get the same removed and rectification carried out at the cost & risk of the Contractor.
- 8. The Contractor hereby covenants, and agrees with SPS Mayur Vihar for Special Repair to Approach Road from Main Gate to Main Building at Salwan Public School, Mayur Vihar and perform the works in conformity with the Contract Conditions in all respects and subject to all terms and conditions/rules as mentioned in the aforesaid documents which shall form part and parcel of this agreement.
- 9. In case of any dispute or difference arising during the progress of the work in relation to meaning or interpretation of the Agreement, the authorised official of the Salwan Public School, Mayur Vihar and the Contractor will address the disputes / differences for mutual resolution and failing which the matter shall be referred to the Sole Arbitrator appointed mutually by both the Parties. The provisions of the Arbitration and Conciliation Act, 1996 will be applicable to the arbitration proceedings. The venue of the arbitration shall be at Delhi. The cost of the Arbitration proceedings shall be shared equally by both the parties. The decision / award of the arbitrator shall be final and binding.

The provisions made in this contract have been carefully read and fully understood by me, the undersigned.

In witness whereof, Salwan Public School, Mayur Vihar, Phase - III and the Contractor hereunto have respectively signed on the day and year first above written.

PART - 1: CONDITIONS OF CONTRACT

1. <u>INTERPRETATIONS</u>.

In construing these conditions, the Specifications, the Schedule and the contract agreement, the following words shall have the meanings herein assigned to them except where the subject or context otherwise require.

(a) Owner : Shall mean SALWAN PUBLIC SCHOOL, MAYUR VIHAR

represented by DIRECTOR and shall include his (their) legal

representative, assigns and successors.

(b) Engineer-in-Charge : Shall mean the Engineer appointed by the Owner for

supervision of the construction and special repairs of the Approaching Road from Main Gate to Main Building, issue on the spot directions / instruction, both oral as well as in writing to the contractor, keeping proper measurement books, verification of interim bill/final bill claims that may

be submitted by the contractor from time to time.

(c) Architect : <u>NIL</u>

> (individual, firm or company), whether incorporated or not undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company or the successors of such firm or company and the permitted assignees of such individual,

firm or company.

(e) Work : Shall mean all the details of work to be carried out as

specified in the Schedule. The works to be executed in accordance with the Contract and its Terms and Conditions or part thereof as the case may be and shall include all extra, additional, altered or substituted items as required for the purpose of the Contract for satisfactory completion of the structure to make it functional well for purposes for

which it is intended.

(f) Site : Shall mean the site of Approach Road from Main Gate to

Main Building at Salwan Public School, Mayur Vihar and any other land adjoining thereto inclusively as aforesaid allotted

by the Owner for the work.

Signature of SPS Mayur Vihar Representative with date

Signature of Bidder or his Authorised Representative with date (g) Contract

Shall mean Notice Inviting Tender, Tender Form, Instructions to Bidders, Letter of Intent, Letter of acceptance by the tenderer, Contract Agreement, Items of Work specified in Schedules, Notes to the Schedules, Conditions of the Contract, Specifications of the Work, List of Makes / Brand of Material and any other document specifically mentioned in the correspondence.

(h) Notice in writing

Shall mean a notice in written, typed or printed or characters sent, communication by email (unless delivered personally or "Written Notice" otherwise proved to have been received) by registered post addressed to the registered office of the addressee/email address furnished by the tenderer/contractor and shall be deemed to have been received when in the ordinary course of post it could have been delivered.

(j) Completion

: Shall mean that the work, in the opinion of the Engineer-in-Charge, is fit for use.

(k) Chief Engineer

: Chief Engineer of Salwan Education Trust (SET)

(I) B.I.S. or I.S.I.

: The terms B.I.S. and / or I.S.I. shall mean Indian Standard Specifications as issued by the Bureau of Indian Standards / Indian Standard Institution, current on the date of submission of the tender.

(m) Words

: Words imparting persons include firms and corporations. Words imparting the singular only also include the plural. Words imparting the male also include the female and vice versa where the context so requires.

2. **SCOPE OF CONTRACT.**

- 2.1 The scope of work shall be to carry out Special Repairs to Approach Road from Main Gate to Main Building at Salwan Public School, Mayur Vihar, as per Items specified in the Schedule, Conditions of the Contract, Specifications, Drawings complete with drainage while adhering to local Municipal Laws/authorities, Govt Guidelines / Regulations on safety, labour welfare, pollution control, direction from Health & Sanitation Departments.
- 2.1.1 To carry out and complete the said work in every respect in accordance with the Terms and Conditions of the contract and with the directions of and to the satisfaction of the Owner/Engineer-in-Charge/Owner.

Signature of SPS Mayur Vihar Representative with date

Signature of Bidder or his Authorised Representative with date

- 2.2 The Contractor's work shall include:-
- 2.2.1 Supply of all labour, equipment, material, machinery, tools, plants, electric generator, transportation, scaffolding, safety equipment, water treatment, etc. and everything else necessary and required by law or local authorities MCD including any directions / orders of NGT or Pollution Control Board and in the full and entire execution and completion of the works and shall unless otherwise stated, include waste on materials, carriage and cartage, carrying of empties, hoisting, setting, fitting and fixing in position, commissioning, testing and all other labour necessary in and for the full and entire execution and completion of aforesaid work in accordance with the Contract, conditions of the contract, specifications, drawings, good engineering practice and recognized engineering principles.
- 2.3 The Contractor shall be fully responsible and liable for everything and all matters in connection with or arising out of or being a result consequence of his carrying out or omitting to carry out any part of the Work.
- 2.4 Where any parts of the Work is executed by Sub Contractors, the responsibly and liability of the Contractor shall cover and extend to the work of all such Sub Contractors.
- 2.5 The Owner may in his absolute discretion from time to time issue drawings and/or written instruction, details, direction and explanations which are hereafter collectively referred to as "the Owner's Instructions" in regards to:
- 2.5.1 The variation or modification or clarifications of the design, quality of works or the additions or omissions or substitution of any work.
- 2.5.2 The removal from the site of any materials brought thereon by the Contractor and substitution of other materials therefore.
- 2.5.3 The removal and/or re-execution of any works executed by the Contractor.
- 2.5.4 The dismissal from the works of any persons thereupon.
- 2.5.5 The opening up for inspection of any work covered up.
- 2.5.6 The amending and making good of any defects.

3. **RATES.**

- 3.1 The Contractor has satisfied himself as to the nature of the site, inspected / visited the site / neighbourhood, soil conditions, traffic, storage space, assessed the local facilities as well as access to site and all matters affecting the entire execution and completion of the works.
- 3.2 Item rate quoted by the contractor in the Schedules shall remain firm till the completion of all construction and issue of final certificate of completion under this Contract. No Escalation or increase in rates shall be allowed during the period / extended period of construction.
- 3.3 The Item rate quoted in the tender/schedules shall include all charges for safety, security of site and all construction processes before and during execution, maintenance

throughout the construction period, scaffolding, centering, materials, water and electricity charges, temporary masonry pillars, site markings, setting out, grid lines, levels, plumbing, transport, labour and supervision, construction of temporary stores, site office, barricading, building fencing, watch & ward, lighting sites making, and clearing of site, water curing for all relevant items of work, hire charges of any / all tools and plants required for the construction including generator etc.

- 3.4 The rates quoted by the Contractor are applicable for all heights/ levels / depths. The rate quoted shall include working in all conditions including in/under water, liquid mud, foul conditions etc. and shall also include bailing or pumping out water from the foundations, shoving, strutting to prevent collapse of earth excavated for pits or at any other place of construction collected from rains, or any other source whatsoever, at any time till the completion of work including all suspension period and delays whatsoever unless mentioned otherwise in Schedule. Surplus earth excavated after filling trenches and plinth etc. shall be disposed off by the contractor.
- 3.5 The contractor shall arrange at his own cost temporary electric connection or generator as required for timely execution of the work. The contractor shall also make arrangement at his own expense for construction water & potable water required by his workers. However, Contractor may approach local administrative / municipal authorities for grant of temporary water and electric connection, for which contractor shall pay the allotment, connection charges, royalty and clear dues timely. Incase, water and electricity are drawn from School, subject to availability, then charges of 0.25% towards water supply and 0.25% towards electricity supply shall be deduced by the School authorities.
- 3.6 The rates quoted in the schedule shall deemed to be full and inclusive of works including all costs and expenses which may be required for the execution of the work described together with either associated items such as general risks, liabilities and obligations, insurance, labour regulations, indemnity, maintenance and the like set forth or implied in the tender documents. On completion of work and if necessary, on completion of defects liability period as decided by the Owner, all such temporary buildings shall be cleared away by the contractor and the site reinstated and left clean and tidy.
- 3.7 The rate quoted are full and inclusive of works described in the Schedule, specifications and other documents including all costs and expenses which may be required for the execution of the work described together with either associated items such as general risks, liabilities and obligations, construction of temporary stores, building fencing, watch & ward, lighting, insurance, labour regulations, indemnity, maintenance and the like set forth or implied in the tender documents.
- 3.8 Any item explained in specifications or explained in schedule of quantities shall be complementary to each other and shall be deemed to be explained in totality. Even if certain things are mentioned in any one of these portions of the tender document and the Contractor

is liable to quote rates after studying all as one and no claim will be allowed for misunderstanding or misinterpretation of any item/term of this Contract.

4. **EMERGENCY WORKS.**

- 4.1 Emergency works mean any urgent measures which in the opinion of the Engineer-in-Charge, become necessary during the progress of the works to obviate any risk of accident or failure or which becomes necessary for security of or rectification to essential services during the Defect Liability Period.
- 4.2 If the emergency works arise which the Contractor is liable under the Contract to carry out at his own expense and if carried by the Owner, all expenses incurred shall be recoverable from the Contractor and if necessary, be set off against any sum payable to him under this Contract.

5. **ASSIGNMENT AND SUBLETTING.**

The whole of the works included in the Contract shall be executed by the Contractor and the Contractor shall not directly or indirectly transfer, assign or sublet the Contract or any part thereof or interest therein without the written consent of the Owner; but no undertaking shall relieve the Contractor from the full and entire responsibility of the Contract or from active superintendence of the works during their progress.

6. **MANDATORY REQUIREMENTS.**

- 6.1 The Contractor shall conform to the provisions of all Acts / Bye-Laws / Regulations of the Legislature / Administrative Authorities relating to the Works, Labour, Pollution, Safety at Works Site, water, electricity/electric etc.
- 6.2 The Contractor shall comply with all statutory regulations relating to the "work" including workmen compensation, minimum wages, Employees Provident Fund Act, ESI Act and Works Contract Act as applicable in State of Delhi in terms of payment and other rules as applicable to construction workers. The guidelines/SOPs/protocols issued from time to time for health, safety or for any public conveniences by Govt. of India/Govt. of Delhi to be followed at work site. The Contractor shall pay minimum wages to the labours'/workers as per the prevailing Minimum Wages Act, applicable in Haryana.
- 6.2.1 The Contractor shall during the progress of the work comply at his own expense with all the current rules and provision for the protection of health and sanitary arrangements and safety provisions for workers employed as required by the relevant provisions of law and shall at his own expense provide for all facilities in connection therewith.
- 6.3 In the event of any time or penalty imposed on the Owner by any authority relating to the works, the same shall be paid by the Contractor.

6.4 **Admission to Site.**

The Owner / Engineer-in- Charge and their representatives shall at all reasonable times have free access to the works and the Contractor shall give every necessary facility to the Owner/ Engineer-in- Charge or his representative for inspections and examination and test of the materials and workmanship as and when required.

7. **INDEMNITY OF OWNER.**

- 7.1 The Contractor shall at all times during the agreement and thereafter, indemnify and keep indemnified Salwan Public School, Mayur Vihar its officers, employees and representatives, from all or any claims, losses, demands, damages, etc., which the Owner, its officers, employees and representatives may or are likely to suffer by reason of acts, defaults, deeds, things, omissions and commissions committed by the Contractor or by its staff, employee, agent, permitted sub-contractor or representative while performing the terms, conditions and obligations under this agreement.
- 7.2 The Contractor shall indemnify the Owner against any action, or claim coming out of the construction and shall defend all actions arising from such claims and himself pay any damages, cost of all and every sort or other charges which may be payable in respect of any article or material or part thereof legally incurred in respect thereof and included in the Contract.
- 7.3 In case any permission is required to be taken for execution / construction of the staff residences under this agreement and there is a breach by the contractor, SPS, Mayur Vihar shall stand indemnified against all claims, charges, liability etc. as the responsibility and liability in respect thereof devolves / rests upon the contractor.
- 7.4 The Contractor shall indemnify the Owner against all claims, which may be made upon the Owner whether under the Workmen's Compensation Act, or under Common Law in respect of any employee of the Contractor.
- 7.5 The Contractor shall also be responsible for all injury to persons, animals or things, which may arise from the operation or neglect of him, or any of his employees. The Contractor shall indemnify the Owner and hold him harmless in respect of all and any expenses arising from any such injury of damage to persons, animals or things as aforesaid and also in respect of any claims made in respect of injury or damage under any Acts of Government or otherwise and also in respect of any Award of compensation damage consequent upon such claim.
- 7.6 The Owner shall be at liberty and is empowered to deduct the amount of any damage, compensation, costs, charges and expenses arising or occurring from or in respect of any such claim or damage from any sum or sums due or to become due to the Contractor for which the Owner will be the sole deciding authority.

8. **DATE OF COMMENCEMENT AND COMPLETION.**

8.1 The time allowed for completing the work under this Contract shall be the essence of the Contract and shall be strictly observed by the Contractor. The contract work / Project shall be completed within <u>45 days</u> from the date of handing over the site to the Contractor. The SPS, Mayur Vihar would extend all required support and inputs to help the Contractor to meet the project timelines. For delays which are directly attributable to the sole actions and / or scope of work of the Contractor, the Contractor shall be liable to pay penalty and/or liquidated damages as per the provisions of this Contract. The Contractor shall regularly in a time bound manner proceed with and complete the entire work on or before the `Date of Completion'.

8.2 Work Programme / Schedule.

The Contractor shall submit to the owner / Engineer-in- Charge complete work program enumerating the stages, as per Payment Yardstick, in the form of bar chart within 07 days from the date of award of the Contract. In case the progress is found slow, the owner reserves the right to impose suitable liquidated damage. The progress of work shall be reviewed every fortnight and ascertained if the recorded progress is in accordance with the time schedule submitted by the contractor & approved by the Owner.

8.3 <u>Certificate of Completion.</u>

- 8.31 Immediately after completion of works, the Contractor shall give notice thereof to the Owner.
- 8.32 The works shall be completed to the entire satisfaction of the Owner/Engineer-in-Charge.
- 8.33 The works shall not be considered as completed until the Engineer-in-Charge has certified in writing that the work has been accepted by the Owner. The defects liability period shall commence from the date mentioned as date of completion in this certificate.
- 8.34 The Owner shall also certify to the Contractor the stage of items or group of items or group of the works remaining defective / incomplete at the end of the defects liability period.

9. LIQUIDATED DAMAGES FOR DELAY IN COMPLETION

In event of delay for any reason whatsoever from the Contractor's side or if the Contractor fails to complete the works by the date stipulated in the Contract or within extended time under relevant clause and the Engineer-in- Charge certifies in writing that in his opinion the same ought to have been completed by the stated/extended date, the Owner shall have the right to impose a deduction named as "LIQUIDATED DAMAGES" @ 2% of the Contract amount for every week of delay subject to maximum of 10% of the contract value.

10. **INCENTIVE FOR EARLY COMPLETION.** @ 0.50% of the contract value for every fortnight of early completion subject to maximum of 2% of The contract value.

11. **CONTRACTOR'S SUPERVISION.**

- 11.1 The Contractor shall provide all necessary personal superintendence during the execution of the works, and as long thereafter as the Owner may consider it necessary until the expiration of the "Defects Liability Period". All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Owner / Engineer-in-charge, and the contractor shall, either himself be present to receive orders and instructions or have a responsible engineer / supervisor duly accredited in writing, present for that purpose.
- 11.2 Orders given to Contactor's engineer / supervisor / agent, nominated by the Contractor before or during commencement of work, shall be considered to have the same force as if they had been given to the Contractor himself.
- 11.3 The Contractor or his engineer / supervisor shall attend, when required, either at the office of the Owner or at the works site to receive instructions from Engineer-in-Charge.
- 11.4 <u>Site Safety and Security</u>. The Contractor shall make his own security arrangements to guard the site and his materials at his own expense. The security arrangements shall be adequate to maintain strict control on the movement of material, labour and maintaining good order and discipline.

12. **ENGINEER-IN-CHARGE'S / OWNER'S INSTRUCTIONS.**

- 12.1 The documents forming part of the Contract shall be taken as mutually explanatory of one another, detailed Drawings being followed in preference to small-scale drawings and figure dimensions in preference to scale drawings.
- 12.2 In case of discrepancy between schedule, the specification and of the drawings, the following order of precedence shall be observed:-
- 12.2.1 Schedules and Notes.
- 12.2.2 Specifications.
- 12.2.3 IRC: SP: 63-2018
- 12.2.4 CPWD / BIS specifications
- 12.2.5 Standard Engineering practice.
- 12.3 If there are varying or conflicting provisions made in any one document forming part of the Contract, the Owner in consultation with Engineer-in- Charge shall be the sole deciding authority with regard to the interpretation of the document and their decision in this respect shall be final and binding.
- 12.4 The drawings may require revisions at times to suit the requirements of the work, due to the availability of local material workmanship, site conditions or any other reason etc. Such changes shall be decided solely by the Owner and shall not entitle the Contractor to any extra

payment, claim or compensation other than executed and measured work, whether during the Contract period or during the extended period of contract.

12.5 The Owner/ Engineer-in-Charge may from time to time issue further drawings / written instructions, details, directions and explanation within the meaning of Contract agreement.

13. PROVISIONING OF MATERIALS AND ACCEPTANCE.

13.1 All construction materials and any material required for the successful completion of works shall be provisioned by the Contractor. All charges on account of transport, Octroi, terminal tax or sales tax and any other type of tax/duties etc on materials obtained for the work from any source shall be borne by the Contractor.

13.2 **Sample of Material.**

The Contractor shall, at his own cost and expense supply to the Owner / Engineer-in- Charge samples of materials proposed to be used in the works for approval before being used. Without the written consent of the Owner or Engineer-in- Charge or their representative, no material is to be used/incorporated in the work. The samples so approved, shall be retained for reference till completion of work.

13.3 **Testing of Materials.**

The Owner / Engineer-in- Charge shall be entitled to have tests carried out as specified in CPWD specifications; relevant IS code for any materials supplied by the Contractor and the Contractor shall provide at his expense all facilities, which the Owner may require. The cost of materials consumed in tests, cost of testing and transportation of samples to the approved laboratory, cost of testing shall be borne by the Contractor. The test results and lab report shall be submitted.

- 13.3.1 Testing to be carried out by reputed testing laboratory such as:
- (1) Sri Ram Institute of Industrial Research, 19, University of Delhi, New Delhi 110 007
- (2) National Council for Cement and Building materials, Ballabhgarh or as directed by Engineer-in- Charge.

13.4 **Rejection of Materials.**

The Owner shall have full power to reject/remove any or all the materials brought to site by the Contractor which are not brand new and are not in accordance with the Contract Specifications or do not conform in character or quality to sample approved by the Owner/Engineer-in-Charge.

14. ORDERS UNDER THE CONTRACT.

14.1 Owner shall have full powers to direct the Contractor without giving any reason to immediately cease to employ/dismiss / remove in connection with this Contract any agent, servant or employee whose continued employment in his opinion is undesirable.

14.2 If the Contractor after receipt of instructions from the Engineer-in-Charge/Owner requiring compliance, fails to comply within ten days with such further instructions, the Owner may employ and pay any other persons to execute any such works whatsoever that may be necessary to give effect there-to, and all costs incurred in connection therewith, shall be recoverable from the Contractor by the Owner as a debt or may be deducted by the Owner from any amount due or to become due to the Contractor.

15. **COMPENSATION.**

15.1 If it shall appear to the Owner / Engineer-in-charge, that any work has been executed with unsound, imperfect, or unskilful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on instructions from the Engineer-in-Charge specifying the work, materials or articles complained of, notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost.

In the event of the failing to do so within a period specified by the Engineer-in- Charge in his demand aforesaid, then the Engineer-in-Charge may reject the work outright without any payment and / or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge shall be final and binding on the contractor.

- 15.2 The Contractor is responsible and will ensure during the defect liability period that there are no undulations, breakages, defects in and any other related work carried out. The Contractor shall re-do the complete stage of work to the satisfaction of Engineer-in-Charge. If these defects are not rectified in time, then the Owner on Engineer-in-Charge's advice shall be at liberty to impose compensation equivalent to twice the cost of redoing the complete stage of work and recovery affected from amount due or that may become due to the Contractor.
- 15.3 The Contractor shall be accountable and responsible to compensate and pay damages to Salwan Public School, Mayur Vihar for any loss / damage / claim / liability, whatsoever, caused either directly or indirectly by the Contractor, its staff or agents which may arise either out of negligence, fraud, misrepresentation, misconduct or material breach of this contract.

16. **APPROVAL BY STAGES.**

The work shall be subject to examination and approval before any payment. The Contractor shall give reasonable notice in writing to the Engineer-in- Charge when each stage is ready. The Owner shall be entitled to appraise the quality and extents thereof the work executed / being executed by the Contractor. In the event of any dispute, the decision of the Owner thereon, shall be final and binding.

17. MEASUREMENT OF WORK/SUBMISSION OF BILLS/CERTIFICATE AND PAYMENT.

- 17.1 The contractor shall be paid by the Owner from time to time, by instalments under interim certificates on Running Account Bills, to be issued by the Engineer-in- Charge on account of the work executed, when in the opinion of the Engineer-in- Charge the work up to particular stage has been executed in full, subject to recovery of Statutory deduction and Security Deposit of such value mentioned. In case of any disagreement, the decision of the Owner in consultation with the Engineer-in- Charge & Owner shall be final and binding.
- 17.2 The intermediate payments under interim certificates to be issued by the Engineer-in-Charge shall be regarded as payments by way of advance against the final payment only.
- 17.3 No intermediate certificate of the Engineer-in- Charge shall itself be conclusive that any work or materials to which it relates to are in accordance with the terms of the Contract. Any certificate relating to work done measured or materials delivered may be modified or corrected by any subsequent interim or final certificate. The issuing of the certificate does not relieve the Contractor of his liability in respect of any defects.
- 17.4 On demand from Engineer-in- Charge/Owner regarding measurement of work or ascertaining quality of work, the Contractor shall render all assistance. The Contractor shall open up any hidden work or covered up work and make it good afterwards at his own expense when desired by the Engineer-in- Charge either to check/recheck it up for quality or workmanship or for checking the extent of work done.
- 17.5 All receipts for any payment made on account of this work must be signed by a person holding due power of attorney in this respect on behalf of the concerned party except when the party described is a limited company, in which case, the receipts must be signed in the name of the company by one of it's principal officers or by some other person having authority to give effectual receipt for the company.
- 17.6 All payments due under this Contract shall be made by means of a crossed Cheque/RTGS.
- 17.7 After the certified completion of the works, the Contractor shall submit to the Owner his "Final Bill" drawn in an approved manner on the basis of the "Measurement Books" certified by the E-in-Charge. The final bill shall include all extra/substituted items of work. The final bill shall be submitted by the Contractor in quadruplicate, within 45 days of physical completion of the works to the satisfaction of the Owner, for which no charges shall be allowed to the Contractor and the Contractor shall not make any claims after the submission of the final bill. No claim will be entertained after the receipt of the Final Bill. The Contractor shall be entitled to be paid the sum due on completion of work less all amount as mentioned below: -
- 17.7.1 All previous running accounts payments.
- 17.7.2 Cost of materials issued to the Contractor, if any.

- 17.7.3 Charges for water and electricity if supplied by the Owner.
- 17.7.4 Security Deposit.
- 17.7.5 Income tax or any other tax as per statutory obligation.
- 17.7.6 Any other deductions deemed necessary by the Owner for defects etc.
- 17.7.7 No charges shall be allowed to the Contractor on account of the preparation of the running bills and final bill.
- 17.7.8 Final Bill shall be paid until the Contractor has cleared the site at all the dues, if any to the satisfaction of the Engineer-in-charge and submitted clearance certificate from the Engineer-in-charge.
- 17.8 The Contractor shall be entitled for advance of 75% of the cost of concrete interlocking paving blocks only during the progress of work, which has been arranged by the Contractor.

18. **SECURITY DEPOSIT.**

- 18.1 Security deposit for due fulfilment of the Contract amounting to 5% of the gross value of the work done will be deducted from each payment made to the Contractor which will be retained till defects liability period of 12 months from the date of issue of completion certificate by the Engineer-in- Charge.
- 18.2 Security deposit mentioned above may be returned, without interest, by the Owner to the Contractor, after the expiry of the defect liability period, if there is nothing outstanding against the Contractor and provided that the works shall have been finally completed and all defects made good, according to the true intent and meaning before and also provided that there was no case of fraud, dishonesty or fraudulent concealment of fact relating to works or materials or any matter dealt with in the certificate and in case of all defects and insufficiencies in the work or material which a reasonable examination would not have disclosed and provided always that the Contractor shall have been paid the final bill and have rendered a "No Demand Certificate".

19. **DEFECTS LIABILITY.**

- 19.1 Defects liability period shall be twelve-calendar months after physical completion of the works as certified under relevant clause, except in case of following works:-
- 19.1.1 Works involving waterproofing in which case the liability of the Contractor shall be for the period of ten years in case of any seepage/leakage and the resultant damage caused by such defects. The Contractor will furnish guarantee bond on a non-judicial Stamp paper of Rs.100/- (Rupees hundred only), on completion of work of this stage, as per yardstick for payment.

- 19.2 Any defects in material or workmanship observed in the entire work within defect liability period shall be notified in writing/email by the Owner/ Engineer-in- Charge to the Contractor and shall be rectified by Contractor at his own cost and risk within time specified by Owner/ Engineer-in- Charge.
- 19.3 In case of default, the Owner may employ any other person to rectify or make good such defect. All expenses consequent thereon or incidental thereto shall be borne by the Contractor and shall be recoverable from him by the Owner and shall be deducted from any money due or may become due to the Contractor.

20. **CLAIM FOR EXTRA AMOUNT.**

- 20.1 The Contractor without specific written permission from the Owner shall not carry out any extra items/substituted items.
- 20.2 When any instruction or decision given at site involves an extra work or whereby the Contractor may plan to claim an extra amount, it shall be the responsibility of the Contractor to inform the Owner of the extra amount and get written authorization from the Owner before proceeding with the work involved. Any modification carried out for expediting or simplifying work at the request of the Contractor or his representatives shall not be taken as the basis for claiming an extra amount. If no such information is given by the Contractor in writing to the Owner such modification shall not be accepted as the basis for extra charge.

21. **DETERMINATION.**

21.1 The Owner may, without prejudice to any other right or remedy which shall have occurred or shall occur thereafter to the Owner, cancel the Contract in any of the following cases: -

If the Contractor:

- 21.1.1 Assigns, transfers or sub-lets any portion of the works without the prior written approval of the Owner, or
- 21.1.3 Major defaults in commencing the work within a reasonable time from the date of the handing over of the site, and continues in that state after reasonable notice from the Engineer-in- Charge, or
- 21.1.4 At any time, whether before the completion date or during the extended date for completion makes defaults in proceedings with the works, with the diligence and continues in that state after reasonable notice for the Engineer-in- Charge/Owner, or
- 21.1.5 Fails to comply with any of the terms and conditions of the Contract, or after reasonable notice in writing, with directions properly issued there under, or if contractor stops the work for 3 weeks continuously, or

- 21.2 Whenever the Owner exercises his authority to cancel the Contract under this condition, he may complete the works by any means at the Contractor's risk and expense.
- 21.3 The Owner shall be at liberty to hold and retain in their hands materials, tools, plants equipment, machinery and stores of all kinds on site, as may think proper and may at any time sell any of the said materials, tools, plants equipment, machinery and stores and apply the proceeds of sale in or towards the realisation of any loss which may arise from cancellation of the Contract as aforesaid.
- 21.4 The Owner shall also be at liberty to use the materials, tools, plants equipment, machinery and other stores on site of the Contractor as they think proper in completing the work.

22. **FORECLOSING.**

If at any time after the commencement of the work, SPS, Mayur Vihar for any reason whatsoever does not require the whole or any part of the work as specified in the tender to be carried out, SPS, Mayur Vihar shall have the right to terminate this Agreement in case the Contractor fails to discharge its obligation under this agreement without sufficient grounds or found guilty for breach of condition(s) of the agreement, negligence, carelessness, inefficiency, fraud, mischief and misappropriation or any other type of misconduct by the Contractor or by its staff or agent. SPS, Mayur Vihar shall communicate the termination by giving a notice in writing to the Contractor, who shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the foreclosing of the works.

23. **SETTLEMENT OF DISPUTE.**

In case of any dispute or difference arising during the progress of or construction/execution of the work or after construction in relation to meaning or interpretation of the agreement, the authorised official of the Salwan Public school, Mayur Vihar and the Contractor will address the disputes / differences for mutual resolution and failing which the matter shall be referred to the Sole Arbitrator appointed mutually by both the Parties. The provisions of the Arbitration and Conciliation Act, 1996 will be applicable to the arbitration proceedings. The venue of the arbitration shall be at Delhi. The cost of the Arbitration proceedings shall be shared equally by both the parties. The decision / award of the arbitrator shall be final and binding.

24. **FORCE MAJEURE.**

Time shall be the essence of the contract in this regard subject however to 'Force Majeure'. For the purpose of this clause, 'Force Majeure' means an event beyond the control of the contractor and not involving the contractor's fault or negligence and not foreseeable. Such events may include, but are not restricted to major changes in the present building rules, act of God, earthquakes, tempest and flood, pandemic, epidemic. If a Force Majeure situation arises, the Contractor shall promptly notify the SPS, Mayur Vihar in writing of such conditions and the cause thereof. Unless otherwise directed by the SPS, Mayur Vihar in writing, the Contractor shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

SPECIAL CONDITIONS OF THE CONTRACT

1. <u>TIMELY COMPLETION</u>. Timely completion and progress shall remain the essence of this contract.

2. **INSURANCE.**

The contractor shall at the time of signing the contract, insure the works and keep them insured until the virtual completion of the contract against loss or damage by fire in joint names of the employer and contractor for the full amount of contract in default of the contractor insurance as provided above. The employer on his behalf may do so and may deduct the premium paid, from any become due, to the contractor.

3. **SPECIALIST'S JOB.**

If during the progress of the work the Engineer-in Charge/ Owner changes design so that in his opinion it becomes a specialist's job or the work is too special for the Contractor on account of lack of knowledge, equipment, the Client shall be free to have the same done by a specialist for a particular work and shall enter into direct contract with such a specialist without invalidating other condition of the Contract. The Contractor shall neither have any right to claim for such specialist work nor seek any compensation for reducing the scope of project work. The Client shall make adjustment in the overall contract value accordingly.

4. ACTION WHERE NO SPECIFICATION.

In the case of any item or class of work for which there is no specification mentioned, such work shall be carried out in accordance with the instruction and requirements of employer and Owner's decision in such case shall be final and binding on contractor.

5. **IMPORTANT STAGES OF WORK.**

(a)	Stage 1	Removal of Bituminous layer, scarifying from the existing surface and all related work of cleaning etc.
(b)	Stage 2	Excavation and preparation of surface.
(c)	Stage 3	Removal of kerb stones and laying / placing of edge restraints and kerb stones to the required level. Laying of brick work for drain channel and laying of pipes for cable crossings etc.
(d)	Stage 4	Laying of large sized aggregates recovered from Stage No. 02 and compacted to the required camber and level.
(d)	Stage 4	Laying of PCC Layer to the required camber and slope.
(e)	Stage 5	Laying and compaction of sand layer to the specified thickness.
(f)	Stage 6	Laying of interlocking blocks as specified and spreading of sand for joint filling.

TECHNICAL SPECIFICATIONS OF WORK

NAME OF WORK: SPECIAL REPAIR TO APPROACH ROAD FROM MAIN GATE TO MAIN BUILDING OF SALWAN PUBLIC SCHOOL, MAYUR VIHAR, PHASE-III, DELHI – 110 096

1. **INTRODUCTION.**

- 1.1 The work involves carrying out Special Repairs to Approach Road from main gate to main building of Salwan Public School, Mayur Vihar, Phase-III, Delhi -110 096. The existing road is bituminous macadam road requiring repairs and relaying of surface. The selected mode of special repairs is to carry out slope/camber corrections wherever required, filling of undulations by concrete, providing surface and sub surface drainage, repairs or replacement to side drains, repairs or replacement of kerbstones and matching the final road surface using the M-40 Interlocking Concrete Paver Blocks, with the existing road surface in front of the , Junior Block of SPS MV as per Items specified in the Schedule, Conditions of the Contract, Specifications, complete with drainage, surface and subsurface, rain water disposal drainage, while adhering to local Municipal Laws/authorities, Govt Guidelines / Regulations on safety, labour welfare, pollution control, direction from Health & Sanitation Departments.
- 1.2 The special repairs to the existing approach road involves preparation improvement/slope correction/repairs of subgrade, sub-base and base course layers by RCC, provision and improvement of edge restraints, laying of sand bedding, finally the laying of blocks and filling of joints. The block paving shall be done entirely by properly trained and specialised manual labour. Paving can also be done by mechanical means.
- 1.3 Any item explained in specifications or explained in schedule of quantities shall be complementary to each other and shall be deemed to be explained in totality. Even if certain things are mentioned in any one of these portions of the tender document and the Contractor is liable to quote rates after studying all as one and no claim will be allowed for misunderstanding or misinterpretation.

2.0 **EARTH WORK.**

- 2.1 Earth work in excavation in ordinary soil as existing for laying of drain etc. of required depth and width as per site laying of kerb stone including dressing of sides and ramming of bottom, lift as per depth required including getting out the excavated soil and disposal of excavated surplus soil/malba to Govt. approved sites, filling approved earth in trenches, plinth sides of foundations, etc. in layer consolidating each layer by ramming and watering etc. complete including for any incidental requirement for completion.
- 2.2 The Contractor shall take adequate protective measures to ensure that the excavation operations do not damage the adjoining structures or dislocate the services. Water supply pipes, sewerage-drainage pipes, manholes, power supply cables etc. met within the course of excavation shall be properly supported and adequately protected, so that these services

remain functional. Any service damaged during excavation shall be restored and made good by the contractor at his own expense, in an expeditious timeframe.

2.3 <u>Earth Work in Excavation and Maintaining Levels.</u>

- 2.3.1 All excavation operations manually or by mechanical means shall include excavation and 'getting out' the excavated materials and its dumping / depositing in the municipal approved dumping grounds. Proper levelling, compacting the earth / soil by ramming and watering shall be carried out.
- 2.3.2 During the excavation the natural drainage of the area shall be maintained. Where the soil is soft, loose or slushy, the width of steps shall be suitably increased, or sides sloped or the soil shored up. It shall be the responsibility of the contractor to ensure that the stability of the soil mass during excavation or during construction so that no (no) damage is done to the existing neighboring structures / buildings / work.
- 2.4 <u>Test Check of the Excavated Levels.</u> School Engineer shall exercise test check of levels at least to the extent of three spots (2 edges of the road and at one center camber of the road) at every meter interval to ensure conformity to the planned levels and will be recorded. Variations in the levels will be technically corrected by the contractor at his own cost.

3.0 MATERIAL, TESTING OF MATERIAL AND WORK.

- 3.1 The water proposed to be used in the manufacturer of mortar and concrete shall be got tested for its suitable as per IS: 3052 1986 / CPWD latest specifications.
- 3.2 The contractor shall provide at the site of work necessary equipment and apparatus for conducting routine test of grading of coarse and fine aggregates. Silt content, bulk age of sand, and slump test of concrete mixes.
- 3.3 The contractor shall arrange to get the other tests conducted from time to time from testing laboratory approved by the Employer to ensure that materials used on the works conform to the specifications. If after test of any materials, work or portions of work which are evaluated as defective or Unsound by the Owner / Employer / Engineer-in-Charge. The rejected samples and materials shall be removed from the site and the rejected items of work due to workmanship shall be pulled down and re-executed by the Contractor at his own cost to the satisfaction of the Owner / Employer / Engineer-In Charge.
- 3.4 It is the contractor's responsibility to take cubes as per CPWD specifications duly numbered serially and signed by the E-in-C or his representative, and get them tested at his own cost from the laboratory approved by the Employer. The strength and the dimensional accuracy checks of the paver blocks, incase paver blocks provided by Contractor, shall be the

responsibility of the Contractor. These tests shall be from the Testing Agency specified as below:-

SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

19, University Road, Delhi, 110007 (India)

Phone: +91-11- 35200445, +91-11- 35200499

Email: info@shriraminstitute.org

Fax: +91-11- 35200455

- 3.5 The cost of the sample including transportation cost to laboratory, cost of tests by the testing agency and all other Incidental charges and the testing charges shall be borne by the Contractor.
- 3.6 Frequency of tests: As per CPWD specifications. A logbook of test reports is to be kept properly.

4.0 CONSTRUCTION.

4.1 **Concrete**.

- 4.1.1 <u>PCC 1:3:6</u>. Providing and laying cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded stone of 12.5 mm 20 mmor 40 mm nominal size for filling of pot holes, slope correction as per site requirements) of thickness / depth minimum 100 mm and curing complete including the cost of form work, if any at locations as required on site.
- 4.1.2 Providing and laying PCC 1:3:6 of thickness 150 mm below any cross drainage structure in mix including addition of nominal re-enforcement to prevent cracking of slab wherever required.
- 4.1.3 <u>PCC 1:2:4.</u> Providing and laying cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone 20 mm nominal size) and curing complete including the cost of form work, if any, in areas like cross drain /or as specified by School Engineer.
- 4.1.4 The finished surface of the concrete base shall match the design profile of the concrete blocks within ±5 mm.
- 4.1.5 Compaction shall be done by normal roller preferably with vibratory roller. In restricted areas where normal rollers cannot operate, hand-held or plate vibrators should be employed.
- 4.1.6 Before placing the bedding layers, the surface of concrete should be cleared by sweeping.
- 4.1.7 The rates/amount for formwork/scaffolding for all elements of work in order to achieve completion of work shall be deemed to be included in the rates quoted.

- 4.1.8 Wet curing period of concrete including RCC shall be minimum of 10 days or its equivalent. Exposed surface of concrete shall be kept continuously in a damp or wet condition by ponding or by covering with a layer of sacking, canvas, hessian or similar materials and kept constantly wet from the date of placing concrete for atleast 10 days.
- 4.1.9 Quality control and acceptance criteria of concrete covering aspects of production of concrete, transportation, laying on site, compaction, curing, and removal of formwork and for provision /laying of reinforcements shall be as per CPWD specifications. After removal of formwork, the concrete shall also be inspected by Engineer-in-Charge for its quality and defects in form of bugholes, honey combing, voids etc. Only after approval of the Engineer-in-charge, the further progress shall be undertaken by the contractor.

4.2 Placing and Screeding of Bedding Sand.

4.2.1 The thickness of the sand bed after compaction shall be in the range of 30 ± 5 mm, whereas, in the loose form, it can be upto 50 mm. The 'compacted thickness of sand shall be restricted to 30 ± 5 mm to reduce the risk of any localized precompaction, which would affect the final block surface level. Bedding sand shall not be used to fill-up local depressions on the surface of a base or sub-base. The depressions shall be repaired in advance with PCC before placing sand.

Sand to be used shall be uniform in loose condition and should have a uniform moisture content. Best moisture content is that when sand is neither too wet nor too dry and have a value of 6 to 8 per cent. Requirement of sand for a day's work shall be prepared and stored

in advance and covered with tarpaulin or polythene sheets. The processed sand shall be spread with the help of screed boards to the required thickness. The screed boards are provided with nails at 2-3 m apart which when dragged shall be used gives the desired thickness. The length of nail should taken into account the surcharge to be provided in the uncompacted thickness. Alternatively, the screed can be dragged on edge strips kept on both sides as guide. The sand shall be subsequently compacted with plate vibrators weighing 0.6 tonnes or more. Level checks shall be carried out on a grid pattern to establish that the desired level is achieved. Local correction can be done either by removing or adding extra sand followed by levelling and compacting the layer. There will be some settlement of sand after the blocks are placed and compacted, which must be allowed for, while fixing the level of sand bed.

4.2.2 Bedding Sand Layer.

Proper attention shall be paid to the quality of bedding sand, thickens of the bedding sand layer to be uniform. Serious irregularities in surface profile can result otherwise in form of excessive differential deformation and rutting. Care should be taken to see that single-sized or gap graded sands or sands with excessive amount of fines or plastic fines should not be used. The shape of sand particles should

preferably be sharp rather than rounded, since the sharp sands possess higher strength and resist the migration of sand from under the blocks. The bedding sand should be free of deleterious materials.

4.2.2.1 The bedding sand layer shall be from either a single source or blended to achieve the following grading:

IS Sieve Size	Per cent Passing
9.52 mm	100
4.75 mm	95-100
2.36 mm	80-100
1.18 mm	50-95
600 micron	25-60
300 micron	10-30
150 micron	0-15
75 micron	0-10

Single sized, gap-graded sands or those containing an excessive amount of fines shall not be used. The sand particles should preferably be angular type. The bedding sand should be slightly moist, and the moisture content shall be about 6 per cent by weight.

- 4.2.2 Walking or driving on the finished surface of the bedding layer shall not be permitted.
- 4.2.2.1 It should contain not more than 3 per cent by weight of clay and silt and the materials shall be free from deleterious salts or contaminates.

4.3 Joint Filling.

4.3.1 The joint-filling sand should pass a 2.36 mm sieve and be well graded. The following grading shall be used:-

Sieve Size Per cent Passing

Sieve Size	Per cent Passing
2.36 mm	100
1.18 mm	90-100
600 micron	60-90
300 micron	30-60
150 micron	15-30
75 micron	0-10

- 4.3.2 The finished surface of the bedding layer shall match exactly the final design profile.
- 4.3.3 The use of cement in the joint-filling sand is not recommended as a general practice as the cemented sand is likely to crack into segments which are easily dislodged.

4.4 Laying: Concrete Paver Blocks.

4.4.1 Blocks shall be laid by manually labour but mechanical aids like hand-pushed trolleys can expedite the work. Laying shall commence from the edge strip and proceed towards the inner side. When dentated blocks are used, the laying done at two fronts will create problem for matching joints in the middle. Hence, as far as possible, laying shall proceed in one direction only, along the entire width of the area to be paved. While locating the starting line, the following should be considered: On a sloping site, start from the lowest point and proceed uphill on a continuous basis, to avoid downhill creep in incomplete areas.

Care must be taken to see that paving blocks are not tightly butted against each other, otherwise there could be non-uniformity in the laying patterns and the blocks may spall or even crack. Joint widths of 2 to 3 m shall be maintained if, when laying a paving unit, it is held lightly against the face of an adjacent laid unit and allowed to vertically slide into position.

- 4.4.2 Laying of the blocks shall be done, precisely at the indicated level and profile and in a way that a good surface draining to the gulley chambers is assured. Around gulley chambers and inspection pits the pavement shall have a level of 5 mm higher than the above mentioned elements.
- 4.4.3 The blocks shall be laid as tight as possible to each other. The maximum joint width shall be limited to 3 mm.
- 4.4.4 Laying of broken blocks is not allowed except along connections or edges. The maximum length of a purpose broken block is 100 mm. Breaking of the blocks shall be done with a "block splitter" or a mechanical saw.
- 4.4.5 Surface tolerance for finished surface shall be \pm 5 mm from the design level.
- 4.4.6 The surface tolerance for base course shall be in the range of 0 to +10 mm from nominated level and 10 mm deviation from a 3 m straight edge.

4.5 <u>Compaction.</u>

For compaction of the bedding sand and the blocks laid over it, vibratory plate compactors are used over the laid paving units; at least two passes of the vibratory plate compactor are needed. Such vibratory compaction should be continued till the top of each paving block is level with its adjacent blocks. It is not good practice to leave compaction till end of the day, as some blocks may move under construction traffic, resulting in the widening of joints and corner contact of blocks, which may cause spalling or cracking of blocks. There should be minimal delay in compaction after laying of the paving blocks to achieve uniformity of compaction and retention of the pattern of laying; however, compaction should not proceed closer than 1 m from the laying face, except after completion of the pavement.

During vibratory compaction of the laid blocks, some amount of bedding sand will work its way into the joints between them. The extent of sand getting worked up into the joints will depend on the degree of pre-compaction of sand and the force applied by the block compactor. Standard compactors may have a weight of about 90 kg, plate area of about 0.3 m2 and apply a centrifugal force of about 15 kN, while heavy duty compactors may weigh 300-600 kg, have a plate area of about 0.5-0.6 m2 and apply a centrifugal force of 30-65 kN. Where the bedding sand has been pre-compacted and for heavily trafficked block pavements, heavy duty compactors should be used. After compaction by vibratory plate compactors, some 2 to 6 passes of a vibratory roller (with rubber coated drums or those of static weight less than 4 tonnes and nominal amplitude of not more than 0.4 mm) will further help in compaction of bedding sand and joint filling.

4.6 **Joint filling.**

The importance of complete joint filling cannot be over-emphasised. Unfilled or partially filled joints allow blocks to deflect, leading to loose blocks, possibly spalling the edges and a locally disturbing bedding sand layer.

After the compaction of the bedding sand has been completed and some bedding sand has been forced up in the joints between blocks, the joints should be completely filled with sand meeting the desired specifications, as specified in paragraph 4.3 above. The joint filing sand should be stockpiled at suitable locations for convenience. There should be minimum delay in joint filling; the process should in any case, be completed by the end of the day's work.

The operation of joint filling comprises of spreading a thin layer of the joint filling sand on the block surface and working the sand into each joint by brooming. Following this, a few passes of heavy plate compactor are applied to facilitate fine sand to fill the joints. The sand should be broomed or spread over the surface with a small surcharge. Dry sand and dry blocks are best for the filling of joint, as damp sand tends to stick at the very top of the joints; also, if the block is wet and the sand dry, the sand will again stick at the joint top. Hence, if either the blocks or sand are wet, one may get a false impression of the joints being full, but the next rain will reveal that they are actually hollow. If the weather does not allow sand and blocks to be dry, the joint filling sand should be washed in by light sprinkling of water. In this case, several cycles of application of sand, water-sprinkling and plate compaction will be necessary to completely fill the joints.

4.6.1 Fine angular sand as per specification shall be brushed into the joints, and thereafter compaction shall be done with a vibrating plate compactor on a clean surface. After compaction, again fine angular sand shall be brushed into the joints.

4.7 Opening to Traffic.

Until all the joints are completely filled, no traffic should be permitted over the block pavement. In case of lime or cement treated layers in the pavement, it must be ensured that these are given at least 14 and 7 days respectively to cure, before traffic is permitted. The block pavement should be inspected frequently, to ensure that any incompletely filled joints, exposed by traffic and/or weather are promptly filled. Such frequent inspection should be continued till dust and detritus from the roadway tightens the surface of the joints.

4.8 **Brick Masonry Work.**

- 4.8.1 Brick work shall be carried out as required on site with coarse sand. Coarse sand refers to crushed stone sand of approved quality.
- 4.8.2 In hot and dry weather, the mortar is likely to dry up before it has attained its final set and may crumble. This shall be prevented by keeping the brickwork constantly wet for at least seven days.
- 4.8.3 Unless otherwise specified here-in-after the brick work in various situations shall be built in cement mortar 1:4.

4.9 Plaster on Brick Work / Masonry Work / Plaster on Internal & External Walls.

On all internal brick walls including soffit of ceilings, 12-20 mm thick plaster in cement mortar 1:4 (1 cement: 4 crushed stone sand of Zone III) shall be carried out. Crushed stone sand of Zone III shall be used to carry out external plaster. No Yamuna sand shall be used.

4.10. Pipes for Cable Crossings

4.10.1 PVC Pipes – Size 3 inch (75 mm), conforming to IS 13592 Pressure rating 6 Kg/sqmm with similar accessories shall be provided. Jointing shall be with matching PVC jointing compound of make as of pipes. Make of the PVC pipe: Prakash / Prince / Supreme.

5.0 **MEASUREMENT AND RECORD**

5.1 The contractors are bound to maintain measurement books for the quantity of steel and cement consumed and also for different items of works executed under this contract. The same will be periodically checked and signed by the E-in-C / owner and reconciled with the theoretical consumption of these materials and also for the physical execution of the work. The contractors are also bound to maintain the site levels for all the jobs where cutting is involved. The representatives of Employers & Contractors shall jointly sign the record so maintained.

LIST OF MAKES/ BRANDS OF MATERIAL

NAME OF WORK: SPECIAL REPAIR TO APPROACH ROAD FROM MAIN GATE TO MAIN BUILDING OF SALWAN PUBLIC SCHOOL, MAYUR VIHAR, Phase-III, Delhi – 110 096

Ser. No.	Item	Recommended Makes / Brands
1.	CEMENT	OPC / PPC: Ultra Tech OPC 43 Grade, OPC 43 grade make BIRLA OPC 43 grade, Ambuja OPC 43 grade, ACC OPC 43GRADE, JK Super Plus OPC 43 Grade
2.	Cement for plaster, masonry work	PPC 43 grade make BIRLA, Ambuja, ACC, Ultra Tech, Wonder Cement
3.	Structural Steel Reinforcements	TMT Reinforcement bars make TATA TISCON, JINDAL JSW Neo Steel (TMT), JINDAL PANTHER (TMT), SAIL / RNIL TMT BARS
4.	Binding Wire	TATA TISCON
5.	RMC	ACC / UltraTech / Lafarge
6.	Integral Liquid Water Proofing Compound	Saint Gobain Weber, FOSROC, SIKA, Dr FIXIT
7.	Superplasticizers	FOSROC
8.	Bricks	First Class
9.	Interlocking Tiles / Exterior Tiles, Pavers Block, Kerb Stone, Drain covers	UNISTONE, NTC, NITCO, KK, NIMCO, ACME, Surabh
10	Wall Putty	Weber Fine Coat, J&K White, Asian
11	Wall Primer	Asian, Nerolac, Berger
12	Cement Base Paint	ASIAN, BERGER, DURACEM, NEROLAC
13	Oil Bound Distemper	ASIAN PAINTS, NEROLAC PAINTS, BERGER PAINTS.

<u>Civil Works : Schedule "A"</u> <u>Schedule No 1 : Schedule of Quantitites</u>

Name of Work: Special Repair to Approach Road from Main Gate to Main Building of Salwan Public School, Mayur Vihar, Ph-III, Delhi-110 096

Ser No	Description of Item	Unit	Quantity	Rate (Rs) (Without GST)	Amount (Rs) (Without GST)
1	Earth work in surface excavation or roadside berm not exceeding 20 cm in depth(averaging) including dressing of sides and ramming of bottoms to the required slope and camber including getting out, and disposal of excavated earth upto 50 m as directed by Engineer-in-Charge in all kinds of soil	Sqm.	10		
2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains including dressing of sides and ramming of bottoms, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m in all kinds of soil.	Cum	6		
3	Providing and Laying Plain Cement concrete (PCC) 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm / 12.5 mm nominal size) in pavements for repair and making good, laid to required slope and camber in repairs averaging 50 mm, as required on site including compaction, finishing tamping complete. Note: Depth of concrete layer shall be measured from top of WBM stones.	Cum	2		
4	Providing and laying Brick work with common burnt clay F.P.S. (non modular) bricks of class-1 Bricks in foundation and plinth in Cement mortar 1:4 (1 cement : 4 coarse sand)	Cum	3.105		
5	Laying Brick work with common burnt clay F.P.S. (non modular) bricks of class-1 Bricks in foundation and plinth in Cement mortar 1:4 (1 cement : 4 coarse sand) Note: 1. Bricks recovered from Item Ser No 12 to be re-used. 2. Cost of cement mortar is deemed to be included in the quoted rates.	Cum	1		
6	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation Class-1 bricks in foundations, plinth, road side kerb and in chambers etc in Cement mortar 1:3 (1 cement : 3 coarse sand)	Sqm.	5		
7	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses, fencing, partitions, etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers, plates etc. complete. with solid plates, electric resistance or induction butt welded tubes all as per directions of Engineer-in-Charge.	Kgs	50.00		

8	Steel work welded in built up sections / framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required in gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	Kgs	150	
9	Cement Plaster in Coarse Sand in cement mortar mix 1:4 (1 cement: 4 coarse sand), 20 mm thick	Sqm.	20	
10	Neat cement punning	Sqm.	15	
11	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade of Two or more coats on new work as in MS gratings and steel work	Sqm.	11.25	
12	Demolishing brick work including plaster laid in Cement Mortar manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.	Cum	2.07	
13	Dismantling manually / by mechanical means the existing Water Bound Macadam Road with bituminous layer by averaging depth of 275 mm ± 25 mm, including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. Note: Item of work of scarifying as per Item Serial No 15 shall not be measured separately for this item of Work.	Sqm.	180	
14	Laying, spreading and compacting stone aggregate of specified sizes received from Item No 2 & 13, after cleaning screening etc, to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road/vibratory roller 8-10 tonne capacity/compacting manually using hand roller in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density over well compacted sub-base compacted and laid to slope and grade.	Cum	49.5	
15	Scarifying metalled (water-bound) existing road surface upto Water Bound Macadam stones averaging 30 mm including, including cleaning, sweeping and making surface ready to recive PCC concrete including disposal of rubbish, lead upto 50 m. Note: 1. Bituminous Premix shall be removed and cleaned, as per directions of Engineer in Charge. 2. The area to be cleaned and removed to be marked before execution for approval of engineer in charge.	Sqm.	450	

16	Providing and laying in position cement concrete of specified grade 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) excluding the cost of centering and shuttering - As in patch repairs and as per site requirements all as directed by Engineer-in-Charge	Cum	33.75	
17	Providing, laying and making kerb channel having width as per site and averaging 50 mm thick with cement concrete 1:3:6 (1 cement: 3 coarse sand:6 graded stone aggregate 20 mm / 12.5 mm nominal size) over 75mm bed of stone ballast from Item No 2 & 13, well rammed and consolidated and grouted with fine sand, including finishing the top smooth etc. complete and as per direction of Engineer-in-charge. Note: 1. The rates quoted are for concrete 1:3:6 and for making he kerb channel only. 2. The laying, spreading and consolidation of stone ballast 75 mm thick will be measured under item No 14.	Sqm.	18	
18	Providing and laying 80mm thick <u>factory</u> made cement concrete interlocking paver block of M-40 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, in required colour and pattern, laid over and including 30 ± 5mm thick compacted bed of coarse sand , filling the joints with fine sand etc. all as per Technical Specification of work, all complete as per the direction of IRC 63:2018 and of Engineer-in-charge. Note : 1. Colour and pattern shall be approved by School authorities. 2. On both the edges along the road, one meter each side interlocking paver blocks to be of red colour.	Sqm.	850	
19	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, including any Cement Concrete 1:3:6 and brickwork underneath to maintain level and support, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge. Note: Length of finished kerb edging shall be measured for payment. (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	Cum	2.025	
20	Taking out existing kerb stones of all types from footpath / roadside / kerb, including removal of mortar etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material as per direction of Engineer-in-Charge.	RM	70	

21	Taking out existing CC interlocking paver blocks from footpath / road, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	Sqm.	2	
22	Laying cement concrete interlocking paver blocks of any design / shape laid in required line, level, curvature, colour and pattern over and including 30 ± 5mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all as per Technical Specification of work, all complete as per the direction of IRC 63:2018 and of Engineer-incharge. Note: 1. Colour and pattern to be laid shall be approved by School authorities. 2. On both the edges along the road, one meter each side interlocking paver blocks to be of red colour. 3. Sand for bedding, compaction, sand for joints etc shall be the responsibility of the contractor and rates are deemed to be included in the quoted rates. 4. Interlocking paver blocks shall be provided by school authorities.	Sqm.	935	
23	Laying at or near ground level old kerb stones of all types in position to the required line, level and curvature, including any Cement Concrete 1:3:6 and brickwork underneath to maintain level and support, jointed with cement mortar 1:3 (1 cement : 3 coarse sand), including making joints with or without grooves (thickness of joints, except at sharp curve, shall not be more than 5 mm), including making drainage opening wherever required etc. complete as per direction of Engineer-in-charge. Note: 1. Length of finished kerb edging shall be measured for payment. 2. The old kerb stones shall be as recovered / to be utilised from Item Ser No 20. 3. Cost of cement concrete, brick, mortar and material for making joints etc shall be deemed to be included in the quoted rates.	RM	55	
24	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 1000 x 450 x 50 mm, reinforced with 8 mm dia four nos longitudinal & 9 nos cross sectional T.M.T. hoop bars, including providing 50 mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50 mm x 1.6 mm complete, all as per direction of Engineer-in-charge.	Each	9	

25	Providing and laying PVC pipe diameter 75 mm of grade pressure 6 Kg / sqcm nominal, complete with trenchings, bedding, haunching including necessary fittings laid acroos the road for drainage and cables, as, refilling & testing of joints complete as per direction of Engineer in Charge.	RM	30	
26	Disposal of building rubbish / malba / similar unserviceable, dismantled or construction waste materials or excavated earth by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-incharge, beyond 50 m initial lead, for all leads including all lifts involved. Note: Measurement will be on Trolley Loads. Capacity of each Trolley not to be less than 90 cu ft	No of Trolley Load	10.0	
	Total (Rs)			-
	Total (Rupees in words)			
	Summary of Cost (Rupees in Words)			