



REQUEST FOR PROPOSAL (RFP)

for

Selection of Agency for Execution of Underground Optical Fiber Cable at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

Ref. No- APSFL/BD/415/2020/UGOFC, Dated: 17/02/2021

Andhra Pradesh State FiberNet Limited

NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station,
Vijayawada – 520 013

Web address: www.apsfl.in

Email address: apsfl@ap.gov.in

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Disclaimer

The information contained in this Request for Proposal document (“**RFP**” or “**Tender**”) including any information subsequently provided to the bidders, (“**bidder/s**”) verbally or in documentary form by Andhra Pradesh State FiberNet Ltd. (APSFL) or any of its employees or advisors, shall at all times be subject to the terms and conditions set out in this Tender document (as may be amended only by APSFL from time to time).

This RFP is not an agreement and is not an offer to any party. The purpose of this RFP is to provide the bidders or any other person with information to formulate their offers (“**Bid**”). This RFP includes statements, which reflect various assumptions and assessments arrived at by APSFL in relation to this scope. This Tender document does not purport to contain all the information each bidder may require. This Tender document may not be appropriate for all persons, and it is not possible for the Managing Director, APSFL and their employees or advisors to consider the objectives, technical expertise and particular needs of each bidder. The assumptions, assessments, statements and information contained herein are made considering the intended objectives of the project, and may not be complete, accurate or adequate. Each bidder must therefore conduct their own analysis of the information contained in this RFP and seek professional advice from appropriate sources.

Information provided in this Tender document to the bidder is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. APSFL accepts no responsibility for the accuracy or otherwise for any interpretation of opinion on law expressed herein.

APSFL, their employees and advisors make no representation or warranty and shall incur no liability to any person, including the bidder under law, statute, rules or regulations or tort, the principles of restitution or unjust enrichment or otherwise for any loss, cost, expense or damage which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, reliability or completeness of the RFP, and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in the selection process as part of this RFP.

APSFL also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any bidder upon the statements contained in this RFP. APSFL may in its absolute discretion, but without being under any obligation to do so, can amend or supplement the information in this RFP.

The issue of this tender document does not imply that APSFL is bound to select a bidder or to appoint the selected bidder (as defined hereinafter), for supporting implementation of the project. APSFL reserves the right to reject all or any of the bidders or Bids without assigning any reason whatsoever.

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The bidder shall bear all the costs associated with or relating to the preparation and submission of Bid pertaining to this RFP including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations, which may be required by. All such costs and expenses will remain with the bidder and APSFL shall not be liable in any manner whatsoever for the same, regardless of the conduct or outcome of the selection process.

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Acronyms

S. No.	Abbreviations	Full Form
1	APSFL	Andhra Pradesh State FiberNet Limited
2	ABD	As-Build Diagram
3	BOQ	Bill of Quantity
4	GIS	Geographic Information System
5	LOA	Letter of Award
6	RFP	Request for Proposal
7	NIT	Notice Inviting Tender
8	DIT	Duct Integrity Test
9	UATP	User Acceptance Test Report
10	UG OFC	Under Ground Optical Fiber Cable
11	PBH	Prime Business Hours (9:00 AM to 9:00 PM)
12	EBH	Extended Business Hours (9:00 PM to 9:00 AM)
13	IBD	In-Build Diagram
14	CCM	Cement Concrete Mixture(CCM)

1. Introduction

1.1 Invitation to Bid

Andhra Pradesh State Fiber Net Limited (APSFL), a fully owned entity of the Govt. of Andhra Pradesh (AP), having its Registered Office at 3rd Floor, NTR Administrative Block, Pandit Nehru Bus Station, NH-65, Vijayawada-520001, Andhra Pradesh, India, invites responses ("Proposals"/"Bids") to this Request for Proposal ("RFP") for "Selection of Agency for execution of Underground Optical Fiber at selected locations of Government offices / Institutions / Organizations on Rate Contract".

The selected agency has to support APSFL in smooth execution of the project across the state of AP, which includes delivery and installation of components related to underground laying of optical fiber in Cities, Towns Categorized under R & B, NHAI, Municipal Corporation, Smart Cities Authority based on the Location and route.

Interested bidders are advised to study this RFP carefully before submitting the proposals in response to the RFP. Submission of a proposal in response to this RFP shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.

Interested bidders may download the RFP from www.apecurement.gov.in. Any subsequent corrigenda/clarifications shall also be made available on the same portal. Bid proposals must be received not later than time and date mentioned in the key events and dates. Bid proposals received, in part or full, after the deadline WILL NOT be considered in this procurement process.

To obtain first-hand information on the assignment, Bidders are encouraged to attend a pre-bid meeting. Attending the pre-bid meeting is optional.

1.2 Procedure for Bid Submission

The Bidder shall submit their response through bid submission process on e-Procurement platform at www.apecurement.gov.in.

The bidders shall submit their Pre-Qualification Bid and Commercial bid online in e-Procurement portal. The bidders shall upload the scanned copies of all the relevant certificates, documents etc., in support of their Pre-Qualification, and other certificates/documents with clear readability, in the e-Procurement website. The bidder should sign on all the statements, documents, certificates uploaded in the e-Procurement website, owning responsibility for their correctness/authenticity.

13 Registration with e-Procurement platform

For registration and online bid submission bidders may contact HELP DESK on www.apecurement.gov.in or <https://tender.apecurement.gov.in> .

1.3.1 Digital Certificate Authentication

The bidders shall authenticate the bid with the agency's Digital Certificate for submitting the bid electronically on e-Procurement platform and the bids that are not authenticated by digital certificate of the bidder, will not be accepted on the e-Procurement platform.

For obtaining Digital Signature Certificate, you may please contact: Andhra Pradesh Technology Services Limited, Vijayawada www.aps.gov.in/
(OR)

You may please contact any Registration Authorities of Certifying Authorities in India. The list of CAs is available in the link provided below.

<https://tender.apecurement.gov.in/DigitalCertificate/signature.html>

1.3.2 Deactivation of Bidders

Vide Ref GOMs.No.174-I&CAD dated 1-9-2008, if any successful bidder fails to submit the original BG towards Performance

Security within stipulated time or if any variation is noticed in the uploaded documents, the successful bidder will be suspended from participating in the RFPs on e-Procurement platform for a period of 3 years. The e-Procurement system would deactivate the user ID of such defaulting bidder based on the trigger/recommendation by the RFP Inviting Authority in the system. Besides this, APSFL shall invoke all processes of law including criminal prosecution of such defaulting bidder as an act of extreme deterrence to avoid delays in the RFP process for execution of the development scheme taken up by the government. Other conditions as per RFP document are applicable.

a. Payment of Transaction Fee

It is mandatory for all the participant bidders from 1st January 2006 to electronically pay a prescribed non-refundable Transaction fee to M/s. APTS, the service provider through "Payment Gateway Service on E-Procurement platform". The Electronic Payment Gateway accepts all Master and Visa Credit Cards issued by any bank and Direct Debit facility/Net banking to facilitate the transaction. This is in compliance as per G.O.Ms.13 dated 07.05.2006.

b. Corpus Fund

As per GOMS No.4, user department shall collect 0.04% of ECV (Estimated Commercial Value) with a cap of Rs.10,000/- (Rupees ten thousand only) for all works with ECV up to Rs.50 Crores, and Rs.25,000/- (Rupees twenty five thousand only) for works with ECV above Rs.50 Crores, from successful bidders on e-Procurement platform before entering into agreement/issue of purchase orders, towards e-procurement fund in favour of Managing Director, APTS. There shall not be any charge towards e-Procurement fund in case of works, goods and services with ECV less than and up to Rs.10 lakhs.

c. RFP Document

The bidder is requested to download the RFP document and read all the terms and conditions mentioned in the RFP Document and seek clarification if any from the RFP inviting authority. Any offline bid submission clause in the RFP document could be neglected.

The bidder has to keep track of any changes by viewing the Addendum/Corrigenda issued by the RFP inviting authority from time-to-time in the e-Procurement platform. The Department calling for RFPs shall not be responsible for any claims/issues arising out of this.

d. Bid Submission Acknowledgement

The bidder shall complete all the processes and steps required for Bid submission. The system will generate an acknowledgement with a unique bid submission number after completing all the prescribed steps and processes by the bidder. Users may also note that the bids for which an acknowledgement is not generated by the e-procurement system are treated as invalid or not saved in the system. Such invalid bids are not made available to the RFP Inviting Authority for processing the bids. The Government of AP is not responsible for incomplete bid submission by users.

- i. The bidders may contact the Helpdesk support of e-procurement portal (at www.apecurement.gov.in) for any further information / clarifications on e-procurement, and for all technical support required for bid submission.

- ii. The bidders need to register on the electronic procurement marketplace of Government of Andhra Pradesh i.e., <http://www.apecurement.gov.in>. On registration in the e-procurement marketplace they will be provided with a user ID and password using which they can submit bids online.
- iii. While registering on the e-procurement market place, the bidders need to scan and upload the required documents as per the RFP requirements on to their profile. The e-procurement marketplace provides an online self-service registration facility to all such Contractors who are already registered with respective participating departments for supply of specified goods and services.
- iv. In addition to the direct payment through any of the e-payment options in the e-procurement portal, the bidder may opt for Demand Draft (DD) towards the bid processing fee and EMD in the form of Bank Guarantee (BG). The bidder shall invariably upload the scanned copies of DD/BG in e-Procurement system and this will be the primary requirement to consider the bid as responsive. The Authority shall carry out the Technical bid evaluation solely based on the uploaded certificates/documents, DD towards EMD in the e-procurement system and open the price bids of the eligible and responsive bidders.

14 Key Events & Dates

1.	Name of the Authority	Managing Director Andhra Pradesh State FiberNet Limited
2.	Name of the Assignment	Agency for laying of Under Ground Optical fiber Cable (Armoured) – 24Fusing HDD / Applicable methodology in selected locations for Implementation of Govt. Offices / Units
3.	Estimated value of the tender	INR 4,85,00,000/- (Rs. Four Crores Eighty Five Lakh only, including CapEx and OpEx for 3 years; exclusive of taxes)
4.	RFP Number	APSFL/BD/415/2020/UGOFC, Dated: 17/02/2021
5.	Place of availability of Tender Document (RFPs)	www.apecprocurement.gov.in http://apsfl.in/tenders/
6.	Place of submission of Bids	www.apecprocurement.gov.in
7.	Tender Document (RFP)	Request for Proposal Document
8.	Tender Type (Open/Limited/EOI/Auction/Single)	Open with Reverse Tender
9.	Tender Category (Services/Goods/works)	Works
10.	Type/Form of Contract (Work/Supply/Auction/Service/Buy /Empanelment/Sell)	Works
11.	Re-bid submission before submission date/ last date of submission allowed by the Bidder (Yes/No)	Yes
12.	Is Offline Submission Allowed (Yes/No)	No
13.	Withdrawal Allowed (Yes/No)	No
14.	Is Multi Currency Allowed	No (Only Indian Rupees)
15.	Last date and time for receiving queries/clarifications	19/02/2021 at 03:00 PM No communication, in any form and for any reason, will be entertained post this date and time.

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16.	Last date and time for submission of Proposal (Proposal Due Date)	25/02/2021 at 03:00 PM The proposal is to be submitted on www.apeprocurement.gov.in on e-procurement portal.
17.	Date and time of opening of Pre-qualification on e-procurement platform	25/02/2021 at 05:00 PM Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, NH -65, Vijayawada - 520001 Web address: http://www.apsfl.in Email address: apsfl@ap.gov.in
18.	Date and time of opening of reverse auction	To be intimated to the qualified bidder of the previous stage
19.	Bid Processing Fee (Non - refundable)	Bid Processing Fee (Non-refundable): INR 50,000/- (Fifty Thousand Rupees Only, including GST) The tender processing fees can be paid through any of the e-payment options in the portal or in the form of Demand Draft issued by one of the Nationalized / Scheduled Banks in India drawn in favour of 'Andhra Pradesh State FiberNet Limited', payable at Vijayawada. Original DD must be submitted in APSFL office at Vijayawada before bid submission date. For further details regarding e-payment, please refer to e-Procurement portal at the above mentioned website or call e-procurement helpline. Note: It will be in the interest of the bidders to familiarize themselves with the e-Procurement system to ensure smooth preparation and submission of the tender documents. Online payments of Bid Processing Fee & EMD and uploading of documents are sequential.

20.	Bid Security / EMD (Refundable / Convertible)	<p>Bid Security / EMD (Refundable / Convertible): INR 10,00,000/- (Ten Lakh Rupees Only)</p> <p>The EMD amount can be paid directly through any of the e-payment options in the portal or in the form of Bank Guarantee issued by one of the Nationalized / Scheduled Banks in India drawn in favour of 'Andhra Pradesh State FiberNet Limited', payable at Vijayawada.</p> <p>Note: e-Procurement portal will deny submission of the bid without submitting the EMD. For further details regarding e payment, please refer to e-Procurement portal at the above mentioned website. Bid Security / EMD should be valid for a period of 180 (one hundred and eighty) days from bid submission Date. The Bid Security / EMD will be refunded to unsuccessful Applicant agencies within 30 (Thirty) days of successful Bidder furnishing the performance security. Original BG must be submitted in APSFL office at Vijayawada before bid submission date.</p> <p>The EMD (bid security) of the unsuccessful Bidder/s will be discharged / returned as promptly as possible. No interest will be payable by APFSL on the amount of the EMD (Bid Security).</p>
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21.	Performance Security	<p>Performance Security of 10% of CAPEX for supply and installation on the total Project cost shall be submitted and valid for 60 days beyond the date of completion (including extension, if any) of supply, installation, and acceptance.</p> <p>Performance Security for O & M shall be 30% of the Total OPEX Cost of the Project and valid for 3 Years and 60 days from the Date of Commencement of O & M.</p> <p>Performance Security shall be in the form of Bank Guarantee or Auto Renewal Fixed Deposit Renewal (FDR), issued by one of the Nationalized / Scheduled Commercial Banks in India drawn in favour of Andhra Pradesh State FiberNet Limited, payable at Vijayawada.</p> <p>Details of the Bank: Name of the Beneficiary: ANDHRA PRADESH STATE FIBERNET LIMITED Bank Name: Andhra Bank Bank Account Number: 060611100003785 IFSC code: ANDB0000606 MICR Code: 520011025 Branch Code : 000606 Branch Name: Main Branch, RR Apparao Street, Vijayawada, Andhra Pradesh</p>
23.	For any enquiries and clarifications, please contact:	<p>Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, Vijayawada – 520001 Web address: http://www.apsfl.in Email: apsfl@ap.gov.in; cmo.apsfl@ap.gov.in v.in</p>

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24.	Validity of the Proposal	Bidder proposals shall remain valid for a period of 180 days from the bidsubmission date.
25.	Nature of Bid Process	Two stage a) Stage- I: Pre-QualificationEligibility b) Stage- II: CommercialBid c) Stage- III: Reverse Auction
26.	Method of Selection	As per Section 7 of this RFP
27.	RFP Tenure	a) Implementation phase: 45 days b) Operation & Maintenance phase: 3 years (36 months)

Note: Proposals/Bids submitted without Bid Processing Fee and EMD shall be summarily rejected.

2. General Instructions to Bidder

2.1 Earnest Money Deposit(EMD)

- a. Bidders shall submit an EMD as per the Key Events & Dates along with their Bids.
- b. The EMD amount is interest free and will be refundable to the unsuccessful bidders without any accrued interest on it.
- c. The bid / proposal submitted without EMD, mentioned above, will be summarily rejected.
- d. The EMD may be forfeited:
 - i. If a bidder withdraws its bid during the period of bid validity.
 - ii. If the successful bidder fails to sign the contract and submit Performance Bank Guarantee within the stipulated period.
 - iii. In case, the documents submitted, or the information furnished by the bidder are found to be not genuine/false.
 - iv. In case the bidder does not tender for the work, after submission of Tender fees or EMD.

2.2 RFP Amendment

APSFL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bid Document by amendment. All the amendments made in the document would be published in the website www.apsfl.in and on the e-procurement platform. APSFL shall not be responsible if the Bidders do not get the individual intimates of such amendments. All such amendments shall be binding on all the Bidders. The Bidders are also advised to visit the aforementioned website on regular basis for checking any updates. APSFL also reserves the rights to amend the dates mentioned in this RFP for Bid process.

2.3 Pre-Bid Queries

APSFL may incorporate any changes in the RFP based on acceptable suggestions received in pre-bid queries. The decision of APSFL regarding acceptability of any suggestion shall be final in this regard and shall not be called upon to question under any circumstances. It may not be possible to answer questions which are received late. The responses to the queries shall be uploaded by way of hosting amendments/clarifications on the website i.e. (www.apsfl.in) in accordance with the respective clauses of the RFP.

No queries in any form and for any reason shall be entertained after the last date and time for submission of queries.

2.4 Cost of Bidding

The Bidder is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other

diligence activities, participation in meetings/discussions/ presentations, preparation of proposal, in providing any additional information required by APSFL to facilitate the evaluation process, and in negotiating a definitive Service Agreement and all such activities related to the Bid process. This RFP does not commit APSFL to award a Contract or to engage in negotiations. Further, no reimbursable cost may be incurred in anticipation of award of Contract for implementation of Project.

25 SiteVisit

The bidder may visit and examine sites at a time to be agreed with APSFL, and obtain all information at their own responsibility that may be necessary for preparing the Bid Document. The costs of visiting the site(s) shall be at Bidder's own expense.

26 Language

The proposal and all correspondence and documents shall be written in English. In case of accompanying literature or brochures etc., being in a language other than English, a certified translation should accompany the documents as a part of the RFP. All proposals and accompanying documentation will become the property of APSFL.

27 Bid Prices

- a. The Bidder shall indicate the price in the prescribed format only.
- b. The Bidder shall prepare the Bid based on details provided in the RFP. It must be clearly understood that the Scope of Work is intended to give the Bidder an idea about the order and magnitude of the work and is not in any way exhaustive and guaranteed by APSFL. The Bidder shall carry out all the tasks in accordance with the requirement of the RFP and due diligence and it shall be the responsibility of the Bidder to fully meet all requirements of RFP.
- c. Prices shall be quoted in Indian Rupees (INR), shall be exclusive of Goods and Service Tax (GST).
- d. Bid value for the OpEx (total O&M cost for 3 years) should be minimum 30% of the "Total Bid Value". Bids received with OpEx cost less than 30% of the "Total Bid Value" (CapEx and OpEx) will be rejected.

28 BidderRepresentative

All documents of the bid may be signed by a nominated Competent Authority. All Certificates and documents (including any clarifications sought and any subsequent correspondences) received hereby, shall, be signed by the competent Authority.

29 Bid Validity

The proposals shall be valid for a period of 180 days from the date of submission of Bids. On completion of the validity period, unless the Bidder withdraws proposal in writing, it will be deemed to be valid until such time that the Bidder formally (in writing) withdraws proposal. If required, beyond 180 days, the Bidder may be asked to extend the bid validity,

on its consent.

2.10 Documents comprising the Bids

The bids prepared by the Bidder shall comprise of the following documents:

2.10.1 Documents to be uploaded as PQ Bid (To be uploaded only in “PQ Bid Folder” in the e-procurement platform)

All the below mentioned documents have to be uploaded in the “PQ” bid folder of the e-procurement platform. If the following documents are not found in the “PQ” bid folder, the bid shall be considered as non-responsive and may be rejected.

- 2.10.1.1 Annexure A – Application Form
- 2.10.1.2 Annexure B – Profile of Bidder/ Partners
- 2.10.1.3 Annexure C – Declaration of Acceptance of Terms and Conditions in the RFP
- 2.10.1.4 Annexure D – Undertaking on SoW Compliance and Unconditional Acceptance
- 2.10.1.5 Annexure E – Pre-Qualification Compliance Documents
- 2.10.1.6 Annexure F – Financial Turnover and Net worth of the Bidder
- 2.10.1.7 Annexure G – Format for Past Experience of the Bidder
- 2.10.1.8 Annexure H – Declaration regarding Clean Track Record
- 2.10.1.9 Annexure I – Power of Attorney
- 2.10.1.10 Annexure J – Board Resolution
- 2.10.1.11 Annexure K – Document Verification Certificate
- 2.10.1.12 Annexure L – Earnest Money Deposit (EMD) Format (only if bidder opts to submit in form of Bank Guarantee (BG), instead of direct online payment through e-procurement portal)
- 2.10.1.13 Copy of DD of Bid processing fees (only if bidder opts to pay as Demand Draft (DD), instead of direct online payment through e-procurement portal)

2.10.2 Documents to be uploaded as Commercial Bid (To be uploaded only in “Commercial Bid Folder” in the e-procurement platform)

All the below mentioned documents have to be uploaded in the “Commercial” bid folder of the e-procurement platform. If the following documents are not found in the “Commercial” bid folder, the bid shall be considered as non-responsive and may be rejected.

- 2.10.2.1 Annexure M – Commercial Proposal Submission Form
- 2.10.2.2 Annexure N – Commercial Bid Cost Components

2.10.3 Documents to be uploaded in TQ folder (To be uploaded online in “TQ Bid Folder”)

No documents have to be uploaded in the “TQ” bid folder of the e-procurement platform. Any documents uploaded in the “TQ” bid folder will not be considered for evaluation

Note:

In case of any issue pertaining to the uploading of bid documents in e-procurement portal due to file size etc., the bidders are expected to take support from e-procurement. APSFL will not be responsible for incomplete bid submission by users.

2.11 Modification and Withdrawal

No proposal may be modified / withdrawn in the interval between the deadline for submission of proposals and the expiration of the validity period specified by the Bidder on the proposal form. In case the Bidder wishes to withdraw the Bid after the date of opening of the bids, the EMD of the Bidder shall be forfeited.

2.12 Opening of Bids

The Pre-Qualification Bids will be opened on the e-procurement platform on the date and time as specified in the RFP schedule.

2.13 Evaluation of Bids

- a. The Bids of only those Bidders, whose Bid Processing Fee and EMD are in order, only, will be accepted.
- b. Bidders need to fulfill all the Pre-qualification conditions mentioned in the RFP. The technical committee will examine the Bids to determine whether they are complete, whether the Bid format conforms to the RFP requirements, whether documents have been properly signed, and whether the Bids are generally in order.
- c. Bids of Bidders whose Pre-qualification proposal does not meet the set criteria shall be rejected forthwith.

2.14 Bids Not Considered For Evaluation

Bids shall be summarily rejected due to incomplete documentation or late receipt.

2.15 Pre-Qualification

The pre-qualification evaluation shall be done as mentioned in this RFP.

2.16 Award Criteria

The Authority will open the Price Bids of the bidders who have met the conditions as per the Pre-Qualification Criteria in this RFP. This will be further taken up for Reverse Auction (as mentioned in Section 7.3) to finalize the L1 bidder.

2.17 Rectification of Errors

Bidders are advised to exercise adequate care in quoting the prices. No excuse for corrections in the

quoted price will be entertained after the proposals are opened. Errors in proposals will be corrected as per the unit rates quoted.

2.18 Contacting APSFL

Any effort by a Bidder to influence the Technical Evaluation and Tender Approval Committee in its decision on Bid evaluation, Bid comparison or contract award may result in disqualification of the Bidder's Bid and also forfeiture of Bid security.

2.19 APSFL's right to vary Scope of Work

APSFL may at any time, by a written order given to the Bidder, make changes to the Scope of the work.

If any such change causes an increase or decrease in the cost of or the time required for the Bidder's performance of any part of the work under the Agreement, whether changed or not changed by the order, an equitable adjustment shall be made in the Agreement Value or time schedule, or both, and the Agreement shall accordingly be amended. Any claims by the Bidder for adjustment under this Clause must be asserted within one (1) week from date of the Bidder's receipt of APSFL's order for change. The unit rate of each item quoted/accepted by the selected Bidder shall however not change.

2.20 APSFL's Right to Accept /Reject

APSFL reserves the right to accept or reject any proposal, and to annul the bid process and reject all proposals at any time prior to award of work, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for APSFL's action.

2.21 Signing of Agreement

The signing of agreement for the project is as follows:

2.21.1 Signing of Agreement

APSFL notifies the successful Bidder that its proposal has been accepted and APSFL shall enter into an Agreement with the successful Bidder as per the Master Service Agreement prescribed in this RFP. The signing of agreement will constitute the formation of the Agreement.

2.21.2 Discharge of Bid Security (EMD)

Upon the successful Bidder's furnishing of Performance Security, APSFL will promptly return the EMD to each unsuccessful Bidder EMD within 30 days. The Bid security (EMD) of successful Bidder will be released, on receipt of the Performance Bank Guarantee.

2.21.3 Expenses for the Agreement

The incidental expenses of execution of Agreement shall be borne by the successful Bidder.

2.21.4 Failure to abide by the Agreement

Failure of the successful Bidder to agree with the Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event APSFL may forfeit the EMD/ Performance Bank Guarantee. The contract may be awarded to the next lowest bidder, or however deemed appropriate by the Authority.

2.22 Performance Security

- a. The successful Bidder shall have to submit a Performance Security within 15 days from the date of issuance of Letter of Award (LoA). Extension of time for submission of beyond 15 days and up to 30 days from the date of issue of LoA may be given by APSFL, who is competent to sign the contract agreement. However, a penal interest of 15% per annum shall be charged for the delay beyond 30 days, i.e. from 31st day after the date of issue of LoA. In case the Bidder fails to submit the requisite Performance Security even after 30 days from the date of issue of LoA, the contract shall be terminated duly forfeiting EMD and other dues, if any payable against the contract. The failed Bidder shall be debarred from participating in re-tender for that work.
- b. The Performance Security shall be submitted by the successful Bidder after the LoA has been issued, but before signing of the contract agreement. The agreement should normally be signed within 15 days after the issue of LoA and the Performance Security shall also be submitted within this time limit. This Performance Security shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case, the time limit for completion of work gets extended, the contractor shall get the validity of Performance Security extended to cover such extended time for completion of work plus 60 days.
- c. The value of Performance Security to be submitted by the Bidder will not change for variation up to 25% (either increase or decrease). In case during the course of execution, value of the contract increases by more than 25% of the original contract value, an additional Performance Security amounting to 5% (five percent) for the excess value over the original contract value shall be deposited by the Bidder.
- d. The Performance Security shall be released after the physical completion of the work based on the 'completion certificate' issued by the competent authority stating that the Bidder has completed the work in all respects satisfactorily. The security deposit shall, however, be released only after the expiry of the defect liability period and after passing the final bill on 'No Claim Certificate' from the contractor.
- e. Whenever the contract is rescinded, the security deposit shall be forfeited and the Performance Security be encashed. The balance work shall be got done independently without risk and cost of the failed Bidder, the failed Bidder shall be debarred from participating in the tender for executing the balance work. If the failed Bidder is a JV or a partnership firm, then every member/ partner of such a firm shall be debarred from

participating in the tender for the balance work in his/ her individual capacity or as a partner of any other JV/ partnership firm.

- f. The Bank Guarantee should be from a Nationalized/Scheduled Commercial Bank acceptable to APSFL, in the format prescribed in Annexure P in section of this RFP, payable on demand, for the due performance and fulfillment of the Agreement by the Bidder.
- g. All incidental charges whatsoever such as premium, commission etc., with respect to the Performance Security shall be borne by the Bidder. The Performance Security shall be valid for 60 days post completion of the Payment terms as per RFP. However, no interest shall be payable on Performance Bank Guarantee.

2.23 Rejection Criteria

- a. The proposal of a Bidder is liable to be disqualified in the following cases or in case Bidder fails to meet the bidding requirements as indicated in this RFP:
 - i. Proposal not submitted in accordance with the procedure and formats prescribed in this document.
 - ii. During validity of proposal, or its extended period after last date and time for submission of Bids, if any, the Bidder increases the quoted prices.
 - iii. The Bidder proposing a "Conditional-Proposal".
 - iv. Proposal is received in incomplete form.
 - v. Proposal is not accompanied by all the requisite documents.
 - vi. Information submitted in Qualification proposal is found to be misrepresented, incorrect or false, accidentally, unwittingly or otherwise, at any time during the processing of the Agreement (no matter at what stage) or during the tenure of Agreement including the extension period if any.
 - vii. Bidder tries to influence the proposal evaluation process by unlawful means at any point of time during the Bid process.
 - viii. In case any Bidder submits multiple proposals or if common interests are found in two or more Bidders, the Bids are likely to be disqualified.
 - ix. Bidder fails to deposit the Performance Security prior to signing of the Agreement or fails to enter into an Agreement within 60 days of the date of issuance of LoA or within such extended period, as may be specified by APSFL.
- b. Bidders may specifically note that while evaluating the proposals, if it comes to APSFL's knowledge expressly or implied, that some Bidders may have colluded in any manner whatsoever or otherwise joined to form an alliance resulting in delaying the processing of proposal then the Bidders so involved are liable to be disqualified for this Contract as well as for a further period of three years from participation in any of the RFPs floated by APSFL and their EMD shall be forfeited.
- c. Prevention of Collusion of Vendor: with a view to prevent collusion or the formation into a ring by vendor / Bidder, the following are issued;

- i. Tender Schedules shall be issued till a date prior to the last date of submission of tenders.
 - ii. Once a vendor / Bidder buys a tender schedule he shall not be permitted to return the schedule after buying a tender schedule / document, if a vendor does not tender for the work, his EMD shall be forfeited (Cash or Bank Guarantee or Both).
- d. APSFL will reject a proposal for award if it determines that the Bidder recommended for award, or any of its personnel, or its agents or, Agencies and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the Contract.

2.24 Termination of Contract

Following clauses shall be applicable, in case of termination of contract:

2.24.1 Termination for default

APSFL may without prejudice to any other remedy for breach of contract, by written notice of default with a notice period of 30 days, sent to the successful bidder, terminate the contract in whole or part

(i) If the successful bidder fails to deliver any or all of the goods and services within the time period(s) specified in the Contract or fails to supply the items as per the Delivery Schedule or within any extension thereof granted by APSFL; or

(ii) If the successful bidder fails to perform any of the obligation(s) under the contract; or

(iii) If the successful bidder, in the judgment of APSFL, has engaged in fraudulent and corrupt practices in competing for or in executing the Contract.

In the event APSFL terminates the Contract in whole or in part, APSFL may procure, upon terms and in such manner as it deems appropriate, the goods and services similar to those and delivered and the successful bidder shall be liable to APSFL for any additional costs for such similar goods. However, the successful bidder shall continue the performance of the contract to the extent not terminated.

2.24.2 Termination for Insolvency

APSFL may at any time terminate the Contract by giving written notice with a notice period of 30 days, sent to the successful bidder, if the successful bidder becomes bankrupt or otherwise insolvent. In this event, the termination will be without compensation to the successful bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to APSFL.

2.24.3 Termination for Convenience

APSFL may, by written notice, with a notice period of 30 days sent to the successful bidder, may terminate the Contract, in completely or in part, at any time for its convenience. The notice of termination shall specify that termination is for APSFL's convenience, the extent to

which performance of work under the Contract is terminated and the date upon which such termination becomes effective. On termination, the successful bidder is entitled for compensation to the extent of work done till the date of termination.

2.25 Execution of WorkOrder

The successful bidder should nominate and intimate APSFL, a Manager as Single Point of Contact (SPoC), who should be responsible for effective delivery of work complying with all the terms and conditions. The successful bidder should ensure that the Manager fully familiarizes with the RFP Conditions, Scope of Work and deliverables.

2.26 Submission of Technical Solution and Approach Methodology

The bidder shall be required to submit the detailed technical solution document entailing minimum technical specifications of material mentioned in the RFP, design/ drawing document, detailed implementation approach methodology, etc. The technical solution documents shall need to be submitted to APSFL within 7 days of issuance of LoA. If in case, there is increase/ decrease in the technical specifications of material, prior approval needs to be taken from APSFL. APSFL reserve rights to cancel the bid, if in case the technical solution document is not in compliance with the requirements mentioned in the RFP.

Broad areas to be covered in technical solution documents are given below, but not limited to:

- a) Applicable Methodology at the Location (HDD / Micro Trenching / Open Trench etc.)
- b) Route Mapping with Geo-Graphical Coordinates.
- c) Survey Reports, Drawings.
- d) Specification of the Fiber being used.

Note: If in case of change of make and model of the components from the once specified in the technical solution document during the project, prior approval from APSFL needs to be taken.

2.27 Extra/ new item

Extra items of work shall not vitiate the contract. There is reimbursement for extra items shall be validated by the APSFL/ any agency appointed by APSFL and cleared by the Authority. The Contractor shall be bound to execute extra items of work as directed by the Authority. The rates for extra items shall be worked out based on the unit rates quoted by the Bidder in Price Bid/ as per mutually agreed terms and conditions. For new items which are beyond the scope of the BoQ, the APSFL/ any agency appointed by APSFL or any authorized official/ agency shall validate the requirements and necessity of such new/extra items after due diligence, based on site conditions and work contingencies.

2.28 Liquidated Damages (LD)

- a. Liquidated Damages will be levied as per the penalty and payment schedule subject to a maximum of 10% of the total value of the contract for non-fulfilment of delivery schedule. Any delay due to the Force Majeure conditions or delay not due to the successful bidder will be excluded from the delivery schedule.
- b. In the event of failure by the successful bidder to fulfil the delivery conditions, Tender Inviting Authority at its discretion may initiate any of the action(s) as given below:
 - i. Extension of time may be permitted to complete the work.
 - ii. Additional resources will be requested for speeding up the work.
 - iii. Liquidated Damages will be levied.
 - iv. Contract with the successful bidder may be terminated as per the Termination clause.
 - v. Any other action as may be deemed fit by Tender Inviting Authority in the best interest of the department.

2.29 Force Majeure

Neither Tender Inviting Authority nor the successful bidder shall be liable to the other for any delay or failure in the performance of their respective obligations except causes or contingencies beyond their reasonable control due to Force Majeure conditions such as:

- a. Any act of God such as lightning, earthquake, landslide, etc. or other events of natural disaster of rare severity. Meteorites or objects falling from aircraft or other aerial devices, travelling at high speeds
- b. Fire or explosion, chemical or radioactive contamination or ionizing radiation
- c. Pandemic or Epidemic or plague. Act of war (whether declared or undeclared), threat of war, invasion, armed conflict or act of foreign enemy, unexpected call up of armed forces, blockade, embargo, revolution, riot, religious strife, bombs or civil commotion, sabotage, and terrorism

2.30 Arbitration

In case of any dispute, the matter will be referred to a Sole Arbitrator to be appointed by APSFL in accordance with the "Arbitration and Conciliation Act 1996" and any amendments thereafter. The arbitration shall be held in Andhra Pradesh, India and in English.

2.31 Exit Management Plan

- a. An Exit Management plan shall be furnished by bidder in writing to the Authority within 90 days from the date of signing this contract, which shall deal with at least the following aspects of exit management in relation to the contract and in relation to the project implementation and service level monitoring.
 - i. A detailed program of the transfer process that could be used in conjunction with a Replacement Service Provider including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the

- transfer;
 - ii. Plans for provision of contingents support to Project and Replacement Service Provider for a reasonable period after transfer;
 - iii. Exit Management Plan in case of normal termination of Contract Period
 - iv. Exit Management Plan in case of any eventuality due to which Project is terminated before the Contract Period
 - v. Exit Management Plan in case of termination of Supplier
 - b. Exit Management plan at the minimum adhere the following:
 - i. Three (3) Months of the support to Replacement Service Provider post termination of contract.
 - ii. Complete handover of the reports, documents and other relevant items to the Replacement Service Provider/Authority.
 - iii. Certificate of acceptance from authorized representative of Replacement Service Provider issued to supplier on successful completion of handover and knowledge transfer.
 - iv. Tentative exit management schedule/Matrix is annexed
 - c. Each Exit Management Plan shall be presented by the Service Provider to and approved by the Managing Director, APSFL or its nominated agencies.
 - d. In the event of termination or expiry of contract, Project Implementation, or Service Level Monitoring, both PIA and Authority shall comply with the Exit Management Plan, and payments shall be made by APSFL only for the work done prior to termination notice, upon successful acceptance by Third Party Auditor (TPA)/ any agency / and personnel as appointed by APSFL.
- During the exit management period, the Service Provider shall use its best efforts to deliver the services.

2.32 Extension of time in Contracts

Subject to any requirement in the contract as to completion of any portion or portions of the works before completion of the whole, the contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as may be directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses.

2.32.1 Extension due to modification

If any modifications have been ordered which in the opinion of APSFL have materially increased the magnitude of the work, then such extension of contracted date of completion may be granted as shall appear to APSFL to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date may be considered necessary as soon as the clause thereof shall arise and in any case not less than one month before the expiry of the date fixed for completion of the works.

2.32.2 Extension for delay not due to APSFL or Contractor

If in the opinion of APSFL, the progress of work has any time been delayed by any act or neglect of APSFL employees or by other contractor employed by the APSFL or in executing the work not forming part of the contract but on which contractor's performance necessarily depends or by reasons of proceeding taken or threatened by or dispute with adjoining or to neighbouring owners or public authority arising otherwise through the Contractor's own default etc. or by the delay authorized by APSFL pending arbitration or in consequences of the contractor not having received in due time necessary instructions from the APSFL for which he shall have specially applied in writing to the APSFL within 15 days of such happening but shall nevertheless make constantly his best endeavours to bring down or make good the delay and shall do all that may be reasonable required of him to the satisfaction of the Engineer to proceed with the works. The contractor may also indicate the period for which the work is likely to be delayed and shall be bound to ask for necessary extension of time. APSFL on receipt of such request from the contractor shall consider the same and shall grant such extension of time as in its opinion is reasonable having regard to the nature and period of delay and the type and quantum of work affected thereby.

No other compensation shall be payable for works so carried forward to the extended period of time, the same rates, terms and conditions of contract being applicable, as if such extended period of time was originally provided in the original contract itself.

2.32.3 Extension for delay due to APSFL

In the event of any failure or delay by the APSFL to ensure site readiness necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the APSFL due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the contractor to damages or compensation therefore, but in any such case, the APSFL may grant such extension or extensions of the completion date as may be considered reasonable.

233 Extension of time for delay due to contractor

The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be essence of the contract and the works must be completed not later than the date(s) as specified in the contract. If the contractor fails to complete the works within the time as specified in the contract for the reasons other than reasons specified in the clause 2.29 and 2.32, APSFL may, if satisfied that the works can be completed by contractor within reasonable short time thereafter, allow the contractor for further extension of time as APSFL may decide. On such extension, APSFL will be entitled without prejudice to any other right and remedy available on that behalf, to recover from the contractor as per penalty terms

mentioned below in this clause.

For the purpose of this clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued. Provided also, that the total amount of liquidated damages under this condition, shall not exceed 10% of the first Rs.2 lakhs and 5% of the balance of the total value of the item or groups of items of work for which a separate distinct completion period is specified in the contract.

Further competent authority while granting extension to the currency of contract under clause 2.33 may also consider levy of token penalty as deemed fit based on the merit of the case. Provided further, if that the APSFL is not satisfied that the works can be completed by the contractor and in the event of failure on the part aforesaid, the APSFL shall be entitled without prejudice to any other right or remedy available in that behalf, to appropriate the contractor's security deposit and rescind the contract, whether or not actual damage is caused by such default.

Note: All General Conditions of Contract (GCC) and Special Conditions of Contract (SCC) as per Department of Roads and Buildings, Government of Andhra Pradesh are applicable for this RFP.

3. ProjectBackground

3.1 Project Background

Government of Andhra Pradesh enterprise, aimed at providing internet connectivity and e-governance services to Govt. Office Unit / Institutions / Organizations in the state of Andhra Pradesh.

As part of this Project in state of Andhra Pradesh, Selected Locations of Govt. Offices / Institutions / Organizations shall be connected by Last Mile Connectivity of Optical Fiber from the Laid Underground Optical Fiber to CPE's Location. After Successful Commissioning of the site / Locations User Acceptance Test Certification / Report would be verified by the Authority / or Nominated representative by APSFL.

Following table depicts the locations for implementation of the Underground Work:

S.No	District	Location Name	Address with Postal Code
1	Guntur	Velagapudi, Tulluru	APSWAN-NOC, 3rd Block, AP Secretariat, Velagapudi -522503
2	Krishna	Vijayawada Campoffice	Collector Camp Office, Near PWD grounds, Vijayawada- 520001
3	Anantapur	Anantapur	Dist Collectorate, Anathapur, Anantapur district, AP-515001
4	Chittoor	Chittoor	Vivekananda Bhavan, new collectrate office, Reddy gunta, Chittoor - 517001
5	East Godavari	Kakinada	Dist Collectorate, Rama Rao Peta, Kakinada, Andhra Pradesh 533001
6	Guntur	Guntur	District Collector office,Guntur-522004
7	Kadapa	Kadapa	Rims road , New Collectorate,Kadapa-516001
8	Krishna	Machilipatnam	Collector Office, Machilipatnam-521002
9	Kurnool	Kurnool	Dist Collectorate, Collectorate Road, Budhawara Peta, Alluri Sitarama Raju Nagar, Kurnool, Andhra Pradesh 518002

RFP for Selection of Agency for execution of Underground Optical Fiber at selected locations of Government Offices / Institutions / Organizations on Rate Contract

S.No	District	Location Name	Address with Postal Code
10	Nellore	Nellore	Dist Collectorate, Achari Street, Nellore, Andhra Pradesh 524001
11	Prakasam	Ongole	Prakasam collectrate Bhavan, nellore road, ongole, Prakasam Dist-523001
12	Srikakulam	Srikakulam	Collector Office, Srikakulam- 532001
13	Vizainagaram	Vizainagaram	Dist Collectorate, Cantonment Road, Cantonment, Vizianagaram, Andhra Pradesh - 535002
14	Visakhapatnam	Visakhapatnam	Dist Collectorate, Main Road, Krishna Nagar, Maharani Peta, Visakhapatnam, Andhra Pradesh - 530002
15	West Godavari	Eluru	Dist Collectorate, Santhi Nagar, Eluru, Andhra Pradesh - 534006

32 ProjectType

The Project will be rolled at Selected Locations of Govt. Offices / Institutions in the state of Andhra Pradesh.

33 Project Locations

The Project shall be implemented through Underground Optical Fiber Cable (24F - Armoured) in Andhra Pradesh. Following table depicts district-wise count of estimated RoW crossing in the project which is tentative; actuals may vary based upon the field conditions and Dept. of the Authority;

S.No	District	Tentative No. of Row if required from the Dept.
1	Ananthapur	3
2	Chittoor	3
3	East Godavari	3
4	Guntur	4
5	Kadapa	3
6	Krishna	6
7	Kurnool	3
8	Nellore	3
9	Prakasham	3
10	Srikakulam	3
11	Visakhapatnam	3
12	Vizianagaram	3
13	West Godavari	3
Total		43

Note:

1. The data provided in above table is illustrative based on current estimation of APSFL and might get changed based on actual condition.

4. Scope of Work

As part of scope, it includes Survey, Route Map of Fiber Laying, Mapping of GIS Coordinates from Nearest APSFL's PoP to Customer Premises Location with Ring Architecture (Based on the Requirement) connectivity and laying of Approximately 40 Km of Underground Armoured 24F optical fiber cable with Liasing of the End Customer (NHAI, R & B – Depends on the Type of the Road and the Authority Dept.) for connecting Selected Locations of Government Offices / Organizations / Institutions in the state of Andhra Pradesh.

Through this RFP, APSFL intends to select agency responsible for laying of Underground optical fiber cable (24F) using appropriate laying methodology viz. HDD/Micro Trenching/ Open Trench which ever methodology is applicable in road crossing, national highway crossing, etc.

The scope of work in **Pre – Implementation & Implementation phase** comprises of following, but not limited to:

Commissioning Phase:

The scope of work shall comprise survey, supply of fiber including all the accessories, live line installation and commissioning of underground optical fiber cable. The fiber has to be terminated at the points provided by APSFL. The agency shall take care of the existing cable safety while laying the UG cable.

Must conduct the feasibility Survey/ Study based on the requirements provided by the APSFL and propose the best possible solution

A. Field/Route Survey

- The service provider has to carry out the route /field survey and submit the feasibility report and route map (along with Latitudes and Longitudes) of fiber for approval/clearance from APSFL to commence the work along with Purchase Order (PO).
- The vendor shall finalise the exact distance of the UG OFC, location of the Manholes and loop chambers and submit a schematic diagram.
- On the basis of the survey reports done by Vendor and further approved by APSFL, routes for OF cable laying shall be finalized. Road Cutting Permission shall be obtained from Transport, Roads and Building, Municipalities, Smart City authorities (Based on the Site Condition and Location) for laying the Optical Fiber Cable along the finalized roads and at rail / road crossing along the route.
- It is essential that the cable is laid after obtaining due permission from all the

concerned authorities to avoid any damage (which may result in disruption of services / revenue loss) and shifting in near future due to their planned road widening works. For obtaining RoW APSFL shall provide necessary documents to the vendor. In case vendor pays fees/deposits for RoW on behalf of APSFL, the amount will be reimbursed to the vendor by APSFL based upon the actuals and submitting the original invoice and its relevant documents as prescribed in the **G.O.MS.NO.60, Transport, Roads & Buildings (R-IV) Department.**

B. Fiber Implementation

- Bidder shall be responsible for supply, install & commissioning of Underground OFC at selected locations of Govt. Offices / Organizations / Institutions as per the finalized route map during the survey.
- Providing additional protection by R.C.C. Pipes/DWC pipes and/or concreting/chambering, wherever required according to construction specification
- Bidder shall provide manhole/handhole for every 500 Meters or as per the feasibility upon approval from APSFL and shall be of NP3 HD20 size (990 mm Outer diameter / 800 mm inner diameter) or construction of brick wall at every Cable pulling location for housing the OF Cable loop & Pulling Optical Fiber Cable using proper tools and accessories. Sealing of both ends of the PLB HDPE pipe in manhole by hard rubber bush of suitable size to avoid entry of rodents into the PLB HDPE Ducts, putting split PLB HDPE Ducts and split RCC pipes with proper fixtures over cable in the manhole to protect the bare cable.
- Digging of pit of size 2-meter x 2-meter x 1.8 meter depth) for fixing of Jointing chambered- cast RCC cover or stone of suitable size on jointing chamber to protect the Joint and backfilling of jointing chamber with excavated soil. The jointing chambers are constructed by way of fixing pre-cast RCC chambers/Brick Chambers and covers as per the instructions from APSFL.
- The joint chambers have to be provided where ever required to keep the O.F.C. joint well protected and also to keep extra cable, which may be, required to attend the faults at a later date. Jointing chambers are to be prepared and actual location of jointing chamber depends on length of cable drum and appropriateness of location for carrying out jointing work. The location is finalized by APSFL.
- In built up areas, the Vendor shall resort to use of manual labor/ HDD only to ensure no damage is caused to any underground or surface installations belonging to other public utility services and/or private parties.

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- The 24F fibers are to be spliced at every Joint & at both ends (Terminations) as directed by the APSFL. The Infrastructure required for cable splicing i.e. Splicing machine, OTDR, Tool kit etc. shall be arranged by the Vendor and also any additional accessories. e. g. Engine etc. required at site for splicing shall also be arranged by the Vendor.
- The Optical Fiber Cable thus jointed end-to-end shall be tested by the APSFL representative for splice losses and transmission parameters. Optical Fiber should meet all the technical parameters, **specified and no relaxation will be granted.**
- The vendor shall provide GIS coordinates of the laid fiber clearly tagging signages wherever installed/provided for APSFL's record & verification.
- Route Tags & Signage for every 500 Mtrs., at Man Holes/ Hand holes.

The scope of work in Post Implementation phase comprises of following, but not limited to:

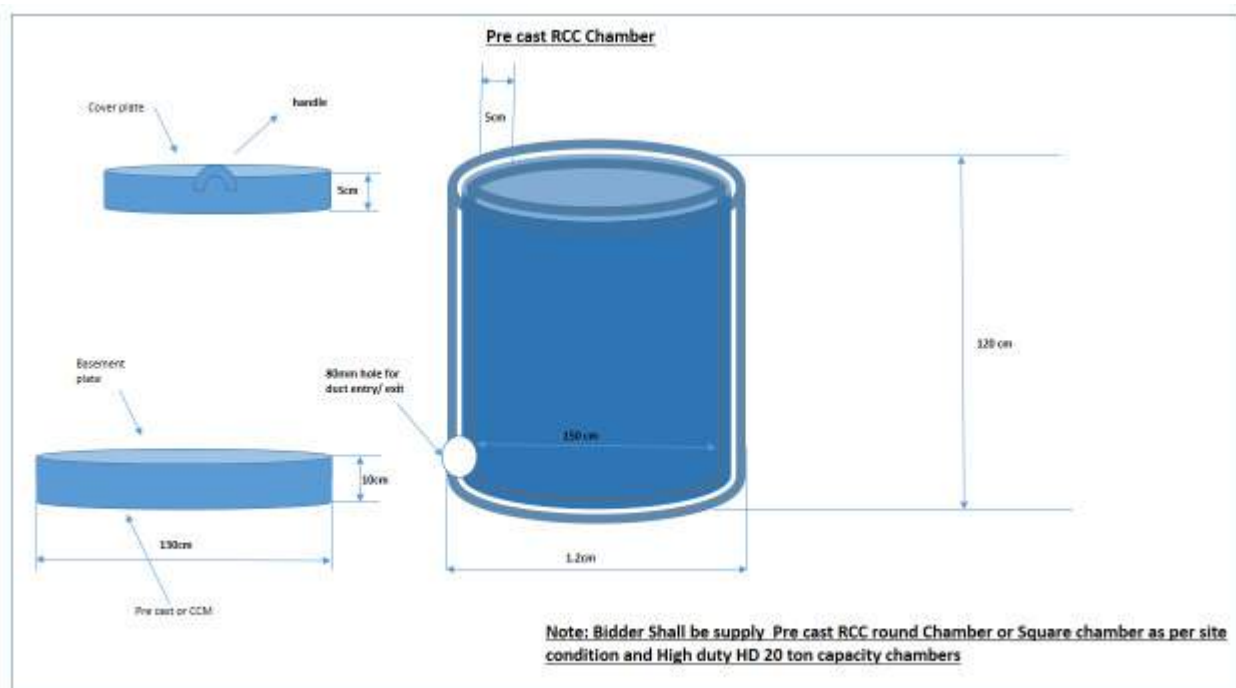
- Graphical presentation depicting the route of the fiber laid generated by the HDD machine.
- Submission of survey report, Route Map of Fiber Laying to APSFL.
- Mapping of the Co-ordinates on the deployment of the Initial route of the Fiber to End-route of the Fiber.
- Maintenance for a period of 3 Years for the Equipment / Material Supplied, Delivered and Commissioned at the Location.
- Submission of As-Built Diagram (Mandatory) & In-Built Diagram (If required).

5. Technical Specifications

5.1 Pre cast RCC chamber specifications

For fixing pre cast RCC chamber (following the below trmplet)first a pit of size 1.4 m x 1.4m x 1.4 m depth shall be required to be dug. Pre cast RCC chamber shall consist of followingsteps:

- a) Full round/square RCC chamber with outer diameter of 120 cm and height of 120cm and thickness of 5cm.
- b) Round/square top cover will be in two halves with thickness of 5 cm having one handle for each half in center and word 'OFC – APSFL' engraved on it.
- c) Round/suare basement plate with thickness of 10cm and diameter shall be provid.
- d) 5.6 mm Horizontal Iron round rings –
- e) 6 mm Vertical bars Iron - 12 mm Nos.
- f) 12 gauge GI wire mesh to be wrapped before reinforcing the CMM (HD:20)
- g) After,installtheprecastRCCchamber,thechamberisfilledwithcleansand beforeclosing.Backfillingofchamberpit souringds shall be closed properly with excavatedsoil in order to avoid crumble of soil / anyother oblication from public or other departments.
- h) Duct Entry & Exit holes shall be closed properly with sealing in order to avoid water leakage / anyother leakage towards manhole after duct entry.



5.2 RCC/ Pre cast route indicatorspecifications

The route /joint indicator made of pre-cast RCC should have the following dimensions (see Figure '2')

Base - 250 mm x 150 mm

Top - 200 mm x 75 mm

Height - 1250 mm

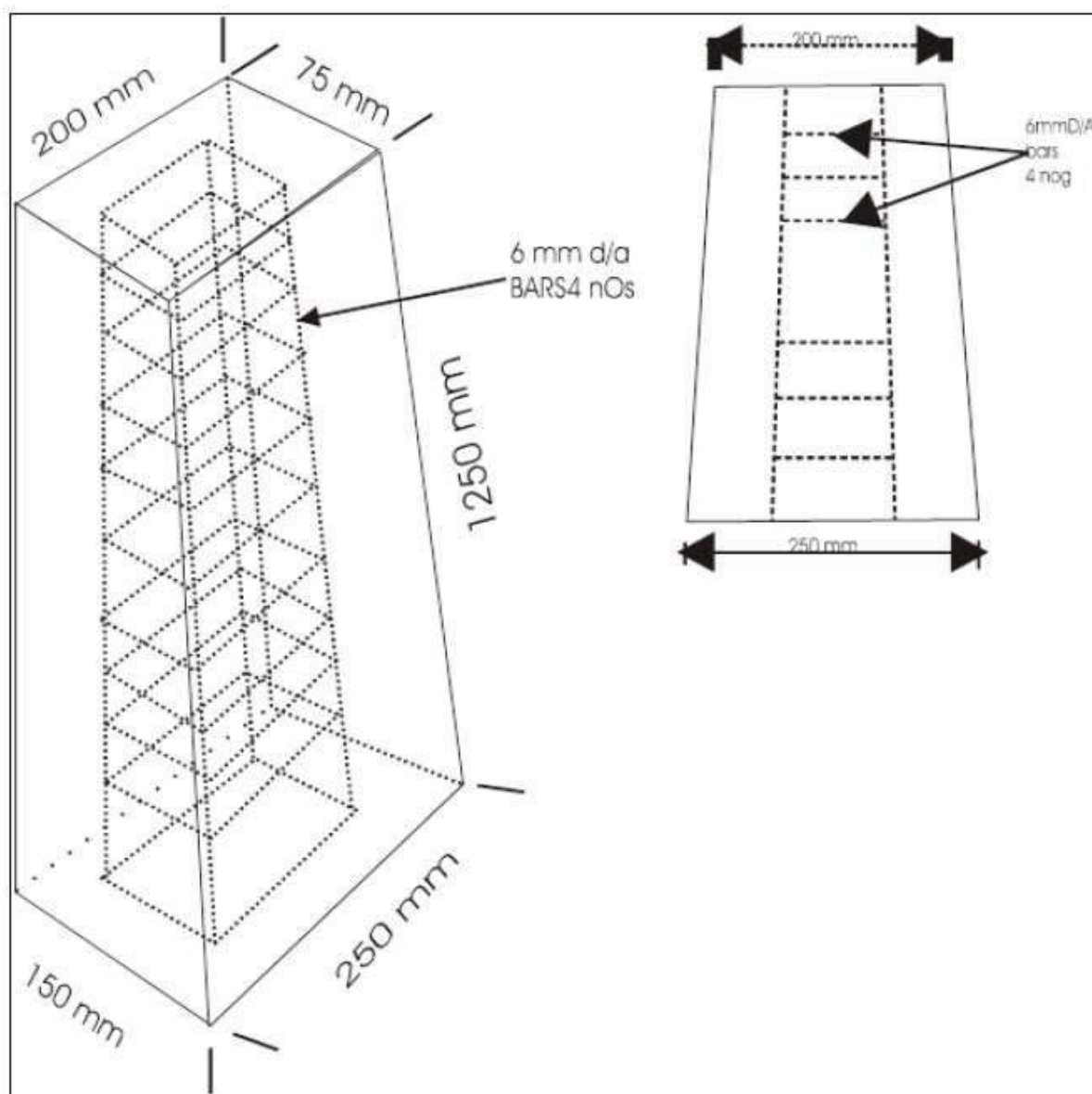


Figure: 2

5.3 RCC full round pipesspecifications

Reinforced cement concrete pipes (spun type) coupled with RCC collars sealed with cement mortar used to provide additional protection to PLB HDPE Ducts / Coils at lesser depths should be of full round, NP-2 class and size 100mm (internal diameter),

conforming to IS standard 458-1988 with latest amendments. The pipes should have a nominal length of 2 meters.

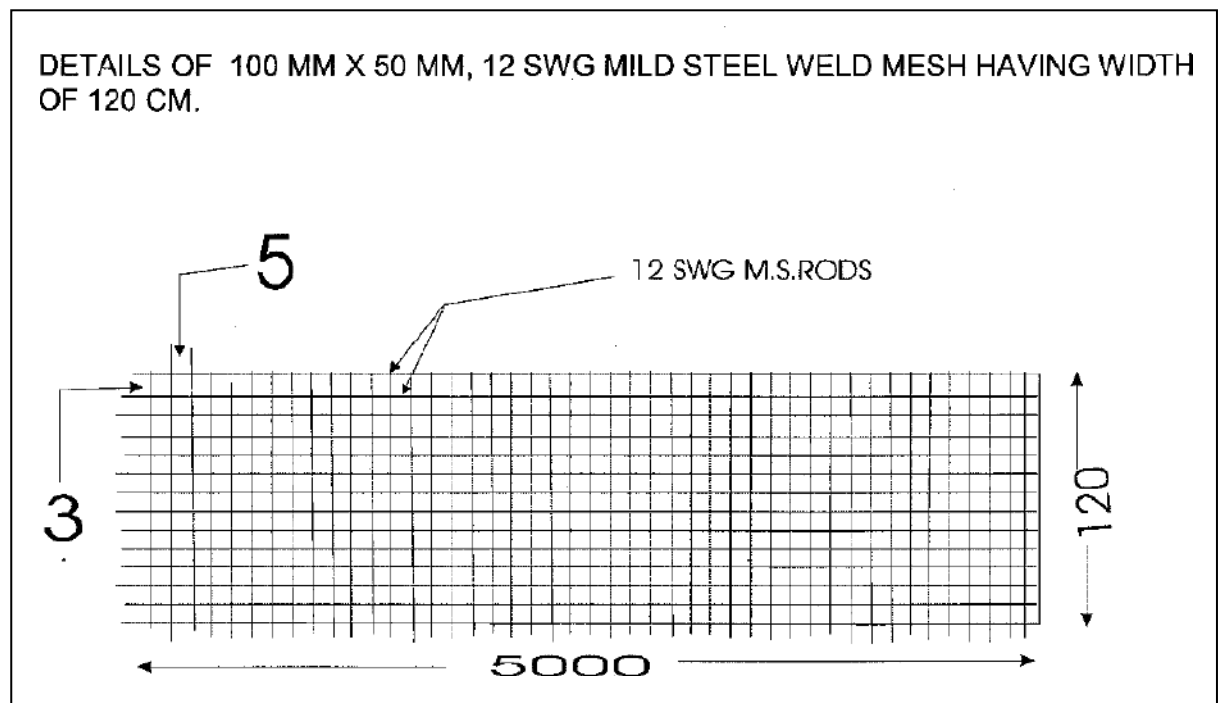
The RCC collar should be properly sealed using cement mortar 1:3 (1:53 grade cement of reputed brand, fine sand without impurities). In case of long spans, every third joint will be embedded in a concrete block of size 60 cms (L) x 40 cms (W) x 25 cms (H) of 1:2:4 cement concrete mix (1: cement, 2: coarse sand, 4: stone aggregate of 20 mm nominal size) so that the alignment of RCC pipes remain firm and intact. Also, both ends of RCC pipes spans will be sealed by providing concrete block of size 40 cm (L) x 40 cm (W) x 25 cm (H) of 1:2:4 cement concrete mix to avoid entry of rodents.

5.4 DWC pipe specifications

Use of normal duty DWC (Double Walled Corrugated) HDPE pipe – confirming to TEC GR no. GR/DWC-34/01 Sep.2007 with latest amendments shall be preferably utilized as first choice of protection of Optical fiber Cable instead of GI pipes. The DWC pipes used shall be of size 75/61 mm.

5.5 M.S Weld Mesh Specifications

The PLB HDPE Ducts can also be protected by embedding it in concrete of size of 25 cms x 25 cms reinforced with MS weld mesh. The MS weld mesh used should be of 50 mm x 100 mm size, 12 SWG, 120 cms in width in rolls of 50m each. One meter of MS weld mesh caters to approx. 3 meters of concreting.



5.6 PLB HDPE Duct

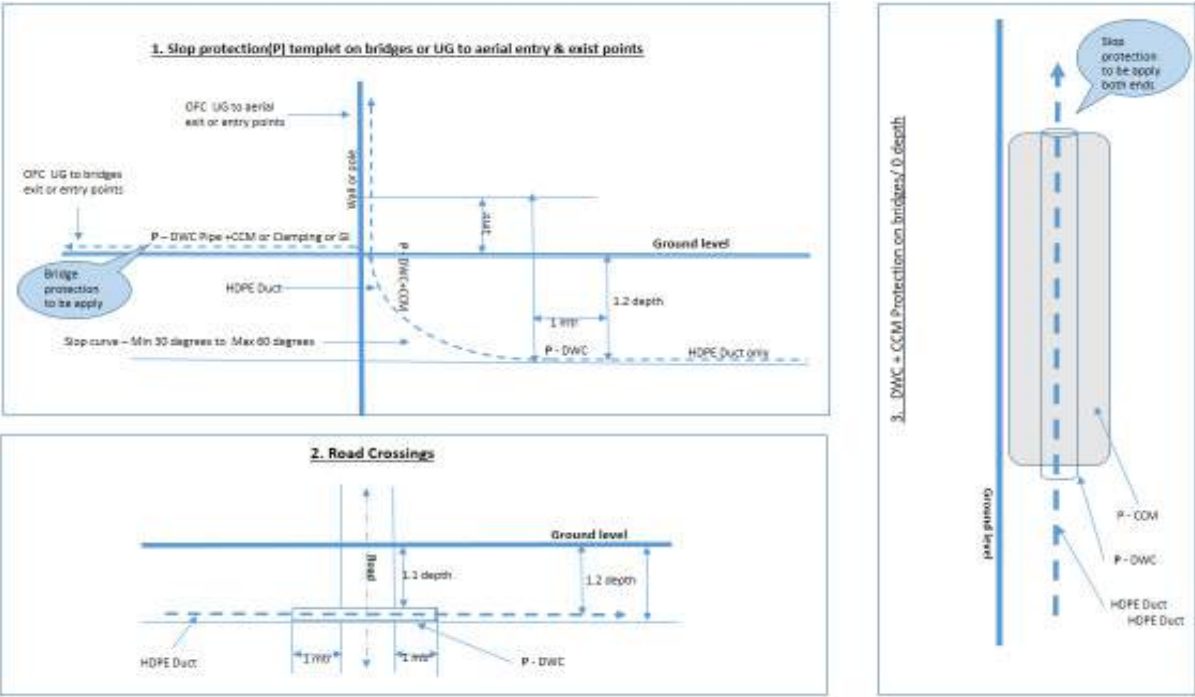
The PLB HDPE duct shall be as per TEC GR No. TEC/GR/TX/CDS-008/03/MAR-11 with latest amendments, if any.

5.7 G.I.Pipe

GI pipe of 6 meters length 50mm diameter ISI standard (Class B), with couplers shall be used as part of the project.

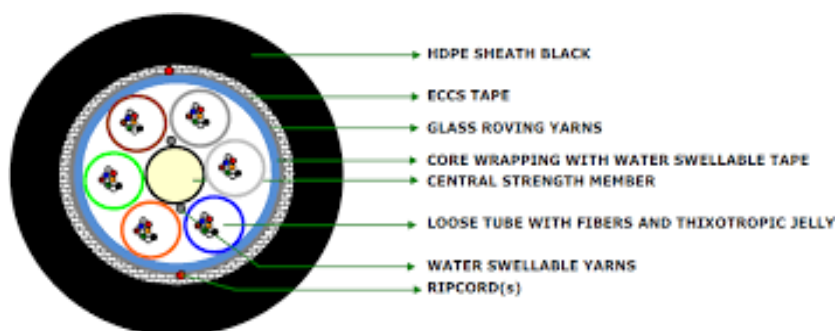
5.8 Protection Drawings

The following templets are used to exit/ entry points for Bridges, heavy drains, culverts, UG to aerial/ aerial to UG & road crossings.



5.9 Fiber Specifications

24F Armoured Underground Optical Fiber Cable



S.No.	Parameter	Unit	Value
1	No. of tubes for 24F Optical Fiber Cable:		6
2	No. of Fibers per tube for 24F Optical Fiber Cable		4
3	Fiber color		Blue,Orange,Green,Brown,Slate, White
4	Diameter of Cable 24FCable(mm):	(mm):	14.5±0.5
5	Core Diameter	µm	8.3
6	Cladding Diameter	µm	125±1
7	Cladding non-circularity	%	≤1
8	Mode Field concentricity error	µm	≤0.6 (Nominal 0.25)
9	Attenuation (Fiber)	dB/Km	
	@1310		≤0.350
	@1550		≤0.210
	@1625		≤0.240
10	Attenuation (Cabled)	db/Km	
	@1310		≤0.350
	@1550		≤0.210
	@1625		≤0.240
11	Chromatic dispersion	Ps/nm.km	
	In 1288-1339		≤3.50
	In 1270-1360		≤5.3
	@1550		18
12	PMD @ 1310 & 1550 Cabled	Ps/sq.root km	
	Individual fiber		≤0.2 (Nominal 0.1)
	Link design value		≤0.1
13	Zero Dispersion slope	Ps/(nm ² .km)	≤0.092
14a.	Water peak at 1383±3 nm	Db/km	≤1.0 (Nominal 0.5)
14b.	Water peak at 1385 nm	Db/km	≤0.310

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15	Zero Dispersion Wave Length	Nm	1300-1324
16	Point Discontinuity	Db	≤0.05 at 1310, 1550 & 1625
17 a.	Fiber Cut-Off	Nm	≤1320 (Nominal 1280)
17b.	Cable Cut-Off		≤1260
18	Attenuation Vs Wavelength		Ref λ are 1310 & 1550 nm

5.10 Specification on UnderGround Execution

- a) Cable Type: 24 F Armoured
- b) No. of Ducts to be laid in trench: 02 Nos
- c) Distance between MH to MH: 500 Meter's
- d) Depth: 1.2 Meter
- e) Methodology: HDD, if it is not feasible open trench methodology.
- f) The splice joints should not be less than 2 kms
- g) Route Markers at every 500 mts.
- h) Markers shall be installed in a manner that 500 mm length is below ground and 750 mm is exposed. Fixing of the route markers shall be done at 0.5 M from the trench and away from the road center.

5.11 Location and Alignment of Trench

Trench must be aligned according to permission granted by authority/ agency. However following guidelines must be adhered to

- i) Cross pits must be made manually to check presence of any underground utilities at adequate spacing.
- j) Trench boundaries shall be marked with rope / lime powder prior to digging in order to get trench in straight line.
- k) Trench shall be located at lowest point of lower area if feasible. Trench must not come over field boundary or any heap of soil.
- l) Trees and their roots must be by passed to avoid damage while trenching and ensuring safe passage of OFC with smooth curves.

5.12 Trenching Specifications:

The trenching should be done on 1.2 mts depth otherwise bidder shall take approvals for the following deviations.

- m) Priority A: Depth should be 1.2 Meters Bare Ducts to be laid. (preferably)
- n) Priority B: Depth found between 1Mtrs to 1.2 Meters Ducts to be protected with DWC Pipe.
- o) Priority C: Depth found between 0.8 Meters to 1.0 Meters DWC with PCC (1:2:4) Protection

should be given.

Warning tape should be laid 500mm from the NGL Level.

5.13 Crossings Using Existing Bridges / Culvert

Bridges and Culverts crossings to be done by HDD Methodology if in case HDD is not possible other deviation Clamping or DWC with PCC.

Ducts shall be installed inside DWC pipes (of diameter suitable for specified number of ducts) when duct are laid on/along bridge/culverts at locations approved by authorities. DWC pipe shall be used when the location is not exposed to direct sunlight. For locations exposed to direct sunlight, high winds or heavy rains GI pipes shall be used as protective measure. In exceptional cases, where authority does not permits use of GI pipe, DWC pipe shall be covered with a GI sheet to prevent direct sunlight and rain falling on DWC pipe. Or DWC with Box Concrete size of 300*300*300mm. As far as practical GI sheet should not touch the DWC pipe. Wooden/other low thermal conductivity material spacers can be used to maintain gap between DWC pipe and GI sheet.

5.14 Installation of OFC Ducts by Trenchless Techniques – HDD

- p) All concerned authorities (water, oil and gas pipeline operators, telecom operators, power companies etc.) who may have their underground utilities in the area shall be informed well in advance and as built drawings obtained to ensure proper planning of HDD operation and drilling profile.
- q) The ends of the HDPE ducts shall be sealed with end caps to prevent ingress of water, mud, debris or obstacles inside the man-hole.
- r) The minimum depth at entry and exit pits shall be 1.2 Meter.
- s) The intermediate Depth shall be 2.5 Meter.
- t) At Coupler point depth shall be 1.2 Meter covered by Kadapa stone.

6. Engineering Instructions for laying optical fibercable

The Engineering Instructions spelt out in this document deal with the methods to be adopted for underground Optical Fiber Cable laying in PLB HDPE

6.1 HDD laying methodology

HDD methodology shall be adopted for laying of fiber in Municipal Roads / national highway

crossing and built up areas. In this section between the last electric pole and entry pit; and exit pit and first pole for HDD / Open Trench / Micro Trench (Which ever Methodology is applicable) UG fibers shall be laid through PLB HDPE ducts buried at nominal depth of 165cm. Following steps shall be adopted for laying UG fiber:

- i. Excavation of trench up to a nominal depth of 165 cm in non-Rocky soil, according to construction specifications along National/State Highways/other roads and in built up areas. Under exceptional conditions/ genuine circumstances due to site constraints/soil conditions, relaxation can be granted for excavation of trench to a depth lesser than 165cm. Such relaxations shall be given as per the laid down norms/ procedures and with the approval of the competent authority.
- ii. Laying of PLB HDPE Ducts/coils coupled by sockets in excavated trenches, on bridges and culverts, as per construction specification and sealing of PLB HDPE Ducts pipe ends at every manhole by end-plugs of appropriate size.
- iii. Providing additional protection by R.C.C. Pipes/GI pipes and/ or concreting/ chambering, wherever required according to construction specification.
- iv. Back filling and Dressing of the Trench according to construction specifications.
- v. The joint chambers are provided at every joint to keep the OFC joint well protected and also to keep extra length of cable, which may be, required to attend the faults at a later date. Jointing chambers are to be prepared near the entry pit from for Underground Methodology applicable used at national highway crossing / Municipal Road Crossings / Built in Areas.
- vi. Digging of pits 500cm to 1000cm towards jungle side at every manhole and jointing chamber along the route to a depth of 75cm fixing of route Indicator/joint indicator, concreting and backfilling of pits. Painting of route indicators with Blue Colour and joint Indicator by Grey colour and sign writing denoting route/joint indicator number and marked as "OFC – APSFL", as per construction specification.

6.2 Types of protection to be adopted at different depth

S. No.	Range of the depth	Protection Type
1	≥ 120 cm.	No protection required
2	≥ 90 cm. < 1.2 cm.	Protection by using DWC pipe shall be provided
3	≥ 60 cm. < 90cm.	Protection by using pre-cast RCC pipes NP-3 shall be provided
4	≥ 50 cm. < 60 cm.	Concreting Surrounding the pipes with a cover of 15 cm. on all the sides with weld mesh or DWC pipe shall be provided. Cement Concrete Mixture(CCM)
5	< 50 cm.	Laying of fiber below 50cm depth not Permitted
6	Road crossings	For every Road crossing, DWC Pipe Shall be used as protection.
7	On Bridges/ drains/heavy utilites.	Must follow protection drawings
8	Aerial to UG / UG to Aerial covert points	Must follow protection drawings
9	Cement Concrete Mixture(CCM)	Cement Concrete Mixture used shall be of 1:2:4 composition, i.e 1 - 53 Grade Cement, 2 - Coarse Sand, 4 - Grade Coarse Stone Aggregate of 20mm Nominal Size, reinforced with Mild Steel Weld mesh.

63 Procedure for fixing RCC/ Pre-cast route/ joint indicators:

- i. Pits shall be dug 500 cm to 1000 cm towards jungle side at every Manhole and Jointing chamber for fixing of Route/Joint Indicator. In addition, Route Indicators are also required to be placed where optical fiber cable changes directions like road crossing etc.
- ii. The pits for fixing the indicator shall be dug for a size of 60 cm x 60 cm and 75 cm (depth). The indicator shall be secured in upright position by ramming with stone and murrum up to a depth of 60 cm and concreting in the ratio of 1:2:4 (1: cement, 2: coarse sand, 4 stone aggregate 20 mm nominal size) for the remaining portion of 15 cm. Necessary curing shall be carried out for the concreted structure with sufficient amount of water for reasonable time to harden the structure.
- iii. The Route indicators shall be painted Blue and placed at 500 to 1000 cm away from the centre of the trench towards jungle side. The Joint indicators are placed at OFC joints and placed 500 to 1000 cm away from wall of the joint chamber facing jungle side and are painted Grey. The engraved word "OFC – APSFL" should be painted in white, on route as well as joint indicators. Numbering of route indicators/joint indicators should also be done in white paint. The numbering scheme for route indicators will be Joint No./Route Indicator No. for that joint. For example, 2/6 marking on a route indicator means 6th route indicator after 2nd joint. Additional joints on account of faults at a later date should be given number of preceding joint with suffix A, B, C, and D. For example sign writing 2A on a joint indicator means, additional joint between joint No. 2 and 3. The numbering of existing route/joint indicator should not be disturbed on account of additional joints. Enamel paint of reputed brands should be used for painting and sign writing of route as well joint indicators.
- iv. Route/ loop and joint indicator to be installed based on following criteria:
 - a) Route/ loop indicator – location where manhole installed for additional loop placement
 - b) Joint indicator – location where joint chamber is installed
- v. The route and joint indicator shall be painted with primer before painting with oil paint. The material used should bear ISI mark. The size of each written letter should be at least 3.5 cms. The colors of painting and sign writing is as under:
 - a) For Joint Indicator: Grey color
 - b) For Route/ loop Indicator: Blue color
 - c) For OFC - APSFL: White color.

64 Trenching near culverts and bridges:

- i. The PLB HDPE Ducts shall be laid in the bed of culvert at the depth not less than 120 cm protected by RCC pipes. Both ends of culvert shall be excavated more than 120 cm in depth to keep the gradient of not less than 15 degree with horizontal. The bed of

trench should be as smooth as possible.

- ii. In case trenching and pipe laying is not possible on the culverts, the pipes shall be laid on the surface of the culverts after due permission approval from the competent authority.
- iii. The PLB HDPE Duct shall be laid on bridges by clamping / cement concrete with MS weld mesh at wheel guard of bridge protected by GI / DWG pipe. Prior approval from APSFL shall be required in case of GI pipe deployment.
- iv. While carrying out the work on bridges and culverts, adequate arrangement for cautioning the traffic by way of caution boards during daytime and danger lights at night shall be provided. In case of small bridges and culverts, where there is a likelihood of their subsequent expansion and remodelling, the cable should be laid with some curve on both sides of the culvert or the bridge to make some extra length available for readjustment of the cable at the time of reconstruction of culvert or the bridge.

6.5 Fiber Blowing

The Optical Fiber Cables are available in drums in lengths of approx. 2 km. The cables shall be blown / manually pulled (in exceptional cases) through already laid PLB HDPE duct. This work is to be carried out under the strict supervision of site-in-charge. It shall be ensured that during the blowing / pulling of Cable the tension is minimum and there is no damage to the Cable / Optical Fibers.

After pulling of the drum is completed, both ends of the PLB HDPE ducts pipe in each Manhole should be sealed by hard rodent resistant rubber bush, to avoid entry of rodents / mud into PLB HDPE ducts.

The optical fiber cables shall be supplied for blowing Test at the Site / Location. APSFL will co-ordinate with the bidder and its nominated representative to ensure seamless implementation of the project.

6.6 Safety and Precautions Measures

6.6.1 Safety Precautions when excavating / working in excavations close to electric cables

The Engineer-in-charge of the work should get full information from Electricity undertaking regarding any electric cables, which are known or suspected to exist near the proposed excavation and unless this is done, excavations should not be carried out in the section concerned. The electricity undertaking should be asked to send a representative and work should be preceded with close consultation with them.

Only wooden handled hand tools should be used until the electric cables have been completely exposed. Power Cables, not laid in conduits, are usually protected from above by a cover slab of concrete, brick or stone. They may or may not be protected on the sides. It is safer, therefore, always to drive the point of the pick axed downwards then uncovering a cable, so that there is less chance of missing such warning slabs. No workman should be permitted to work alone where there are electric cables involved. At

least one more man should be working nearby so that help can be given quickly in case of an accident. If disconnection of power could be arranged in that section it will be better. No electric cables shall be moved or altered without the consent of the Electric Authority and they should be contacted to do the needful. If an electric cable is damaged even slightly, it should be reported to the Electric Authority and any warning bricks disturbed during excavation should be replaced while back filling the trench. Before driving a spike into the ground, the presence of other underground properties should be checked. Information on plans regarding the location of power cables need not to be assumed as wholly accurate. Full precautions should be taken in the vicinity until the power cable is uncovered. All electric cables should be regarded as being live and consequently dangerous. Any power is generally dangerous, even low voltage proving fatal in several cases.

6.6.2 Electric shock-Action and treatment

Free the victim from the contact as quickly as possible. He should be jerked away from the live conductors by dry timber, dry rope or dry clothing. Care should be taken not to touch with bare hands as his body may be energized while in contact. Artificial respiration should begin immediately to restore breathing even if life appears to be extinct. Every moment of delay is serious, so, in the meanwhile, a doctor should be called for.

6.6.3 Safety Precautions while working in public street and road crossings

Where a road or footpath is to be opened up in the course of work, special care should be taken to see that proper protection is provided to prevent any accidents from occurring. Excavation work should be done in such a manner that it will not unduly cause inconvenience to pedestrians or occupants of buildings or obstruct road traffic. Suitable bridges over open trenches should be so planned that these are required for the minimum possible time. If in the case of Where bridges are constructed to accommodate vehicular traffic and is done near or on railway property, it should be with the full consent and knowledge of the competent railway authorities.

6.6.4 Danger from falling material

Care should be taken to see that apparatus, tools or other excavating implements or excavated materials are not left in a dangerous or insecure position so as to fall or be knocked into the trench thereby injuring any workman whom may be working inside the trench.

6.6.5 Care when working in Excavations

Jumping into a trench is dangerous. If it is deep, workmen should be encouraged to lower themselves. Workers should work at safe distance so as to avoid striking each other accidentally with tools. If the walls of the trench contain glass bits, corroded wire or sharp objects they should be removed carefully. If an obstruction is encountered, it

should be carefully uncovered and protected if necessary. If an obstruction is encountered, it should be carefully uncovered and protected if necessary. Care must be taken to see that excavated material is not left in such a position that it is likely to cause any accident or obstruction to a roadway or waterway. If possible the excavated material should be put between the workmen and the traffic without encroaching too much on the road.

6.6.6 Danger of cave in

When working in deep trenches in loose soil, timbering up/shoring the sides will prevent soil subsidence. The excavated material should be kept at sufficient distance from the edge of the trench or pit. Vehicles or heavy equipment must not be permitted to approach too close to the excavation.

When making tunneled opening, it should be ensured that the soil is compact enough to prevent cave in even under adverse condition of traffic. Extra care should be taken while excavating near the foundations of buildings or retaining walls. In such cases, excavation should be done gradually and as far as possible in the presence of the owners of the property.

6.6.7 Protection of Excavations

Excavations in populated areas, which are not likely to be filled up on the same day should be protected by barriers or other effective means of preventing accidents and the location of all such openings must in any event be indicated by red flags or other suitable warning signs. During the hours from dusk to dawn, adequate number of red warning lamps should be displayed. Supervisory officers should ensure that all excavations are adequately protected in this manner as serious risk and responsibility is involved. Notwithstanding adoption of the above mentioned precautions, works involving excavations should be so arranged as to keep the extent of opened ground and the time to open it to a minimum.

6.6.8 Precautions while working on roads

The period between half an hour after sun-set and half an hour before sunrise, and any period of fog or abnormal darkness may also be considered as night for the purpose of these instructions, for the purpose of providing the warning signs. Excavation liable to cause danger to vehicles or the public must at all times be protected with fencing of rope tied to strong uprights or bamboo poles at a suitable height or by some other effective means. Any such temporary erection which is likely to cause obstructions and which is not readily visible should be marked by posts carrying red flags or boards with a red background by day and by continuously lighted lamps at night.

The flags and the lamps should be placed in conspicuous positions so as to indicate the pedestrians and drivers of vehicles the full expanse i.e. both width and length of the obstruction. The distance between lamps or between floors should not generally

exceed 1.25 m along the width and 6m along length of the obstruction in non-congested areas, but 4 meters along the length in congested areas.

If the excavation is extensive, sufficient notice to give adequate warning of the danger, should be displayed conspicuously not less than 1.25 m above the ground and close to the excavation. Where any excavation is not clearly visible for a distance of 25m to traffic approaching from any direction or any part of the carriage way of the road in which the excavation exists, a warning notice should be placed on the kerb edge of all such roads from which the excavation or as near the distance as is practicable but not less than 10 m from the junction of an entering or intersecting road in which the excavation exists. All warnings, in these should have a red background and should be clearly visible and legible. All warning lamps should exhibit a red light, but white lights may be used in addition to facilitate working at night. Wherever required a passage for pedestrians with footbridges should be provided. At excavations, cable drums, tools and all materials likely to offer obstructions should be properly folded round and protected. This applies to jointer's stents as well. Leads, hoses etc. stretched and across the carriageway should be guarded adequately for their own protection and also that of the public.

6.6.9 Traffic Control

The police authorities are normally responsible for the control of traffic and may require the setting up of traffic controls to reduce the inconvenience occasioned by establishment of a single line of traffic due to restriction in road width or any other form of obstruction caused by the work. As far as possible, such arrangements should be settled in advance. If there are any specific regulations imposed by the local authorities, these should be followed.

6.6.10 Protection from Lightning During Storing

Every magazine shall have attached there to one or more efficient lightning conductors designed and erected in accordance with the specification laid down in Indian Standard Specifications No. 2309 as amended from time to time. The connections to various parts of earth resistance of the lightning conductor terminal on the building to the earth shall be tested at least once in every year by a qualified electrical engineer or any other competent person holding a certificate of competency in this behalf from the State Electricity Department. A certificate showing the results of such tests and the date of the last test shall be hung up in conspicuous place in the building.

6.6.11 Precautions during thunder-storm

When a thunder-storm appears to be imminent in the vicinity of a magazine or store house every person engaged in or around such magazine and store house shall be withdrawn to a safe distance from such magazine or store house and the magazine and store houses shall be kept closed and locked until the thunder storm has ceased or the

threat of it has passed.

6.6.12 Maintenance of records

Every person holding a license granted under these rules for possession, sale or use of explosives shall maintain records in the prescribed form and shall produce such record on demand to an Inspection Officer.

6.6.13 General Precautions

- a) For the safety of persons a red flag shall be prominently displayed around the area where blasting operations are to be carried out. All the workers at site, except those who actually ignite the fuse, shall withdraw to a safe distance of at least 200 meter from the blasting site. Audio warning by blowing whistle shall be given before igniting the fuse.
- b) Blasting work shall be done under careful supervision and trained personnel shall be employed. Blasting shall not be done within 200 meters of an existing structure, unless specifically permitted by the Engineer-in-Charge in writing.
- c) Where electrically operated equipment is used in locations having conductive ground or continuous metal objects, tests shall be made for stray current to ensure that electrical firing can proceed safely.

6.6.14 Allied Activities

- a) Transportation of Materials: The materials required for executing the work entrusted to the contractors against a work order shall be made available at Project Store Depot. In some cases the materials may be available at subdivisional store go down. The contractor shall be responsible for transporting the materials, or otherwise to execute the work under the contract, to site at his/ their own cost. The costs of transportation are subsumed in the standard Schedule Rates and therefore no separate charges are payable on this account.
- b) Disposal of Empty Cable Drums: The contractor shall be responsible to dispose of the empty cable drums after laying of the cables. The cost of various sizes of empty cable drums recoverable from the contractor has been fixed taking into account the prevailing market rates as mentioned in this document.
- c) It shall be obligatory on part of the contractor to dispose of the empty cable drums at his/their level and the amount fixed for various empty cable drums shall be recovered from the bill for the work for which the drum (s) was/were issued or from any other amount due to the contractor or the Security Deposit.
- d) The contractor shall not be allowed to dump the empty cable drums in Govt. /Public place which may cause inconvenience to the public and should be disposed at appropriate manner. If the contractor does not dispose of the empty cable drums within 3 days of becoming it empty, the APSFL shall be at liberty to dispose of the drums in any manner deemed fit and also recover the double the amount fixed in this contract from the bill/security deposit/ any other amount due to

thecontractor.

- e) Supply of Materials: There are some materials required to be supplied by the contractor for execution of work under this contract like Bricks, Cement, Wire Mesh and Steel for protection, etc., besides using other consumables which do/don't become the part of the asset. The contractor shall ensure that the materials supplied are of best quality and workmanship and shall be strictly in an accordance with the specifications.
- f) Disposals of Cable Drums should not have any disturbance to Public Places. Transportation charges would be barred by the Bidder for the Disposals.

7. Bid Evaluation Criteria and Process

7.1 Pre-Qualification Criteria

The bidder should satisfy the following Pre-qualification criteria to be eligible for further evaluation under this RFP. The bidder should enclose documentary evidence for fulfilling the Eligibility in the Pre-qualification Bid. If a bidder fails to enclose the documentary proof for eligibility, their bid is liable to be rejected.

The following is the Pre-Qualification Criteria:

S. No	Eligibility Criteria	Documents Required
1	The Bidder should be a Sole Proprietorship firm or a company registered in India under the Companies Act, 1956 / 2013 /LLP Act 2008 /Indian Partnership Act 1932, as amended from time to time, and should be in operation for at least the last 3 years as on the date of bid submission.	For Sole Proprietorship firm, following documents are required. a. Copy PAN b. Proof of address and contact details For other, following documents are required: a. Copy of valid Certificate of Incorporation from Registrar of Companies b. Copy of Corporate Identification Number (CIN) c. Copy of GST registration certificate d. Copy of PAN
2	The cumulative annual turnover of the Bidder in the financial years i.e. FY 2017-18, FY 2018-19, FY 2019-20 and current financial year, should be at least INR 7.5Cr.	Certificate from the Statutory Auditor of the Company mentioning year-wise annual turnover. And, Copy of audited profit and loss statement showing the year-wise turnover, as mentioned in Annexure –F in Section 8.1 of the RFP
3	Average Net Worth of the Bidder, for the financial years, i.e. FY 2017-18, FY 2018-19, FY 2019-20 and current financial year, should be at least INR 25 Lakhs as per the audited financial results.	Certificate from Statutory Auditor clearly stating the Net worth of the Bidder, as mentioned in Annexure – F in section 8.1 of the RFP.

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S. No	Eligibility Criteria	Documents Required
4	The Bidder should have experience in works related to national highway in minor bridges/culverts or Horizontal Directional Drilling (HDD), amounting to INR 1.5 crores in the past 3 years.	Completion Certificate on the letterhead of the client clearly mentioning the value of work completed for national highways in minor bridges/culverts or Horizontal Directional Drilling (HDD) of 3 Years, as mentioned in Annexure – G in Section 8.1 of the RFP.
5	Bidder should not have been blacklisted by any central or state Govt. department or PSU on the date of bid submission	Bidder should submit an undertaking, as mentioned in Annexure H in Section 8.1 of the RFP, that it has not been blacklisted/debarred by any Govt. department or any PSU in India as on bid submission date.
6	All documents in the proposed bid, shall be signed by an authorized signatory, in whose name the Power of Attorney/ Board Resolution, should be duly issued.	For Pvt. Ltd. firms, a Board Resolution, as mentioned in Annexure-J, in Section 8.1 of the RFP to be submitted. For others, the Power of Attorney, as mentioned in Annexure-I, in Section 8.1 of the RFP to be submitted.
7	Bidder to Share the Document Verification Certificate	Certificate, on INR 100/- non Judicial Stamp Paper and duly notarized and Stamp, to be enclosed along with the bid documents (as per the format enclosed as Annexure – K in section 8.1 of the RFP.

NOTE 1:

- Only the bids of those Bidders, who submit the prescribed Bid-processing fee and EMD, shall be considered for evaluation. The bids not accompanied with a valid Bid-processing fee and EMD as part of the proposal shall be summarily rejected.
- The Commercial bids of only those bidders, who meet the Pre-Qualification criteria, shall be opened.
- Bidders are required to provide the aforementioned information as per the formats provided along with the required supporting documents for each of the criteria mentioned above.
- Specifications and Amendments referred in the Clause No: 5, should also be submitted with Supporting Docs along with the PQ Documents.

Post Tender Discussions at any cost and at any form will not be entertained.

Proposals without necessary supporting documents or without meeting the prescribed qualification criteria will be treated as non-responsive and will not be considered for further evaluation.

7.2 Commercial Evaluation Criteria

- a. Financial bids submitted of only those bidders, who are qualified as per pre-qualification criteria shall be opened and are eligible for further evaluation.
- b. All the Pre-qualification qualified bidders shall be notified to participate in Commercial Bid opening process.
- c. Bidders quoting unrealistic cost shall be rejected straightaway by APSFL. Any bid found to have unsatisfactory response in the eligibility criteria as mentioned shall be rejected and shall not be considered for further evaluation.
- d. The commercial bids for the Pre-Qualification qualified bidders shall be reviewed to determine whether the Commercial Bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at purchaser's discretion.
- e. Commercial Bids that are not as per the provided format in section 8.2 shall be liable for rejection.
- f. In case of computation error in commercial forms, the Technical/Evaluation Committee's decision in this regard shall be final and binding on all.

7.3 Reverse Auction

APSFL will schedule the reverse auction on the website of Procurement.

- a. Only the qualified and whose financial bids are complying to the RFP requirements only will be permitted to participate in the reverse auction.
- b. The date and time will be intimated to the qualified bidders.
- c. Reverse auction will be conducted on the total price of the respective schedule, quoted by the bidder for the indicated quantities in the cost sheet.
- d. The amount quoted in the Bid will be considered for overall evaluation to arrive 'L1' bidder.
- e. The 'opening price' i.e. start price for Reverse Auction will be the L1 price quoted.
- f. The reverse auction will be conducted for the entire schedule. The bidder's screen will have provision for decrement of prices. In the bidder's screen the total price of his bid and the L1 Price at that instance will also be displayed.
- g. For the purpose of Reverse Auction, the minimum bid decrement will be Rs. 2,00,000/- (Rupees Two lakh only)
- h. The Bidders can modify the total price of the bid based on the minimum bid decrement or the multiples thereof, to displace a standing lowest bid and become "L1", and this will continue as an iterative process.
- i. The reverse auction shall be conducted for 3 Hours. If any bidder submits a bid in the last 15

minutes of the auction closing time, the auction time will be automatically increased by 15 minutes. All bidders are required to submit their online bids during this period.

- j. After the completion of the online reverse auction, the Closing Price (Final L1 Price) and the successful bidders shall be finalized. The bidder has to submit the breakup of the cost in the commercial bid format (Annexure M) within 48 Hours to the e-mail ID: apsfl@ap.gov.in as mentioned on completion of the reverse auction.
- k. In case the bidder fails to submit the breakup of the cost quoted in the reverse auction, the quote shall stand cancelled and the EMD of the bidder will be forfeited.

7.4 Selection Process of Bidder

Evaluation of bids shall be done on Least Cost/Lowest Cost (L1) criteria as per the quotes submitted in reverse auction

Note: Post award of work, APSFL has the right to alter the quantity of allotment to the successful bidder.

8. Bid SubmissionForms

8.1 Pre-Qualification EvaluationForms

“All the forms in this section shall be uploaded as part of “PQ” Bid and in the “PQ” bid folder of the eprocurement platform.If the following documents are not found in the “PQ” bid folder, the bid shall be considered as non-responsive and may be rejected. Failure to submit any of the forms in this section shall lead to disqualification of the bidder.”

Annexure A - Application Form

(On Bidder's letterhead)

(Date)

To,

Managing Director,
Andhra Pradesh State FiberNet Limited
NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station,
NH -65, Vijayawada - 520001

Sub: Selection of agency for execution of Underground Optical Fiber at the selected locations of Govt. Offices / Organizations / Institutions on Rate Contract

Ref: APSFL/BD/415/2020/UGOFC, Dated: 17/02/2021

Dear Sir,

With reference to your RFP Document dated 17/02/2021, I/We, having examined all relevant documents and understood their contents, hereby submit our Proposal to provide Underground Optical Fiber Connectivity at the selected locations of Govt. Offices / Organizations / Institutions on Rate Contract.

- 1) All information provided in the Proposal and in the Appendices is true and correct and all documents accompanying such Proposal are true copies of their respective originals.
- 2) I/We shall make available to the Authority any additional information it may deem necessary or require for supplementing or authenticating the Proposal.
- 3) I/We acknowledge the right of the Authority to reject our Proposal without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.
- 4) I/We to the best of our knowledge certify that in the last three years, we or any of our Associates have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder, nor been expelled from any project or contract by any public authority nor have had any contract terminated by any public authority for breach on our part.

- 5) I/We understand that you may cancel the Selection Process at any time and that you are neither bound to accept any Proposal that you may receive nor to select the selected supplier, without incurring any liability to the Bidders
- 6) I/We to the best of our knowledge certify that in regard to matters other than security and integrity of the country, we or any of our Associates have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which would cast a doubt on our ability to undertake the Consultancy for the Project or which relates to a grave offence that outrages the moral sense of the community.
- 7) I/We to the best of our knowledge further certify that in regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a Court of Law for any offence committed by us or by any of our Associates.
- 8) I/We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Authority and/ or the Government of India in connection with the selection of Supplier or in connection with the Selection Process itself in respect of the above mentioned Project.
- 9) I/We agree and understand that the Proposal is subject to the provisions of the RFP document. In no case, shall I/We have any claim or right of whatsoever nature if our Proposal is not opened or rejected.
- 10) I/We agree to keep this offer valid for 180 days from the Proposal Due Date specified in the RFP.
- 11) I/We agree and undertake to abide by all the terms and conditions of the RFP Document. In witness thereof, I/We submit this Proposal under and in accordance with the terms of the RFP Document.

Yours faithfully,

(Signature, name and designation of the authorized signatory)

(Name and seal of the firm)

Annexure B - Profile of Bidder/ Partners

(To be submitted by Bidder)

S. No.	Particulars	Details
1	Name of the Company	
2	Year of incorporation	
3	Nature of the Company (Registered Company)	
4	Registered Office Address	
5	Office Telephone Number	
6	Fax Number	
7	Contact Person	
8	Name	
9	Telephone Number	
10	Email Address	
11	Local presence at Andhra Pradesh, if any	
12	Office Address	
13	Office Telephone Number	
14	Fax Number	
15	Registration Details	
16	Permanent Account Number	
17	GST Registration Number	
18	Service Tax Registration Number	
19	Banker's Name, Address and Account Number	
20	No. of Technical Staff employeed	

Witness:
 Signature -----
 Name -----
 Address -----
 Date -----

SUPPLIER:
 Signature -----
 Name -----
 Designation -----
 Company Seal -----
 Date -----

Annexure C – Declaration of Acceptance of Terms and Conditions in the RFP

(To be submitted by Bidder)

To,

[Date]

Managing Director

Andhra Pradesh State FiberNet Limited

NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station,

NH -65, Vijayawada - 520001

Sub: Selection of agency for execution of Underground Optical Fiber at Selected locations of Govt. Offices / Organizations / Institutions on Rate Contract.

Ref: APSFL/BD/415/2020/UGOFC, Dated 17/02/2021

Sir,

It is to certify that the RFP document – Ref: APSFL/BD/415/2020/UGOFC, Dated 17/02/2021 is carefully read & understood and all the sections and clauses are COMPLIED UNCONDITIONALLY AND UNEQUIVOCALLY. There is no deviation from the terms and conditions of the RFP. We also hereby confirm that the solution proposed by us will meet the project requirements.

Yours faithfully,

(Signature, name and designation of the authorized signatory)

(Name and seal of the firm)

Note: A copy of this form should be returned along with the Bid duly signed

Witness:

Supplier:

Signature -----

Signature -----

Name -----

Name -----

Address -----

Designation -----

Company Seal -----

Date -----

Date -----

Annexure D – Undertaking on SoW Compliance and Unconditional Acceptance

To

Managing Director

Andhra Pradesh State FiberNet Ltd.

3rd Floor, NTR Administrative Block, Pandit Nehru Bus Station, NH-65,

Vijayawada – 520001, Andhra Pradesh,

India.

Subject: Undertaking on SoW Compliance and Unconditional Acceptance with reference to RFP No. APSFL/BD /415/2020/UGOFC, Dated 17/02/2021

We, M/s _____, based at _____ hereby confirm our compliance to the requirements outlined in Section 4 - Scope of Work (SoW) of the above referenced RFP. By way of this compliance undertaking, we confirm that we have adequate capability and experience to perform the services outlined in the SoW, as per the requirements defined in the RFP.

We confirm our unconditional acceptance of full responsibility of providing services in accordance with the Terms and Conditions and Scope of work of this RFP.

For M/s _____

Authorized Signatory (duly signed and stamped)

Name

Designation

Annexure E – Pre-Qualification Compliance Documents

The bidder should attach following checklist for compliance with important criterion along with the bid to be submitted:

S. No.	Item	Complied (Yes/ No)	Remarks
1.	Bid Processing Fee		
2.	EMD		
3.	Application Form		
4.	All pages of bid are numbered, signed by authorized signatory and bids are sealed properly		
5.	Proof of authorized signatory (Power of Attorney/ Board Resolution)		
6.	Profile of the Bidder		
7.	Financial Turnover and Net worth of the Bidder		
8.	Previous experience of supply/ installation/ maintenance of Underground Optical Fiber works in the last three financial years as on bid submission date.		
9.	Self-Declaration Certificate (Certificate to be enclosed in the bid duly signed by the authorized signatory on its letterhead) regarding blacklisting by any central or state Govt. department or PSU on the date of bid submission.		
10.	Undertaking for Unconditional Acceptance of Terms and Conditions of the RFP		

Annexure F – Financial Turnover and Net worth of the Bidder
(To be submitted by Bidder)

Annual Turnover of the Bidder

Criteria	Sub Criteria	FY	Total Financials
Financial Capability	Turnover from business activities	FY 2017-18	
		FY 2018-19	
		FY 2019-20	
		FY 2020-21	
Net worth	Measured as paid-up capital plus free reserves	FY 2017-18	
		FY 2018-19	
		FY 2019-20	
		FY 2020-21	

Documentary Proof Required:

- Statutory Auditor / CA Certificate clearly specifying the turnover for the specified years.
- Audited P&L and Balance Sheets

Annexure G – Format for Past Experience of the Bidder

Please provide citations as per the Qualification / Technical criteria in the format provided below. The relevant documentary proofs need to be attached.

Project Title (Attach separate sheet for each Project)			
Name of Client		Address	
Type of Client (Govt./PSU/Others)		Order Value of the Project(in Crores)	
Duration of the Assignment		Start Date (month/year):	
		End Date (month/year):	
Referrals(Client side): Provide one referral only	Name		
	Designation		
	Contact Number		
	E mail Id		
Brief Description of the Project			

Documentary Proof Required:

- Copy of Work order
- Certificate of successful operation by the client

Annexure H – Declaration regarding Clean Track Record

To, [Date]
Managing Director
Andhra Pradesh State FiberNet Limited
NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station,
NH -65, Vijayawada – 520001

Sub: Selection of agency for execution of Underground optical fiber at selected
Locations of Government Offices / Institutions / Organizations on Rate Contract.

Ref: APSFL/BD/415/2020/UGOFC, dated: 17/02/2021

Sir,

I/We hereby declare that my company has not been debarred / black listed as on Bid submission date by any State Government, Central Government, Central & State Govt. Undertakings / Organizations and by any other Quasi Government bodies / Organizations, and any other major Enterprise / Organizations in India for non-satisfactory past performance, corrupt, fraudulent or any other unethical business practices.

Yours faithfully,

(Signature, name and designation of the authorized signatory)
(Name and seal of the firm)

Note:

- **Submission of this Annexure is mandatory along with the bid. Failure to submit this Annexure may lead to disqualification.**

Annexure I – Power of Attorney

Sample form of Power of Attorney for signing the Application & Bid

(On INR 100.00 Non judicial Stamp Paper and duly notarized and Stamp)

KNOW ALL MEN BY THESE PRESENTS,

We _____ (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr. / Ms. (name), _____ son/daughter/wife of _____ and presently residing at _____, who is presently employed with us and holding the position of _____, as our true and lawful attorney (hereinafter referred to as the “Attorney”) to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our application for qualification and submission of our bid for the Project proposed by the M/s _____ (the “Andhra Pradesh State FiberNet Limited”) including but not limited to signing and submission of all applications, bids and other documents and writings, participate in pre-applications and other conferences and providing information/ responses to the APSFL, representing us in all matters before the APSFL, signing and execution of all contracts including the Agreement and undertakings consequent to acceptance of our bid, and generally dealing with the APSFL in all matters in connection with or relating to or arising out of our bid for the said Project and/ or upon award thereof to us and/or till the entering into of the Agreement with the APSFL.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

The power of attorney shall be effective from _____ and will continue to be valid binding and unforgettable till the attorney Mr./Ms. _____ ceases to be in the employment of the company unless otherwise withdrawn earlier by the company. This power of attorney will supersede any power of attorney issued earlier prior to the date of execution. In case this Power of Attorney is withdrawn for any reasons, APSFL shall be pre intimated.

IN WITNESS WHEREOFF for and on behalf of M/s _____ Mr./Ms. _____ Managing director of the company has set his hands with company seal on the day of _____ Month of _____ year _____ and at _____.

For _____ (Authorised Signatory of the company)
(Signature, Name, Designation, Address and emblem of the office seal)

RFP for Selection of Agency for execution of Underground Optical Fiber at selected locations of Government Offices / Institutions / Organizations on Rate Contract

1.

2.

Accepted (Authorised Signatory of the company)

(Signature in Duplicate, Name, Title and Address of the Attorney)

Witnesses:

1. (Notarized)

2.

Notes:

- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
- Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favor of the person executing this Power of Attorney for the delegation of power here-under on behalf of the Bidder.
- In case the Application is signed by an authorized signatory / Partner, a certified copy in the regard should be enclosed in lieu of the Power of Attorney.
- **Submission of this Annexure is mandatory along with the bid. Failure to submit this Annexure may lead to disqualification.**

Annexure J – Board Resolution

Board Resolution (Suggested format)

(To be printed on organization letter head)

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED AT THE MEETING OF THE BOARD OF DIRECTORS of (Company Name) HELD ON (Date) AT (Address)

RESOLVED THAT the company has decided to authorize, Mr. / Ms. to sign and submit all the necessary applications, annexure, and other documents to be submitted by the company in connection with RFP APSFL/BD/415/2020/UGOFC, dated: 17/02/2021 for “Selection of agency for execution of Underground Optical Fiber at selected locations of Govt. Offices / Organizations / Institutions on Rate Contract”. The acts done and documents shall be binding on the company, until the same is withdrawn by giving written notice thereof.

Specimen Signatures of Authorised Signatory:

(Signature)

RESOLVED FURTHER THAT, a copy of the above resolution duly certified as true by designated director/ authorised signatory of the company be furnished to APSFL as may be required from time to time in connection with the above matter.

For the Organization,

(Seal & Signature)

Name:

Designation:

Note:

- **Submission of this Annexure is mandatory along with the bid. Failure to submit this Annexure may lead to disqualification.**

Annexure K – Document Verification Certificate

FORMAT FOR CERTIFICATE TO BE SUBMITTED / UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS

(On INR 100.00 Non judicial Stamp Paper and duly notarized and stamped)

I _____ (Name _____ and _____ designation)** appointed as the attorney/authorized signatory of the tenderer (including its constituents), M/s _____ (hereinafter called the tenderer) for the purpose of RFP for Selection of Agency for execution of Underground Optical Fiber at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract” as per the tender No.APSFL/BD/415/2020/UGOFC, dated: 17/02/2021 of APSFL, do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

1. I/We the tenderer(s) am/are signing this document after carefully reading the contents.
2. I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/We hereby declare that I/we have downloaded the tender documents from APSFL website <http://apsfl.in/tenders/> or AP procurement website www.apcprocurement.gov.in. I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the APSFL shall be final and binding upon me/us.
4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.
6. I/We declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.
7. I/We understand that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during the process for evaluation of tenders, it shall lead to forfeiture of the tender EMD besides banning of business for a period of up to five year. Further, I/we *(insert name of the*

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tenderer)**_____ and all my/our constituents understand that my/our offer shall be summarily rejected.

8. I/We also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of EMD and Performance guarantee besides any other action provided in the contract including banning of business for a period of up to five year.

SEAL AND SIGNATURE OF THE TENDERER

Place:

Dated:

Note:

- **Submission of this Annexure is mandatory along with the bid. Failure to submit this Annexure may lead to disqualification.**

Annexure L – Earnest Money Deposit (EMD) Format

(To be executed in Rs.100/- Stamp Paper)

To,
The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station,
NH – 65, Vijayawada – 520013

Bank Guarantee No:
Amount of Guarantee:
Guarantee covers from:
Last date for lodgement of claim:

This Guarantee executed by _____ (Banker's Name & Address) having our Head Office at _____ (address) (hereinafter referred to as "Bank") in favour of Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, NH -65, Vijayawada – 520013 India (hereinafter referred to as "Beneficiary") for an amount not exceeding Rs. _____/- (Rupees _____ Only) as per the request of M/s. _____ having its office address at _____ (hereinafter referred to as "Bidder") against RFP reference no APSFL/BD/415/2020/UGOFC, Dated: 17/02/2021 of M/s. Andhra Pradesh State FiberNet Limited (APSFL). This guarantee is issued subject to the condition that the liability of the Bank under this guarantee is limited to a maximum of Rs. _____/- (Rupees _____ Only) and the guarantee shall remain in full force up to _____ (date) and cannot be invoked otherwise by a written demand or claim by the beneficiary under the Guarantee served on the Bank before _____ (date).

ANDWHEREAS it has been stipulated by you in the said ORDER that the Supplier shall furnish you with a Bank Guarantee by a Scheduled/Nationalized Bank for the sum specified therein as EMD towards bid submission.

ANDWHEREAS we have agreed to give the Bidder a Guarantee.

THEREFORE, we (Bankers address), hereby affirm that we are Guarantors and responsible to you on behalf of the Bidder for Rs. _____/- (Rupees _____ Only) and we undertake to pay you, upon your first written demand without any demur, cavil or argument, any sum or sums within the limit of Rs. _____/- (Rupees _____ Only) as aforesaid, without your needing to prove or show grounds or reasons for your demand or the sum specified therein. We will pay the guaranteed amount notwithstanding any objection or dispute whatsoever raised by the Bidder.

This Guarantee is valid until _____.

Place:

Date:

Signature and seal of Guarantors (Bank)

Commercial Forms

Annexure M – Commercial Proposal Submission Form

Dated:

To

.....

.....

.....

.....

.....

Sir/ Madam,

Subject: “Selection of Agency for execution of Underground Optical Fiber Cable at Selected Locations of Govt. Offices / Institutions / Organizations on Rate Contract.”

Reference: RFP No: APSFL/BD/415/2020/UGOFC, Dated 17/02/2021

We, the undersigned SUPPLIER, having read and examined in detail all the RFP in respect of “Selection of Agency for execution of Underground Optical Fiber at selected locations of Government offices/ Institutions / Organizations” do hereby propose to provide services as specified in the RFP number **APSFL/BD/415/2020/UGOFC, Dated 17/02/2021**.

1. PRICE AND VALIDITY

- a. All the prices mentioned in our Bid are in accordance with the terms & conditions as specified in the RFP. The validity of bid is 180 days from the date of opening of the RFP.
- b. We are an Indian Firm and do hereby confirm that our prices exclude all taxes. However, all the taxes are quoted separately under relevant sections and shall be applicable as per actuals.

2. We have studied the laws relating to Indian Income Tax Department and hereby declare that all income tax, surcharge on Income Tax, Professional and any other Corporate Tax, withholding tax as applicable under the law, shall be paid by us.

3. EARNEST MONEY DEPOSIT (EMD)

We have enclosed an EMD for a sum of **Rs. 10,00,000/- (In Words – Rupees Ten Lakhs Only)**. This EMD is liable to be forfeited in accordance with the provisions of the **Section II - General Instructions to Bidders**.

4. TENDER PRICING

We further confirm that the prices stated in our bid are in accordance with your Instruction to Bidders included in RFP.

5. QUALIFYING DATA

We confirm having submitted the information as required by you in your Instruction to Bidders. In case you require any other further information/documentary proof in this regard before evaluation of our Bid, we agree to furnish the same in time to your satisfaction.

6. BID PRICE

We declare that our Bid Price is for the entire scope of the work as specified in Scope of Work. These prices are indicated in Bid Submission Formats attached with our Financial Bid as part of the Bid Response and the price quoted in the reverse auction, as mentioned in the Clause no: 2.7 of the RFP.

7. CONTRACT PERFORMANCE GUARANTEE BOND

We hereby declare that in case the Contract is awarded to us, we shall submit the Bank Guarantee for Contract performance in the prescribed format given in RFP.

We hereby declare that our Bid is made in good faith, without collusion or fraud and the information contained in the Bid is true and correct to the best of our knowledge and belief. We understand that our Bid is binding on us and that you are not bound to accept a Bid you receive.

We confirm that no deviations are attached here with this financial offer.

Thanking you,

Yours faithfully,

(Signature of the SUPPLIER)

Printed Name
Designation Seal.

Date:

Place:

Business Address:

Witness:

Signature -----

Name -----

Address -----

Date -----

Supplier:

Signature -----

Name -----

Designation -----

Company Seal-----

Date -----

Annexure N – Commercial Bid Cost Components

Price Bid for laying of optical fiber cable using Applicable Methodology HDD / OPEN Trenching / Micro Trenching.

Tentative Price Estimation - UGOFC					
S.No	Item	UOM	Quantity	Unit Cost (INR)	Total Cost (INR)
Survey (A)					
1	Physical Survey of Route, capturing the Lat/Long of OFC Proposed Route,Joint Indicator, Preparation of GIS Report, As built network diagram of OFC Route	mtr	30000		
Supply, Delivery and Installation towards Underground Connectivity (B)					
2	Armoured Optical Fiber Cable (24F) with drum test	mtr	30000		
3	Supply of PLB HDPE Duct (40/33) mm with associated Accessories (Push Fit Couplers,End Plugs and Sealing Plug etc.) as per Specifications	mtr	30000		
4	Supply of full DWC with 75/61 mm dia	mtr	750		
5	Supply of GI Pipe 50mm dia ISI standard (Class B) with couplers	mtr	110		
6	Supply of full RCC Round Pipe with 4" dia (100 mm) incl. collar for 4" dia RCC Pipe	mtr	375		
7	Supply of Route / Joint Indicator as per specification RCC / Pre cast route indicator made of pre-cast RCC & of dimensions. Base - 250 mm X 150 mm; Top - 200 mm x 75 mm;Height - 1250 mm.	No	120		
8	Supply of Split DWC Pipe with 75/61 mm dia	mtr	225		
9	Supply of half RCC Round Pipe with 4" dia (100mm) incl. collar for 4" dia RCC Pipe	mtr	375		
10	Supply of wire mesh 100 mm x 50 mm, 12 SWG	No	120		
11	Supply of PVC Flexible Conduit of OD (15-25mm) in corridor with Clamping (for every 1meter) / risers / substation and Office Premises	mtr	300		

RFP for Selection of Agency for execution of Underground Optical Fiber at selected locations of Government Offices / Institutions / Organizations on Rate Contract

12	Construction of pre - fabricated RCC Joints chamber as per specification and the Construction practice as specified in the tender document. Specification: 1. Diameter: 100 cm (inner side) 2. Diameter: 120 cm (External) 3. Thickness: 10 cm 4. Height: 120 cm 5. 6 mm Horizontal Iron round rings - 6. 6 mm Vertical bars Iron - 12 mm Nos. 7. 12 gauge GI wire mesh to be wrapped before reinforcing the concrete	No	120		
13	Road crossing / NHA1 Crossing through Horizontal Directional Drilling Method and inserting two no of 40/33 mm HDPE Duct (whichever is applicable) and OFC cable in all type of Soil	mtr	24800		
14	Manual Trenching for a depth not less than of 120 cms and back filling the trenches after laying HDPE Duct and OFC Cable with or without protection in all types of soil (Dimension of trench 120cm x 45cm x 30cm)	mtr	6200		
15	Additional Duct (40/33 mm HDPE Duct)	mtr	10		
16	Providing cement concrete 1:2:4 mixing of (H = 40 cm, W= 40 cm, D= 40 cm) on Covering of GI / DWC Pipe, with PLB HDPE Duct (40/33 mm or 50/42) in the trench for protection.	mtr	500		
17	Installation of RCC Chamber	No	150		
18	Blowing of Optical Fiber Cable Inside Laid PLB HDPE Duct with DIT test, joint cuplers, end plugs, end caps, Splicing Joints and end to end Link Termination (OTDR reports with maintaining each fiber loss @ - db)	mtr	31000		
Total cost (D) CAPEX = (A) + (B) + (C)					
Total Cost in words:					
Operation & Maintenance (E)					
19	O & M Charges towards Year - I				
20	O & M Charges towards Year - II				
21	O & M Charges towards Year - III				
Total Cost (F) = (D) + (E)					
Total cost (CAPEX + OPEX) in words:					

Note:

- Prices in Financial Bid should be quoted in the provided format.
- All prices should be quoted in Indian Rupees and indicated in both figures and words.

RFP for Selection of Agency for execution of Underground Optical Fiber at selected locations of Government Offices / Institutions / Organizations on Rate Contract

- c. *In case there is discrepancy between words and figures, the amount in words shall prevail.*
- d. *APSFL reserves the right to reject the bid, which are not submitted in the prescribed format.*
- e. Quantity Indicated above is tentative and which might Increase / Decrease based on the requirement and actuals.
- f. ***In Special Case Item No: 17 as described above, shall be used to restoration at CC Roads / BT Roads based upon the actual requirement and request to APSFL towards Approval / Decision which would be treated as Significant RoW.***
- g. ***Row Liasoning Charges towards implementation would be based on the actuals and the procedure to be followed is as per the G.O. MS.NO.60, Transport, Roads & Buildings (R-IV) Department.***
- h. *Payment to be made based on the actual methodology and after submission of the prescribed document*

Instructions to fill the Financial Bid:

- a. Bidders should provide all prices as per the prescribed format under this Annexure. Bidder should not leave any field blank.
- b. All the prices are to be entered in Indian Rupees ONLY (%age values are not allowed).
- c. All the prices quoted in the Financial Bid shall be exclusive of applicable taxes and levies.
- d. APSFL reserves the right to ask the Bidder to submit proof of payment against any of the taxes, duties, levies indicated.
- e. For the purpose of evaluation of Financial Bids the APSFL shall make appropriate assumptions to arrive at a common bid price for all the Bidders. This however shall have no co-relation with the Contract value or actual payment to be made to the Bidder.
- f. The soft copy of the financial bid should be uploaded online. The financial bid formats shall be provided in company's letter of the lead bidder duly signed and stamped.

8.2 Other Forms and Formats

Annexure O – Performance Bank Guarantee Format

(To be submitted by the successful bidder on Rs.100/- stamp paper)

In consideration of APSFL (“Authority”), having agreed to accept from _____ “successful bidder”, a Performance Bank Guarantee as maybe modified from time to time wherever necessary under the terms and conditions of the Agreement entered into by the said successful bidder in respect of work for execution of Underground Optical Fiber at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract, RFP No. APSFL/BD/415/2020/UGOFC, Dated: 17/02/2021 under APSFL for the due fulfilment of the terms and conditions of the said Agreement under APSFL, on production of a Bank Guarantee for Rs.____ (Rupees _____ only), we _____ “Bank” _____ branch, hereby undertake the guarantee to pay immediately to APSFL, on demand in writing by APSFL, an amount of Rs. _____ (Rupees _____) without any reservation and recourse against any loss or damage caused to or suffered by APSFL by reason of any breach by the successful bidder of any of the terms and conditions of the said agreement under the said Authority.

We _____ Bank, further agree that the guarantee hereby contained shall remain in full force and effect during the period that will be taken for the performance of the said Agreement under the APSFL and that it shall be in enforcement until all the dues of APSFL under or by virtue of the said Agreement under the APSFL have been fully paid and their claims satisfied or discharged or until the said Authority certifies that the terms and conditions of the said Agreement under the APSFL have been fully and properly carried out by the successful bidder and accordingly discharges the guarantee subject. This bank guarantee is valid until _____ (date) and APSFL shall have no rights under this guarantee after _____ (date).

We _____ Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the APSFL in writing.

Dated _____ day of _____ 2021.

Place:

Date: Signature and seal of Guarantors (Bank)

Annexure P – Draft Contract Format

THIS AGREEMENT made the _____ day of _____ 20XX

BETWEEN

The **APSFL** (hereinafter referred to as “the Purchaser”) which expression shall unless repugnant to the context or meaning thereof mean and be deemed to include its authorized agents, representatives and permitted assigns of the First Part.

AND

The Party _____ (hereinafter referred to as “the SUPPLIER”) which expression shall unless repugnant to the context or meaning thereof mean and be deemed to include their successors and permitted assigns having its registered office at _____ of the Second Part.

WHEREAS

The Purchaser had invited Bids vide their Tender _____ (hereinafter referred to as “RFP”) for “Selection of agency for execution of Underground Optical Fiber at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract”.

- (a) The SUPPLIER had submitted its proposal dated _____ (hereinafter referred to as the ‘Bid’) for the provision of such services in accordance with its proposal as set out in its Bid and in accordance with the terms & conditions of the RFP and this Contract.
- (b) The Purchaser has agreed to select the SUPPLIER for the provision of such services and the SUPPLIER has agreed to provide services as are represented in the RFP, including the terms & conditions of this Contract, the Schedules and Annexure attached hereto and in accordance with the terms & conditions of the RFP and in terms of the discussions, negotiations and clarifications in relation to the implementation of the scope of work
- (c) In consideration of the foregoing and the mutual covenants and promises contained herein and other good and valuable consideration the receipt and adequacy of which is hereby acknowledged, the parties intending to be bound legally.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

- (d) In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of the Contract referred to.
- (e) The following documents shall be deemed to form and be read and construed as part of this Agreement viz:
 - i. the Scope of Work
 - ii. the General Conditions of the Contract
 - iii. Approach Paper on methodology and work plan for performing the assignment

RFP for Selection of Agency for execution of Underground Optical Fiber at selected locations of Government Offices / Institutions / Organizations on Rate Contract

- iv. Copy of RFP, financial proposal as submitted by the SUPPLIER and as amended pursuant to the post bid negotiations
 - v. Format of bank guarantee for Performance Security.
 - vi. the Service Level Agreement (SLA)
 - vii. the Purchaser's Notification of Award.
- (f) In consideration of the payments to be made by the Purchaser to the SUPPLIER as hereinafter mentioned, the SUPPLIER hereby covenants with the Purchaser to provide the Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- (g) The Purchaser hereby covenants to pay the SUPPLIER in consideration of the provision of the Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written

Signed, Sealed and Delivered by the said _____ (For the Purchaser in the presence of: _____ (WITNESS)

Signed, Sealed and Delivered by the said _____ (For the Bidder) in the presence of: _____ (WITNESS)

Annexure Q – Pre-Bid Queries Format

All enquiries from the Bidders relating to this RFP must be submitted to the Managing Director, APSFL. These queries should be e-mailed to apsfl@ap.gov.in. The queries should necessarily be submitted in the following Format:

S. No.	Section No.	Page no.	Content of the RFP requiring clarification	Clarification Sought

9. Penalties and PaymentSchedule

9.1 Service LevelAgreements

Service Level Agreement (SLA) shall become the part of contract between APSFL and the successful bidder. SLA defines the terms of the successful bidder's responsibility in ensuring the timely delivery of the deliverables and the correctness of the same based on the agreed Performance Indicators.

The successful bidder has to comply with service level requirements to ensure adherence to project timelines, quality and availability of services, throughout the period of this contract
i.e. during implementation phase.

9.2 Project Milestone

Milestone	Activity Description	Timelines
	Award of Contract	T
Milestone - 1	Supply , Delivery, Installation and Commissioning of the Site - (5 Locations)	T+15 Days
Milestone - 2	Supply , Delivery, Installation and Commissioning of the Site - (5 Locations)	T+35Days
Milestone - 3	Supply , Delivery, Installation and Commissioning of the Site - (6 Locations)	T+45 Days

Note:Site Locations forwhichRoWapprovalisalreadygrantedfromcompetent

RFP for Selection of Agency for execution of Underground Optical Fiber at selected locations of Government Offices / Institutions / Organizations on Rate Contract

authority for execution of work, selected agency will be required to complete the Underground Optical fiber laying work in that section/ location within 25 days of award of purchase order/ signing of agreement.

9.3 Payment Terms

The successful bidders shall be entitled to raise invoices (along with all supporting documents), as per below stated milestones. APSFL shall release payments against all valid invoices within 30 days of receipt of invoice, subject however to satisfactory acceptance of the deliverables as per the scope of work.

9.3.1 Payment terms for supply and installation of components related UG fiber laying:

S. No.	Activities	Payment (%)
1.	Supply and installation of materials and works required for fiber laying as applicable (Methodology) as per Milestone – 1	90% of CAPEX Value of Purchase order for supply, Delivery, Installation and commissioning of the Locations with the required Material after submission of related documents mentioned in section 9.9 of the RFP as applicable for Milestone - 1
2	Supply and installation of materials and works required for fiber laying as applicable (Methodology) as per Milestone – 2	90% of CAPEX Value of Purchase order for supply, Delivery, Installation and commissioning of the Locations with the required Material after submission of related documents mentioned in section 9.9 of the RFP as applicable for Milestone - 2
3	Supply and installation of materials and works required for fiber laying as applicable (Methodology) as per Milestone – 3	90% of CAPEX Value of Purchase order for supply, Delivery, Installation and commissioning of the Locations with the required Material after submission of related documents mentioned in section 9.9 of the RFP as applicable for Milestone - 3
4	After start of Comprehensive Maintenance Phase and Submission of Performance Security for O & M as per Milestone - 1	Remaining 10% of CAPEX Value on the Purchase order for Supply, Delivery, Installation and Commissioning of the Locations with required materials as applicable for Milestone - 1
5	After start of Comprehensive Maintenance Phase and Submission of Performance Security for O & M as per Milestone - 2	Remaining 10% of CAPEX Value on the Purchase order for Supply, Delivery, Installation and Commissioning of the Locations with required materials as applicable for Milestone - 2
6	After start of Comprehensive Maintenance Phase and Submission of Performance Security for O & M as per Milestone - 3	Remaining 10% of CAPEX Value on the Purchase order for Supply, Delivery, Installation and Commissioning of the Locations with required materials as applicable for Milestone – 3.
7	Operation and Maintenance for 3 Years	Quarterly payment would be made post completion of the same quarter, as per actuals, after calculating SLA's and adjusting

RFP for Selection of Agency for execution of Underground Optical Fiber at selected locations of Government Offices / Institutions / Organizations on Rate Contract

		against the penalties if any applicable.
8.	Permission charges	Based on the actuals and submission of all relevant documents as prescribed in <u>"G.O.M.S.NO:60, Transports, Roads & Buildings."</u>

Note:

- All payments shall be released after certification of delivery, installation and acceptance test as per the Deliverables listed in **Section 9.9** of this RFP, by APSFL or its Nominated Representative / Authority.
- All payments shall be made in Indian rupees only (INR).
- Payments shall be released against the invoices raised by supplier on providing all relevant documents timely, including acceptance testing report duly signed and approved by APSFL / APSFL authorized agency / or its nominated representative and are complete in all respect and subsequent approval.
- Payment shall be subject to deductions of any amount for which the supplier is liable under the RFP conditions. Further, all payments shall be made subject to deduction of applicable taxes and other Government levies like TDS (Tax Deduction at Source) and etc., as per the current Income-Tax Act.
- All payments shall be released only after deducting the all SLA Penalties as applicable.

9.4 Penalty

The following penalties shall be imposed on the supplier if the supplier does not adhere to the timelines as mentioned in the RFP.

S. N	Description	Penalties
1.	Delay in supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for Milestone - 1	<ol style="list-style-type: none"> Sum equivalent to 10 % of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 2 Weeks. Sum equivalent to 15% of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 4 Weeks. If the Sum Equivalent to 15% exceeds the cost of supply and installation of materials and works required, the contract would be terminated. In addition to the above penalty, in case the validity of application expires, the successful bidder shall be required to secure approval from

RFP for Selection of Agency for execution of Underground Optical Fiber at selected locations of Government Offices / Institutions / Organizations on Rate Contract

		competent authority from respective Dept through Communication letter for laying of fiber at his own cost (Where the amount is not considered during the invoice submission)
2	Delay in supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for Milestone - 2	<p>e) Sum equivalent to 10 % of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 2 Weeks.</p> <p>f) Sum equivalent to 15% of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 4 Weeks.</p> <p>g) If the Sum Equivalent to 15% exceeds the cost of supply and installation of materials and works required, the contract would be terminated.</p> <p>h) In addition to the above penalty, in casethe validity of application expires, the successful</p> <p>i) bidder shall be required to secure approval from competent authority from respective Dept through Communication letter for laying of fiber at his own cost (Where the amount is not considered during the invoice submission)</p>
3	Delay in supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for Milestone - 3	<p>j) Sum equivalent to 10 % of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 2 Weeks.</p> <p>k) Sum equivalent to 15% of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 4 Weeks.</p> <p>l) If the Sum Equivalent to 15% exceeds the cost of supply and installation of materials and works required, the contract would be terminated.</p> <p>m) In addition to the above penalty, in casethe validity of application expires, the successful</p> <p>n) bidder shall be required to secure approval from competent authority from respective Dept through Communication letter for laying of fiber at his own cost (Where the amount is not</p>

		considered during the invoice submission)
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9.5 Conditions for NoPenalties

Penalties shall not be levied on the Bidder in the following cases:

- There is a force majeure event effecting the SLA, which is beyond the control of the successful bidder. Force Majeure events shall be considered in line with the clause duly mentioned in the RFP
- The non-compliance to the SLA has been due to reasons beyond the control of the successful bidder

9.6 Penalty during Commissioning Period:

Penalty during commissioning period should be in compliance with SLA and performance indicators with the Terms and their definitions are discussed in the following sections.

9.7 Penalty during Operation & Maintenance Period:

SLA Uptime

Type of Connectivity	Description
Ring Architecture Connectivity Locations	State HQ's of various Dept. Utmost Priority, require $\geq 99.5\%$ Uptime during both PBH & EBH
Spur Architecture Connectivity Locations	District HQ's of Various Dept. very high Priority, require $\geq 99.0\%$ Uptime during PBH
Spur Architecture Connectivity Locations	District HQ's of Various Dept. Very high importance, require $\geq 98\%$ Uptime during EBH

Fault Rectification (SLA)

Category	MTTR	Resolution Efficiency
Ring Connectivity	1 Hour	$99\% < 1 \text{ Hrs}$
Spur Connectivity (PBH)	2 Hours	$98.5\% < 2 \text{ Hrs}$

Spur Connectivity (EBH)	3 Hours	98% < 3 Hrs
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The SLAs shall be effective immediately after commissioning along with the test reports, OTDR Report and other necessary tests and will be calculated per location on the basis of the SLA Parameter defined above.

9.8 MTTR (Mean Time to Resolve):

Mean Time to resolve will be the benchmark SLA to calculate all maintenance penalties.

The SLA's defined shall be applicable during the Prime Business hours **(9:00 A.M – 9:00 P.M)**. The penalty shall be calculated on monthly basis which would be payable only after successful completion of One year after commissioning or from the date of installation to the selected agency.

Basically, the MTTR for a particular location will be the average time for which a TroubleTicket (TT) assigned to a selected / qualified agency remains open during the month of the Year. This will be calculated by adding the duration of each trouble ticket assigned to the agency and dividing this number by the total number of trouble tickets in that month.

Formula:

$$\text{MTTR (for a given location)} = \frac{\text{TT}_1 \text{ (Hrs)} + \text{TT}_2 \text{ (Hrs)} + \text{TT}_3 \text{ (Hrs)} + \dots + \text{TT}_N \text{ (Hrs)}}{\text{TT}_1 + \text{TT}_2 + \dots \text{TT}_N}$$

$$\text{Resolution Efficiency (RE)} = (\text{No. of TTs resolved within TTR SLA} / \text{Total No. of TTs}) \times 100$$

9.9 Deliverables

- The Payment shall be released only after the submission of original invoice, signed delivery challan, and certification from Authority.
- Submission of route map (Single line Diagram & As Built Drawing) with lat/longs
- Submission of Drum test reports for all cores of fibercable
- Submission of OTDR Reports for the total length of cable for all cores (end to end)
- Submission of M Books & splicing report with Lat longs.
- Submission of Inspection Test & Plan Reports (ITP) for Trenching, Ducting and Back filling, DIT, Blowing, splicing fiber optic cables both open trench & HDD
- Submission of lat/longs for all man holes, hand holes with three point locations
- Submission of No Objection Certificate from the concerned Authorities/ municipality/highway.

10. ResponsibilityMatrix

The (Indicative) responsibility matrix (RACIS) describing responsibilities of Agency and other parties to the project, are mentioned in below matrix. Any specific updates/or changes, as mutually agreed between the Parties, will be finalized/modified through discussion with the bidders.

Where RACIS stands for the following:

R (Responsibility): Those who do the work to achieve the task

A (Accountability): The one ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those responsible

C (Consulted): Those whose opinions are sought, typically subject matter experts; and with whom there is two-way communication

I (Informed): Those who are kept up-to-date on progress, often only on completion of the task or deliverable; and with whom there is just one-way communication

S (Support): Resources allocated to responsible

Responsibility Matrix				
S.No	Action Items	APSFL	Agency	Network Engineer
1	Contract Signing	A, R	A, R	-
2	Survey	I, C	R	-
3	RoW Grant & Coordination with the Dept.	I	R	-
4	Submission of Fiber Route Map & Row Approval	A, I	R	C
5	Laying of Underground Optical Fiber Cable using applicable Methodology as per the site conditions and Dept. approval	I, C	A, R	I
6	User Acceptance Test Report	I	R, S	A
7	Commissioning Certificate (Duly Attested)	C	A, R	I
8	Mapping of GIS Co-ordinates of the Location (En-route Fiber)	I	A, R	-
9	Blowing Test Report, DIT Reports Validation	A, R	S	C
10	Submission of Invoices for release of Payment	A,R	S	-

RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

Annexure 1: Details of RoW crossing locations (indicativelist):

S.No	District	Mandal	From POP	TO Office Location (Postal Code)	Type of RoW Agency (Road Crossing / NHAI Crossing / Municipality / Dist. Adminsitration)	Latitude	Longitude
1	Guntur	Velagapudi, Tulluru	SACHIVALAYAM	APSWAN-NOC, 3rd Block, AP Secretariat, Velagapudi - 522503	Road Crossing / Municipality	16.513963	80.514063
2	Krishna	Vijayawada Campoffice	INDIRA GANDI STADIUM	Collector Camp Office, Near PWD grounds, Vijayawada- 520001	Road Crossing / Municipality / Dist. Administration	16.506600	80.633310
3	Anantapur	Anantapur	COLLECTORATE	Dist Collectorate, Anathapur, Ananatapur district, AP- 515001	Road Crossing / Municipality / Dist. Administration	14.668930	77.610313
4	Chittoor	Chittoor	GANDHI ROAD	Vivekananda Bhavan, new collectrate office, Reddy gunta, Chittoor - 517001	Road Crossing / Municipality / Dist. Administration	13.182451	79.095829
5	East Godavari	Kakinada	KAKINADA DISTRICT NODE	Dist Collectorate, Rama Rao Peta, Kakinada, Andhra Pradesh 533001	Road Crossing / KSCCL / Dist. Administration	16.960156	82.226126
6	Guntur	Guntur	APCRDA	District Collector office,Guntur-522004	Road Crossing / Municipality / Dist. Administration	16.299140	80.431943
7	Kadapa	Kadapa	COLLECTORATE	Rims road , New Collectorate,Kadapa-516001	Road Crossing / Municipality / Dist. Administration	14.455026	78.829041
8	Krishna	Machilipatnam	MACHILIPATNAM	Collector Office, Machilipatnam-521002	Road Crossing / Municipality / Dist. Administration	16.194460	81.147010

RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

9	Kurnool	Kurnool	COLLECTORATE	Dist Collectorate, Collectorate Road, Budhawara Peta, Alluri Sitarama Raju Nagar, Kurnool, Andhra Pradesh 518002	Road Crossing / Municipality / Dist. Administration	15.817581	78.041810
10	Nellore	Nellore	NELLORE OLD MUNICIPAL OFFICE	Dist Collectorate, Achari Street, Nellore, Andhra Pradesh 524001	Road Crossing / Municipality / Dist. Administration	14.451449	79.980794
11	Prakasam	Ongole	SHARMA COLLEGE ROAD	Prakasam collectrate Bhavan, nellore road, ongole, Prakasam Dist-523001	Road Crossing / Municipality / Dist. Administration	15.499172	80.049675
12	Srikakulam	Srikakulam	COLLECTORATE	Collector Office, Srikakulam- 532001	Road Crossing / Municipality / Dist. Administration	18.272929	83.905888
13	Vizainagaram	Vizainagaram	INDOOR DONDAPARTHY	Dist Collectorate, Cantonment Road, Cantonment, Vizianagaram, Andhra Pradesh - 535002	Road Crossing / Municipality / Dist. Administration	17.709157	83.308191
14	Visakhapatnam	Visakhapatnam	COLLECTORATE	Dist Collectorate, Main Road, Krishna Nagar, Maharani Peta, Visakhapatnam, Andhra Pradesh - 530002	Road Crossing / Municipality / Dist. Administration / VUDA	18.117683	83.387355
15	West Godavari	Eluru	BEHIND JC BUNGLOW	Dist Collectorate, Santhi Nagar, Eluru, Andhra Pradesh - 534006	Road Crossing / Municipality / Dist. Administration.	16.710610	81.089120

***Ring Architecture Connectivity to be provided for S.NO: 1 Locations.**

Annexure2- (MAP – From Nearest PoP to Office Location)

1. Velagapudi - Sachivalayam

RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract



2. Vijayawada – Collector Camp Office

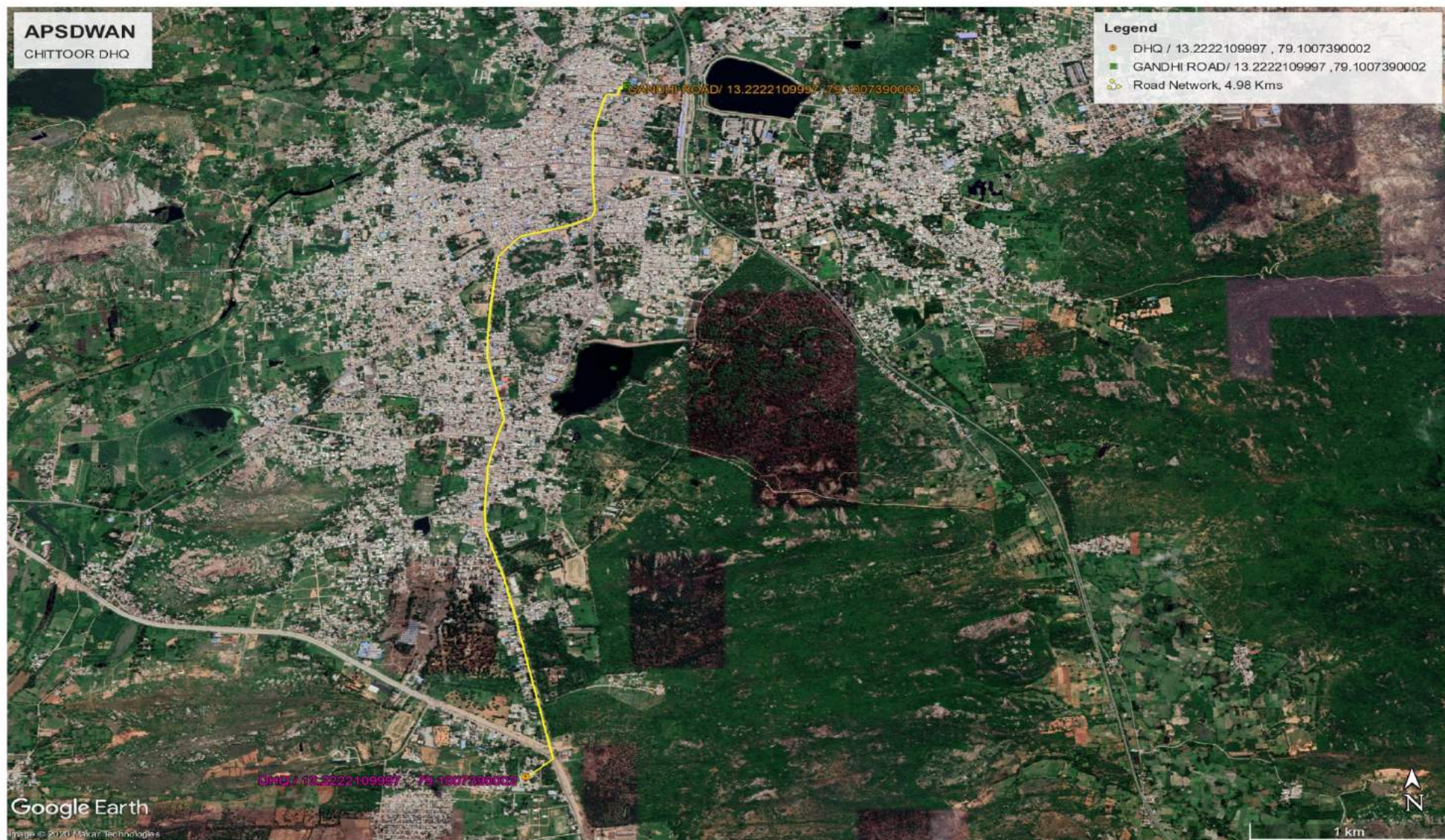


RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

3. Ananthapur DHQ – District Collectorate Office



4. Chittoor – New Collectorate Office



RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

5. East Godavari – District Collectorate Office



RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

6. Guntur – District Collectorate Office



RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

7. Kadapa – New Collectorate Office

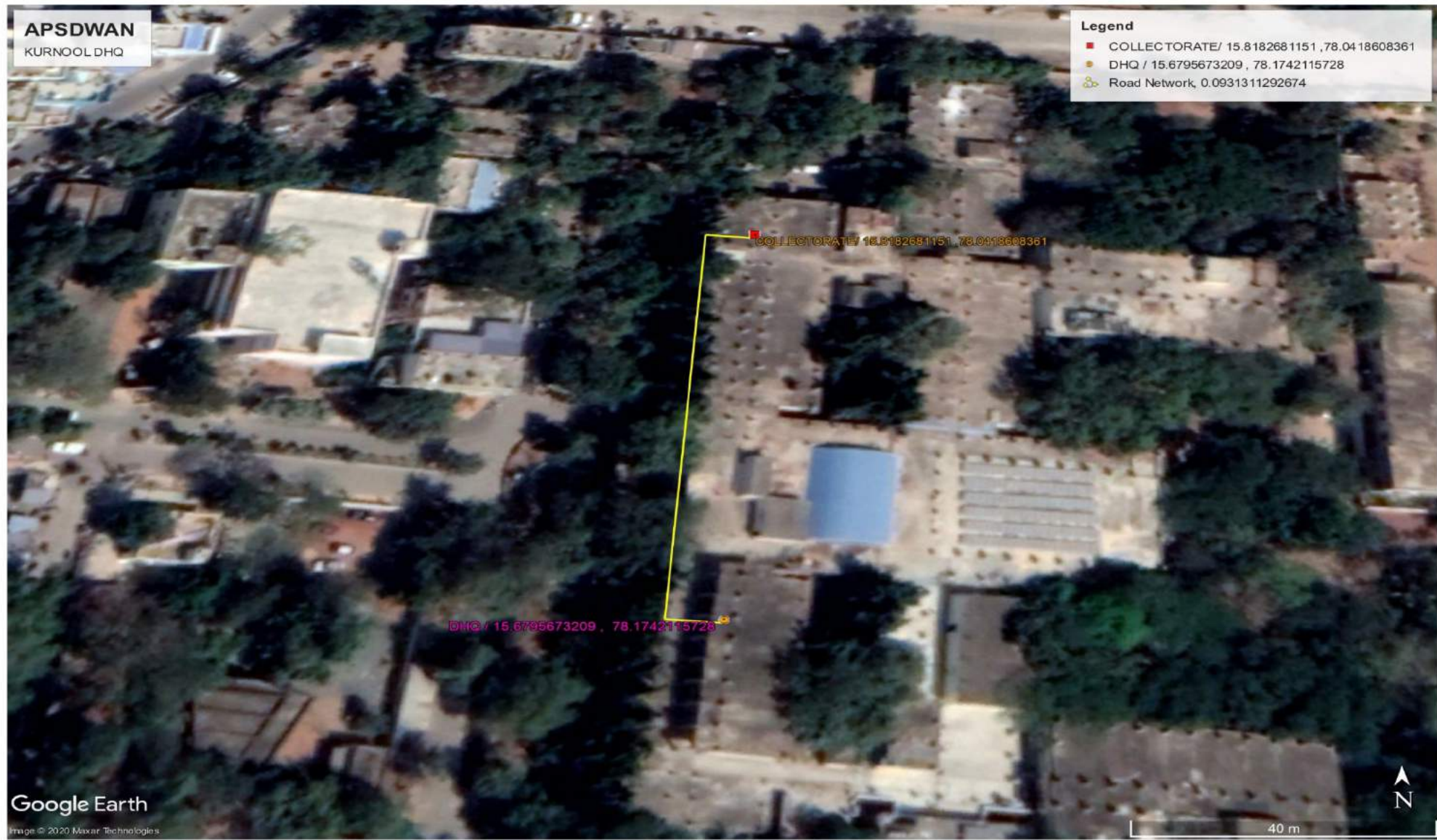


RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

8. Krishna – Machilipatnam District Collectorate Office

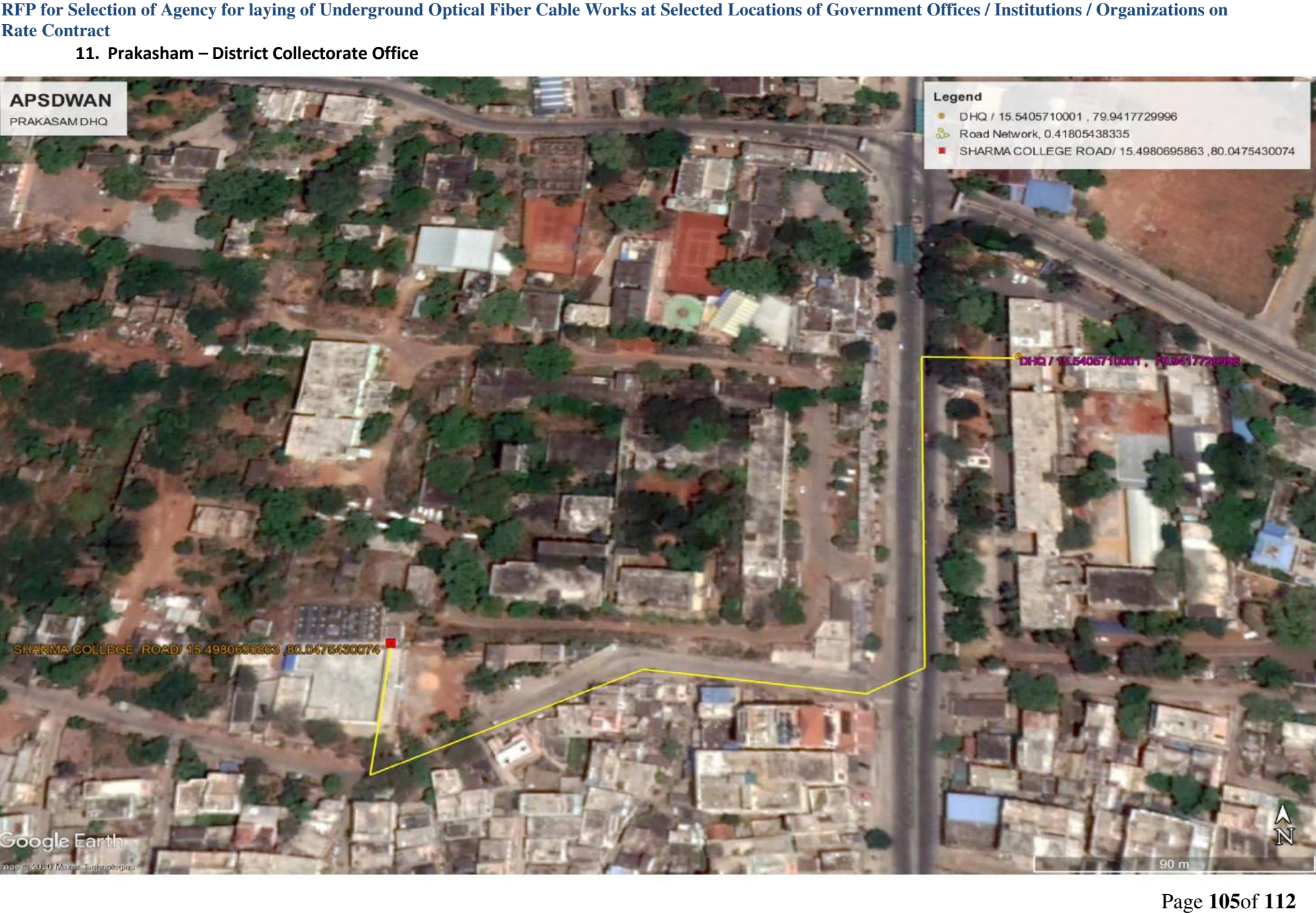


9. Kurnool – District Collectorate Office



10. Nellore – District Collectorate Office



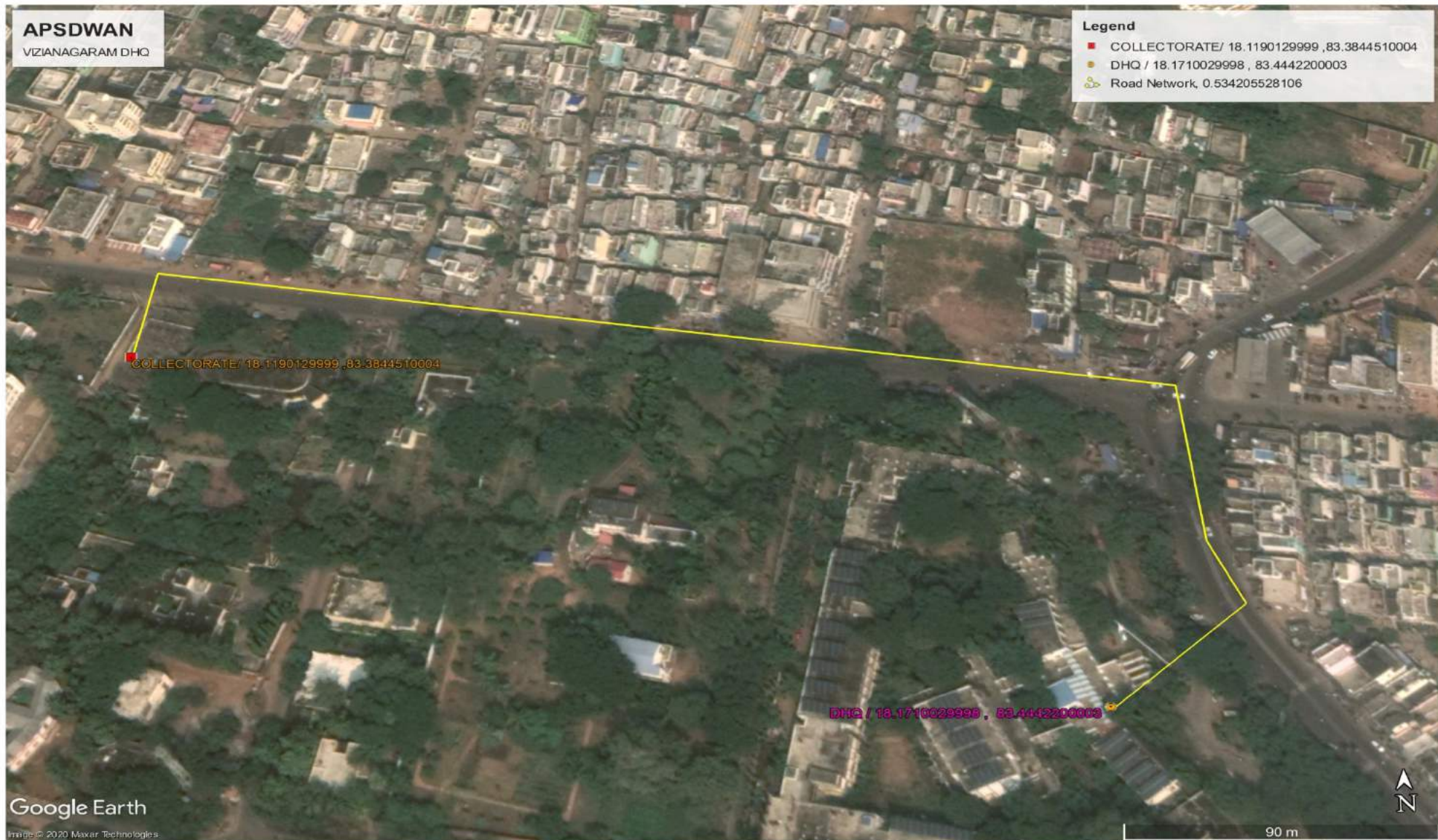


12. Srikakulam – District Collectorate Office



RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

13. Vizianagaram – District Collectorate Office



14. Visakhapatnam – District Collectorate office



15. West Godavari – District Collectorate Office





REQUEST FOR PROPOSAL (RFP)

for

Selection of Agency for Execution of Underground Optical Fiber Cable at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

Ref. No- APSFL/BD/415/2020/UGOFC, Dated: 17/02/2021

Andhra Pradesh State FiberNet Limited

NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station,
Vijayawada – 520 013

Web address: www.apsfl.in

Email address: apsfl@ap.gov.in

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Disclaimer

The information contained in this Request for Proposal document (“**RFP**” or “**Tender**”) including any information subsequently provided to the bidders, (“**bidder/s**”) verbally or in documentary form by Andhra Pradesh State FiberNet Ltd. (APSFL) or any of its employees or advisors, shall at all times be subject to the terms and conditions set out in this Tender document (as may be amended only by APSFL from time to time).

This RFP is not an agreement and is not an offer to any party. The purpose of this RFP is to provide the bidders or any other person with information to formulate their offers (“**Bid**”). This RFP includes statements, which reflect various assumptions and assessments arrived at by APSFL in relation to this scope. This Tender document does not purport to contain all the information each bidder may require. This Tender document may not be appropriate for all persons, and it is not possible for the Managing Director, APSFL and their employees or advisors to consider the objectives, technical expertise and particular needs of each bidder. The assumptions, assessments, statements and information contained herein are made considering the intended objectives of the project, and may not be complete, accurate or adequate. Each bidder must therefore conduct their own analysis of the information contained in this RFP and seek professional advice from appropriate sources.

Information provided in this Tender document to the bidder is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. APSFL accepts no responsibility for the accuracy or otherwise for any interpretation of opinion on law expressed herein.

APSFL, their employees and advisors make no representation or warranty and shall incur no liability to any person, including the bidder under law, statute, rules or regulations or tort, the principles of restitution or unjust enrichment or otherwise for any loss, cost, expense or damage which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, reliability or completeness of the RFP, and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in the selection process as part of this RFP.

APSFL also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any bidder upon the statements contained in this RFP. APSFL may in its absolute discretion, but without being under any obligation to do so, can amend or supplement the information in this RFP.

The issue of this tender document does not imply that APSFL is bound to select a bidder or to appoint the selected bidder (as defined hereinafter), for supporting implementation of the project. APSFL reserves the right to reject all or any of the bidders or Bids without assigning any reason whatsoever.

RFP for Selection of Agency for execution of Underground Optical Fiber at selected locations of Government Offices / Institutions / Organizations on Rate Contract

The bidder shall bear all the costs associated with or relating to the preparation and submission of Bid pertaining to this RFP including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations, which may be required by. All such costs and expenses will remain with the bidder and APSFL shall not be liable in any manner whatsoever for the same, regardless of the conduct or outcome of the selection process.

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Acronyms

S. No.	Abbreviations	Full Form
1	APSFL	Andhra Pradesh State FiberNet Limited
2	ABD	As-Build Diagram
3	BOQ	Bill of Quantity
4	GIS	Geographic Information System
5	LOA	Letter of Award
6	RFP	Request for Proposal
7	NIT	Notice Inviting Tender
8	DIT	Duct Integrity Test
9	UATP	User Acceptance Test Report
10	UG OFC	Under Ground Optical Fiber Cable
11	PBH	Prime Business Hours (9:00 AM to 9:00 PM)
12	EBH	Extended Business Hours (9:00 PM to 9:00 AM)
13	IBD	In-Build Diagram
14	CCM	Cement Concrete Mixture(CCM)

1. Introduction

1.1 Invitation to Bid

Andhra Pradesh State Fiber Net Limited (APSFL), a fully owned entity of the Govt. of Andhra Pradesh (AP), having its Registered Office at 3rd Floor, NTR Administrative Block, Pandit Nehru Bus Station, NH-65, Vijayawada-520001, Andhra Pradesh, India, invites responses ("Proposals"/"Bids") to this Request for Proposal ("RFP") for "Selection of Agency for execution of Underground Optical Fiber at selected locations of Government offices / Institutions / Organizations on Rate Contract".

The selected agency has to support APSFL in smooth execution of the project across the state of AP, which includes delivery and installation of components related to underground laying of optical fiber in Cities, Towns Categorized under R & B, NHAI, Municipal Corporation, Smart Cities Authority based on the Location and route.

Interested bidders are advised to study this RFP carefully before submitting the proposals in response to the RFP. Submission of a proposal in response to this RFP shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.

Interested bidders may download the RFP from www.apecurement.gov.in. Any subsequent corrigenda/clarifications shall also be made available on the same portal. Bid proposals must be received not later than time and date mentioned in the key events and dates. Bid proposals received, in part or full, after the deadline WILL NOT be considered in this procurement process.

To obtain first-hand information on the assignment, Bidders are encouraged to attend a pre-bid meeting. Attending the pre-bid meeting is optional.

1.2 Procedure for Bid Submission

The Bidder shall submit their response through bid submission process on e-Procurement platform at www.apecurement.gov.in.

The bidders shall submit their Pre-Qualification Bid and Commercial bid online in e-Procurement portal. The bidders shall upload the scanned copies of all the relevant certificates, documents etc., in support of their Pre-Qualification, and other certificates/documents with clear readability, in the e-Procurement website. The bidder should sign on all the statements, documents, certificates uploaded in the e-Procurement website, owning responsibility for their correctness/authenticity.

13 Registration with e-Procurement platform

For registration and online bid submission bidders may contact HELP DESK on www.apecurement.gov.in or <https://tender.apecurement.gov.in> .

1.3.1 Digital Certificate Authentication

The bidders shall authenticate the bid with the agency's Digital Certificate for submitting the bid electronically on e-Procurement platform and the bids that are not authenticated by digital certificate of the bidder, will not be accepted on the e-Procurement platform.

For obtaining Digital Signature Certificate, you may please contact: Andhra Pradesh Technology Services Limited, Vijayawada www.aps.gov.in/
(OR)

You may please contact any Registration Authorities of Certifying Authorities in India. The list of CAs is available in the link provided below.

<https://tender.apecurement.gov.in/DigitalCertificate/signature.html>

1.3.2 Deactivation of Bidders

Vide Ref GOMs.No.174-I&CAD dated 1-9-2008, if any successful bidder fails to submit the original BG towards Performance

Security within stipulated time or if any variation is noticed in the uploaded documents, the successful bidder will be suspended from participating in the RFPs on e-Procurement platform for a period of 3 years. The e-Procurement system would deactivate the user ID of such defaulting bidder based on the trigger/recommendation by the RFP Inviting Authority in the system. Besides this, APSFL shall invoke all processes of law including criminal prosecution of such defaulting bidder as an act of extreme deterrence to avoid delays in the RFP process for execution of the development scheme taken up by the government. Other conditions as per RFP document are applicable.

a. Payment of Transaction Fee

It is mandatory for all the participant bidders from 1st January 2006 to electronically pay a prescribed non-refundable Transaction fee to M/s. APTS, the service provider through "Payment Gateway Service on E-Procurement platform". The Electronic Payment Gateway accepts all Master and Visa Credit Cards issued by any bank and Direct Debit facility/Netbanking to facilitate the transaction. This is in compliance as per G.O.Ms.13 dated 07.05.2006.

b. Corpus Fund

As per GOMS No.4, user department shall collect 0.04% of ECV (Estimated Commercial Value) with a cap of Rs.10,000/- (Rupees ten thousand only) for all works with ECV up to Rs.50 Crores, and Rs.25,000/- (Rupees twenty five thousand only) for works with ECV above Rs.50 Crores, from successful bidders on e-Procurement platform before entering into agreement/issue of purchase orders, towards e-procurement fund in favour of Managing Director, APTS. There shall not be any charge towards e-Procurement fund in case of works, goods and services with ECV less than and up to Rs.10 lakhs.

c. RFP Document

The bidder is requested to download the RFP document and read all the terms and conditions mentioned in the RFP Document and seek clarification if any from the RFP inviting authority. Any offline bid submission clause in the RFP document could be neglected.

The bidder has to keep track of any changes by viewing the Addendum/Corrigenda issued by the RFP inviting authority from time-to-time in the e-Procurement platform. The Department calling for RFPs shall not be responsible for any claims/issues arising out of this.

d. Bid Submission Acknowledgement

The bidder shall complete all the processes and steps required for Bid submission. The system will generate an acknowledgement with a unique bid submission number after completing all the prescribed steps and processes by the bidder. Users may also note that the bids for which an acknowledgement is not generated by the e-procurement system are treated as invalid or not saved in the system. Such invalid bids are not made available to the RFP Inviting Authority for processing the bids. The Government of AP is not responsible for incomplete bid submission by users.

- i. The bidders may contact the Helpdesk support of e-procurement portal (at www.apecurement.gov.in) for any further information / clarifications on e-procurement, and for all technical support required for bid submission.

- ii. The bidders need to register on the electronic procurement marketplace of Government of Andhra Pradesh i.e., <http://www.apecurement.gov.in>. On registration in the e-procurement marketplace they will be provided with a user ID and password using which they can submit bids online.
- iii. While registering on the e-procurement market place, the bidders need to scan and upload the required documents as per the RFP requirements on to their profile. The e-procurement marketplace provides an online self-service registration facility to all such Contractors who are already registered with respective participating departments for supply of specified goods and services.
- iv. In addition to the direct payment through any of the e-payment options in the e-procurement portal, the bidder may opt for Demand Draft (DD) towards the bid processing fee and EMD in the form of Bank Guarantee (BG). The bidder shall invariably upload the scanned copies of DD/BG in e-Procurement system and this will be the primary requirement to consider the bid as responsive. The Authority shall carry out the Technical bid evaluation solely based on the uploaded certificates/documents, DD towards EMD in the e-procurement system and open the price bids of the eligible and responsive bidders.

14 Key Events & Dates

1.	Name of the Authority	Managing Director Andhra Pradesh State FiberNet Limited
2.	Name of the Assignment	Agency for laying of Under Ground Optical fiber Cable (Armoured) – 24Fusing HDD / Applicable methodology in selected locations for Implementation of Govt. Offices / Units
3.	Estimated value of the tender	INR 4,85,00,000/- (Rs. Four Crores Eighty Five Lakh only, including CapEx and OpEx for 3 years; exclusive of taxes)
4.	RFP Number	APSFL/BD/415/2020/UGOFC, Dated: 17/02/2021
5.	Place of availability of Tender Document (RFPs)	www.apecprocurement.gov.in http://apsfl.in/tenders/
6.	Place of submission of Bids	www.apecprocurement.gov.in
7.	Tender Document (RFP)	Request for Proposal Document
8.	Tender Type (Open/Limited/EOI/Auction/Single)	Open with Reverse Tender
9.	Tender Category (Services/Goods/works)	Works
10.	Type/Form of Contract (Work/Supply/Auction/Service/Buy /Empanelment/Sell)	Works
11.	Re-bid submission before submission date/ last date of submission allowed by the Bidder (Yes/No)	Yes
12.	Is Offline Submission Allowed (Yes/No)	No
13.	Withdrawal Allowed (Yes/No)	No
14.	Is Multi Currency Allowed	No (Only Indian Rupees)
15.	Last date and time for receiving queries/clarifications	19/02/2021 at 03:00 PM No communication, in any form and for any reason, will be entertained post this date and time.

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16.	Last date and time for submission of Proposal (Proposal Due Date)	25/02/2021 at 03:00 PM The proposal is to be submitted on www.apeprocurement.gov.in on e-procurement portal.
17.	Date and time of opening of Pre-qualification on e-procurement platform	25/02/2021 at 05:00 PM Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, NH -65, Vijayawada - 520001 Web address: http://www.apsfl.in Email address: apsfl@ap.gov.in
18.	Date and time of opening of reverse auction	To be intimated to the qualified bidder of the previous stage
19.	Bid Processing Fee (Non - refundable)	Bid Processing Fee (Non-refundable): INR 50,000/- (Fifty Thousand Rupees Only, including GST) The tender processing fees can be paid through any of the e-payment options in the portal or in the form of Demand Draft issued by one of the Nationalized / Scheduled Banks in India drawn in favour of 'Andhra Pradesh State FiberNet Limited', payable at Vijayawada. Original DD must be submitted in APSFL office at Vijayawada before bid submission date. For further details regarding e-payment, please refer to e-Procurement portal at the above mentioned website or call e-procurement helpline. Note: It will be in the interest of the bidders to familiarize themselves with the e-Procurement system to ensure smooth preparation and submission of the tender documents. Online payments of Bid Processing Fee & EMD and uploading of documents are sequential.

20.	Bid Security / EMD (Refundable / Convertible)	<p>Bid Security / EMD (Refundable / Convertible): INR 10,00,000/- (Ten Lakh Rupees Only)</p> <p>The EMD amount can be paid directly through any of the e-payment options in the portal or in the form of Bank Guarantee issued by one of the Nationalized / Scheduled Banks in India drawn in favour of 'Andhra Pradesh State FiberNet Limited', payable at Vijayawada.</p> <p>Note: e-Procurement portal will deny submission of the bid without submitting the EMD. For further details regarding e payment, please refer to e-Procurement portal at the above mentioned website. Bid Security / EMD should be valid for a period of 180 (one hundred and eighty) days from bid submission Date. The Bid Security / EMD will be refunded to unsuccessful Applicant agencies within 30 (Thirty) days of successful Bidder furnishing the performance security. Original BG must be submitted in APSFL office at Vijayawada before bid submission date.</p> <p>The EMD (bid security) of the unsuccessful Bidder/s will be discharged / returned as promptly as possible. No interest will be payable by APFSL on the amount of the EMD (Bid Security).</p>
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21.	Performance Security	<p>Performance Security of 10% of CAPEX for supply and installation on the total Project cost shall be submitted and valid for 60 days beyond the date of completion (including extension, if any) of supply, installation, and acceptance.</p> <p>Performance Security for O & M shall be 30% of the Total OPEX Cost of the Project and valid for 3 Years and 60 days from the Date of Commencement of O & M.</p> <p>Performance Security shall be in the form of Bank Guarantee or Auto Renewal Fixed Deposit Renewal (FDR), issued by one of the Nationalized / Scheduled Commercial Banks in India drawn in favour of Andhra Pradesh State FiberNet Limited, payable at Vijayawada.</p> <p>Details of the Bank: Name of the Beneficiary: ANDHRA PRADESH STATE FIBERNET LIMITED Bank Name: Andhra Bank Bank Account Number: 060611100003785 IFSC code: ANDB0000606 MICR Code: 520011025 Branch Code : 000606 Branch Name: Main Branch, RR Apparao Street, Vijayawada, Andhra Pradesh</p>
23.	For any enquiries and clarifications, please contact:	<p>Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, Vijayawada – 520001 Web address: http://www.apsfl.in Email: apsfl@ap.gov.in; cmo.apsfl@ap.gov.in v.in</p>

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24.	Validity of the Proposal	Bidder proposals shall remain valid for a period of 180 days from the bidsubmission date.
25.	Nature of Bid Process	Two stage a) Stage- I: Pre-QualificationEligibility b) Stage- II: CommercialBid c) Stage- III: Reverse Auction
26.	Method of Selection	As per Section 7 of this RFP
27.	RFP Tenure	a) Implementation phase: 45 days b) Operation & Maintenance phase: 3 years (36 months)

Note: Proposals/Bids submitted without Bid Processing Fee and EMD shall be summarily rejected.

2. General Instructions to Bidder

2.1 Earnest Money Deposit(EMD)

- a. Bidders shall submit an EMD as per the Key Events & Dates along with their Bids.
- b. The EMD amount is interest free and will be refundable to the unsuccessful bidders without any accrued interest on it.
- c. The bid / proposal submitted without EMD, mentioned above, will be summarily rejected.
- d. The EMD may be forfeited:
 - i. If a bidder withdraws its bid during the period of bid validity.
 - ii. If the successful bidder fails to sign the contract and submit Performance Bank Guarantee within the stipulated period.
 - iii. In case, the documents submitted, or the information furnished by the bidder are found to be not genuine/false.
 - iv. In case the bidder does not tender for the work, after submission of Tender fees or EMD.

2.2 RFP Amendment

APSFL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bid Document by amendment. All the amendments made in the document would be published in the website www.apsfl.in and on the e-procurement platform. APSFL shall not be responsible if the Bidders do not get the individual intimates of such amendments. All such amendments shall be binding on all the Bidders. The Bidders are also advised to visit the aforementioned website on regular basis for checking any updates. APSFL also reserves the rights to amend the dates mentioned in this RFP for Bid process.

2.3 Pre-Bid Queries

APSFL may incorporate any changes in the RFP based on acceptable suggestions received in pre-bid queries. The decision of APSFL regarding acceptability of any suggestion shall be final in this regard and shall not be called upon to question under any circumstances. It may not be possible to answer questions which are received late. The responses to the queries shall be uploaded by way of hosting amendments/clarifications on the website i.e. (www.apsfl.in) in accordance with the respective clauses of the RFP.

No queries in any form and for any reason shall be entertained after the last date and time for submission of queries.

2.4 Cost of Bidding

The Bidder is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other

diligence activities, participation in meetings/discussions/ presentations, preparation of proposal, in providing any additional information required by APSFL to facilitate the evaluation process, and in negotiating a definitive Service Agreement and all such activities related to the Bid process. This RFP does not commit APSFL to award a Contract or to engage in negotiations. Further, no reimbursable cost may be incurred in anticipation of award of Contract for implementation of Project.

25 SiteVisit

The bidder may visit and examine sites at a time to be agreed with APSFL, and obtain all information at their own responsibility that may be necessary for preparing the Bid Document. The costs of visiting the site(s) shall be at Bidder's own expense.

26 Language

The proposal and all correspondence and documents shall be written in English. In case of accompanying literature or brochures etc., being in a language other than English, a certified translation should accompany the documents as a part of the RFP. All proposals and accompanying documentation will become the property of APSFL.

27 Bid Prices

- a. The Bidder shall indicate the price in the prescribed format only.
- b. The Bidder shall prepare the Bid based on details provided in the RFP. It must be clearly understood that the Scope of Work is intended to give the Bidder an idea about the order and magnitude of the work and is not in any way exhaustive and guaranteed by APSFL. The Bidder shall carry out all the tasks in accordance with the requirement of the RFP and due diligence and it shall be the responsibility of the Bidder to fully meet all requirements of RFP.
- c. Prices shall be quoted in Indian Rupees (INR), shall be exclusive of Goods and Service Tax (GST).
- d. Bid value for the OpEx (total O&M cost for 3 years) should be minimum 30% of the "Total Bid Value". Bids received with OpEx cost less than 30% of the "Total Bid Value" (CapEx and OpEx) will be rejected.

28 BidderRepresentative

All documents of the bid may be signed by a nominated Competent Authority. All Certificates and documents (including any clarifications sought and any subsequent correspondences) received hereby, shall, be signed by the competent Authority.

29 Bid Validity

The proposals shall be valid for a period of 180 days from the date of submission of Bids. On completion of the validity period, unless the Bidder withdraws proposal in writing, it will be deemed to be valid until such time that the Bidder formally (in writing) withdraws proposal. If required, beyond 180 days, the Bidder may be asked to extend the bid validity,

on its consent.

2.10 Documents comprising the Bids

The bids prepared by the Bidder shall comprise of the following documents:

2.10.1 Documents to be uploaded as PQ Bid (To be uploaded only in “PQ Bid Folder” in the e-procurement platform)

All the below mentioned documents have to be uploaded in the “PQ” bid folder of the e-procurement platform. If the following documents are not found in the “PQ” bid folder, the bid shall be considered as non-responsive and may be rejected.

- 2.10.1.1 Annexure A – Application Form
- 2.10.1.2 Annexure B – Profile of Bidder/ Partners
- 2.10.1.3 Annexure C – Declaration of Acceptance of Terms and Conditions in the RFP
- 2.10.1.4 Annexure D – Undertaking on SoW Compliance and Unconditional Acceptance
- 2.10.1.5 Annexure E – Pre-Qualification Compliance Documents
- 2.10.1.6 Annexure F – Financial Turnover and Net worth of the Bidder
- 2.10.1.7 Annexure G – Format for Past Experience of the Bidder
- 2.10.1.8 Annexure H – Declaration regarding Clean Track Record
- 2.10.1.9 Annexure I – Power of Attorney
- 2.10.1.10 Annexure J – Board Resolution
- 2.10.1.11 Annexure K – Document Verification Certificate
- 2.10.1.12 Annexure L – Earnest Money Deposit (EMD) Format (only if bidder opts to submit in form of Bank Guarantee (BG), instead of direct online payment through e-procurement portal)
- 2.10.1.13 Copy of DD of Bid processing fees (only if bidder opts to pay as Demand Draft (DD), instead of direct online payment through e-procurement portal)

2.10.2 Documents to be uploaded as Commercial Bid (To be uploaded only in “Commercial Bid Folder” in the e-procurement platform)

All the below mentioned documents have to be uploaded in the “Commercial” bid folder of the e-procurement platform. If the following documents are not found in the “Commercial” bid folder, the bid shall be considered as non-responsive and may be rejected.

- 2.10.2.1 Annexure M – Commercial Proposal Submission Form
- 2.10.2.2 Annexure N – Commercial Bid Cost Components

2.10.3 Documents to be uploaded in TQ folder (To be uploaded online in “TQ Bid Folder”)

No documents have to be uploaded in the “TQ” bid folder of the e-procurement platform. Any documents uploaded in the “TQ” bid folder will not be considered for evaluation

Note:

In case of any issue pertaining to the uploading of bid documents in e-procurement portal due to file size etc., the bidders are expected to take support from e-procurement. APSFL will not be responsible for incomplete bid submission by users.

2.11 Modification and Withdrawal

No proposal may be modified / withdrawn in the interval between the deadline for submission of proposals and the expiration of the validity period specified by the Bidder on the proposal form. In case the Bidder wishes to withdraw the Bid after the date of opening of the bids, the EMD of the Bidder shall be forfeited.

2.12 Opening of Bids

The Pre-Qualification Bids will be opened on the e-procurement platform on the date and time as specified in the RFP schedule.

2.13 Evaluation of Bids

- a. The Bids of only those Bidders, whose Bid Processing Fee and EMD are in order, only, will be accepted.
- b. Bidders need to fulfill all the Pre-qualification conditions mentioned in the RFP. The technical committee will examine the Bids to determine whether they are complete, whether the Bid format conforms to the RFP requirements, whether documents have been properly signed, and whether the Bids are generally in order.
- c. Bids of Bidders whose Pre-qualification proposal does not meet the set criteria shall be rejected forthwith.

2.14 Bids Not Considered For Evaluation

Bids shall be summarily rejected due to incomplete documentation or late receipt.

2.15 Pre-Qualification

The pre-qualification evaluation shall be done as mentioned in this RFP.

2.16 Award Criteria

The Authority will open the Price Bids of the bidders who have met the conditions as per the Pre-Qualification Criteria in this RFP. This will be further taken up for Reverse Auction (as mentioned in Section 7.3) to finalize the L1 bidder.

2.17 Rectification of Errors

Bidders are advised to exercise adequate care in quoting the prices. No excuse for corrections in the

quoted price will be entertained after the proposals are opened. Errors in proposals will be corrected as per the unit rates quoted.

2.18 Contacting APSFL

Any effort by a Bidder to influence the Technical Evaluation and Tender Approval Committee in its decision on Bid evaluation, Bid comparison or contract award may result in disqualification of the Bidder's Bid and also forfeiture of Bid security.

2.19 APSFL's right to vary Scope of Work

APSFL may at any time, by a written order given to the Bidder, make changes to the Scope of the work.

If any such change causes an increase or decrease in the cost of or the time required for the Bidder's performance of any part of the work under the Agreement, whether changed or not changed by the order, an equitable adjustment shall be made in the Agreement Value or time schedule, or both, and the Agreement shall accordingly be amended. Any claims by the Bidder for adjustment under this Clause must be asserted within one (1) week from date of the Bidder's receipt of APSFL's order for change. The unit rate of each item quoted/accepted by the selected Bidder shall however not change.

2.20 APSFL's Right to Accept /Reject

APSFL reserves the right to accept or reject any proposal, and to annul the bid process and reject all proposals at any time prior to award of work, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for APSFL's action.

2.21 Signing of Agreement

The signing of agreement for the project is as follows:

2.21.1 Signing of Agreement

APSFL notifies the successful Bidder that its proposal has been accepted and APSFL shall enter into an Agreement with the successful Bidder as per the Master Service Agreement prescribed in this RFP. The signing of agreement will constitute the formation of the Agreement.

2.21.2 Discharge of Bid Security (EMD)

Upon the successful Bidder's furnishing of Performance Security, APSFL will promptly return the EMD to each unsuccessful Bidder EMD within 30 days. The Bid security (EMD) of successful Bidder will be released, on receipt of the Performance Bank Guarantee.

2.21.3 Expenses for the Agreement

The incidental expenses of execution of Agreement shall be borne by the successful Bidder.

2.21.4 Failure to abide by the Agreement

Failure of the successful Bidder to agree with the Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event APSFL may forfeit the EMD/ Performance Bank Guarantee. The contract may be awarded to the next lowest bidder, or however deemed appropriate by the Authority.

2.22 Performance Security

- a. The successful Bidder shall have to submit a Performance Security within 15 days from the date of issuance of Letter of Award (LoA). Extension of time for submission of beyond 15 days and up to 30 days from the date of issue of LoA may be given by APSFL, who is competent to sign the contract agreement. However, a penal interest of 15% per annum shall be charged for the delay beyond 30 days, i.e. from 31st day after the date of issue of LoA. In case the Bidder fails to submit the requisite Performance Security even after 30 days from the date of issue of LoA, the contract shall be terminated duly forfeiting EMD and other dues, if any payable against the contract. The failed Bidder shall be debarred from participating in re-tender for that work.
- b. The Performance Security shall be submitted by the successful Bidder after the LoA has been issued, but before signing of the contract agreement. The agreement should normally be signed within 15 days after the issue of LoA and the Performance Security shall also be submitted within this time limit. This Performance Security shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case, the time limit for completion of work gets extended, the contractor shall get the validity of Performance Security extended to cover such extended time for completion of work plus 60 days.
- c. The value of Performance Security to be submitted by the Bidder will not change for variation up to 25% (either increase or decrease). In case during the course of execution, value of the contract increases by more than 25% of the original contract value, an additional Performance Security amounting to 5% (five percent) for the excess value over the original contract value shall be deposited by the Bidder.
- d. The Performance Security shall be released after the physical completion of the work based on the 'completion certificate' issued by the competent authority stating that the Bidder has completed the work in all respects satisfactorily. The security deposit shall, however, be released only after the expiry of the defect liability period and after passing the final bill on 'No Claim Certificate' from the contractor.
- e. Whenever the contract is rescinded, the security deposit shall be forfeited and the Performance Security be encashed. The balance work shall be got done independently without risk and cost of the failed Bidder, the failed Bidder shall be debarred from participating in the tender for executing the balance work. If the failed Bidder is a JV or a partnership firm, then every member/ partner of such a firm shall be debarred from

participating in the tender for the balance work in his/ her individual capacity or as a partner of any other JV/ partnership firm.

- f. The Bank Guarantee should be from a Nationalized/Scheduled Commercial Bank acceptable to APSFL, in the format prescribed in Annexure P in section of this RFP, payable on demand, for the due performance and fulfillment of the Agreement by the Bidder.
- g. All incidental charges whatsoever such as premium, commission etc., with respect to the Performance Security shall be borne by the Bidder. The Performance Security shall be valid for 60 days post completion of the Payment terms as per RFP. However, no interest shall be payable on Performance Bank Guarantee.

2.23 Rejection Criteria

- a. The proposal of a Bidder is liable to be disqualified in the following cases or in case Bidder fails to meet the bidding requirements as indicated in this RFP:
 - i. Proposal not submitted in accordance with the procedure and formats prescribed in this document.
 - ii. During validity of proposal, or its extended period after last date and time for submission of Bids, if any, the Bidder increases the quoted prices.
 - iii. The Bidder proposing a "Conditional-Proposal".
 - iv. Proposal is received in incomplete form.
 - v. Proposal is not accompanied by all the requisite documents.
 - vi. Information submitted in Qualification proposal is found to be misrepresented, incorrect or false, accidentally, unwittingly or otherwise, at any time during the processing of the Agreement (no matter at what stage) or during the tenure of Agreement including the extension period if any.
 - vii. Bidder tries to influence the proposal evaluation process by unlawful means at any point of time during the Bid process.
 - viii. In case any Bidder submits multiple proposals or if common interests are found in two or more Bidders, the Bids are likely to be disqualified.
 - ix. Bidder fails to deposit the Performance Security prior to signing of the Agreement or fails to enter into an Agreement within 60 days of the date of issuance of LoA or within such extended period, as may be specified by APSFL.
- b. Bidders may specifically note that while evaluating the proposals, if it comes to APSFL's knowledge expressly or implied, that some Bidders may have colluded in any manner whatsoever or otherwise joined to form an alliance resulting in delaying the processing of proposal then the Bidders so involved are liable to be disqualified for this Contract as well as for a further period of three years from participation in any of the RFPs floated by APSFL and their EMD shall be forfeited.
- c. Prevention of Collusion of Vendor: with a view to prevent collusion or the formation into a ring by vendor / Bidder, the following are issued;

- i. Tender Schedules shall be issued till a date prior to the last date of submission of tenders.
 - ii. Once a vendor / Bidder buys a tender schedule he shall not be permitted to return the schedule after buying a tender schedule / document, if a vendor does not tender for the work, his EMD shall be forfeited (Cash or Bank Guarantee or Both).
- d. APSFL will reject a proposal for award if it determines that the Bidder recommended for award, or any of its personnel, or its agents or, Agencies and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the Contract.

2.24 Termination of Contract

Following clauses shall be applicable, in case of termination of contract:

2.24.1 Termination for default

APSFL may without prejudice to any other remedy for breach of contract, by written notice of default with a notice period of 30 days, sent to the successful bidder, terminate the contract in whole or part

(i) If the successful bidder fails to deliver any or all of the goods and services within the time period(s) specified in the Contract or fails to supply the items as per the Delivery Schedule or within any extension thereof granted by APSFL; or

(ii) If the successful bidder fails to perform any of the obligation(s) under the contract; or

(iii) If the successful bidder, in the judgment of APSFL, has engaged in fraudulent and corrupt practices in competing for or in executing the Contract.

In the event APSFL terminates the Contract in whole or in part, APSFL may procure, upon terms and in such manner as it deems appropriate, the goods and services similar to those and delivered and the successful bidder shall be liable to APSFL for any additional costs for such similar goods. However, the successful bidder shall continue the performance of the contract to the extent not terminated.

2.24.2 Termination for Insolvency

APSFL may at any time terminate the Contract by giving written notice with a notice period of 30 days, sent to the successful bidder, if the successful bidder becomes bankrupt or otherwise insolvent. In this event, the termination will be without compensation to the successful bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to APSFL.

2.24.3 Termination for Convenience

APSFL may, by written notice, with a notice period of 30 days sent to the successful bidder, may terminate the Contract, in completely or in part, at any time for its convenience. The notice of termination shall specify that termination is for APSFL's convenience, the extent to

which performance of work under the Contract is terminated and the date upon which such termination becomes effective. On termination, the successful bidder is entitled for compensation to the extent of work done till the date of termination.

2.25 Execution of WorkOrder

The successful bidder should nominate and intimate APSFL, a Manager as Single Point of Contact (SPoC), who should be responsible for effective delivery of work complying with all the terms and conditions. The successful bidder should ensure that the Manager fully familiarizes with the RFP Conditions, Scope of Work and deliverables.

2.26 Submission of Technical Solution and Approach Methodology

The bidder shall be required to submit the detailed technical solution document entailing minimum technical specifications of material mentioned in the RFP, design/ drawing document, detailed implementation approach methodology, etc. The technical solution documents shall need to be submitted to APSFL within 7 days of issuance of LoA. If in case, there is increase/ decrease in the technical specifications of material, prior approval needs to be taken from APSFL. APSFL reserve rights to cancel the bid, if in case the technical solution document is not in compliance with the requirements mentioned in the RFP.

Broad areas to be covered in technical solution documents are given below, but not limited to:

- a) Applicable Methodology at the Location (HDD / Micro Trenching / Open Trench etc.)
- b) Route Mapping with Geo-Graphical Coordinates.
- c) Survey Reports, Drawings.
- d) Specification of the Fiber being used.

Note: If in case of change of make and model of the components from the once specified in the technical solution document during the project, prior approval from APSFL needs to be taken.

2.27 Extra/ new item

Extra items of work shall not vitiate the contract. There is reimbursement for extra items shall be validated by the APSFL/ any agency appointed by APSFL and cleared by the Authority. The Contractor shall be bound to execute extra items of work as directed by the Authority. The rates for extra items shall be worked out based on the unit rates quoted by the Bidder in Price Bid/ as per mutually agreed terms and conditions. For new items which are beyond the scope of the BoQ, the APSFL/ any agency appointed by APSFL or any authorized official/ agency shall validate the requirements and necessity of such new/extra items after due diligence, based on site conditions and work contingencies.

2.28 Liquidated Damages (LD)

- a. Liquidated Damages will be levied as per the penalty and payment schedule subject to a maximum of 10% of the total value of the contract for non-fulfilment of delivery schedule. Any delay due to the Force Majeure conditions or delay not due to the successful bidder will be excluded from the delivery schedule.
- b. In the event of failure by the successful bidder to fulfil the delivery conditions, Tender Inviting Authority at its discretion may initiate any of the action(s) as given below:
 - i. Extension of time may be permitted to complete the work.
 - ii. Additional resources will be requested for speeding up the work.
 - iii. Liquidated Damages will be levied.
 - iv. Contract with the successful bidder may be terminated as per the Termination clause.
 - v. Any other action as may be deemed fit by Tender Inviting Authority in the best interest of the department.

2.29 Force Majeure

Neither Tender Inviting Authority nor the successful bidder shall be liable to the other for any delay or failure in the performance of their respective obligations except causes or contingencies beyond their reasonable control due to Force Majeure conditions such as:

- a. Any act of God such as lightning, earthquake, landslide, etc. or other events of natural disaster of rare severity. Meteorites or objects falling from aircraft or other aerial devices, travelling at high speeds
- b. Fire or explosion, chemical or radioactive contamination or ionizing radiation
- c. Pandemic or Epidemic or plague. Act of war (whether declared or undeclared), threat of war, invasion, armed conflict or act of foreign enemy, unexpected call up of armed forces, blockade, embargo, revolution, riot, religious strife, bombs or civil commotion, sabotage, and terrorism

2.30 Arbitration

In case of any dispute, the matter will be referred to a Sole Arbitrator to be appointed by APSFL in accordance with the "Arbitration and Conciliation Act 1996" and any amendments thereafter. The arbitration shall be held in Andhra Pradesh, India and in English.

2.31 Exit Management Plan

- a. An Exit Management plan shall be furnished by bidder in writing to the Authority within 90 days from the date of signing this contract, which shall deal with at least the following aspects of exit management in relation to the contract and in relation to the project implementation and service level monitoring.
 - i. A detailed program of the transfer process that could be used in conjunction with a Replacement Service Provider including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the

- transfer;
 - ii. Plans for provision of contingents support to Project and Replacement Service Provider for a reasonable period after transfer;
 - iii. Exit Management Plan in case of normal termination of Contract Period
 - iv. Exit Management Plan in case of any eventuality due to which Project is terminated before the Contract Period
 - v. Exit Management Plan in case of termination of Supplier
 - b. Exit Management plan at the minimum adhere the following:
 - i. Three (3) Months of the support to Replacement Service Provider post termination of contract.
 - ii. Complete handover of the reports, documents and other relevant items to the Replacement Service Provider/Authority.
 - iii. Certificate of acceptance from authorized representative of Replacement Service Provider issued to supplier on successful completion of handover and knowledge transfer.
 - iv. Tentative exit management schedule/Matrix is annexed
 - c. Each Exit Management Plan shall be presented by the Service Provider to and approved by the Managing Director, APSFL or its nominated agencies.
 - d. In the event of termination or expiry of contract, Project Implementation, or Service Level Monitoring, both PIA and Authority shall comply with the Exit Management Plan, and payments shall be made by APSFL only for the work done prior to termination notice, upon successful acceptance by Third Party Auditor (TPA)/ any agency / and personnel as appointed by APSFL.
- During the exit management period, the Service Provider shall use its best efforts to deliver the services.

2.32 Extension of time in Contracts

Subject to any requirement in the contract as to completion of any portion or portions of the works before completion of the whole, the contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as may be directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses.

2.32.1 Extension due to modification

If any modifications have been ordered which in the opinion of APSFL have materially increased the magnitude of the work, then such extension of contracted date of completion may be granted as shall appear to APSFL to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date may be considered necessary as soon as the clause thereof shall arise and in any case not less than one month before the expiry of the date fixed for completion of the works.

2.32.2 Extension for delay not due to APSFL or Contractor

If in the opinion of APSFL, the progress of work has any time been delayed by any act or neglect of APSFL employees or by other contractor employed by the APSFL or in executing the work not forming part of the contract but on which contractor's performance necessarily depends or by reasons of proceeding taken or threatened by or dispute with adjoining or to neighbouring owners or public authority arising otherwise through the Contractor's own default etc. or by the delay authorized by APSFL pending arbitration or in consequences of the contractor not having received in due time necessary instructions from the APSFL for which he shall have specially applied in writing to the APSFL within 15 days of such happening but shall nevertheless make constantly his best endeavours to bring down or make good the delay and shall do all that may be reasonable required of him to the satisfaction of the Engineer to proceed with the works. The contractor may also indicate the period for which the work is likely to be delayed and shall be bound to ask for necessary extension of time. APSFL on receipt of such request from the contractor shall consider the same and shall grant such extension of time as in its opinion is reasonable having regard to the nature and period of delay and the type and quantum of work affected thereby.

No other compensation shall be payable for works so carried forward to the extended period of time, the same rates, terms and conditions of contract being applicable, as if such extended period of time was originally provided in the original contract itself.

2.32.3 Extension for delay due to APSFL

In the event of any failure or delay by the APSFL to ensure site readiness necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the APSFL due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the contractor to damages or compensation therefore, but in any such case, the APSFL may grant such extension or extensions of the completion date as may be considered reasonable.

233 Extension of time for delay due to contractor

The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be essence of the contract and the works must be completed not later than the date(s) as specified in the contract. If the contractor fails to complete the works within the time as specified in the contract for the reasons other than reasons specified in the clause 2.29 and 2.32, APSFL may, if satisfied that the works can be completed by contractor within reasonable short time thereafter, allow the contractor for further extension of time as APSFL may decide. On such extension, APSFL will be entitled without prejudice to any other right and remedy available on that behalf, to recover from the contractor as per penalty terms

mentioned below in this clause.

For the purpose of this clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued. Provided also, that the total amount of liquidated damages under this condition, shall not exceed 10% of the first Rs.2 lakhs and 5% of the balance of the total value of the item or groups of items of work for which a separate distinct completion period is specified in the contract.

Further competent authority while granting extension to the currency of contract under clause 2.33 may also consider levy of token penalty as deemed fit based on the merit of the case. Provided further, if that the APSFL is not satisfied that the works can be completed by the contractor and in the event of failure on the part aforesaid, the APSFL shall be entitled without prejudice to any other right or remedy available in that behalf, to appropriate the contractor's security deposit and rescind the contract, whether or not actual damage is caused by such default.

Note: All General Conditions of Contract (GCC) and Special Conditions of Contract (SCC) as per Department of Roads and Buildings, Government of Andhra Pradesh are applicable for this RFP.

3. ProjectBackground

3.1 Project Background

Government of Andhra Pradesh enterprise, aimed at providing internet connectivity and e-governance services to Govt. Office Unit / Institutions / Organizations in the state of Andhra Pradesh.

As part of this Project in state of Andhra Pradesh, Selected Locations of Govt. Offices / Institutions / Organizations shall be connected by Last Mile Connectivity of Optical Fiber from the Laid Underground Optical Fiber to CPE's Location. After Successful Commissioning of the site / Locations User Acceptance Test Certification / Report would be verified by the Authority / or Nominated representative by APSFL.

Following table depicts the locations for implementation of the Underground Work:

S.No	District	Location Name	Address with Postal Code
1	Guntur	Velagapudi, Tulluru	APSWAN-NOC, 3rd Block, AP Secretariat, Velagapudi -522503
2	Krishna	Vijayawada Campoffice	Collector Camp Office, Near PWD grounds, Vijayawada- 520001
3	Anantapur	Anantapur	Dist Collectorate, Anathapur, Anantapur district, AP-515001
4	Chittoor	Chittoor	Vivekananda Bhavan, new collectrate office, Reddy gunta, Chittoor - 517001
5	East Godavari	Kakinada	Dist Collectorate, Rama Rao Peta, Kakinada, Andhra Pradesh 533001
6	Guntur	Guntur	District Collector office, Guntur-522004
7	Kadapa	Kadapa	Rims road , New Collectorate, Kadapa-516001
8	Krishna	Machilipatnam	Collector Office, Machilipatnam-521002
9	Kurnool	Kurnool	Dist Collectorate, Collectorate Road, Budhawara Peta, Alluri Sitarama Raju Nagar, Kurnool, Andhra Pradesh 518002

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S.No	District	Location Name	Address with Postal Code
10	Nellore	Nellore	Dist Collectorate, Achari Street, Nellore, Andhra Pradesh 524001
11	Prakasam	Ongole	Prakasam collectrate Bhavan, nellore road, ongole, Prakasam Dist-523001
12	Srikakulam	Srikakulam	Collector Office, Srikakulam- 532001
13	Vizainagaram	Vizainagaram	Dist Collectorate, Cantonment Road, Cantonment, Vizianagaram, Andhra Pradesh - 535002
14	Visakhapatnam	Visakhapatnam	Dist Collectorate, Main Road, Krishna Nagar, Maharani Peta, Visakhapatnam, Andhra Pradesh - 530002
15	West Godavari	Eluru	Dist Collectorate, Santhi Nagar, Eluru, Andhra Pradesh - 534006

32 ProjectType

The Project will be rolled at Selected Locations of Govt. Offices / Institutions in the state of Andhra Pradesh.

33 Project Locations

The Project shall be implemented through Underground Optical Fiber Cable (24F - Armoured) in Andhra Pradesh. Following table depicts district-wise count of estimated RoW crossing in the project which is tentative; actuals may vary based upon the field conditions and Dept. of the Authority;

S.No	District	Tentative No. of Row if required from the Dept.
1	Ananthapur	3
2	Chittoor	3
3	East Godavari	3
4	Guntur	4
5	Kadapa	3
6	Krishna	6
7	Kurnool	3
8	Nellore	3
9	Prakasham	3
10	Srikakulam	3
11	Visakhapatnam	3
12	Vizianagaram	3
13	West Godavari	3
Total		43

Note:

1. The data provided in above table is illustrative based on current estimation of APSFL and might get changed based on actual condition.

4. Scope of Work

As part of scope, it includes Survey, Route Map of Fiber Laying, Mapping of GIS Coordinates from Nearest APSFL's PoP to Customer Premises Location with Ring Architecture (Based on the Requirement) connectivity and laying of Approximately 40 Km of Underground Armoured 24F optical fiber cable with Liasing of the End Customer (NHAI, R & B – Depends on the Type of the Road and the Authority Dept.) for connecting Selected Locations of Government Offices / Organizations / Institutions in the state of Andhra Pradesh.

Through this RFP, APSFL intends to select agency responsible for laying of Underground optical fiber cable (24F) using appropriate laying methodology viz. HDD/Micro Trenching/ Open Trench which ever methodology is applicable in road crossing, national highway crossing, etc.

The scope of work in **Pre – Implementation & Implementation phase** comprises of following, but not limited to:

Commissioning Phase:

The scope of work shall comprise survey, supply of fiber including all the accessories, live line installation and commissioning of underground optical fiber cable. The fiber has to be terminated at the points provided by APSFL. The agency shall take care of the existing cable safety while laying the UG cable.

Must conduct the feasibility Survey/ Study based on the requirements provided by the APSFL and propose the best possible solution

A. Field/Route Survey

- The service provider has to carry out the route /field survey and submit the feasibility report and route map (along with Latitudes and Longitudes) of fiber for approval/clearance from APSFL to commence the work along with Purchase Order (PO).
- The vendor shall finalise the exact distance of the UG OFC, location of the Manholes and loop chambers and submit a schematic diagram.
- On the basis of the survey reports done by Vendor and further approved by APSFL, routes for OF cable laying shall be finalized. Road Cutting Permission shall be obtained from Transport, Roads and Building, Municipalities, Smart City authorities (Based on the Site Condition and Location) for laying the Optical Fiber Cable along the finalized roads and at rail / road crossing along the route.
- It is essential that the cable is laid after obtaining due permission from all the

concerned authorities to avoid any damage (which may result in disruption of services / revenue loss) and shifting in near future due to their planned road widening works. For obtaining RoW APSFL shall provide necessary documents to the vendor. In case vendor pays fees/deposits for RoW on behalf of APSFL, the amount will be reimbursed to the vendor by APSFL based upon the actuals and submitting the original invoice and its relevant documents as prescribed in the **G.O.MS.NO.60, Transport, Roads & Buildings (R-IV) Department.**

B. Fiber Implementation

- Bidder shall be responsible for supply, install & commissioning of Underground OFC at selected locations of Govt. Offices / Organizations / Institutions as per the finalized route map during the survey.
- Providing additional protection by R.C.C. Pipes/DWC pipes and/or concreting/chambering, wherever required according to construction specification
- Bidder shall provide manhole/handhole for every 500 Meters or as per the feasibility upon approval from APSFL and shall be of NP3 HD20 size (990 mm Outer diameter / 800 mm inner diameter) or construction of brick wall at every Cable pulling location for housing the OF Cable loop & Pulling Optical Fiber Cable using proper tools and accessories. Sealing of both ends of the PLB HDPE pipe in manhole by hard rubber bush of suitable size to avoid entry of rodents into the PLB HDPE Ducts, putting split PLB HDPE Ducts and split RCC pipes with proper fixtures over cable in the manhole to protect the bare cable.
- Digging of pit of size 2-meter x 2-meter x 1.8 meter depth) for fixing of Jointing chambered- cast RCC cover or stone of suitable size on jointing chamber to protect the Joint and backfilling of jointing chamber with excavated soil. The jointing chambers are constructed by way of fixing pre-cast RCC chambers/Brick Chambers and covers as per the instructions from APSFL.
- The joint chambers have to be provided where ever required to keep the O.F.C. joint well protected and also to keep extra cable, which may be, required to attend the faults at a later date. Jointing chambers are to be prepared and actual location of jointing chamber depends on length of cable drum and appropriateness of location for carrying out jointing work. The location is finalized by APSFL.
- In built up areas, the Vendor shall resort to use of manual labor/ HDD only to ensure no damage is caused to any underground or surface installations belonging to other public utility services and/or private parties.

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- The 24F fibers are to be spliced at every Joint & at both ends (Terminations) as directed by the APSFL. The Infrastructure required for cable splicing i.e. Splicing machine, OTDR, Tool kit etc. shall be arranged by the Vendor and also any additional accessories. e. g. Engine etc. required at site for splicing shall also be arranged by the Vendor.
- The Optical Fiber Cable thus jointed end-to-end shall be tested by the APSFL representative for splice losses and transmission parameters. Optical Fiber should meet all the technical parameters, **specified and no relaxation will be granted.**
- The vendor shall provide GIS coordinates of the laid fiber clearly tagging signages wherever installed/provided for APSFL's record & verification.
- Route Tags & Signage for every 500 Mtrs., at Man Holes/ Hand holes.

The scope of work in Post Implementation phase comprises of following, but not limited to:

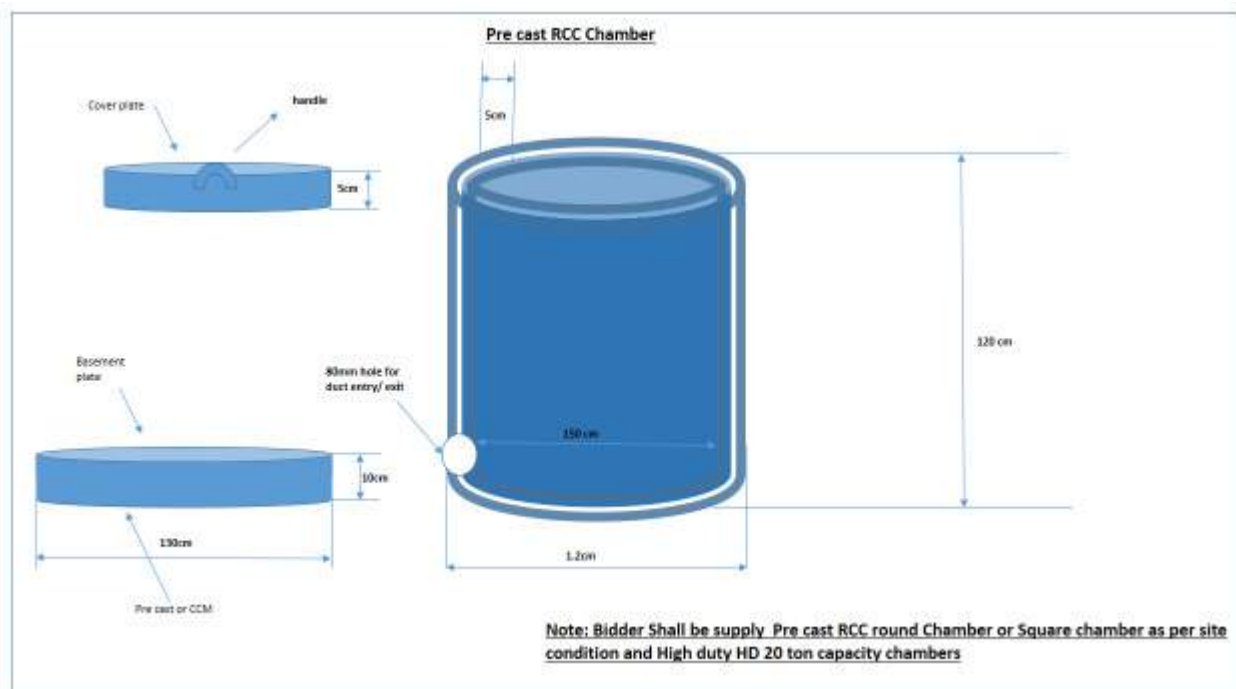
- Graphical presentation depicting the route of the fiber laid generated by the HDD machine.
- Submission of survey report, Route Map of Fiber Laying to APSFL.
- Mapping of the Co-ordinates on the deployment of the Initial route of the Fiber to End-route of the Fiber.
- Maintenance for a period of 3 Years for the Equipment / Material Supplied, Delivered and Commissioned at the Location.
- Submission of As-Built Diagram (Mandatory) & In-Built Diagram (If required).

5. Technical Specifications

5.1 Pre cast RCC chamber specifications

For fixing pre cast RCC chamber (following the below trmplet)first a pit of size 1.4 m x 1.4m x 1.4 m depth shall be required to be dug. Pre cast RCC chamber shall consist of followingsteps:

- a) Full round/square RCC chamber with outer diameter of 120 cm and height of 120cm and thickness of 5cm.
- b) Round/square top cover will be in two halves with thickness of 5 cm having one handle for each half in center and word 'OFC – APSFL' engraved on it.
- c) Round/suare basement plate with thickness of 10cm and diameter shall be provid.
- d) 5.6 mm Horizontal Iron round rings –
- e) 6 mm Vertical bars Iron - 12 mm Nos.
- f) 12 gauge GI wire mesh to be wrapped before reinforcing the CMM (HD:20)
- g) After,installtheprecastRCCchamber,thechamberisfilledwithcleansand beforeclosing.Backfillingofchamberpit souringds shall be closed properly with excavatedsoil in order to avoid crumble of soil / anyother oblication from public or other departments.
- h) Duct Entry & Exit holes shall be closed properly with sealing in order to avoid water leakage / anyother leakage towards manhole after duct entry.



5.2 RCC/ Pre cast route indicatorspecifications

The route /joint indicator made of pre-cast RCC should have the following dimensions (see Figure '2')

Base - 250 mm x 150 mm

Top - 200 mm x 75 mm

Height - 1250 mm

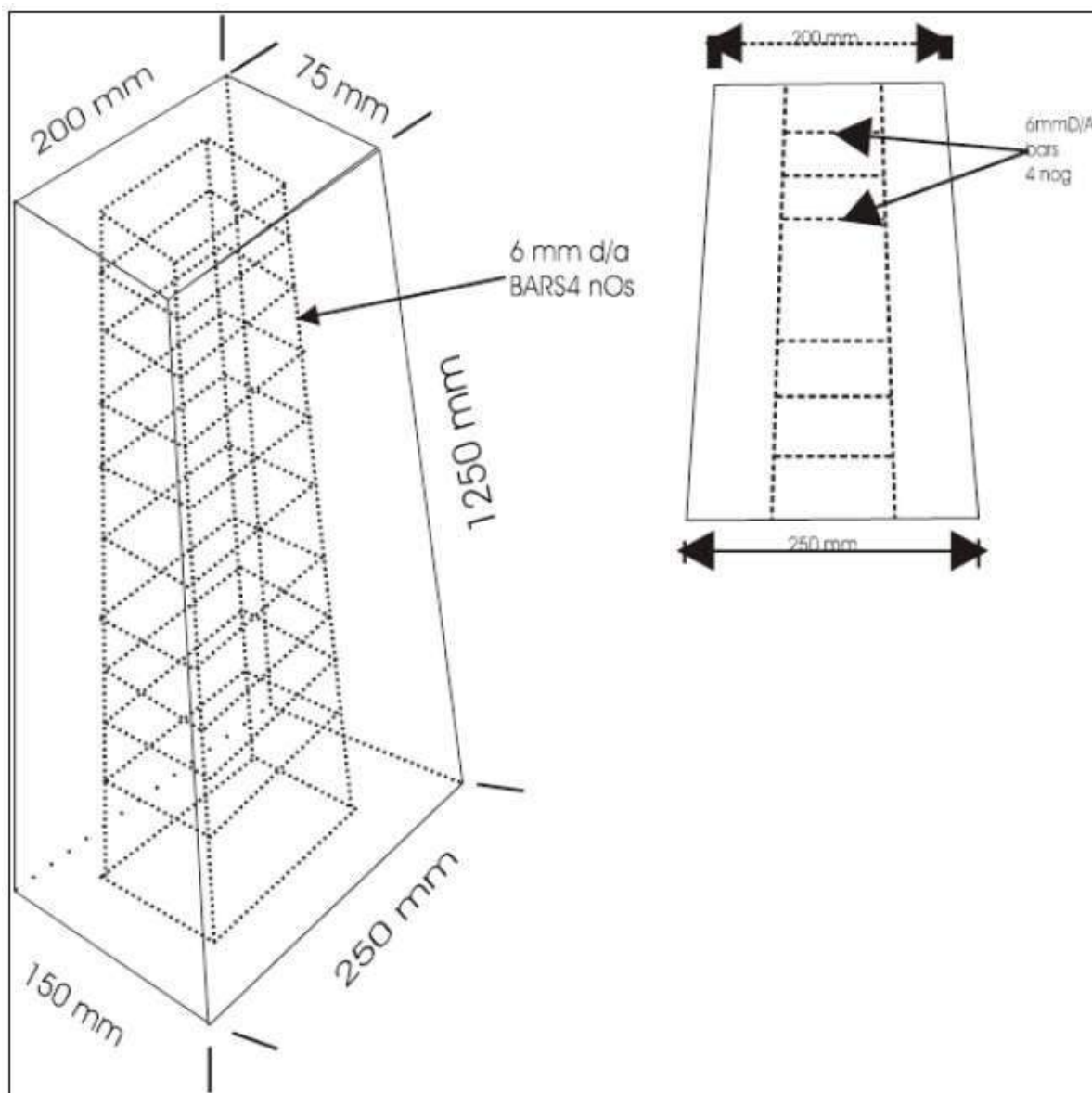


Figure: 2

5.3 RCC full round pipesspecifications

Reinforced cement concrete pipes (spun type) coupled with RCC collars sealed with cement mortar used to provide additional protection to PLB HDPE Ducts / Coils at lesser depths should be of full round, NP-2 class and size 100mm (internal diameter),

conforming to IS standard 458-1988 with latest amendments. The pipes should have a nominal length of 2 meters.

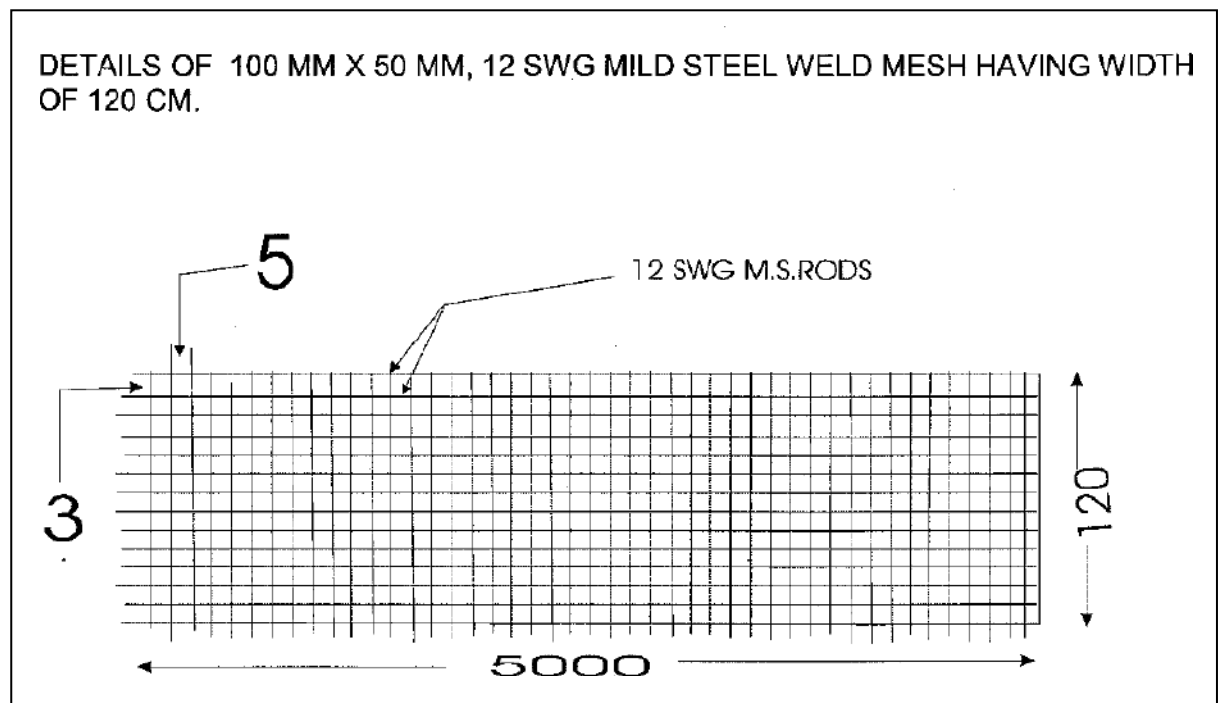
The RCC collar should be properly sealed using cement mortar 1:3 (1:53 grade cement of reputed brand, fine sand without impurities). In case of long spans, every third joint will be embedded in a concrete block of size 60 cms (L) x 40 cms (W) x 25 cms (H) of 1:2:4 cement concrete mix (1: cement, 2: coarse sand, 4: stone aggregate of 20 mm nominal size) so that the alignment of RCC pipes remain firm and intact. Also, both ends of RCC pipes spans will be sealed by providing concrete block of size 40 cm (L) x 40 cm (W) x 25 cm (H) of 1:2:4 cement concrete mix to avoid entry of rodents.

5.4 DWC pipe specifications

Use of normal duty DWC (Double Walled Corrugated) HDPE pipe – confirming to TEC GR no. GR/DWC-34/01 Sep.2007 with latest amendments shall be preferably utilized as first choice of protection of Optical fiber Cable instead of GI pipes. The DWC pipes used shall be of size 75/61 mm.

5.5 M.S Weld Mesh Specifications

The PLB HDPE Ducts can also be protected by embedding it in concrete of size of 25 cms x 25 cms reinforced with MS weld mesh. The MS weld mesh used should be of 50 mm x 100 mm size, 12 SWG, 120 cms in width in rolls of 50m each. One meter of MS weld mesh caters to approx. 3 meters of concreting.



5.6 PLB HDPE Duct

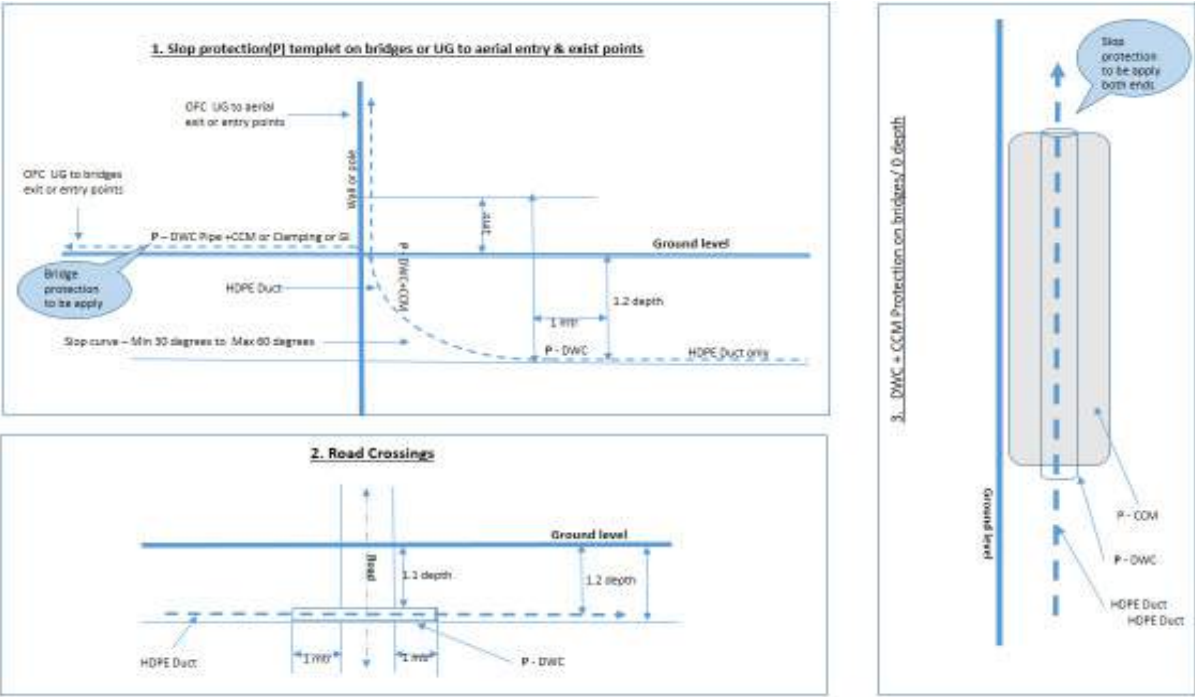
The PLB HDPE duct shall be as per TEC GR No. TEC/GR/TX/CDS-008/03/MAR-11 with latest amendments, if any.

5.7 G.I.Pipe

GI pipe of 6 meters length 50mm diameter ISI standard (Class B), with couplers shall be used as part of the project.

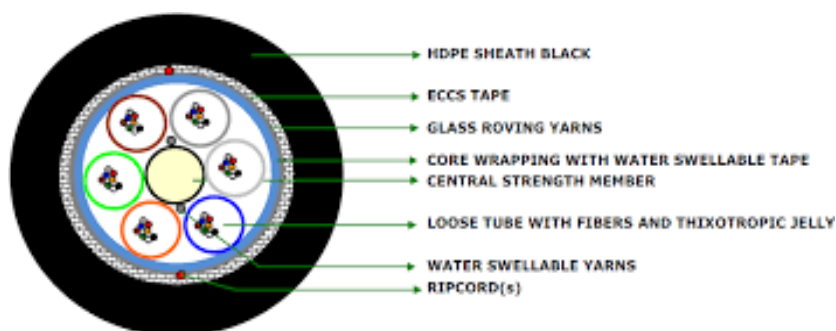
5.8 Protection Drawings

The following templets are used to exit/ entry points for Bridges, heavy drains, culverts, UG to aerial/ aerial to UG & road crossings.



5.9 Fiber Specifications

24F Armoured Underground Optical Fiber Cable



S.No.	Parameter	Unit	Value
1	No. of tubes for 24F Optical Fiber Cable:		6
2	No. of Fibers per tube for 24F Optical Fiber Cable		4
3	Fiber color		Blue,Orange,Green,Brown,Slate, White
4	Diameter of Cable 24FCable(mm):	(mm):	14.5±0.5
5	Core Diameter	μm	8.3
6	Cladding Diameter	μm	125±1
7	Cladding non-circularity	%	≤1
8	Mode Field concentricity error	μm	≤0.6 (Nominal 0.25)
9	Attenuation (Fiber)	dB/Km	
	@1310		≤0.350
	@1550		≤0.210
	@1625		≤0.240
10	Attenuation (Cabled)	db/Km	
	@1310		≤0.350
	@1550		≤0.210
	@1625		≤0.240
11	Chromatic dispersion	Ps/nm.km	
	In 1288-1339		≤3.50
	In 1270-1360		≤5.3
	@1550		18
12	PMD @ 1310 & 1550 Cabled	Ps/sq.root km	
	Individual fiber		≤0.2 (Nominal 0.1)
	Link design value		≤0.1
13	Zero Dispersion slope	Ps/(nm ² .km)	≤0.092
14a.	Water peak at 1383±3 nm	Db/km	≤1.0 (Nominal 0.5)
14b.	Water peak at 1385 nm	Db/km	≤0.310

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15	Zero Dispersion Wave Length	Nm	1300-1324
16	Point Discontinuity	Db	≤ 0.05 at 1310, 1550 & 1625
17 a.	Fiber Cut-Off	Nm	≤ 1320 (Nominal 1280)
17b.	Cable Cut-Off		≤ 1260
18	Attenuation Vs Wavelength		Ref λ are 1310 & 1550 nm

5.10 Specification on UnderGround Execution

- a) Cable Type: 24 F Armoured
- b) No. of Ducts to be laid in trench: 02 Nos
- c) Distance between MH to MH: 500 Meter's
- d) Depth: 1.2 Meter
- e) Methodology: HDD, if it is not feasible open trench methodology.
- f) The splice joints should not be less than 2 kms
- g) Route Markers at every 500 mts.
- h) Markers shall be installed in a manner that 500 mm length is below ground and 750 mm is exposed. Fixing of the route markers shall be done at 0.5 M from the trench and away from the road center.

5.11 Location and Alignment of Trench

Trench must be aligned according to permission granted by authority/ agency. However following guidelines must be adhered to

- i) Cross pits must be made manually to check presence of any underground utilities at adequate spacing.
- j) Trench boundaries shall be marked with rope / lime powder prior to digging in order to get trench in straight line.
- k) Trench shall be located at lowest point of lower area if feasible. Trench must not come over field boundary or any heap of soil.
- l) Trees and their roots must be by passed to avoid damage while trenching and ensuring safe passage of OFC with smooth curves.

5.12 Trenching Specifications:

The trenching should be done on 1.2 mts depth otherwise bidder shall take approvals for the following deviations.

- m) Priority A: Depth should be 1.2 Meters Bare Ducts to be laid. (preferably |)
- n) Priority B: Depth found between 1Mtrs to 1.2 Meters Ducts to be protected with DWC Pipe.
- o) Priority C: Depth found between 0.8 Meters to 1.0 Meters DWC with PCC (1:2:4) Protection

should be given.

Warning tape should be laid 500mm from the NGL Level.

5.13 Crossings Using Existing Bridges / Culvert

Bridges and Culverts crossings to be done by HDD Methodology if in case HDD is not possible other deviation Clamping or DWC with PCC.

Ducts shall be installed inside DWC pipes (of diameter suitable for specified number of ducts) when duct are laid on/along bridge/culverts at locations approved by authorities. DWC pipe shall be used when the location is not exposed to direct sunlight. For locations exposed to direct sunlight, high winds or heavy rains GI pipes shall be used as protective measure. In exceptional cases, where authority does not permits use of GI pipe, DWC pipe shall be covered with a GI sheet to prevent direct sunlight and rain falling on DWC pipe. Or DWC with Box Concrete size of 300*300*300mm. As far as practical GI sheet should not touch the DWC pipe. Wooden/other low thermal conductivity material spacers can be used to maintain gap between DWC pipe and GI sheet.

5.14 Installation of OFC Ducts by Trenchless Techniques – HDD

- p) All concerned authorities (water, oil and gas pipeline operators, telecom operators, power companies etc.) who may have their underground utilities in the area shall be informed well in advance and as built drawings obtained to ensure proper planning of HDD operation and drilling profile.
- q) The ends of the HDPE ducts shall be sealed with end caps to prevent ingress of water, mud, debris or obstacles inside the man-hole.
- r) The minimum depth at entry and exit pits shall be 1.2 Meter.
- s) The intermediate Depth shall be 2.5 Meter.
- t) At Coupler point depth shall be 1.2 Meter covered by Kadapa stone.

6. Engineering Instructions for laying optical fibercable

The Engineering Instructions spelt out in this document deal with the methods to be adopted for underground Optical Fiber Cable laying in PLB HDPE

6.1 HDD laying methodology

HDD methodology shall be adopted for laying of fiber in Municipal Roads / national highway

crossing and built up areas. In this section between the last electric pole and entry pit; and exit pit and first pole for HDD / Open Trench / Micro Trench (Which ever Methodology is applicable) UG fibers shall be laid through PLB HDPE ducts buried at nominal depth of 165cm. Following steps shall be adopted for laying UG fiber:

- i. Excavation of trench up to a nominal depth of 165 cm in non-Rocky soil, according to construction specifications along National/State Highways/other roads and in built up areas. Under exceptional conditions/ genuine circumstances due to site constraints/soil conditions, relaxation can be granted for excavation of trench to a depth lesser than 165cm. Such relaxations shall be given as per the laid down norms/ procedures and with the approval of the competent authority.
- ii. Laying of PLB HDPE Ducts/coils coupled by sockets in excavated trenches, on bridges and culverts, as per construction specification and sealing of PLB HDPE Ducts pipe ends at every manhole by end-plugs of appropriate size.
- iii. Providing additional protection by R.C.C. Pipes/GI pipes and/ or concreting/ chambering, wherever required according to construction specification.
- iv. Back filling and Dressing of the Trench according to construction specifications.
- v. The joint chambers are provided at every joint to keep the OFC joint well protected and also to keep extra length of cable, which may be, required to attend the faults at a later date. Jointing chambers are to be prepared near the entry pit from for Underground Methodology applicable used at national highway crossing / Municipal Road Crossings / Built in Areas.
- vi. Digging of pits 500cm to 1000cm towards jungle side at every manhole and jointing chamber along the route to a depth of 75cm fixing of route Indicator/joint indicator, concreting and backfilling of pits. Painting of route indicators with Blue Colour and joint Indicator by Grey colour and sign writing denoting route/joint indicator number and marked as "OFC – APSFL", as per construction specification.

6.2 Types of protection to be adopted at different depth

S. No.	Range of the depth	Protection Type
1	≥ 120 cm.	No protection required
2	≥ 90 cm. < 1.2 m.	Protection by using DWC pipe shall be provided
3	≥ 60 cm. < 90cm.	Protection by using pre-cast RCC pipes NP-3 shall be provided
4	≥ 50 cm. < 60 cm.	Concreting Surrounding the pipes with a cover of 15 cm. on all the sides with weld mesh or DWC pipe shall be provided. Cement Concrete Mixture (CCM)
5	< 50 cm.	Laying of fiber below 50cm depth not Permitted
6	Road crossings	For every Road crossing, DWC Pipe Shall be used as protection.
7	On Bridges/ drains/heavy utilites.	Must follow protection drawings
8	Aerial to UG / UG to Aerial covert points	Must follow protection drawings
9	Cement Concrete Mixture (CCM)	Cement Concrete Mixture used shall be of 1:2:4 composition, i.e 1 - 53 Grade Cement, 2 - Coarse Sand, 4 - Grade Coarse Stone Aggregate of 20mm Nominal Size, reinforced with Mild Steel Weld mesh.

63 Procedure for fixing RCC/ Pre-cast route/ joint indicators:

- i. Pits shall be dug 500 cm to 1000 cm towards jungle side at every Manhole and Jointing chamber for fixing of Route/Joint Indicator. In addition, Route Indicators are also required to be placed where optical fiber cable changes directions like road crossing etc.
- ii. The pits for fixing the indicator shall be dug for a size of 60 cm x 60 cm and 75 cm (depth). The indicator shall be secured in upright position by ramming with stone and murrum up to a depth of 60 cm and concreting in the ratio of 1:2:4 (1: cement, 2: coarse sand, 4 stone aggregate 20 mm nominal size) for the remaining portion of 15 cm. Necessary curing shall be carried out for the concreted structure with sufficient amount of water for reasonable time to harden the structure.
- iii. The Route indicators shall be painted Blue and placed at 500 to 1000 cm away from the centre of the trench towards jungle side. The Joint indicators are placed at OFC joints and placed 500 to 1000 cm away from wall of the joint chamber facing jungle side and are painted Grey. The engraved word "OFC – APSFL" should be painted in white, on route as well as joint indicators. Numbering of route indicators/joint indicators should also be done in white paint. The numbering scheme for route indicators will be Joint No./Route Indicator No. for that joint. For example, 2/6 marking on a route indicator means 6th route indicator after 2nd joint. Additional joints on account of faults at a later date should be given number of preceding joint with suffix A, B, C, and D. For example sign writing 2A on a joint indicator means, additional joint between joint No. 2 and 3. The numbering of existing route/joint indicator should not be disturbed on account of additional joints. Enamel paint of reputed brands should be used for painting and sign writing of route as well joint indicators.
- iv. Route/ loop and joint indicator to be installed based on following criteria:
 - a) Route/ loop indicator – location where manhole installed for additional loop placement
 - b) Joint indicator – location where joint chamber is installed
- v. The route and joint indicator shall be painted with primer before painting with oil paint. The material used should bear ISI mark. The size of each written letter should be at least 3.5 cms. The colors of painting and sign writing is as under:
 - a) For Joint Indicator: Grey color
 - b) For Route/ loop Indicator: Blue color
 - c) For OFC - APSFL: White color.

64 Trenching near culverts and bridges:

- i. The PLB HDPE Ducts shall be laid in the bed of culvert at the depth not less than 120 cm protected by RCC pipes. Both ends of culvert shall be excavated more than 120 cm in depth to keep the gradient of not less than 15 degree with horizontal. The bed of

trench should be as smooth as possible.

- ii. In case trenching and pipe laying is not possible on the culverts, the pipes shall be laid on the surface of the culverts after due permission approval from the competent authority.
- iii. The PLB HDPE Duct shall be laid on bridges by clamping / cement concrete with MS weld mesh at wheel guard of bridge protected by GI / DWG pipe. Prior approval from APSFL shall be required in case of GI pipe deployment.
- iv. While carrying out the work on bridges and culverts, adequate arrangement for cautioning the traffic by way of caution boards during daytime and danger lights at night shall be provided. In case of small bridges and culverts, where there is a likelihood of their subsequent expansion and remodelling, the cable should be laid with some curve on both sides of the culvert or the bridge to make some extra length available for readjustment of the cable at the time of reconstruction of culvert or the bridge.

6.5 Fiber Blowing

The Optical Fiber Cables are available in drums in lengths of approx. 2 km. The cables shall be blown / manually pulled (in exceptional cases) through already laid PLB HDPE duct. This work is to be carried out under the strict supervision of site-in-charge. It shall be ensured that during the blowing / pulling of Cable the tension is minimum and there is no damage to the Cable / Optical Fibers.

After pulling of the drum is completed, both ends of the PLB HDPE ducts pipe in each Manhole should be sealed by hard rodent resistant rubber bush, to avoid entry of rodents / mud into PLB HDPE ducts.

The optical fiber cables shall be supplied for blowing Test at the Site / Location. APSFL will co-ordinate with the bidder and its nominated representative to ensure seamless implementation of the project.

6.6 Safety and Precautions Measures

6.6.1 Safety Precautions when excavating / working in excavations close to electric cables

The Engineer-in-charge of the work should get full information from Electricity undertaking regarding any electric cables, which are known or suspected to exist near the proposed excavation and unless this is done, excavations should not be carried out in the section concerned. The electricity undertaking should be asked to send a representative and work should be preceded with close consultation with them.

Only wooden handled hand tools should be used until the electric cables have been completely exposed. Power Cables, not laid in conduits, are usually protected from above by a cover slab of concrete, brick or stone. They may or may not be protected on the sides. It is safer, therefore, always to drive the point of the pick axed downwards then uncovering a cable, so that there is less chance of missing such warning slabs. No workman should be permitted to work alone where there are electric cables involved. At

least one more man should be working nearby so that help can be given quickly in case of an accident. If disconnection of power could be arranged in that section it will be better. No electric cables shall be moved or altered without the consent of the Electric Authority and they should be contacted to do the needful. If an electric cable is damaged even slightly, it should be reported to the Electric Authority and any warning bricks disturbed during excavation should be replaced while back filling the trench. Before driving a spike into the ground, the presence of other underground properties should be checked. Information on plans regarding the location of power cables need not to be assumed as wholly accurate. Full precautions should be taken in the vicinity until the power cable is uncovered. All electric cables should be regarded as being live and consequently dangerous. Any power is generally dangerous, even low voltage proving fatal in several cases.

6.6.2 Electric shock-Action and treatment

Free the victim from the contact as quickly as possible. He should be jerked away from the live conductors by dry timber, dry rope or dry clothing. Care should be taken not to touch with bare hands as his body may be energized while in contact. Artificial respiration should begin immediately to restore breathing even if life appears to be extinct. Every moment of delay is serious, so, in the meanwhile, a doctor should be called for.

6.6.3 Safety Precautions while working in public street and road crossings

Where a road or footpath is to be opened up in the course of work, special care should be taken to see that proper protection is provided to prevent any accidents from occurring. Excavation work should be done in such a manner that it will not unduly cause inconvenience to pedestrians or occupants of buildings or obstruct road traffic. Suitable bridges over open trenches should be so planned that these are required for the minimum possible time. If in the case of Where bridges are constructed to accommodate vehicular traffic and is done near or on railway property, it should be with the full consent and knowledge of the competent railway authorities.

6.6.4 Danger from falling material

Care should be taken to see that apparatus, tools or other excavating implements or excavated materials are not left in a dangerous or insecure position so as to fall or be knocked into the trench thereby injuring any workman whom may be working inside the trench.

6.6.5 Care when working in Excavations

Jumping into a trench is dangerous. If it is deep, workmen should be encouraged to lower themselves. Workers should work at safe distance so as to avoid striking each other accidentally with tools. If the walls of the trench contain glass bits, corroded wire or sharp objects they should be removed carefully. If an obstruction is encountered, it

should be carefully uncovered and protected if necessary. If an obstruction is encountered, it should be carefully uncovered and protected if necessary. Care must be taken to see that excavated material is not left in such a position that it is likely to cause any accident or obstruction to a roadway or waterway. If possible the excavated material should be put between the workmen and the traffic without encroaching too much on the road.

6.6.6 Danger of cave in

When working in deep trenches in loose soil, timbering up/shoring the sides will prevent soil subsidence. The excavated material should be kept at sufficient distance from the edge of the trench or pit. Vehicles or heavy equipment must not be permitted to approach too close to the excavation.

When making tunneled opening, it should be ensured that the soil is compact enough to prevent cave in even under adverse condition of traffic. Extra care should be taken while excavating near the foundations of buildings or retaining walls. In such cases, excavation should be done gradually and as far as possible in the presence of the owners of the property.

6.6.7 Protection of Excavations

Excavations in populated areas, which are not likely to be filled up on the same day should be protected by barriers or other effective means of preventing accidents and the location of all such openings must in any event be indicated by red flags or other suitable warning signs. During the hours from dusk to dawn, adequate number of red warning lamps should be displayed. Supervisory officers should ensure that all excavations are adequately protected in this manner as serious risk and responsibility is involved. Notwithstanding adoption of the above mentioned precautions, works involving excavations should be so arranged as to keep the extent of opened ground and the time to open it to a minimum.

6.6.8 Precautions while working on roads

The period between half an hour after sun-set and half an hour before sunrise, and any period of fog or abnormal darkness may also be considered as night for the purpose of these instructions, for the purpose of providing the warning signs. Excavation liable to cause danger to vehicles or the public must at all times be protected with fencing of rope tied to strong uprights or bamboo poles at a suitable height or by some other effective means. Any such temporary erection which is likely to cause obstructions and which is not readily visible should be marked by posts carrying red flags or boards with a red background by day and by continuously lighted lamps at night.

The flags and the lamps should be placed in conspicuous positions so as to indicate the pedestrians and drivers of vehicles the full expanse i.e. both width and length of the obstruction. The distance between lamps or between floors should not generally

exceed 1.25 m along the width and 6m along length of the obstruction in non-congested areas, but 4 meters along the length in congested areas.

If the excavation is extensive, sufficient notice to give adequate warning of the danger, should be displayed conspicuously not less than 1.25 m above the ground and close to the excavation. Where any excavation is not clearly visible for a distance of 25m to traffic approaching from any direction or any part of the carriage way of the road in which the excavation exists, a warning notice should be placed on the kerb edge of all such roads from which the excavation or as near the distance as is practicable but not less than 10 m from the junction of an entering or intersecting road in which the excavation exists. All warnings, in these should have a red background and should be clearly visible and legible. All warning lamps should exhibit a red light, but white lights may be used in addition to facilitate working at night. Wherever required a passage for pedestrians with foot bridges should be provided. At excavations, cable drums, tools and all materials likely to offer obstructions should be properly folded round and protected. This applies to jointer's stents as well. Leads, hoses etc. stretched and across the carriageway should be guarded adequately for their own protection and also that of the public.

6.6.9 Traffic Control

The police authorities are normally responsible for the control of traffic and may require the setting up of traffic controls to reduce the inconvenience occasioned by establishment of a single line of traffic due to restriction in road width or any other form of obstruction caused by the work. As far as possible, such arrangements should be settled in advance. If there are any specific regulations imposed by the local authorities, these should be followed.

6.6.10 Protection from Lightning During Storing

Every magazine shall have attached there to one or more efficient lightning conductors designed and erected in accordance with the specification laid down in Indian Standard Specifications No. 2309 as amended from time to time. The connections to various parts of earth resistance of the lightning conductor terminal on the building to the earth shall be tested at least once in every year by a qualified electrical engineer or any other competent person holding a certificate of competency in this behalf from the State Electricity Department. A certificate showing the results of such tests and the date of the last test shall be hung up in conspicuous place in the building.

6.6.11 Precautions during thunder-storm

When a thunder-storm appears to be imminent in the vicinity of a magazine or store house every person engaged in or around such magazine and store house shall be withdrawn to a safe distance from such magazine or store house and the magazine and store houses shall be kept closed and locked until the thunder storm has ceased or the

threat of it has passed.

6.6.12 Maintenance of records

Every person holding a license granted under these rules for possession, sale or use of explosives shall maintain records in the prescribed form and shall produce such record on demand to an Inspection Officer.

6.6.13 General Precautions

- a) For the safety of persons a red flag shall be prominently displayed around the area where blasting operations are to be carried out. All the workers at site, except those who actually ignite the fuse, shall withdraw to a safe distance of at least 200 meter from the blasting site. Audio warning by blowing whistle shall be given before igniting the fuse.
- b) Blasting work shall be done under careful supervision and trained personnel shall be employed. Blasting shall not be done within 200 meters of an existing structure, unless specifically permitted by the Engineer-in-Charge in writing.
- c) Where electrically operated equipment is used in locations having conductive ground or continuous metal objects, tests shall be made for stray current to ensure that electrical firing can proceed safely.

6.6.14 Allied Activities

- a) Transportation of Materials: The materials required for executing the work entrusted to the contractors against a work order shall be made available at Project Store Depot. In some cases the materials may be available at subdivisional store go down. The contractor shall be responsible for transporting the materials, or otherwise to execute the work under the contract, to site at his/ their own cost. The costs of transportation are subsumed in the standard Schedule Rates and therefore no separate charges are payable on this account.
- b) Disposal of Empty Cable Drums: The contractor shall be responsible to dispose of the empty cable drums after laying of the cables. The cost of various sizes of empty cable drums recoverable from the contractor has been fixed taking into account the prevailing market rates as mentioned in this document.
- c) It shall be obligatory on part of the contractor to dispose of the empty cable drums at his/their level and the amount fixed for various empty cable drums shall be recovered from the bill for the work for which the drum (s) was/were issued or from any other amount due to the contractor or the Security Deposit.
- d) The contractor shall not be allowed to dump the empty cable drums in Govt. /Public place which may cause inconvenience to the public and should be disposed at appropriate manner. If the contractor does not dispose of the empty cable drums within 3 days of becoming it empty, the APSFL shall be at liberty to dispose of the drums in any manner deemed fit and also recover the double the amount fixed in this contract from the bill/security deposit/ any other amount due to

thecontractor.

- e) Supply of Materials: There are some materials required to be supplied by the contractor for execution of work under this contract like Bricks, Cement, Wire Mesh and Steel for protection, etc., besides using other consumables which do/don't become the part of the asset. The contractor shall ensure that the materials supplied are of best quality and workmanship and shall be strictly in an accordance with the specifications.
- f) Disposals of Cable Drums should not have any disturbance to Public Places. Transportation charges would be barred by the Bidder for the Disposals.

7. Bid Evaluation Criteria and Process

7.1 Pre-Qualification Criteria

The bidder should satisfy the following Pre-qualification criteria to be eligible for further evaluation under this RFP. The bidder should enclose documentary evidence for fulfilling the Eligibility in the Pre-qualification Bid. If a bidder fails to enclose the documentary proof for eligibility, their bid is liable to be rejected.

The following is the Pre-Qualification Criteria:

S. No	Eligibility Criteria	Documents Required
1	The Bidder should be a Sole Proprietorship firm or a company registered in India under the Companies Act, 1956 / 2013 /LLP Act 2008 /Indian Partnership Act 1932, as amended from time to time, and should be in operation for at least the last 3 years as on the date of bid submission.	For Sole Proprietorship firm, following documents are required. a. Copy PAN b. Proof of address and contact details For other, following documents are required: a. Copy of valid Certificate of Incorporation from Registrar of Companies b. Copy of Corporate Identification Number (CIN) c. Copy of GST registration certificate d. Copy of PAN
2	The cumulative annual turnover of the Bidder in the financial years i.e. FY 2017-18, FY 2018-19, FY 2019-20 and current financial year, should be at least INR 7.5Cr.	Certificate from the Statutory Auditor of the Company mentioning year-wise annual turnover. And, Copy of audited profit and loss statement showing the year-wise turnover, as mentioned in Annexure –F in Section 8.1 of the RFP
3	Average Net Worth of the Bidder, for the financial years, i.e. FY 2017-18, FY 2018-19, FY 2019-20 and current financial year, should be at least INR 25 Lakhs as per the audited financial results.	Certificate from Statutory Auditor clearly stating the Net worth of the Bidder, as mentioned in Annexure – F in section 8.1 of the RFP.

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S. No	Eligibility Criteria	Documents Required
4	The Bidder should have experience in works related to national highway in minor bridges/culverts or Horizontal Directional Drilling (HDD), amounting to INR 1.5 crores in the past 3 years.	Completion Certificate on the letterhead of the client clearly mentioning the value of work completed for national highways in minor bridges/culverts or Horizontal Directional Drilling (HDD) of 3 Years, as mentioned in Annexure – G in Section 8.1 of the RFP.
5	Bidder should not have been blacklisted by any central or state Govt. department or PSU on the date of bid submission	Bidder should submit an undertaking, as mentioned in Annexure H in Section 8.1 of the RFP, that it has not been blacklisted/debarred by any Govt. department or any PSU in India as on bid submission date.
6	All documents in the proposed bid, shall be signed by an authorized signatory, in whose name the Power of Attorney/ Board Resolution, should be duly issued.	For Pvt. Ltd. firms, a Board Resolution, as mentioned in Annexure-J, in Section 8.1 of the RFP to be submitted. For others, the Power of Attorney, as mentioned in Annexure-I, in Section 8.1 of the RFP to be submitted.
7	Bidder to Share the Document Verification Certificate	Certificate, on INR 100/- non Judicial Stamp Paper and duly notarized and Stamp, to be enclosed along with the bid documents (as per the format enclosed as Annexure – K in section 8.1 of the RFP.

NOTE 1:

- Only the bids of those Bidders, who submit the prescribed Bid-processing fee and EMD, shall be considered for evaluation. The bids not accompanied with a valid Bid-processing fee and EMD as part of the proposal shall be summarily rejected.
- The Commercial bids of only those bidders, who meet the Pre-Qualification criteria, shall be opened.
- Bidders are required to provide the aforementioned information as per the formats provided along with the required supporting documents for each of the criteria mentioned above.
- Specifications and Amendments referred in the Clause No: 5, should also be submitted with Supporting Docs along with the PQ Documents.

Post Tender Discussions at any cost and at any form will not be entertained.

Proposals without necessary supporting documents or without meeting the prescribed qualification criteria will be treated as non-responsive and will not be considered for further evaluation.

7.2 Commercial Evaluation Criteria

- a. Financial bids submitted of only those bidders, who are qualified as per pre-qualification criteria shall be opened and are eligible for further evaluation.
- b. All the Pre-qualification qualified bidders shall be notified to participate in Commercial Bid opening process.
- c. Bidders quoting unrealistic cost shall be rejected straightaway by APSFL. Any bid found to have unsatisfactory response in the eligibility criteria as mentioned shall be rejected and shall not be considered for further evaluation.
- d. The commercial bids for the Pre-Qualification qualified bidders shall be reviewed to determine whether the Commercial Bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at purchaser's discretion.
- e. Commercial Bids that are not as per the provided format in section 8.2 shall be liable for rejection.
- f. In case of computation error in commercial forms, the Technical/Evaluation Committee's decision in this regard shall be final and binding on all.

7.3 Reverse Auction

APSFL will schedule the reverse auction on the website of Procurement.

- a. Only the qualified and whose financial bids are complying to the RFP requirements only will be permitted to participate in the reverse auction.
- b. The date and time will be intimated to the qualified bidders.
- c. Reverse auction will be conducted on the total price of the respective schedule, quoted by the bidder for the indicated quantities in the cost sheet.
- d. The amount quoted in the Bid will be considered for overall evaluation to arrive 'L1' bidder.
- e. The 'opening price' i.e. start price for Reverse Auction will be the L1 price quoted.
- f. The reverse auction will be conducted for the entire schedule. The bidder's screen will have provision for decrement of prices. In the bidder's screen the total price of his bid and the L1 Price at that instance will also be displayed.
- g. For the purpose of Reverse Auction, the minimum bid decrement will be Rs. 2,00,000/- (Rupees Two lakh only)
- h. The Bidders can modify the total price of the bid based on the minimum bid decrement or the multiples thereof, to displace a standing lowest bid and become "L1", and this will continue as an iterative process.
- i. The reverse auction shall be conducted for 3 Hours. If any bidder submits a bid in the last 15

minutes of the auction closing time, the auction time will be automatically increased by 15 minutes. All bidders are required to submit their online bids during this period.

- j. After the completion of the online reverse auction, the Closing Price (Final L1 Price) and the successful bidders shall be finalized. The bidder has to submit the breakup of the cost in the commercial bid format (Annexure M) within 48 Hours to the e-mail ID: apsfl@ap.gov.in as mentioned on completion of the reverse auction.
- k. In case the bidder fails to submit the breakup of the cost quoted in the reverse auction, the quote shall stand cancelled and the EMD of the bidder will be forfeited.

7.4 Selection Process of Bidder

Evaluation of bids shall be done on Least Cost/Lowest Cost (L1) criteria as per the quotes submitted in reverse auction

Note: Post award of work, APSFL has the right to alter the quantity of allotment to the successful bidder.

8. Bid SubmissionForms

8.1 Pre-Qualification EvaluationForms

“All the forms in this section shall be uploaded as part of “PQ” Bid and in the “PQ” bid folder of the eprocurement platform.If the following documents are not found in the “PQ” bid folder, the bid shall be considered as non-responsive and may be rejected. Failure to submit any of the forms in this section shall lead to disqualification of the bidder.”

Annexure A - Application Form

(On Bidder's letterhead)

(Date)

To,

Managing Director,
Andhra Pradesh State FiberNet Limited
NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station,
NH -65, Vijayawada - 520001

Sub: Selection of agency for execution of Underground Optical Fiber at the selected locations of Govt. Offices / Organizations / Institutions on Rate Contract

Ref: APSFL/BD/415/2020/UGOFC, Dated: 17/02/2021

Dear Sir,

With reference to your RFP Document dated 17/02/2021, I/We, having examined all relevant documents and understood their contents, hereby submit our Proposal to provide Underground Optical Fiber Connectivity at the selected locations of Govt. Offices / Organizations / Institutions on Rate Contract.

- 1) All information provided in the Proposal and in the Appendices is true and correct and all documents accompanying such Proposal are true copies of their respective originals.
- 2) I/We shall make available to the Authority any additional information it may deem necessary or require for supplementing or authenticating the Proposal.
- 3) I/We acknowledge the right of the Authority to reject our Proposal without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.
- 4) I/We to the best of our knowledge certify that in the last three years, we or any of our Associates have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder, nor been expelled from any project or contract by any public authority nor have had any contract terminated by any public authority for breach on our part.

- 5) I/We understand that you may cancel the Selection Process at any time and that you are neither bound to accept any Proposal that you may receive nor to select the selected supplier, without incurring any liability to the Bidders
- 6) I/We to the best of our knowledge certify that in regard to matters other than security and integrity of the country, we or any of our Associates have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which would cast a doubt on our ability to undertake the Consultancy for the Project or which relates to a grave offence that outrages the moral sense of the community.
- 7) I/We to the best of our knowledge further certify that in regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a Court of Law for any offence committed by us or by any of our Associates.
- 8) I/We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Authority and/ or the Government of India in connection with the selection of Supplier or in connection with the Selection Process itself in respect of the above mentioned Project.
- 9) I/We agree and understand that the Proposal is subject to the provisions of the RFP document. In no case, shall I/We have any claim or right of whatsoever nature if our Proposal is not opened or rejected.
- 10) I/We agree to keep this offer valid for 180 days from the Proposal Due Date specified in the RFP.
- 11) I/We agree and undertake to abide by all the terms and conditions of the RFP Document. In witness thereof, I/We submit this Proposal under and in accordance with the terms of the RFP Document.

Yours faithfully,

(Signature, name and designation of the authorized signatory)

(Name and seal of the firm)

Annexure B - Profile of Bidder/ Partners

(To be submitted by Bidder)

S. No.	Particulars	Details
1	Name of the Company	
2	Year of incorporation	
3	Nature of the Company (Registered Company)	
4	Registered Office Address	
5	Office Telephone Number	
6	Fax Number	
7	Contact Person	
8	Name	
9	Telephone Number	
10	Email Address	
11	Local presence at Andhra Pradesh, if any	
12	Office Address	
13	Office Telephone Number	
14	Fax Number	
15	Registration Details	
16	Permanent Account Number	
17	GST Registration Number	
18	Service Tax Registration Number	
19	Banker's Name, Address and Account Number	
20	No. of Technical Staff employeed	

Witness:
 Signature -----
 Name -----
 Address -----
 Date -----

SUPPLIER:
 Signature -----
 Name -----
 Designation -----
 Company Seal -----
 Date -----

Annexure C – Declaration of Acceptance of Terms and Conditions in the RFP

(To be submitted by Bidder)

To,

[Date]

Managing Director

Andhra Pradesh State FiberNet Limited

NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station,

NH -65, Vijayawada - 520001

Sub: Selection of agency for execution of Underground Optical Fiber at Selected locations of Govt. Offices / Organizations / Institutions on Rate Contract.

Ref: APSFL/BD/415/2020/UGOFC, Dated 17/02/2021

Sir,

It is to certify that the RFP document – Ref: APSFL/BD/415/2020/UGOFC, Dated 17/02/2021 is carefully read & understood and all the sections and clauses are COMPLIED UNCONDITIONALLY AND UNEQUIVOCALLY. There is no deviation from the terms and conditions of the RFP. We also hereby confirm that the solution proposed by us will meet the project requirements.

Yours faithfully,

(Signature, name and designation of the authorized signatory)

(Name and seal of the firm)

Note: A copy of this form should be returned along with the Bid duly signed

Witness:

Supplier:

Signature -----

Signature -----

Name -----

Name -----

Address -----

Designation -----

Company Seal -----

Date -----

Date -----

Annexure D – Undertaking on SoW Compliance and Unconditional Acceptance

To

Managing Director

Andhra Pradesh State FiberNet Ltd.

3rd Floor, NTR Administrative Block, Pandit Nehru Bus Station, NH-65,

Vijayawada – 520001, Andhra Pradesh,

India.

Subject: Undertaking on SoW Compliance and Unconditional Acceptance with reference to RFP No. APSFL/BD /415/2020/UGOFC, Dated 17/02/2021

We, M/s _____, based at _____ hereby confirm our compliance to the requirements outlined in Section 4 - Scope of Work (SoW) of the above referenced RFP. By way of this compliance undertaking, we confirm that we have adequate capability and experience to perform the services outlined in the SoW, as per the requirements defined in the RFP.

We confirm our unconditional acceptance of full responsibility of providing services in accordance with the Terms and Conditions and Scope of work of this RFP.

For M/s _____

Authorized Signatory (duly signed and stamped)

Name

Designation

Annexure E – Pre-Qualification Compliance Documents

The bidder should attach following checklist for compliance with important criterion along with the bid to be submitted:

S. No.	Item	Complied (Yes/ No)	Remarks
1.	Bid Processing Fee		
2.	EMD		
3.	Application Form		
4.	All pages of bid are numbered, signed by authorized signatory and bids are sealed properly		
5.	Proof of authorized signatory (Power of Attorney/ Board Resolution)		
6.	Profile of the Bidder		
7.	Financial Turnover and Net worth of the Bidder		
8.	Previous experience of supply/ installation/ maintenance of Underground Optical Fiber works in the last three financial years as on bid submission date.		
9.	Self-Declaration Certificate (Certificate to be enclosed in the bid duly signed by the authorized signatory on its letterhead) regarding blacklisting by any central or state Govt. department or PSU on the date of bid submission.		
10.	Undertaking for Unconditional Acceptance of Terms and Conditions of the RFP		

Annexure F – Financial Turnover and Net worth of the Bidder
(To be submitted by Bidder)

Annual Turnover of the Bidder

Criteria	Sub Criteria	FY	Total Financials
Financial Capability	Turnover from business activities	FY 2017-18	
		FY 2018-19	
		FY 2019-20	
		FY 2020-21	
Net worth	Measured as paid-up capital plus free reserves	FY 2017-18	
		FY 2018-19	
		FY 2019-20	
		FY 2020-21	

Documentary Proof Required:

- Statutory Auditor / CA Certificate clearly specifying the turnover for the specified years.
- Audited P&L and Balance Sheets

Annexure G – Format for Past Experience of the Bidder

Please provide citations as per the Qualification / Technical criteria in the format provided below. The relevant documentary proofs need to be attached.

Project Title (Attach separate sheet for each Project)			
Name of Client		Address	
Type of Client (Govt./PSU/Others)		Order Value of the Project(in Crores)	
Duration of the Assignment		Start Date (month/year):	
		End Date (month/year):	
Referrals(Client side): Provide one referral only	Name		
	Designation		
	Contact Number		
	E mail Id		
Brief Description of the Project			

Documentary Proof Required:

- Copy of Work order
- Certificate of successful operation by the client

Annexure H – Declaration regarding Clean Track Record

To, [Date]
Managing Director
Andhra Pradesh State FiberNet Limited
NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station,
NH -65, Vijayawada – 520001

Sub: Selection of agency for execution of Underground optical fiber at selected
Locations of Government Offices / Institutions / Organizations on Rate Contract.

Ref: APSFL/BD/415/2020/UGOFC, dated: 17/02/2021

Sir,

I/We hereby declare that my company has not been debarred / black listed as on Bid submission date by any State Government, Central Government, Central & State Govt. Undertakings / Organizations and by any other Quasi Government bodies / Organizations, and any other major Enterprise / Organizations in India for non-satisfactory past performance, corrupt, fraudulent or any other unethical business practices.

Yours faithfully,

(Signature, name and designation of the authorized signatory)
(Name and seal of the firm)

Note:

- **Submission of this Annexure is mandatory along with the bid. Failure to submit this Annexure may lead to disqualification.**

Annexure I – Power of Attorney

Sample form of Power of Attorney for signing the Application & Bid

(On INR 100.00 Non judicial Stamp Paper and duly notarized and Stamp)

KNOW ALL MEN BY THESE PRESENTS,

We _____ (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr. / Ms. (name), _____ son/daughter/wife of _____ and presently residing at _____, who is presently employed with us and holding the position of _____, as our true and lawful attorney (hereinafter referred to as the “Attorney”) to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our application for qualification and submission of our bid for the Project proposed by the M/s _____ (the “Andhra Pradesh State FiberNet Limited”) including but not limited to signing and submission of all applications, bids and other documents and writings, participate in pre-applications and other conferences and providing information/ responses to the APSFL, representing us in all matters before the APSFL, signing and execution of all contracts including the Agreement and undertakings consequent to acceptance of our bid, and generally dealing with the APSFL in all matters in connection with or relating to or arising out of our bid for the said Project and/ or upon award thereof to us and/or till the entering into of the Agreement with the APSFL.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

The power of attorney shall be effective from _____ and will continue to be valid binding and unforgettable till the attorney Mr./Ms. _____ ceases to be in the employment of the company unless otherwise withdrawn earlier by the company. This power of attorney will supersede any power of attorney issued earlier prior to the date of execution. In case this Power of Attorney is withdrawn for any reasons, APSFL shall be pre intimated.

IN WITNESS WHEREOFF for and on behalf of M/s _____ Mr./Ms. _____ Managing director of the company has set his hands with company seal on the day of _____ Month of _____ year _____ and at _____.

For _____ (Authorised Signatory of the company)
(Signature, Name, Designation, Address and emblem of the office seal)

RFP for Selection of Agency for execution of Underground Optical Fiber at selected locations of Government Offices / Institutions / Organizations on Rate Contract

1.

2.

Accepted (Authorised Signatory of the company)

(Signature in Duplicate, Name, Title and Address of the Attorney)

Witnesses:

1. (Notarized)

2.

Notes:

- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
- Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favor of the person executing this Power of Attorney for the delegation of power here-under on behalf of the Bidder.
- In case the Application is signed by an authorized signatory / Partner, a certified copy in the regard should be enclosed in lieu of the Power of Attorney.
- **Submission of this Annexure is mandatory along with the bid. Failure to submit this Annexure may lead to disqualification.**

Annexure J – Board Resolution

Board Resolution (Suggested format)

(To be printed on organization letter head)

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED AT THE MEETING OF THE BOARD OF DIRECTORS of (Company Name) HELD ON (Date) AT (Address)

RESOLVED THAT the company has decided to authorize, Mr. / Ms. to sign and submit all the necessary applications, annexure, and other documents to be submitted by the company in connection with RFP APSFL/BD/415/2020/UGOFC, dated: 17/02/2021 for “Selection of agency for execution of Underground Optical Fiber at selected locations of Govt. Offices / Organizations / Institutions on Rate Contract”. The acts done and documents shall be binding on the company, until the same is withdrawn by giving written notice thereof.

Specimen Signatures of Authorised Signatory:

(Signature)

RESOLVED FURTHER THAT, a copy of the above resolution duly certified as true by designated director/ authorised signatory of the company be furnished to APSFL as may be required from time to time in connection with the above matter.

For the Organization,

(Seal & Signature)

Name:

Designation:

Note:

- **Submission of this Annexure is mandatory along with the bid. Failure to submit this Annexure may lead to disqualification.**

Annexure K – Document Verification Certificate

FORMAT FOR CERTIFICATE TO BE SUBMITTED / UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS

(On INR 100.00 Non judicial Stamp Paper and duly notarized and stamped)

I _____ (Name _____ and _____ designation)** appointed as the attorney/authorized signatory of the tenderer (including its constituents), M/s _____ (hereinafter called the tenderer) for the purpose of RFP for Selection of Agency for execution of Underground Optical Fiber at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract” as per the tender No.APSFL/BD/415/2020/UGOFC, dated: 17/02/2021 of APSFL, do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

1. I/We the tenderer(s) am/are signing this document after carefully reading the contents.
2. I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/We hereby declare that I/we have downloaded the tender documents from APSFL website <http://apsfl.in/tenders/> or AP procurement website www.apcprocurement.gov.in. I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the APSFL shall be final and binding upon me/us.
4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.
6. I/We declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.
7. I/We understand that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during the process for evaluation of tenders, it shall lead to forfeiture of the tender EMD besides banning of business for a period of up to five year. Further, I/we *(insert name of the*

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tenderer)**_____ and all my/our constituents understand that my/our offer shall be summarily rejected.

8. I/We also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of EMD and Performance guarantee besides any other action provided in the contract including banning of business for a period of up to five year.

SEAL AND SIGNATURE OF THE TENDERER

Place:

Dated:

Note:

- **Submission of this Annexure is mandatory along with the bid. Failure to submit this Annexure may lead to disqualification.**

Annexure L – Earnest Money Deposit (EMD) Format

(To be executed in Rs.100/- Stamp Paper)

To,
The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station,
NH – 65, Vijayawada – 520013

Bank Guarantee No:
Amount of Guarantee:
Guarantee covers from:
Last date for lodgement of claim:

This Guarantee executed by _____ (Banker's Name & Address) having our Head Office at _____ (address) (hereinafter referred to as "Bank") in favour of Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, NH -65, Vijayawada – 520013 India (hereinafter referred to as "Beneficiary") for an amount not exceeding Rs. _____/- (Rupees _____ Only) as per the request of M/s. _____ having its office address at _____ (hereinafter referred to as "Bidder") against RFP reference no APSFL/BD/415/2020/UGOFC, Dated: 17/02/2021 of M/s. Andhra Pradesh State FiberNet Limited (APSFL). This guarantee is issued subject to the condition that the liability of the Bank under this guarantee is limited to a maximum of Rs. _____/- (Rupees _____ Only) and the guarantee shall remain in full force up to _____ (date) and cannot be invoked otherwise by a written demand or claim by the beneficiary under the Guarantee served on the Bank before _____ (date).

ANDWHEREAS it has been stipulated by you in the said ORDER that the Supplier shall furnish you with a Bank Guarantee by a Scheduled/Nationalized Bank for the sum specified therein as EMD towards bid submission.

ANDWHEREAS we have agreed to give the Bidder a Guarantee.

THEREFORE, we (Bankers address), hereby affirm that we are Guarantors and responsible to you on behalf of the Bidder for Rs. _____/- (Rupees _____ Only) and we undertake to pay you, upon your first written demand without any demur, cavil or argument, any sum or sums within the limit of Rs. _____/- (Rupees _____ Only) as aforesaid, without your needing to prove or show grounds or reasons for your demand or the sum specified therein. We will pay the guaranteed amount notwithstanding any objection or dispute whatsoever raised by the Bidder.

This Guarantee is valid until _____.

Place:

Date:

Signature and seal of Guarantors (Bank)

Commercial Forms

Annexure M – Commercial Proposal Submission Form

Dated:

To

.....

.....

.....

.....

.....

Sir/ Madam,

Subject: “Selection of Agency for execution of Underground Optical Fiber Cable at Selected Locations of Govt. Offices / Institutions / Organizations on Rate Contract.”

Reference: RFP No: APSFL/BD/415/2020/UGOFC, Dated 17/02/2021

We, the undersigned SUPPLIER, having read and examined in detail all the RFP in respect of “Selection of Agency for execution of Underground Optical Fiber at selected locations of Government offices/ Institutions / Organizations” do hereby propose to provide services as specified in the RFP number **APSFL/BD/415/2020/UGOFC, Dated 17/02/2021**.

1. PRICE AND VALIDITY

- a. All the prices mentioned in our Bid are in accordance with the terms & conditions as specified in the RFP. The validity of bid is 180 days from the date of opening of the RFP.
- b. We are an Indian Firm and do hereby confirm that our prices exclude all taxes. However, all the taxes are quoted separately under relevant sections and shall be applicable as per actuals.

2. We have studied the laws relating to Indian Income Tax Department and hereby declare that all income tax, surcharge on Income Tax, Professional and any other Corporate Tax, withholding tax as applicable under the law, shall be paid by us.

3. EARNEST MONEY DEPOSIT (EMD)

We have enclosed an EMD for a sum of **Rs. 10,00,000/- (In Words – Rupees Ten Lakhs Only)**. This EMD is liable to be forfeited in accordance with the provisions of the **Section II - General Instructions to Bidders**.

4. TENDER PRICING

We further confirm that the prices stated in our bid are in accordance with your Instruction to Bidders included in RFP.

5. QUALIFYING DATA

We confirm having submitted the information as required by you in your Instruction to Bidders. In case you require any other further information/documentary proof in this regard before evaluation of our Bid, we agree to furnish the same in time to your satisfaction.

6. BID PRICE

We declare that our Bid Price is for the entire scope of the work as specified in Scope of Work. These prices are indicated in Bid Submission Formats attached with our Financial Bid as part of the Bid Response and the price quoted in the reverse auction, as mentioned in the Clause no: 2.7 of the RFP.

7. CONTRACT PERFORMANCE GUARANTEE BOND

We hereby declare that in case the Contract is awarded to us, we shall submit the Bank Guarantee for Contract performance in the prescribed format given in RFP.

We hereby declare that our Bid is made in good faith, without collusion or fraud and the information contained in the Bid is true and correct to the best of our knowledge and belief. We understand that our Bid is binding on us and that you are not bound to accept a Bid you receive.

We confirm that no deviations are attached here with this financial offer.

Thanking you,

Yours faithfully,

(Signature of the SUPPLIER)

Printed Name
Designation Seal.

Date:

Place:

Business Address:

Witness:

Signature -----

Name -----

Address -----

Date -----

Supplier:

Signature -----

Name -----

Designation -----

Company Seal-----

Date -----

Annexure N – Commercial Bid Cost Components

Price Bid for laying of optical fiber cable using Applicable Methodology HDD / OPEN Trenching / Micro Trenching.

Tentative Price Estimation - UGOFC					
S.No	Item	UOM	Quantity	Unit Cost (INR)	Total Cost (INR)
Survey (A)					
1	Physical Survey of Route, capturing the Lat/Long of OFC Proposed Route,Joint Indicator, Preparation of GIS Report, As built network diagram of OFC Route	mtr	30000		
Supply, Delivery and Installation towards Underground Connectivity (B)					
2	Armoured Optical Fiber Cable (24F) with drum test	mtr	30000		
3	Supply of PLB HDPE Duct (40/33) mm with associated Accessories (Push Fit Couplers,End Plugs and Sealing Plug etc.) as per Specifications	mtr	30000		
4	Supply of full DWC with 75/61 mm dia	mtr	750		
5	Supply of GI Pipe 50mm dia ISI standard (Class B) with couplers	mtr	110		
6	Supply of full RCC Round Pipe with 4" dia (100 mm) incl. collar for 4" dia RCC Pipe	mtr	375		
7	Supply of Route / Joint Indicator as per specification RCC / Pre cast route indicator made of pre-cast RCC & of dimensions. Base - 250 mm X 150 mm; Top - 200 mm x 75 mm;Height - 1250 mm.	No	120		
8	Supply of Split DWC Pipe with 75/61 mm dia	mtr	225		
9	Supply of half RCC Round Pipe with 4" dia (100mm) incl. collar for 4" dia RCC Pipe	mtr	375		
10	Supply of wire mesh 100 mm x 50 mm, 12 SWG	No	120		
11	Supply of PVC Flexible Conduit of OD (15-25mm) in corridor with Clamping (for every 1meter) / risers / substation and Office Premises	mtr	300		

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12	Construction of pre - fabricated RCC Joints chamber as per specification and the Construction practice as specified in the tender document. Specification: 1. Diameter: 100 cm (inner side) 2. Diameter: 120 cm (External) 3. Thickness: 10 cm 4. Height: 120 cm 5. 6 mm Horizontal Iron round rings - 6. 6 mm Vertical bars Iron - 12 mm Nos. 7. 12 gauge GI wire mesh to be wrapped before reinforcing the concrete	No	120		
13	Road crossing / NHA1 Crossing through Horizontal Directional Drilling Method and inserting two no of 40/33 mm HDPE Duct (whichever is applicable) and OFC cable in all type of Soil	mtr	24800		
14	Manual Trenching for a depth not less than of 120 cms and back filling the trenches after laying HDPE Duct and OFC Cable with or without protection in all types of soil (Dimension of trench 120cm x 45cm x 30cm)	mtr	6200		
15	Additional Duct (40/33 mm HDPE Duct)	mtr	10		
16	Providing cement concrete 1:2:4 mixing of (H = 40 cm, W= 40 cm, D= 40 cm) on Covering of GI / DWC Pipe, with PLB HDPE Duct (40/33 mm or 50/42) in the trench for protection.	mtr	500		
17	Installation of RCC Chamber	No	150		
18	Blowing of Optical Fiber Cable Inside Laid PLB HDPE Duct with DIT test, joint cuplers, end plugs, end caps, Splicing Joints and end to end Link Termination (OTDR reports with maintaining each fiber loss @ - db)	mtr	31000		
Total cost (D) CAPEX = (A) + (B) + (C)					
Total Cost in words:					
Operation & Maintenance (E)					
19	O & M Charges towards Year - I				
20	O & M Charges towards Year - II				
21	O & M Charges towards Year - III				
Total Cost (F) = (D) + (E)					
Total cost (CAPEX + OPEX) in words:					

Note:

- Prices in Financial Bid should be quoted in the provided format.
- All prices should be quoted in Indian Rupees and indicated in both figures and words.

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- c. *In case there is discrepancy between words and figures, the amount in words shall prevail.*
- d. *APSFL reserves the right to reject the bid, which are not submitted in the prescribed format.*
- e. Quantity Indicated above is tentative and which might Increase / Decrease based on the requirement and actuals.
- f. ***In Special Case Item No: 17 as described above, shall be used to restoration at CC Roads / BT Roads based upon the actual requirement and request to APSFL towards Approval / Decision which would be treated as Significant RoW.***
- g. ***Row Liasoning Charges towards implementation would be based on the actuals and the procedure to be followed is as per the G.O. MS.NO.60, Transport, Roads & Buildings (R-IV) Department.***
- h. *Payment to be made based on the actual methodology and after submission of the prescribed document*

Instructions to fill the Financial Bid:

- a. Bidders should provide all prices as per the prescribed format under this Annexure. Bidder should not leave any field blank.
- b. All the prices are to be entered in Indian Rupees ONLY (%age values are not allowed).
- c. All the prices quoted in the Financial Bid shall be exclusive of applicable taxes and levies.
- d. APSFL reserves the right to ask the Bidder to submit proof of payment against any of the taxes, duties, levies indicated.
- e. For the purpose of evaluation of Financial Bids the APSFL shall make appropriate assumptions to arrive at a common bid price for all the Bidders. This however shall have no co-relation with the Contract value or actual payment to be made to the Bidder.
- f. The soft copy of the financial bid should be uploaded online. The financial bid formats shall be provided in company's letter of the lead bidder duly signed and stamped.

8.2 Other Forms and Formats

Annexure O – Performance Bank Guarantee Format

(To be submitted by the successful bidder on Rs.100/- stamp paper)

In consideration of APSFL (“Authority”), having agreed to accept from _____ “successful bidder”, a Performance Bank Guarantee as maybe modified from time to time wherever necessary under the terms and conditions of the Agreement entered into by the said successful bidder in respect of work for execution of Underground Optical Fiber at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract, RFP No. APSFL/BD/415/2020/UGOFC, Dated: 17/02/2021 under APSFL for the due fulfilment of the terms and conditions of the said Agreement under APSFL, on production of a Bank Guarantee for Rs.____ (Rupees _____ only), we _____ “Bank” _____ branch, hereby undertake the guarantee to pay immediately to APSFL, on demand in writing by APSFL, an amount of Rs. _____ (Rupees _____) without any reservation and recourse against any loss or damage caused to or suffered by APSFL by reason of any breach by the successful bidder of any of the terms and conditions of the said agreement under the said Authority.

We _____ Bank, further agree that the guarantee hereby contained shall remain in full force and effect during the period that will be taken for the performance of the said Agreement under the APSFL and that it shall be in enforcement until all the dues of APSFL under or by virtue of the said Agreement under the APSFL have been fully paid and their claims satisfied or discharged or until the said Authority certifies that the terms and conditions of the said Agreement under the APSFL have been fully and properly carried out by the successful bidder and accordingly discharges the guarantee subject. This bank guarantee is valid until _____ (date) and APSFL shall have no rights under this guarantee after _____ (date).

We _____ Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the APSFL in writing.

Dated _____ day of _____ 2021.

Place:

Date: Signature and seal of Guarantors (Bank)

Annexure P – Draft Contract Format

THIS AGREEMENT made the _____ day of _____ 20XX

BETWEEN

The **APSFL** (hereinafter referred to as “the Purchaser”) which expression shall unless repugnant to the context or meaning thereof mean and be deemed to include its authorized agents, representatives and permitted assigns of the First Part.

AND

The Party _____ (hereinafter referred to as “the SUPPLIER”) which expression shall unless repugnant to the context or meaning thereof mean and be deemed to include their successors and permitted assigns having its registered office at _____ of the Second Part.

WHEREAS

The Purchaser had invited Bids vide their Tender _____ (hereinafter referred to as “RFP”) for “Selection of agency for execution of Underground Optical Fiber at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract”.

- (a) The SUPPLIER had submitted its proposal dated _____ (hereinafter referred to as the ‘Bid’) for the provision of such services in accordance with its proposal as set out in its Bid and in accordance with the terms & conditions of the RFP and this Contract.
- (b) The Purchaser has agreed to select the SUPPLIER for the provision of such services and the SUPPLIER has agreed to provide services as are represented in the RFP, including the terms & conditions of this Contract, the Schedules and Annexure attached hereto and in accordance with the terms & conditions of the RFP and in terms of the discussions, negotiations and clarifications in relation to the implementation of the scope of work
- (c) In consideration of the foregoing and the mutual covenants and promises contained herein and other good and valuable consideration the receipt and adequacy of which is hereby acknowledged, the parties intending to be bound legally.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

- (d) In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of the Contract referred to.
- (e) The following documents shall be deemed to form and be read and construed as part of this Agreement viz:
 - i. the Scope of Work
 - ii. the General Conditions of the Contract
 - iii. Approach Paper on methodology and work plan for performing the assignment

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- iv. Copy of RFP, financial proposal as submitted by the SUPPLIER and as amended pursuant to the post bid negotiations
 - v. Format of bank guarantee for Performance Security.
 - vi. the Service Level Agreement (SLA)
 - vii. the Purchaser's Notification of Award.
- (f) In consideration of the payments to be made by the Purchaser to the SUPPLIER as hereinafter mentioned, the SUPPLIER hereby covenants with the Purchaser to provide the Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- (g) The Purchaser hereby covenants to pay the SUPPLIER in consideration of the provision of the Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written

Signed, Sealed and Delivered by the said _____ (For the Purchaser in the presence of: _____ (WITNESS)

Signed, Sealed and Delivered by the said _____ (For the Bidder) in the presence of: _____ (WITNESS)

Annexure Q – Pre-Bid Queries Format

All enquiries from the Bidders relating to this RFP must be submitted to the Managing Director, APSFL. These queries should be e-mailed to apsfl@ap.gov.in. The queries should necessarily be submitted in the following Format:

S. No.	Section No.	Page no.	Content of the RFP requiring clarification	Clarification Sought

9. Penalties and PaymentSchedule

9.1 Service LevelAgreements

Service Level Agreement (SLA) shall become the part of contract between APSFL and the successful bidder. SLA defines the terms of the successful bidder's responsibility in ensuring the timely delivery of the deliverables and the correctness of the same based on the agreed Performance Indicators.

The successful bidder has to comply with service level requirements to ensure adherence to project timelines, quality and availability of services, throughout the period of this contract
i.e. during implementation phase.

9.2 Project Milestone

Milestone	Activity Description	Timelines
	Award of Contract	T
Milestone - 1	Supply , Delivery, Installation and Commissioning of the Site - (5 Locations)	T+15 Days
Milestone - 2	Supply , Delivery, Installation and Commissioning of the Site - (5 Locations)	T+35Days
Milestone - 3	Supply , Delivery, Installation and Commissioning of the Site - (6 Locations)	T+45 Days

Note:Site Locations forwhichRoWapprovalisalreadygrantedfromcompetent

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authority for execution of work, selected agency will be required to complete the Underground Optical fiber laying work in that section/ location within 25 days of award of purchase order/ signing of agreement.

9.3 Payment Terms

The successful bidders shall be entitled to raise invoices (along with all supporting documents), as per below stated milestones. APSFL shall release payments against all valid invoices within 30 days of receipt of invoice, subject however to satisfactory acceptance of the deliverables as per the scope of work.

9.3.1 Payment terms for supply and installation of components related UG fiber laying:

S. No.	Activities	Payment (%)
1.	Supply and installation of materials and works required for fiber laying as applicable (Methodology) as per Milestone – 1	90% of CAPEX Value of Purchase order for supply, Delivery, Installation and commissioning of the Locations with the required Material after submission of related documents mentioned in section 9.9 of the RFP as applicable for Milestone - 1
2	Supply and installation of materials and works required for fiber laying as applicable (Methodology) as per Milestone – 2	90% of CAPEX Value of Purchase order for supply, Delivery, Installation and commissioning of the Locations with the required Material after submission of related documents mentioned in section 9.9 of the RFP as applicable for Milestone - 2
3	Supply and installation of materials and works required for fiber laying as applicable (Methodology) as per Milestone – 3	90% of CAPEX Value of Purchase order for supply, Delivery, Installation and commissioning of the Locations with the required Material after submission of related documents mentioned in section 9.9 of the RFP as applicable for Milestone - 3
4	After start of Comprehensive Maintenance Phase and Submission of Performance Security for O & M as per Milestone - 1	Remaining 10% of CAPEX Value on the Purchase order for Supply, Delivery, Installation and Commissioning of the Locations with required materials as applicable for Milestone - 1
5	After start of Comprehensive Maintenance Phase and Submission of Performance Security for O & M as per Milestone - 2	Remaining 10% of CAPEX Value on the Purchase order for Supply, Delivery, Installation and Commissioning of the Locations with required materials as applicable for Milestone - 2
6	After start of Comprehensive Maintenance Phase and Submission of Performance Security for O & M as per Milestone - 3	Remaining 10% of CAPEX Value on the Purchase order for Supply, Delivery, Installation and Commissioning of the Locations with required materials as applicable for Milestone – 3.
7	Operation and Maintenance for 3 Years	Quarterly payment would be made post completion of the same quarter, as per actuals, after calculating SLA's and adjusting

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		against the penalties if any applicable.
8.	Permission charges	Based on the actuals and submission of all relevant documents as prescribed in <u>"G.O.M.S.NO:60, Transports, Roads & Buildings."</u>

Note:

- All payments shall be released after certification of delivery, installation and acceptance test as per the Deliverables listed in **Section 9.9** of this RFP, by APSFL or its Nominated Representative / Authority.
- All payments shall be made in Indian rupees only (INR).
- Payments shall be released against the invoices raised by supplier on providing all relevant documents timely, including acceptance testing report duly signed and approved by APSFL / APSFL authorized agency / or its nominated representative and are complete in all respect and subsequent approval.
- Payment shall be subject to deductions of any amount for which the supplier is liable under the RFP conditions. Further, all payments shall be made subject to deduction of applicable taxes and other Government levies like TDS (Tax Deduction at Source) and etc., as per the current Income-Tax Act.
- All payments shall be released only after deducting the all SLA Penalties as applicable.

9.4 Penalty

The following penalties shall be imposed on the supplier if the supplier does not adhere to the timelines as mentioned in the RFP.

S. N	Description	Penalties
1.	Delay in supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for Milestone - 1	<ol style="list-style-type: none"> Sum equivalent to 10 % of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 2 Weeks. Sum equivalent to 15% of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 4 Weeks. If the Sum Equivalent to 15% exceeds the cost of supply and installation of materials and works required, the contract would be terminated. In addition to the above penalty, in case the validity of application expires, the successful bidder shall be required to secure approval from

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		competent authority from respective Dept through Communication letter for laying of fiber at his own cost (Where the amount is not considered during the invoice submission)
2	Delay in supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for Milestone - 2	<p>e) Sum equivalent to 10 % of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 2 Weeks.</p> <p>f) Sum equivalent to 15% of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 4 Weeks.</p> <p>g) If the Sum Equivalent to 15% exceeds the cost of supply and installation of materials and works required, the contract would be terminated.</p> <p>h) In addition to the above penalty, in casethe validity of application expires, the successful</p> <p>i) bidder shall be required to secure approval from competent authority from respective Dept through Communication letter for laying of fiber at his own cost (Where the amount is not considered during the invoice submission)</p>
3	Delay in supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for Milestone - 3	<p>j) Sum equivalent to 10 % of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 2 Weeks.</p> <p>k) Sum equivalent to 15% of the cost of supply and installation of materials and works required for fiber laying using applicable methodology or as applicable for delay of 4 Weeks.</p> <p>l) If the Sum Equivalent to 15% exceeds the cost of supply and installation of materials and works required, the contract would be terminated.</p> <p>m) In addition to the above penalty, in casethe validity of application expires, the successful</p> <p>n) bidder shall be required to secure approval from competent authority from respective Dept through Communication letter for laying of fiber at his own cost (Where the amount is not</p>

		considered during the invoice submission)
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9.5 Conditions for NoPenalties

Penalties shall not be levied on the Bidder in the following cases:

- There is a force majeure event effecting the SLA, which is beyond the control of the successful bidder. Force Majeure events shall be considered in line with the clause duly mentioned in the RFP
- The non-compliance to the SLA has been due to reasons beyond the control of the successful bidder

9.6 Penalty during Commissioning Period:

Penalty during commissioning period should be in compliance with SLA and performance indicators with the Terms and their definitions are discussed in the following sections.

9.7 Penalty during Operation & Maintenance Period:

SLA Uptime

Type of Connectivity	Description
Ring Architecture Connectivity Locations	State HQ's of various Dept. Utmost Priority, require $\geq 99.5\%$ Uptime during both PBH & EBH
Spur Architecture Connectivity Locations	District HQ's of Various Dept. very high Priority, require $\geq 99.0\%$ Uptime during PBH
Spur Architecture Connectivity Locations	District HQ's of Various Dept. Very high importance, require $\geq 98\%$ Uptime during EBH

Fault Rectification (SLA)

Category	MTTR	Resolution Efficiency
Ring Connectivity	1 Hour	$99\% < 1 \text{ Hrs}$
Spur Connectivity (PBH)	2 Hours	$98.5\% < 2 \text{ Hrs}$

Spur Connectivity (EBH)	3 Hours	98% < 3 Hrs
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The SLAs shall be effective immediately after commissioning along with the test reports, OTDR Report and other necessary tests and will be calculated per location on the basis of the SLA Parameter defined above.

9.8 MTTR (Mean Time to Resolve):

Mean Time to resolve will be the benchmark SLA to calculate all maintenance penalties.

The SLA's defined shall be applicable during the Prime Business hours **(9:00 A.M – 9:00 P.M)**. The penalty shall be calculated on monthly basis which would be payable only after successful completion of One year after commissioning or from the date of installation to the selected agency.

Basically, the MTTR for a particular location will be the average time for which a TroubleTicket (TT) assigned to a selected / qualified agency remains open during the month of the Year. This will be calculated by adding the duration of each trouble ticket assigned to the agency and dividing this number by the total number of trouble tickets in that month.

Formula:

$$\text{MTTR (for a given location)} = \frac{\text{TT}_1 \text{ (Hrs)} + \text{TT}_2 \text{ (Hrs)} + \text{TT}_3 \text{ (Hrs)} + \dots + \text{TT}_N \text{ (Hrs)}}{\text{TT}_1 + \text{TT}_2 + \dots \text{TT}_N}$$

$$\text{Resolution Efficiency (RE)} = (\text{No. of TTs resolved within TTR SLA} / \text{Total No. of TTs}) \times 100$$

9.9 Deliverables

- The Payment shall be released only after the submission of original invoice, signed delivery challan, and certification from Authority.
- Submission of route map (Single line Diagram & As Built Drawing) with lat/longs
- Submission of Drum test reports for all cores of fibercable
- Submission of OTDR Reports for the total length of cable for all cores (end to end)
- Submission of M Books & splicing report with Lat longs.
- Submission of Inspection Test & Plan Reports (ITP) for Trenching, Ducting and Backfilling, DIT, Blowing, splicing fiber optic cables both open trench & HDD
- Submission of lat/longs for all man holes, hand holes with three point locations
- Submission of No Objection Certificate from the concerned Authorities/ municipality/highway.

10. ResponsibilityMatrix

The (Indicative) responsibility matrix (RACIS) describing responsibilities of Agency and other parties to the project, are mentioned in below matrix. Any specific updates/or changes, as mutually agreed between the Parties, will be finalized/modified through discussion with the bidders.

Where RACIS stands for the following:

R (Responsibility): Those who do the work to achieve the task

A (Accountability): The one ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those responsible

C (Consulted): Those whose opinions are sought, typically subject matter experts; and with whom there is two-way communication

I (Informed): Those who are kept up-to-date on progress, often only on completion of the task or deliverable; and with whom there is just one-way communication

S (Support): Resources allocated to responsible

Responsibility Matrix				
S.No	Action Items	APSFL	Agency	Network Engineer
1	Contract Signing	A, R	A, R	-
2	Survey	I, C	R	-
3	RoW Grant & Coordination with the Dept.	I	R	-
4	Submission of Fiber Route Map & Row Approval	A, I	R	C
5	Laying of Underground Optical Fiber Cable using applicable Methodology as per the site conditions and Dept. approval	I, C	A, R	I
6	User Acceptance Test Report	I	R, S	A
7	Commissioning Certificate (Duly Attested)	C	A, R	I
8	Mapping of GIS Co-ordinates of the Location (En-route Fiber)	I	A, R	-
9	Blowing Test Report, DIT Reports Validation	A, R	S	C
10	Submission of Invoices for release of Payment	A,R	S	-

RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

Annexure 1: Details of RoW crossing locations (indicativelist):

S.No	District	Mandal	From POP	TO Office Location (Postal Code)	Type of RoW Agency (Road Crossing / NHAI Crossing / Municipality / Dist. Adminsitration)	Latitude	Longitude
1	Guntur	Velagapudi, Tulluru	SACHIVALAYAM	APSWAN-NOC, 3rd Block, AP Secretariat, Velagapudi - 522503	Road Crossing / Municipality	16.513963	80.514063
2	Krishna	Vijayawada Campoffice	INDIRA GANDI STADIUM	Collector Camp Office, Near PWD grounds, Vijayawada- 520001	Road Crossing / Municipality / Dist. Administration	16.506600	80.633310
3	Anantapur	Anantapur	COLLECTORATE	Dist Collectorate, Anathapur, Ananatapur district, AP- 515001	Road Crossing / Municipality / Dist. Administration	14.668930	77.610313
4	Chittoor	Chittoor	GANDHI ROAD	Vivekananda Bhavan, new collectrate office, Reddy gunta, Chittoor - 517001	Road Crossing / Municipality / Dist. Administration	13.182451	79.095829
5	East Godavari	Kakinada	KAKINADA DISTRICT NODE	Dist Collectorate, Rama Rao Peta, Kakinada, Andhra Pradesh 533001	Road Crossing / KSCCL / Dist. Administration	16.960156	82.226126
6	Guntur	Guntur	APCRDA	District Collector office,Guntur-522004	Road Crossing / Municipality / Dist. Administration	16.299140	80.431943
7	Kadapa	Kadapa	COLLECTORATE	Rims road , New Collectorate,Kadapa-516001	Road Crossing / Municipality / Dist. Administration	14.455026	78.829041
8	Krishna	Machilipatnam	MACHILIPATNAM	Collector Office, Machilipatnam-521002	Road Crossing / Municipality / Dist. Administration	16.194460	81.147010

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9	Kurnool	Kurnool	COLLECTORATE	Dist Collectorate, Collectorate Road, Budhawara Peta, Alluri Sitarama Raju Nagar, Kurnool, Andhra Pradesh 518002	Road Crossing / Municipality / Dist. Administration	15.817581	78.041810
10	Nellore	Nellore	NELLORE OLD MUNICIPAL OFFICE	Dist Collectorate, Achari Street, Nellore, Andhra Pradesh 524001	Road Crossing / Municipality / Dist. Administration	14.451449	79.980794
11	Prakasam	Ongole	SHARMA COLLEGE ROAD	Prakasam collectrate Bhavan, nellore road, ongole, Prakasam Dist-523001	Road Crossing / Municipality / Dist. Administration	15.499172	80.049675
12	Srikakulam	Srikakulam	COLLECTORATE	Collector Office, Srikakulam- 532001	Road Crossing / Municipality / Dist. Administration	18.272929	83.905888
13	Vizainagaram	Vizainagaram	INDOOR DONDAPARTHY	Dist Collectorate, Cantonment Road, Cantonment, Vizianagaram, Andhra Pradesh - 535002	Road Crossing / Municipality / Dist. Administration	17.709157	83.308191
14	Visakhapatnam	Visakhapatnam	COLLECTORATE	Dist Collectorate, Main Road, Krishna Nagar, Maharani Peta, Visakhapatnam, Andhra Pradesh - 530002	Road Crossing / Municipality / Dist. Administration / VUDA	18.117683	83.387355
15	West Godavari	Eluru	BEHIND JC BUNGLOW	Dist Collectorate, Santhi Nagar, Eluru, Andhra Pradesh - 534006	Road Crossing / Municipality / Dist. Administration.	16.710610	81.089120

***Ring Architecture Connectivity to be provided for S.NO: 1 Locations.**

Annexure2- (MAP – From Nearest PoP to Office Location)

1. Velagapudi - Sachivalayam

RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract



2. Vijayawada – Collector Camp Office

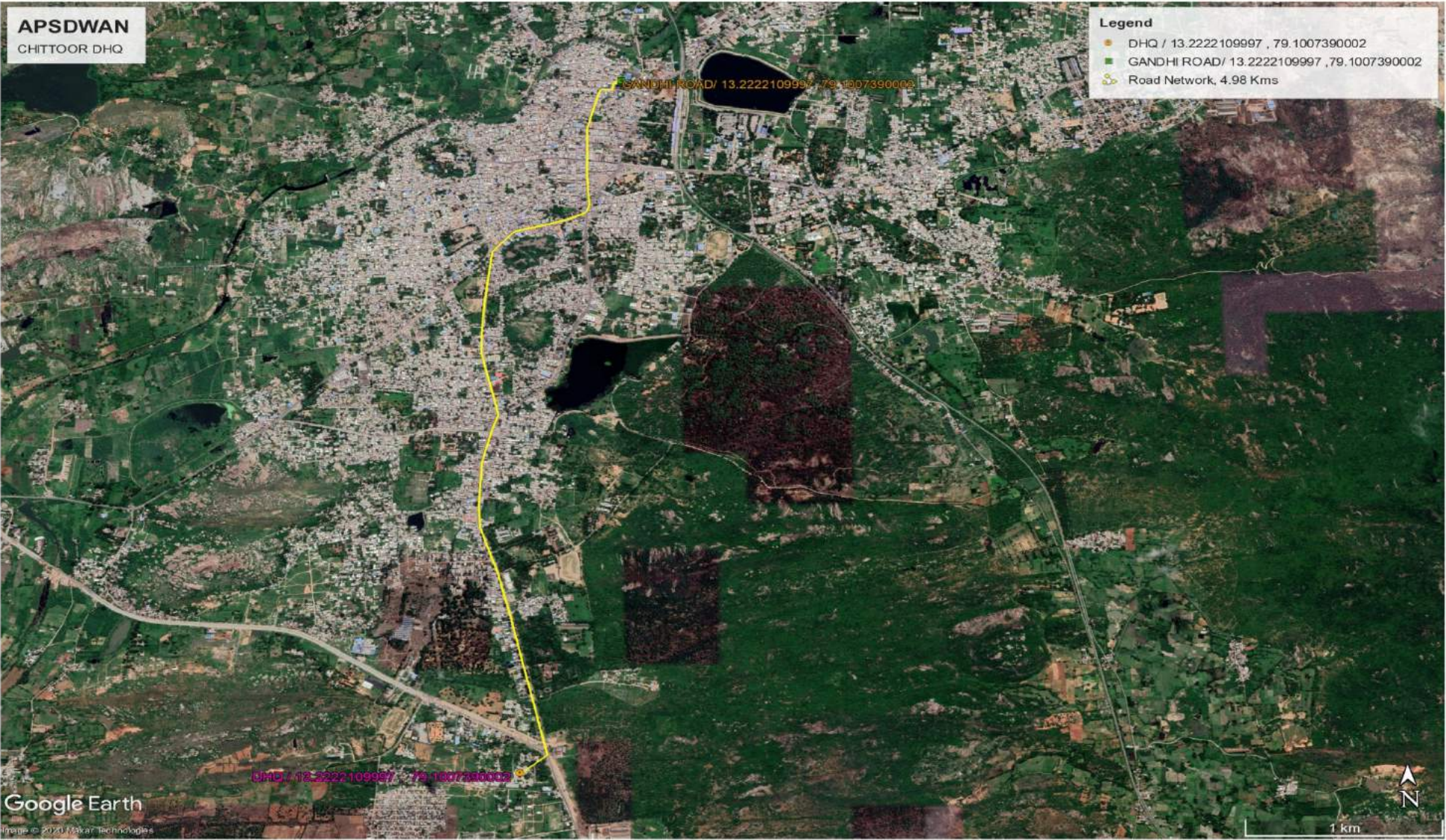


RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

3. Ananthapur DHQ – District Collectorate Office



4. Chittoor – New Collectorate Office



RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

5. East Godavari – District Collectorate Office



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6. Guntur – District Collectorate Office



RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

7. Kadapa – New Collectorate Office

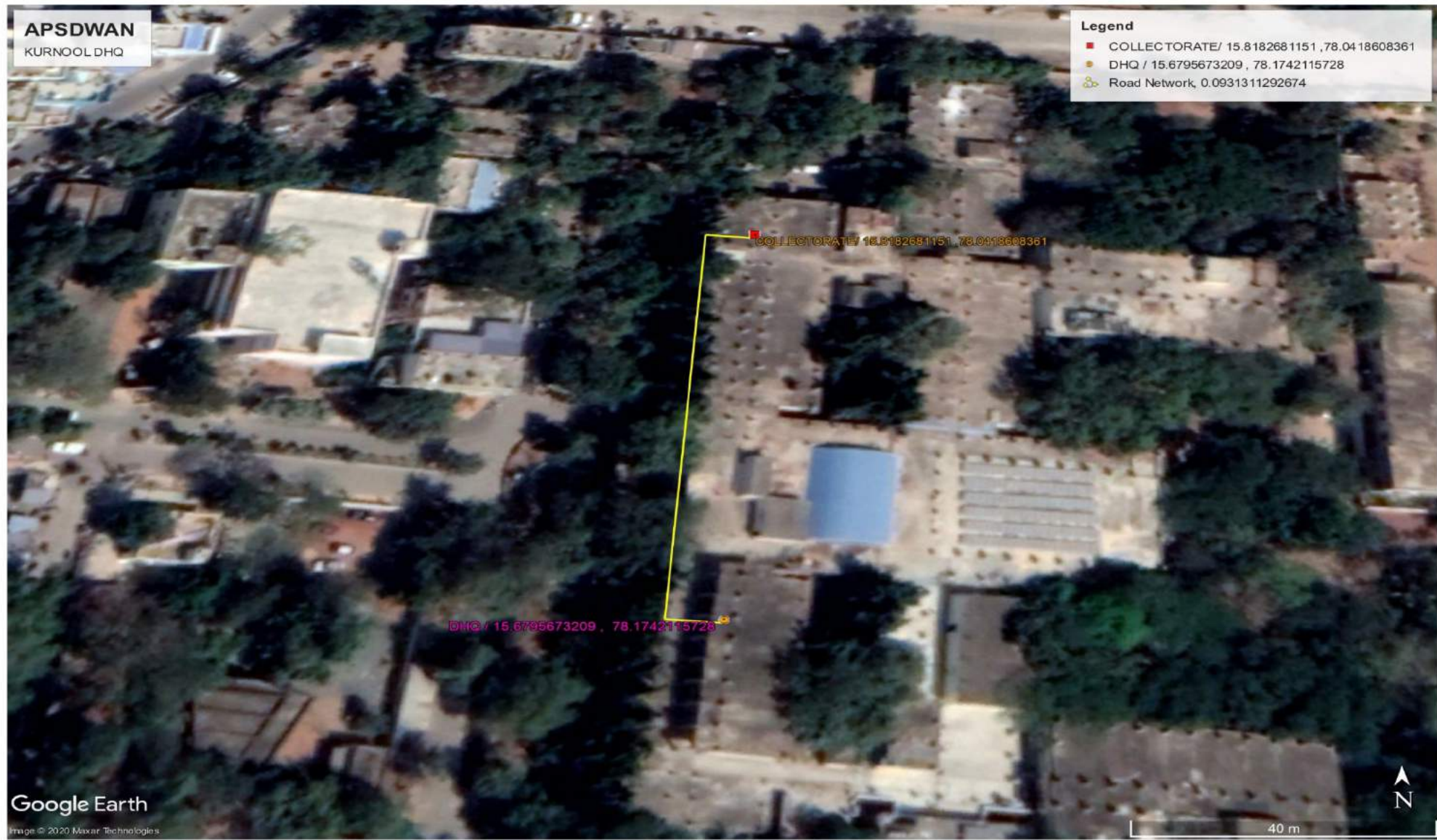


RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

8. Krishna – Machilipatnam District Collectorate Office

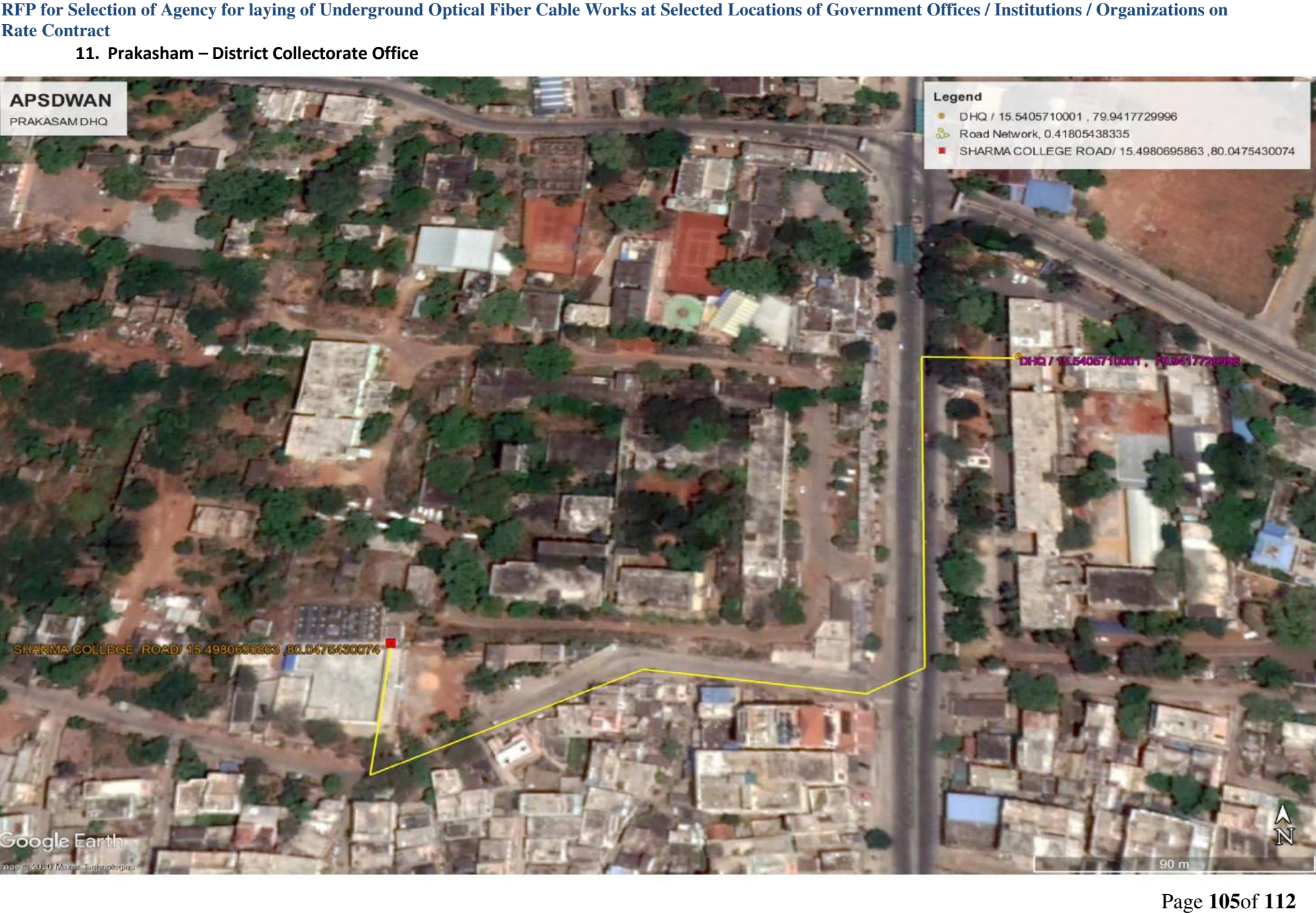


9. Kurnool – District Collectorate Office



10. Nellore – District Collectorate Office



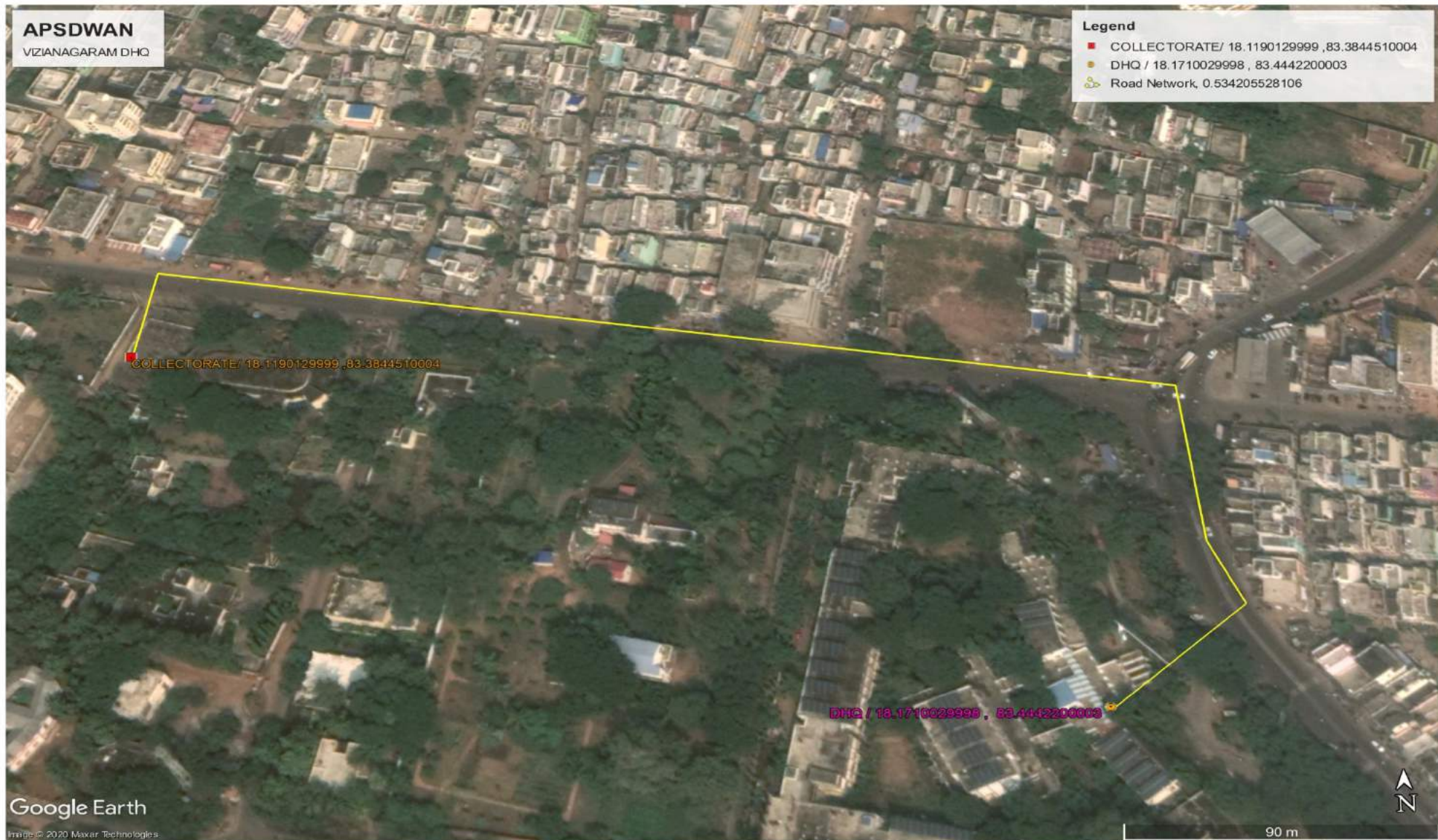


12. Srikakulam – District Collectorate Office



RFP for Selection of Agency for laying of Underground Optical Fiber Cable Works at Selected Locations of Government Offices / Institutions / Organizations on Rate Contract

13. Vizianagaram – District Collectorate Office



14. Visakhapatnam – District Collectorate office

