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RUS 515 OUTSIDE PLANT CONSTRUCTION CONTRACT

AUBURN EXCHANGE

of

LOGAN TELEPHONE COOPERATIVE

AUBURN CO PHASE 2 FTTP

LT 13035



March 2014



Finley Engineering Company

Telecommunications Planning, Design & Engineering
1500 Bull Lea Road, Sulte 194 • Lexington, Kentucky 40511
Telephone: (859) 231-9831 • Fax: (859) 233-0046 • www.FECeng.com



United States Department of Agriculture

Telecommunications System Construction Contract

Rural Utilities Service

RUS Form 515

September 2001

(Labor and Materials)

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REPRODUCTION STATEMENT

<u>Finley Engineering Company, Inc.</u> certifies that the attached electronically reproduced forms are true reproductions of RUS Form 515, Telecommunications System Construction Contract from which they were derived and understands that in the case of discrepancies the forms published by the United States Government Printing Office are the source.

ALL REFERENCES TO RUS OR ADMINISTRATOR SHALL MEAN OWNER.

Telecommunications System Construction Contract

(Labor and Materials)

RUS Contract Form 515

SEPTEMBER 17, 2001

U.S. Department of Agriculture Rural Utilities Service

TELECOMMUNICATIONS SYSTEM CONSTRUCTION CONTRACT

(Labor and Materials)

The Complete Construction Contract Consists of the Following:

- I. RUS Contract Form 515, Telecommunications System Construction Contract, which includes:
 - A. Notice to Bidders (Page 1)
 - B. Instructions to Bidders (Page 5)
 - C. Contractor's Proposal (Page 23)
 - D. Construction Agreement (Page 115)
 - E. Engineering, Construction, and Inspection Details (Page 128)
- II. One or more of the specification packets made a part of the Contract by reference as indicated on page 13.
 - A. RUS Form 515a, Specifications and Drawings for Construction of Buried Plant (RUS Bulletin 1753F-150).
 - B. RUS Form 515b, Specifications and Drawings for Underground Plant (RUS Bulletin 1753F-151).
 - C. RUS Form 515c, Specifications and Drawings for Construction of Aerial Plant (RUS Bulletin 1753F-152).
 - D. RUS Form 515d, Specifications and Drawings for Service Entrance Installations at Customer Access Locations (RUS Bulletin 1753F-153).
- III. Plans, including Maps, Construction Sheets and Special Drawings prepared by the Owner's Engineer (Current version of related forms to be utilized).

Check List of Pages to be Completed

Engineer - Prior to Release for Bids Completes:

Pages	1-3	Notice to Bidders
Pages	5-11	Paragraphs 1, 2, 5, 8, 18b, 18c, and 18f
Page	23	Contractor's Proposal
Pages	25-89	Listing of Units, Quantities and Other
		information as Applicable
Page	91	"Value and Disposition of Units to be Removed"
		Table (Columns 1-7)
Pages	93-95	List of Special Assembly Unit Drawings and
		Special Guide Drawings, and List of Changes
Page	97	List of Cable Plant Layout Maps
Page	99	List of Construction Sheets
Page	101	List of Special Arrangement Units
Page	110	Paragraph 14

Page 111 Paragraph 17, 18

Pages 116-117 Article II, Section 1(b)

Page 135-137 Schedule of Acceptance Tests and Measurements

Page 138 Article VI, Section 2

"W" units in RUS Forms 515a, 515b, 515c, and 515d, as Applicable.

Owner - Prior to Release for Bids Completes:

Pages 2, 138 Liquidated Damage Amount

Page 19 Interim Financing, as Applicable

Page 21-22 Supplement A to Construction Contract RUS

Form 515, as Applicable

Bidder - Prior to Submitting Bid Completes:

Page	13	Bid Bond or Certified Check
Page	15	Certification Regarding Debarment, Suspension,
		Ineligibility and Voluntary Exclusion - Lower
		Tier Covered Transactions
Page	17	Certification for Contracts, Grants, Loans, and

Page 17 Certification for Contracts, Grants, Loans, and Cooperative Agreements (Lobbying Certification)

Page 19 Interim Financing, as Applicable

Page 21-22 Supplement A to Construction Contract RUS

Form 515, as Applicable

Pages 25-89 Unit Prices and Extensions, as Applicable

Pages 103-105 Proposal Summary

Page 109 Contractor's License, Paragraph 10

Page 112 Paragraph 21

Page 113 Signature, Address, Date and Seal

Engineer - On Acceptance Completes:

Page 115 Top of Page and Article I, Section 1 (except for

date)

Page 121 Article III, Section 1(b)

Owner - On Acceptance:

Page 115 Dates Construction Agreement Page 145 Signs Construction Agreement

Bidder - Upon Notification of Acceptance:

Page 145 Signs Construction Agreement

Pages 151-157 Inserts executed Contractor's Bond

TELECOMMUNICATIONS SYSTEM CONSTRUCTION CONTRACT (RUS FORM 515)

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NOTICE TO BIDDERS

TELECOMMUNICATIONS OUTSIDE PLANT PROJECT

Sealed proposals for	the const	ructio	n, in	cluding t	he supply	of	
necessary Labor, mat	erials, an	nd equip	oment	, of a ru	ıral		
telecommunications p	roject as	describ	oed be	elow:			
Project Number:	LT 13	035 Aı	ıbu <u>rn</u>	CO Phase	2	···	
Company Name: Logar	Telephone	Coope	rat <u>iv</u> e	e Corpora	tion		
Exchange(s): Aubur	:n		***************************************				
County(ies):	Logan			Marian Company			
State(s):							
shall be received at	the follo	wing lo	catio	on and ti	me:		
Address: 10725	Bowling G	reen Ro	oad, A	Auburn KY	42206	_	
Bid Date: Marc	h 24, 2014		·····	, , , , , , , , , , , , , , , , , , ,	MARCO MARCON MAR	_	
Time:10:30	, AM, CDT	, at wh	nich t	time the	proposals	shall	be
publicly opened and	read.						
The project shall co	nsist of t	he foll	owing	g miles			
[kilometers (km)] of	plant:						
Aerial:	0	miles	(0	km);		
Buried:	19.26	miles	(km);		
Underground:	1.24	miles	(km);		
Conduit:	0	miles	(0	km);		

Service Er	ntrances	•	15.02	miles	(_ km);
Number of	Service	Entr	ances:			
Aerial _	0	;	Buried	363	•	

The number of cable placement operations used at any one time shall not exceed one mainline plow, and three drop plows. The time for Completion of Construction of the Project shall be _____130__ calendar days (excluding Saturdays, Sundays, and legal holidays) from the contract commencement date. Liquidated damages in the amount of \$1,800.00_ per day shall apply for each and every day that construction is delayed after giving effect to extensions of time as provided for in the contract.

The Plans, Specifications, and Construction Sheets together with all necessary forms and other documents for Bidders may be obtained from the Owner, or from the Engineer Finley Engineering Company, Inc., at the latter's office at 1500 Bull Lea Road; Suite 194, Lexington, Kentucky 40511, upon payment of \$250.00 (per set). The Plans, Specifications, and Construction Sheets may be examined at the offices of the Owner or Engineer. Each set of Plans, Specifications and Construction Sheets will have a serial number, assigned by the Engineer, and the number of each set with the name of the purchasers will be recorded by the Engineer. Bids will be accepted only from original purchasers or from some other qualified Bidder to whom such a set has been transferred by the

original purchaser with the approv	al of the Owner, at least forty-
eight (48) hours prior to the Pre-	Bid Conference set for March 10,
2014 1:30 PM CDT at the fo	llowing location: 10725 Bowling
Green Road, Auburn KY 42206	
No proposals will be considered fr	om bidders that do not attend the
Pre-Bid Conference unless the bidd	er has been notified by the
Engineer prior to the Pre-Bid Conf	erence that such bidder's
attendance is not required. Notes	covering the Pre-Bid Conference
will be prepared by the Engineer a	nd distributed to all bidders
attending the Pre-Bid Conference.	
Bidders shall file with the Engine	er at least <u>5</u> days in
advance of the scheduled Pre-Bid C	onference, the Bidder's
Qualifications. The Owner or Engi	neer will not release a set of
Plans, Specifications, and Constru	ction Sheets bearing a serial
number to a bidder until after the	Bidder's Qualifications have been
approved by the Engineer on behalf	of the Owner. Questions relating
to Bidder's Qualifications shall be	e resolved prior to the Pre-Bid
Conference.	
	Logan Telephone Cooperative
(Date)	(Borrower Name)
Ву	
	(Signature)

INSTRUCTIONS TO BIDDERS

1. Sealed proposals for the construction, including the supply
of necessary labor, materials, and equipment, of a rural
telecommunications project to be financed pursuant to a Loan
Contract between Logan Telephone Cooperative
(hereinafter called the "Owner") and the United States of America by
the Administrator of the Rural Utilities Service, dated $_$ N/A
, (a copy of the Loan Contract may be examined at the office
of the Owner) and to be known as Project
Auburn CO Phase 2 FTTP
which is to be part of the System known as N/A will be
received by the Owner on or before 10:30 o'clock AM., CDT,
March 24 , 2014, at the following location:
10725 Bowling Green Road, Auburn KY 42206 at which
time and place the proposals will be publicly opened and read. Any
proposals received subsequent to the time specified will be promptly
returned to the Bidder unopened.
2. The Project, located in the following County(ies):
Logan ;
in the State(s) of <u>Kentucky</u> , all as more fully
described in the Plans, Specifications, Construction Sheets, Maps,
Special Drawings, and Description of Assembly Units therefore
hereinafter referred to will consist of the following miles (km) of
telecommunication lines and associated facilities:
a. Buried Plant - Total Route Miles 19.26 (km)
Construction Corridor
New Miles 0 (km)
Existing Miles 19.26 (km)

	<u>Underground Plant</u> - Tota				` <u> </u>	
	Conduit System:					
	Construction Corridor	:				
	New	Miles		(0	km)
	Existing	Miles	1.24	(0	km)
	Innerducts placed in:					
	Conduit	Miles	1.1	7 (0	km
	Underground Cable in Cor	nduit Syste	ems:			
	New	Miles	0	(0	km)
	Existing	Miles	2.19	_ (km;
	Manholes:		0	(:	number)
c.	New Aerial Plant - Total	L Route Mil	les <u> </u>	(0	km)
	New (Including Rebuilt M Poles Are To Be Replace		nich Sub	stanti	ally <i>A</i>	111
		cea)				
		ute Miles	0	(0	km)
٠		ute Miles			0	
	- Ro Pole Line w/ Self Suppor	ute Miles	Optic	Cable	0	
	- Ro Pole Line w/ Self Suppor	ute Miles	Optic	Cable		_ km)
	- Ro Pole Line w/ Self Suppor - Ro Pole Line with Cable	ute Miles	Optic 0	Cable (0	_ km) _ km)
	- Ro Pole Line w/ Self Suppor - Ro Pole Line with Cable	ute Miles cting Fiber ute Miles ute Miles	Optic 0	Cable (0	_ km) _ km)
	- Ro Pole Line w/ Self Support - Ro Pole Line with Cable - Ro Joint Use - Electric - C	ute Miles cting Fiber ute Miles ute Miles	Optic 0 0	Cable (0	_ km) _ km) _ km)
	- Ro Pole Line w/ Self Support - Ro Pole Line with Cable - Ro Joint Use - Electric - C	ute Miles ting Fiber ute Miles ute Miles Cable ute Miles	Optic O O	Cable (0	_ km) _ km) _ km)
	Pole Line w/ Self Support Ro Pole Line with Cable Ro Joint Use - Electric - C Ro Joint Use - Electric - S	ute Miles ting Fiber ute Miles ute Miles Cable ute Miles	Optic O O Cting Fi	Cable ((ber Op	0 0 tic Ca	_ km) _ km) _ km)
	Pole Line w/ Self Support Ro Pole Line with Cable Ro Joint Use - Electric - C Ro Joint Use - Electric - S	ute Miles sting Fiber ute Miles ute Miles cable ute Miles self Suppor	Optic O O O O O O O O O O O O O O O O O O O	Cable ((ber Op	0 0 tic Ca	_ km) _ km) _ km) _ km)

d.	Modification of Existing Aerial Plant -
	- Route Miles $\underline{0}$ ($\underline{0}$ km) (Includes all lines on which substantial number of poles are retained and which are not included in the above Classification)
е.	Service Entrances - Route Miles15.02 (km)
	Buried Service Entrances - Number363
	- Route Miles15.02 (km)
	Aerial Service Entrances - Number0
	- Route Miles0 (km)

- 3. Proposals and all supporting instruments must be submitted in their entirety on the forms furnished by the Owner and must be delivered in a sealed envelope addressed to the Owner. The name and address of the Bidder, its license number, if a license is required by the State, and the date and hour of the opening of Bids must appear on the envelope in which the Proposal is submitted. Proposals must be filled in ink or typewritten. No alternations or interlineations will be permitted, unless made before submission, and initialed and dated.
- 4. Prior to the submission of the Proposal, the Bidder shall make a careful examination of the site of the Project and of the Plans, Specifications, Construction Sheets, Maps, Special Drawings, Description of Assembly Units, and forms of Construction Agreement and Contractor's Bond attached hereto, and shall become informed as to the location and nature of the proposed construction, the transportation facilities, the kind and character of the soil and terrain to be encountered, the kind of facilities required before and during the construction of the Project, general local conditions and all other matters that may affect the cost and the time of completion of the Project. Bidders will be required to comply with all applicable statutes, regulations, etc., including those pertaining to the licensing of contractors and the Anti-Kickback Acts, as amended (40 USC 276c; 41 USC 51 et seq.) and regulations issued pursuant thereto.
- 5. To facilitate the Bidder's meeting the requirements of Paragraph 4, a <u>one half</u> day Pre-Bid Conference is scheduled at the following location 10725 Bowling Green Road, Auburn KY 42206 ,

on March 10, 2014 commencing at 1:30, PM, CDT. At the Pre-Bid (Time)

Conference, qualified representatives of the Engineer and/or Owner, and Contractor will be prepared to discuss the project plans in detail including previous construction experience. They will also provide assistance to personnel of the Bidder for visiting existing representative cable routes and locations, if any, that may require special construction planning. All Bidders are required to attend the Pre-Bid Conference or furnish information to the satisfaction of the Engineer prior to the Pre-Bid Conference, that the Bidder, through prior visitation or previous construction work in the Area, has adequate familiarity with the site and plans for the project.

No proposal shall be accepted or considered from Bidders that do not attend the Pre-Bid Conference or have not been notified by the Engineer prior to the Pre-Bid Conference, that their attendance is not required.

- 6. Each Bidder shall include and shall be deemed to have included, in the price quoted in the Contractor's Proposal for each Assembly Unit, the amounts which it is estimated will be payable by the successful Bidder or by the Owner on account of taxes imposed by any taxing authority upon the sale, purchase, or use of materials, supplies and equipment, or services or labor or installation thereof, to be incorporated in the Project as part of such Assembly Unit. All taxes of the foregoing descriptions shall be payable by the Bidder which shall be awarded the Contract for the construction of the Project.
- 7. The Owner reserves the right to confine its consideration of the several bids to one type of design regardless of alternate types of design which may be specified in the Plans and Specifications and offered in the Proposals.
- 8. Where buried plant is included in the construction of the Project, the number of cable placement operations that may be $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2} \right$

used	at	any	one	time	shall	not	exceed				
		or	ne m	ainlin	e plow	, an	d three	drop	plows	•	

- 9. The time for Completion of Construction of the Project shall be as specified by the Owner in the Proposal.
- 10. Each Proposal must be accompanied by a Bid Bond in the form attached or a certified check on a bank that is a member of the Federal Deposit Insurance Corporation, payable to the order of the Owner, in an amount equal to ten percent (10%) of the maximum Bid price. Each Bidder agrees, provided its Proposal is one of the

three low Proposals, that, by filing its Proposal together with such Bid Bond or check, in consideration of the Owner's receiving and considering such Proposal, said Proposal shall be firm and binding upon each such Bidder and such Bid Bond or check shall be held by the Owner until a Proposal is accepted and a satisfactory Contractor's Bond is furnished by the successful Bidder and such acceptance has been approved by the Administrator, or for a period not to exceed ninety (90) days from the date hereinbefore set for the opening of Proposals whichever period shall be the shorter. If such Proposal is not one of the three low Proposals, the Bid Bond or check will be returned in each instance within a period of ten (10) days to the Bidder furnishing same.

- 11. The successful Bidder will be required to enter into a Contract with the Owner and to furnish a Contractor's Bond, in one of the forms attached hereto, with sureties listed by the United States Treasury Department as Acceptable Sureties in a penal sum not less than the Contract price.
- 12. Should the successful Bidder fail or refuse to execute a Contract and to furnish a Contractor's Bond within fifteen (15) days after written notification of the award of the Contract by the Owner, the Bidder will be considered to have abandoned the Proposal. In such event, the Owner shall be entitled (a) to enforce the Bid Bond in accordance with its terms, or (b) if a certified check has been delivered with the Proposal, to retain from the proceeds of the certified check the difference between the amount of the Proposal and such larger amount (up to 10% of the Proposal) for which the Owner may in good faith contract with another party to construct the Project. The term "successful Bidder" shall be deemed to include any Bidder whose Proposal is accepted after another Bidder has previously refused or has been unable to execute the Contract or to furnish a satisfactory Contractor's Bond.
- 13. The Contract, when executed, shall be deemed to include the entire agreement between the parties thereto, and the Contractor shall not claim any modification thereof resulting from any representation or promise made at any time by any officer, agent, or employee of the Owner or by any other person.
- 14. The Owner reserves the right to waive minor irregularities or minor errors in any Proposal, if it appears to the Owner that such irregularities or errors were made through inadvertence. Any such irregularities or errors so waived must be corrected on the Proposal in which they occur prior to the execution of any Contract which may be awarded thereon.

- 15. The Owner reserves the right to reject any or all Proposals. The attention of Bidders is specially called to the desirability of a proper balance between prices for labor and materials and between the total prices for the respective Assembly Units. Lack of such balance may be considered as a reason for rejecting a Proposal.
- 16. Where the unit prices in the Contractor's Proposal are separated into three columns designated as "Labor", "Materials", and "Labor and Materials", and where a discrepancy appears between the sum shown in the "Labor and Materials" column and the correct addition of the sums appearing in the "Labor" column and the "Materials" column, the correct addition of the sums appearing in the "Labor" column and the "Materials" column shall control.
- 17. The terms "Administrator", "Engineer", "Supervisor" "Contractor's Proposal", "Project", "Section", "Completion of Construction", "Completion of Project", "Cleanup", "Work Sector", "Construction Corridor", "Reduced Construction Corridor", and "Construction Sheets" as used throughout this Contract shall be defined in the Construction Agreement, Article VII, Section 1.
 - 18. The Owner represents:
 - (a) If by other provisions of the contract documents the Owner shall have undertaken to furnish any materials for the construction of the Project, such materials are on hand at locations which may be determined by inquiry by Bidders from the Engineer or if such materials are not on hand they will be made available by the Owner to the successful Bidder before the time such materials are required for construction.
 - (b) That all items to be accomplished by the Owner to facilitate construction have been accomplished or will be completed prior to construction activity.
 - (c) Staking has been completed for the entire project, except for Service Entrances, as of January 6, 2014 ...
 - (d) Easements and rights-of-way for the Construction Corridor used for the placement of buried cable have been obtained from property owners or public authorities. Public rights-of-way, totaling approximately 1.41 miles (km) and private rights-of-way, totaling approximately 19.09 miles (km) are as shown on the Construction Sheets. All rights-of-way obtained that do not provide sufficient width to meet the specifications for Construction Corridor as defined in the specifications are designated as "Reduced Construction Corridor". The actual

widths available for cable placement in the reduced areas are shown on the respective Construction Sheets. Rights-of-way not obtained are designated as "Unobtained Construction Corridor" and are shown on the Construction Sheets.

Where the placement of the cable is restricted within the Construction Corridor, these locations are designated "Restricted Construction Corridor". The nature of the restriction of the replacement of the cable is as shown on the Construction Sheets. When the cause of a restriction is the presence of existing telecommunications plant or foreign utilities, the general location of these facilities is as shown on the Construction Sheets. Since these facilities can be located definitely only by exposing them to view, all Construction Sheet representations as to their locations are approximate.

- (e) Easements and rights-of-way for placement of all Service Entrances have not been obtained. Such rights-of-way will be obtained as required to avoid delay in placement of such Service Entrances.
- (f) The Owner will have available all funds necessary for immediate payment for the construction of the Project.
- (g) Where buried plant is involved, the Owner has obtained permission from State and local highway and road authorities to bury cable and set housings on the highway and road rights-of-way in the Project Area. Notwithstanding such permission granted to the Owner, each Bidder is responsible for ascertaining that the equipment, methods of construction and repair proposed to be used on the Project will meet all requirements of public authorities having jurisdiction over highway and road rights-of-way. The successful Bidder will be required to furnish proof satisfactory to the Owner of compliance with this requirement. If required by the highway or road authorities, the successful Bidder will furnish to such authorities a bond or meet other guaranty requirements to assure the prompt repair of all damages to highways and roads and their associated rights-of-way caused by the Bidder during construction of the Project. This requirement is in addition to, and independent of, the performance bond required under this Contract. The approval of a Bidder's Qualifications by the Owner or the acceptance of a Bid from any Bidder is not to be construed as approval of the Bidder's equipment or proposed construction methods by, or on behalf of, the highway and road authorities. Bidders may obtain information concerning the requirements of highway and road authorities by communicating with the following:

	District 3, Bowling Green
	KY Department of Transportation
	900 Morgantown Road
	PO Box 599
	Bowling Green KY 42102
	270.746.7898
ATTN:	Sarah Payton

If the Owner shall fail to comply with any of the undertakings contained in the foregoing representations or if any of such representations shall be incorrect, the Bidder will be entitled to extension of time of completion for a period equal to the delay, if any, caused by the failure of the Owner to comply with such undertaking or by any such incorrect representation; provided the Bidder shall have promptly notified the Owner, in writing within ten (10) days, of its desire to extend the time of completion in accordance with the foregoing, and provided further that such extension, if any, of the time of completion shall be the sole remedy of the Bidder for the Owner's failure, because of conditions beyond the control and without the fault of the Owner, to furnish materials in accordance with subparagraph (a) hereof.

	Logan Telephone Cooperative
(Date)	(Owner)
	Ву
	(Authorized Signature)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control mumber for this information collection is 0572-0107. The time required to complete this information collection is estimated to average 05 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

U.S. Department of Agriculture Rural Utilities Service

BID BOND

1.	KNOW ALL MEN that we,			_
			as Pr	incipal, and
	as Surety, are held and firmly bound unto	77169	100	>
	Logan Telephone Cooperative Corporation (10%) of the amount of the bid referred to in	on (hereafter co paragraph 2 below, b	alled the "Owner") in the penal su ut not to	ım of ten percent
	exceed	which sum well and tru ly and severally, by th	dollars (\$ uly to be made we bind ourselves, ese presents;), as our executors,
)	WHEREAS, the Principal has submitted a bio	d to the Owner for the	construction of the Rural Utilitie	s Service
	project known as Auburn CO Phase	2 FTTP		
ł.	NOW, THEREFORE, the condition of this ob a. the Principal shall execute such contra such Contractor's Bond or Bonds for to material furnished for the project as ma	nct documents, if any, he performance of the	as may be required by the terms e contract and for the prompt pa	of the bid and giv
	b. in the event of the failure of the Princip Bond or Bonds, if the Principal shall between the amount specified in the bia with another party to construct the pro and effect.	pay to the Owner to and such larger amo	he difference, not to exceed the ount for which the Owner may in	penal sum hereoj good faith contrac
N I	WITNESS WHEREOF, the undersigned have c he affixed and attested by their duly authorized	caused this instrument representatives this	to be executed and their respecti	ve corporate seals
		day of		, 20
		ستين ور ا	Principle	(Seal,
TT	TEST:	Ву		
	Secretary		Title	
			Surety	(Seal)
TI	TEST:	Ву	5 o.y	
	Country		Title	A THE STATE OF THE
	Secretary		ı iii e	

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILTY

AND VOLUNTARY EXCLUSION - LOWER TIER COVERED TRANSACTIONS

INSTRUCTIONS FOR CERTIFICATION

- 1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- 2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- 3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- 5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9 subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- 6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 7. A participant in a covered transaction way rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9 subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Nonprocurrement Programs.
- 8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9 subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

CERTIFICATION

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

NOT APPLICABLE	
Organization Name	PR/Award or Project Name
Name and Title	
Signature	Date

NOT APPPLICABLE

LOBBYING CERTIFICATION

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 3 1, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Organization Name	
Name of Authorized Official	
N/A	
Signature	Date

INTERIM FINANCING NOT APPLICABLE

If this project is financed in part by the Rural Telephone Bank, an agency of the United States of America, the references in the contract documents to "the United States of America and the Government" shall mean the "Rural Telephone Bank", as well, and the references to the "Administrator" shall mean the "Governor" of the Rural Telephone Bank as well. If the project is financed wholly by the Rural Telephone Bank, the reference to "the United States of America" and the "Government" shall mean the Rural Telephone Bank and the references to the "Administrator" shall mean the "Governor" of the Rural Telephone Bank. References to RUS loans or loan contracts shall include RUS guarantees of loans by others.

The Owner, notwithstanding the references in the contract documents to the RUS or Rural Telephone Bank financing of the work herein provided for, plans to use funds other than RUS or Rural Telephone Bank loan funds initially and expects to be reimbursed subsequently with RUS or Rural Telephone Bank loan funds in whole or in part. It is understood that:

RUS or Ru	ral Telephone Bank loan funds in whole or in part. It is understood that:			
1.	An RUS, RTB, and/or FFB loan for this workhas has not (owner to check one) been made and has not been released.			
2.	 Arrangements have been made for other funds so that invoices may be paid promptly in accordance with the contract provisions. 			
3.	 Approval of the contract by RUS or the Rural Telephone Bank shall not be construed as a commitment to make a loan for this purpose. 			
	Date Owner			
	Ву			
	President			
Date	Contractor			
	Ву			

SUPPLEMENT A TO CONSTRUCTION CONTRACT RUS FORM 515

The Bidder agrees that the following provisions shall be a part of the Proposal to which this Supplement is attached and shall supersede all provisions of the Proposal which are inconsistent herewith:

- 1. The following Section 24 shall be added on Page 113:
 - 24(a) The Bidder understands and agrees that, if this proposal is accepted, the Owner shall furnish to the Bidder the materials set forth in the attached "List of Owner's Materials on Hand" and the Bidder will give a receipt therefore in writing to the Owner. The Bidder further agrees, at its expense and in on behalf of the Owner, to promptly receive, unload, transport and handle all materials and equipment on the "List of Materials Ordered by Owner but Not Delivered" when delivered and shall be responsible for demurrage, if any, and will promptly forward to the Owner the Bidder's receipt in writing for such materials. The materials referred to above are on hand at, or will be delivered to the locations specified in the attached Lists and the Bidder will use such materials in constructing the Project.
 - (b) The Contractor's Bond shall be in a penal sum of not less than the contract price, which is the sum of all labor and materials including owner-furnished materials covered by this Supplement A.
 - (c) The references in the Construction Agreement to "materials," except in Article IV Section 1(f), Page 124, shall be understood to mean only materials to be furnished by the Bidder.
 - (d) The value of the completed Assembly Units certified to by the Bidder each month pursuant to article III, Section 1(a) Pages 120 and 121, of the Construction Agreement shall be reduced by an amount equal to the value of the materials installed by the Bidder during the preceding month which have been furnished by the Owner or the delivery of which has been accepted by the Bidder on behalf of the Owner. Only 95 percent of the remainder shall be paid prior to the completion of the Project. The value of such materials for the purpose of this Supplement shall be computed on the basis of the unit prices stated in the attached Lists, and not on the Bidder's material unit bid prices. Materials, if any, not required for the Project, which has been accepted by the Bidder on behalf of the Owner, shall be returned to the Owner by the Bidder upon completion of the construction of the Project. The value of all materials not installed in the Project or returned to the Owner shall be deducted from the final payment to the Bidder.
 - (e) The Owner shall furnish such materials, if any, as may be required for the Project in excess of the quantities set forth in the attached Lists. In such event,

the value of such excess materials shall be determined on the basis of the unit prices stated in the attached Lists and payments to the Bidder on account of such excess materials furnished by the Owner shall be reduced in the manner provided in paragraph (d) above.

- 2. Section 15, Page 110, shall be revised to read as follows:
- 15. The unit prices for Assembly Units in this Contractor's Proposal include provisions for the payment of all moneys which will be payable by the Bidder or the Owner in connection with the construction of the Project on account of taxes imposed by any taxing authority upon the sale, purchase, or use of materials, supplies and equipment or services or labor of installation thereof, to be incorporated in the Project as part of such Assembly Units. The Bidder agrees to pay all such taxes except on Owner Furnished Materials and it is understood that, as to Owner Furnished Materials, the values stated in the attached "List of Owner's Materials on Hand" and "List of Materials Ordered by Owner but Not Delivered" include such taxes, if applicable. The Bidder will furnish to the appropriate taxing authorities all required information and reports pertaining to materials used in construction of the project except as to Owner Furnished Materials.

	Bidder	
Date	Ву	
Date		
	Title	
	Logan Telephone Cooperative	
	Owner	
Doto	Ву	
Date		
	Title	

Logan Telephone Cooperative Owner-Furnished Material Auburn CO Phase 2 FTTP

			UNIT EXTENDED		XTENDED	
UNIT	DESCRIPTION	QTY	F	PRICE	PRICE	
BM53	Warning Sign	52	\$	20.00	\$	1,040.00
BM53L	Locate Post	160	\$	25.00	\$	4,000.00
MDU12	Multiple Dwelling Unit	10	\$	33.00	\$	330.00
NIDO	FO Splice Connection Box	336	\$	33.00	\$	11,088.00
NIDO9	FO Splice Connection Box	17	\$	33.00	\$	561.00
					\$	17,019.00

CONTRACTOR'S PROPOSAL (Proposal Shall be Submitted in Ink or Typewritten)

To: Logan Telephone Cooperative (hereinafter called the "Owner").

1(a) The undersigned (hereinafter called the "Bidder") hereby proposes to construct the rural telecommunications project

Auburn CO Phase 2 FTTP

in

strict accordance with the Plans, Specifications, and Construction Sheets and Special Drawings therefore, indicated below, and by this reference made a part hereof, and to furnish all materials, machinery, tools, equipment, labor, transportation and other means necessary therefore, for the prices hereinafter stated.

The Engineer will check the applicable Specification Packet(s) which become(s) a part of the Contract by this reference:

■ RUS Form 515a - Specifications and Drawings for Construction of Direct Buried Plant (RUS Bulletin 1753F-150).

Dated: 09.30.10

RUS Form 515b - Specifications and Drawings for Construction of Underground Plant (RUS Bulletin 1753F-151).

Dated: 09.17.01

 \square RUS Form 515c - Specifications and Drawings for Construction of Aerial Plant (RUS Bulletin 1753F-152).

Dated: 09.17.01

■ RUS Form 515d - Specifications and Drawings for Service Installations at Customer Access Locations (RUS Bulletin 1753F-153).

Dated: 09.17.01

The following Standards are applicable: (Engineer to insert date)

RUS Bulletin 1753F-401 (PC-2) Dated: 02.27.95
RUS Bulletin 1753F-201 (PC-4) Dated: 06.02.97
RUS Bulletin 1753F-801 (PC-5A) Dated: 09.17.01

1(b) CONSTRUCTION UNITS

Section A - POLE UNITS

Poles will conform to the following: (Engineer to fill in)			
Pole Plan: (Check one or more if acceptable)			
(1) Insured warranted (2) Independent inspected (3) Quality Assurance Program			
Specie of Timber:			
Kind of Preservative:			
Method of Treatment: (Check one or more if acceptable)			
(1) Pressure (2) Thermal Process: a. Butt b. Full Length			
Note: If not indicated in the above spaces, the Bidder may select the pole plan, species, kind of preservative, a the method of treatment for supplying the poles. Pole furnished on the Project shall all be under the same pole plan, and of the same species, kind of preservative, and method of treatment, and shall meet the latest RUS specifications in effect at the time th bid is received.	S		
No. Unit Price Extended Pri	ce		
Unit of Labor Materials Labor and Materials Labor and Materials	rials		
NOT IN CONTRACT			
	·····		

Total, Section A NIC

Section BA - BURIED PLANT HOUSING STUB POLE UNITS

If wood stub pole units are to be used they will conform to the following: (Engineer will fill in) $\$

Stub Pole Plan: (Check one or more if acceptable)
<pre>(1) Insured warranted (2) Independent inspected</pre> (3) Quality Assurance Program
Kind of Preservative:
<pre>Method of Treatment: (Check one or more if acceptable)</pre>
(1) Pressure (2) Thermal Process: Full Length
Note: If not indicated in the above spaces, the Bidder may select the kind of preservative, and the method of treatment for supplying the stub pole units. Stub pole units furnished on the Project shall all be under the same pole plan, and of the same species, kind of preservative, and method of treatment, and shall meet the latest RUS specifications in effect at the time the bid is received.
The minimum dimensions for stub poles are:
Round - Top 4-1/2 inches (in.) [11.3 centimeters (cm)], Bottom 5 in. (12.7 cm) (Diameter) Sawn - 4-1/2 in. (11.4 cm) x 3-1/2 in. (9.0 cm)
When Stub poles are required that exceed these minimums, indicate the required minimum in the following spaces: Round - Bottom diameter in. (cm), Top diameter in. (cm), Sawn in. (cm) x in. (cm).
Stub Poles for mounting buried plant housings shall be set 3.0 feet (ft) [0.9 meters (m)] in either soil or solid rock. If a greater depth in soil is necessary for wood stub pole units, it shall be indicated in the following space:ft (m) (Engineer to fill in).
No. Unit Price Extended Price Unit of Labor Materials Labor and Materials Labor and Materials
Unit of Labor Materials Labor and Materials Labor and Materials Units
NOT IN CONTRACT
Total Section RA NIC

Section BD - BURIED PLANT HOUSING ASSEMBLY UNITS

p		,			<u> </u>
			Unit Pri	ice	Extended Price
	No.			Labor	Labor
Unit	of	Labor	Materials	and Materials	and Materials
	Units				
*					
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				aler shall be i	nstalled in
accordanc	ce with t	the manufa	cturer's in	structions.	
				,	
If	checked	by the En	gineer, ant	repellent shal	l be installed
in accord	dance wit	th the man	ufacturer!e	inetructions	

accordance If in accord	checked lance wi	the manufacture by the End	cturer's ir gineer, ant ufacturer's	structions repellent instructi	shal ons.	nstalled in l be installed less otherwise
			Tot	al, Sectio	n BD	NIC
			29			

Section BDO - BURIED PLANT FIBER OPTIC HOUSING ASSEMBLY UNITS

			Unit Pri	.ce	Extended Price
Unit	No. of Unit s	Labor	Materials	Labor and Materials	Labor and Materials
BDO5	36				

		7-20 (1994) - 14			
				100000	

____ If checked by the Engineer, sealer shall be installed in accordance with the manufacturer's instructions.

 $\underline{\underline{X}}$ If checked by the Engineer, ant repellent shall be installed in accordance with the manufacturer's instructions.

The buried plant housings shall be green in color unless otherwise specified below.

Please refer to Special Construction Notes and Special Arrangement Units for additional information.

Total,	Section	BDO	

Section BDS - SERVING AREA INTERFACE CABINET (SAIC) ASSEMBLY UNITS

		Unit Price			Extended Price
	No.			Labor	Labor
Unit	of	Labor	Materials	and Materials	and Materials
	Units				*****
					//// / ///////////////////////////////
					1
			NOT IN	CONTRACT	
			1	-,	

If checked by the Engineer, sealer shall be in accordance with the manufacturer's instructions.	nstalled in
If checked by the Engineer, ant repellent shain accordance with the manufacturer's instructions.	all be installed
The SAIC shall be green in color unless otherwise spe	ecified below.

Please refer to Special Construction Notes and Special Arrangement Units for additional information.

Total,	Section	BDS	NIC

Section BFC - BURIED FILLED COPPER CABLE ASSEMBLY UNITS

		Unit Price			Extended Price
Unit	No. of	Labor	Materials	Labor And Materials	Labor and Materials
	Units				
				710000	

		NO'	r in coi	NTRACT	
711000					

Sub-Total,	Soction	BFC	NIC
Sub-10tal,	Secrion	DrC	NIC

Section BFC - BURIED FILLED COPPER CABLE ASSEMBLY UNITS

		Unit Price			Extended Price
Unit	No. of Units	Labor	Materials	Labor And Materials	Labor and Materials
	VV 10/1/10 TO A VV 10/10 In				
		NO	T IN COI	NTRACT	
-		110			
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				100/41/2003-04	
				and the second s	

Sub-Total,	Section	BFC	NIC

Section BFC - BURIED FILLED COPPER CABLE ASSEMBLY UNITS (Continued)

The depth of buried cable in soil measured from the top of the cable to the surface of the ground is 24 in. (61 cm) minimum. If the cable is to be plowed for the entire project to a minimum depth greater than 24 in. (61 cm), the Engineer will indicate the required minimum depth in the following space below:
in. (cm).
If any section of cable is to be installed to a depth greater than the minimum depth stated above, the applicable BFC units will be suffixed by the letter "E" followed by the required depth in parentheses.
The cable to be used with the above buried filled cable units shall have a shield as indicated below:
Standard, Coated Aluminum
Standard, Copper
Gopher Resistant, Containing Copper
Gopher Resistant, Coated Aluminum/Coated Steel
The following type(s) of conductor insulation shall be used: Solid
Expanded
If checked by the Engineer, preconnectorized cable may be used at the option of the contractor for reel end splices. If checked by the Engineer, warning tape shall be used.
Total, Section BFC NIC

Section BFO - BURIED FILLED FIBER OPTIC CABLE ASSEMBLY UNITS

N ₁		Unit Pri	се	Extended Price Labor
of	Labor	Materials	Labor and	and
	Labor	Hacerrars	TICCETTATE	Materials
				7711
 				
	···			
2042				
1568	-			-
6214				
5270				
2442				
2012				
10910				
9394				
2672				
2132				
6468				
5378				
11387				
64				
355				
742				
1146				
2785				
204				
968				
700				
	Units 26550 5838 5295 5564 5068 3682 1154 2616 1024 2600 7010 3830 3396 694 694 2042 1568 6214 5270 2442 2012 10910 9394 2672 2132 6468 5378 11387 64 355 742 1146 2785 204	of Units Labor 26550 5838 5295 5564 5068 3682 1154 2616 1024 2600 7010 3830 3396 694 694 2042 1568 6214 5270 2442 2012 10910 9394 2672 2132 6468 5378 11387 64 355 742 1146 2785 204 968 700	No. of Units Labor Materials 26550 5838 5295 5564 5068 3682 1154 2616 1024 2600 7010 3830 3396 694 694 2042 1568 6214 5270 2442 2012 10910 9394 2672 2132 6468 5378 11387 64 355 742 1146 2785 204 968 700	No. of Units Labor Materials Labor and Materials 26550

Section BFO - BURIED FILLED FIBER OPTIC CABLE ASSEMBLY UNITS

The depth of buried cable in soil measured from the top of the cable to the surface of the ground is 24 in. (61 cm) minimum. If the cable is to be plowed for the entire project to a minimum depth greater than 24in. (61 cm), the Engineer will indicate the required minimum depth in the following space below:

If any section of cable is to be installed to a depth greater than the minimum depth stated above, the applicable BFO units will be suffixed by the letter "E" followed by the required depth in parentheses.

The cable to be used with the above fiber optic cable units shall be as specified below:

Cables 12 through 144

- Corning Cable Systems ALTOS Lite Loose Tube, Gel-Filled, Single-Jacket, Single-Armored cable.
- 2. Single mode fiber with 0.35 dB/Km at 1310nm, 0.25dB/Km at 1550 nm, low water peak.
- 3. Sequentially marked in feet.
- 4. Cable shall meet the G.652D standard.
- 5. For warning tape see Special Construction Notes.

Cables 288-864

- 1. Corning Cable Systems SST-UltraRibbon Gel-Filled, Single-Jacket, Single-Armored cable.
- 2. Single mode fiber with 0.35 dB/Km at 1310nm, 0.25dB/Km at 1550 nm, low water peak.
- 3. Sequentially marked in feet.
- 4. Cable shall meet the G.652D standard.
- 5. For warning tape see Special Construction Notes.

X If checked by the Engineer, warning tape shall be used.

Please refer to Special Construction Notes and Special Arrangement Units for additional information.

The Contractor shall furnish & install fiber optic cable in required lengths so that no additional splices are required between predesignated size changes or pre-designated splice points. Any additional splices must have approval from the Engineer & if approved shall be at the Contractor's expense.

Total, Section BFO _____

Section BH - BURIED HANDHOLE ASSEMBLY UNITS

			Unit Pric	Extended Price	
	No.			Labor and	Labor
Unit	of	Labor	Materials	Materials	And Materials
	Units				
BHF(12X12X12)	6				
Bnr (12X12X12)	0				
BHF(22X42X30)	86				
DIE (20740720)					
BHF(22X42X30) TIER 15	62			<u>.</u>	
11111 13	02				
BHF(30X48X30)	5				
DUE (2004000)					
BHF(30X48X30) TIER 15	2				
TIBN 13		····			
		·			
			10 10 10 10 10 10 10 10 10 10 10 10 10 1		

Please refer to Special Construction Notes and Special Arrangement Units for additional information.

Total,	Section	BH	

Section BM - MISCELLANEOUS ASSEMBLY UNITS - BURIED PLANT AND SERVICE ENTRANCE INSTALLATIONS

			Unit Price		Extended
				Labor and	Price
Unit	No.	Labor	Materials	Materials	Labor
	of				And
	Units				Materials
BM2	125				
BM2A	64				
BM53	52				
BM53L	160				
BM60(1X1.25)	6042				
BM60(1X1.25)R	418				
BM60(1X1.25)RR	240				
BM60(1X1.50)	1839				
BM60(1X1.50)R	100				
BM60(1X1.50)RR	90				
BM60(1X2)SDR9	60				
BM60(1X3)	76				The state of the s
BM60(2X1.25)	290				
BM60(2X1.25)R	90				
BM60(2X1.50)	1578				
BM60(2X1.50)R	556				
BM60(2X1.50)RR	132				
BM61(1)	205				
BM71	9295				
BM72	10				
BM73	164				
BM77	500				
BM83	365				
				303301	

Please refer to Special Construction Notes and Special Arrangement Units for additional information.

Total,	Section	BM	

Section CFO - SELF SUPPORTING FILLED FIBER OPTIC CABLE ASSEMBLY UNITS

		Unit Price				Extended Price	
Unit	No. of Units	Labor	Materials	and	Labor Materials	Labor And Materials	
			<u> </u>				
		NO'	I IN COI	NTR <i>I</i>	ACT		
The cable			the above f	iber	optic cabl	e units shall be	
	Attenuation (if other than normal specification value) Bandwidth requirement for multimode fibers Armored Unarmored Multiple loose tube core construction If checked, dry filled core If checked, gel filled core Unit or central core tube construction						
Other cha 1. 2. 3. 4.	2. 3.						
If checked by the Engineer, the cable shall be spiraled around the suspension strand at all locations shown on the Construction Sheets. Spiraling of cable shall be in accordance with the Construction Guide Drawing 250-1.							
used at t	checked he optic	d by the Er on of the c	ngineer, pro contractor :	econn for r	ectorized eel end sp	cable may be lices.	
			Tota	al, S	ection CFO	NTC	

Section CO - AERIAL FILLED FIBER OPTIC CABLE ASSEMBLY UNITS

			Unit Pri	Extended Price	
Unit	No. of Units	Labor	Materials	Labor and Materials	Labor And Materials
4		***************************************		ACTIVITY OF THE STREET	
					1 1
		NO	T IN COI	NTRACT	
The cable as specif	fied bel	ow:		-	e units shall be
		idth requi ed		normal specifi multimode fiber	
	 Multi If che	ple loose ecked, dry	tube core c filled cor filled cor		
	Unit o Metal:	or central lic streng		construction	
Other cha			rength memb		

If checked by the Engineer, the cable shall be spiraled around the suspension strand at all locations shown on the Construction Sheets. Spiraling of cable shall be in accordance with the Construction Guide Drawing 250.

Section CO - AERIAL FILLED FIBER OPTIC CABLE ASSEMBLY UNITS (continued)

If checked by the Engineer, the existing lashing wire shall be removed and the new and existing cables shall be double lashed to the existing suspension strand at all locations shown on the Construction Sheets.
The lashing wire to be used with the above aerial cable shall be the size and materials indicated by the Engineer:() stainless steel,() aluminum.
If checked by the Engineer, preconnectorized cable may be used at the option of the contractor for reel end splices.
If checked by the Engineer, Extra High Strength (EHS) galvanized steel strand shall be used.
Total, Section CO NIC

Section CW - AERIAL FILLED COPPER CABLE ASSEMBLY UNITS

			Unit Pri	Extended Price	
Unit	No. of Units	Labor	Materials	Labor and Materials	Labor and Materials
		-			
		A ************************************			
		NO'	I IN COL	NTRACT	7, 12, 40 H. V
	MINITED AT THE PARTY OF THE PAR				
	-				
		7,110,000			
		1111000			
		77 F 77 G 9			

Section CW - AERIAL FILLED COPPER CABLE ASSEMBLY UNITS (Continued)

The cable to be used with the above a shield as indicated below:	erial cable units shall have a
Coated Aluminum	
Copper	
The following type(s) of conductor in	sulation shall be used:
Solid	
Expanded	
If checked by the Engineer, the around the suspension strand at all lo Construction Sheets. Spiraling of calthe Construction Guide Drawing 250.	ocations shown on the
If checked by the Engineer, the be removed and the new and existing cathe existing suspension strand at all Construction Sheets.	ables shall be double lashed to
The lashing wire to be used with the a size and materials indicated by the Enstainless steel, () alumb	ngineer:()
If checked by the Engineer, proused at the option of the contractor in	
If checked by the Engineer, Ext galvanized steel strand shall be used.	
Tota	al, Section CW NIC

Section HA - AERIAL SPLICE CLOSURE ASSEMBLY UNITS

			Unit Pri	Extended Price	
Unit	No. of Units	Labor	Materials	Labor and Materials	Labor and Materials
		NO	T IN CO		

Total,	Section	HA	NIC	

Section HBF - BURIED FILLED SPLICE CLOSURE ASSEMBLY UNITS

			Unit Pric	Extended Price		
	No. of			Labor and	Labor	
Unit	Units	Labor	Materials	Materials	and Materials	
HBFO(864)G	2					
HBFO(288)G	2					
HBFOXL	3					
HBFOL	14	*******				
HBFOM	46					
HBFOS	103					

Please refer to Special Construction Notes and Special Arrangement Units for additional information.

Total,	Section	${\tt HBF}$	

Section HC - COPPER SPLICING ASSEMBLY UNITS

			Unit Pri	Extended Price	
	No.			Labor	Labor
Unit	of	Labor	Materials	and Materials	and Materials
	Units				
		Maryanus A	T MANAGEMENT		
		NO'	T IN COL	NTRACT	

Section HO - FIBER OPTIC SPLICING ASSEMBLY UNITS

			Unit Pri	Extended Price	
Unit	No. of Units	Labor	Materials	Labor and Materials	Labor and Materials
HO1	1951				
HO1R	3024				
					PRAME AND ADDRESS OF THE ADDRESS OF

nor requi	red at	each	NIDO	and/or	MDU	J.			
				Τοta	٦ .	Section	нО		

Section HR - READY ACCESS CLOSURE ASSEMBLY UNITS

		-	Unit Pri	Extended Price	
	No.			Labor	Labor
Unit	of	Labor	Materials	and Materials	and Materials
	Units				
			*		
		_			
		NO'	T IN COI		
			1		
			<u> </u>		

Total, S	Section	HR	NIC
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Section HU - UNDERGROUND SPLICE CLOSURE ASSEMBLY UNITS

			Unit Pri	Extended Price	
	No.			Labor	Labor
Unit	of Units	Labor	Materials	and Materials	and Materials
		NO	T IN COI	NTRACT	
NO					2703111

rotal,	Section	HU	NIC
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Section NID - NETWORK INTERFACE DEVICE ASSEMBLY UNITS

			Unit Pri	Extended Price	
	No.			Labor	Labor
Unit	of	Labor	Materials	and Materials	and Materials
	Units	***************************************			
NTDO	336				
NIDO	336				
NIDO9	17				
MDU12	10				

Please refer to Special Construction Notes and Special Arrangement Units for additional information.

- 1. Some NIDO installations may require the temporary relocation of existing NID and station wire, to allow new NIDO to be installed in its location. Use black tie wraps to secure existing NID. This shall be included in cost of NIDO installation.
- 2. NIDO's shall be furnished under Supplement A materials. Contractor shall furnish all material required for mounting NIDO per manufacturer's instructions and RUS Form PC5A.

Total,	Section	NID	

Section PE - GUY ASSEMBLY UNITS

			Unit Pri	Extended Price	
Unit	No. of Units	Labor	Materials	Labor and Materials	Labor and Materials
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Total, Section PE NIC

Section PF - ANCHOR ASSEMBLY UNITS

			Unit Pri	Extended Price	
Unit	No. of Units	Labor	Materials	Labor and Materials	Labor and Materials
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Total,	Section	PF	NIC	

Section PM - MISCELLANEOUS ASSEMBLY UNITS - UNDERGROUND AND AERIAL PLANT

			Unit Pri	Extended Price	
	No.			Labor	Labor
Unit	of	Labor	Materials	and Materials	and Materials
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Total,	Section	PM	NIC
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Section R - RIGHT-OF-WAY CLEARING AND TRIMMING UNITS -AERIAL PLANT

1100 11			Unit Pri	Extended Price				
Unit	No. of Units	Labor	Materials	Labor and Materials	Labor and Materials			
		NO	T IN COI	NTRACT				
1111								
- 11111000								
Note 1:	length landow designa	and left ner. Comm ated by th	on the side ercial wood e Engineer,	be cut to commof the right-color length means to but in no case feet (of-way for the he length shall be			
Note 2:	shall, follow:	without ding method	elay, be di	from the clear sposed of by on ed by the Engin o be used.)	e of the			
	 a. Chipped and Blown b. Removed from the vicinity of the right-of-way c. Piled on one side of the right-of-way in such manner as to not obstruct roads, ditches, etc. d. Other (Describe): 							
		· · · · · · · · · · · · · · · · · · ·						

Total, Section R _____NIC

Section SE - SERVICE ENTRANCE ASSEMBLY UNITS

			Unit Pric	Extended	
	No. of			Labor and	Price Labor
Unit	Units	Labor	Materials	Materials	and Materials
SEBO2	71897				
SEBO2E(24)	1250				
SEBO2I	2442				
SEBO6	3730				
				. 100 100 100 100 100 100 100 100 100 10	

The depth of buried service wire in soil measured from the top of the service wire to the surface of the ground is 12 in. (30.5 cm) minimum. If the service wire is to be placed for the entire project to a minimum depth greater than 12 in. (30.5 cm), the Engineer will indicate the required minimum depth in the following space below:

If any section of service wire is to be installed to a depth greater than the minimum depth stated above, the unit will be suffixed by the letter "E" followed by the required depth in parentheses.

Please refer to Special Construction Notes and Special Arrangement Units for additional information.

Other characteristics are as follows:

- 1. Corning Cable Systems SST-Drop, Toneable, Gel-Filled cable.
- 2. Bend-insensitive ClearCurve XB fiber with 10mm bend radius.
- 3. Single mode fiber with 0.35 dB/Km at 1310nm, 0.25dB/Km at 1550 nm, low water peak.
- 4. Sequentially marked in feet.
- 5. Cable shall meet the G.652D standard.

Total,	Section	SE	

Section UD - UNDERGROUND CONDUIT ASSEMBLY UNITS

			Unit Pri	Extended Price	
	No. of			Labor	Labor
Unit	Units	Labor	Materials	and Materials	and Materials
UD(4-3X2)	6179				
OD (4-SAZ)	01/9				

rotal,	Section	UD	
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Section UF - UNDERGROUND FILLED COPPER CABLE ASSEMBLY UNITS

			Unit Pri	CO		Extended Price	
	No.		OHILL PLI	Labor		Labor	
Unit	of	Labor	Matariala	i	1		
OILL	Units	Labor	Materials	and Mater	riais	and Materials	
***	UIIILS						
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The cable	e to be u nield as	used with indicated	the above u	nderground	l cable	e units shall	
Co	pated Alı	uminum					
C	nnor						
	Copper						
The follo	owing tyr	ne(s) of c	onductor in	aulation a	h-11 h	a unad.	
1110 10110	owing cyt)C(3) OI C	onductor in	Suracion S	IIaıı L	de usea:	
Solid							
Expanded							
*****	- <u>r</u> 1300						
If used at t	checked the optic	l by the E	ngineer, procession.	econnector	ized c	able may be	

Section UH - UNDERGROUND HANDHOLE ASSEMBLY UNITS

			Unit Pri	Extended Price	
	No.			Labor	Labor
Unit	of	Labor	Materials	and Materials	And Materials
	Units				MANAGE SALVERS TO STREET SALVERS SALVE
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Section UM - PRECAST MANHOLE ASSEMBLY UNITS

			Unit Pri	Extended Price	
	No.			Labor	Labor
Unit	of	Labor	Materials	and Materials	and Materials
	Units				NICO.
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		NO'	T IN COI	NTRACT	P 30 0 4 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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____ If checked by the Engineer, poured-in-place manholes may be used.

Total,	Section	UM	NIC

Section UO - UNDERGROUND FILLED FIBER OPTIC CABLE ASSEMBLY UNITS

			Unit Pri	Extended Price	
Unit of Units	Labor	Materials	Labor and Materials	Labor and Materials	
UO96	1052				
UO288R	5210				
U0864R	5326				

The cable to be used with the above fiber optic cable units shall be as specified below:

Cables 12 through 144

- 1. Corning Cable Systems ALTOS Lite Loose Tube, Gel-Filled, Single-Jacket, Single-Armored cable.
- 2. Single mode fiber with 0.35 dB/Km at 1310nm, 0.25dB/Km at 1550 nm, low water peak.
- 3. Sequentially marked in feet.
- 4. Cable shall meet the G.652D standard.

Cables 288-864

- 1. Corning Cable Systems SST-UltraRibbon Gel-Filled, Single-Jacket, Single-Armored cable.
- 2. Single mode fiber with 0.35 dB/Km at 1310nm, 0.25dB/Km at 1550 nm, low water peak.
- 3. Sequentially marked in feet.
- 4. Cable shall meet the G.652D standard.

Total,	Section	UO	

Section W - REARRANGEMENT UNITS

		-	Unit Pric	e	Extended Price
	No.			Labor and	Labor
Unit	of	Labor	Materials	Materials	and Materials
	Units				
WBHF	1				100000000000000000000000000000000000000
WHBFO	1				
WIIDIO					
WHO1	12				
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	ll		<u> </u>		

Please refer to Special Construction Notes and Special Arrangement Units for additional information.

Total,	Section	W	

Section XX - NONREUSABLE MATERIALS REMOVAL UNITS

			Unit Pri	ce	Extended Price
	No.			Labor	Labor
Unit	of	Labor	Materials	and Materials	and Materials
	Units				
XXBHF	1				741700
XXHBFO	1				
			1100000000000000		
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		WHATA			
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Total,	Section	XX	

Section XZ - REUSABLE MATERIALS REMOVAL UNITS

			Unit Pri	Extended Price	
Unit	No. of Units	Labor	Materials	Labor and Materials	Labor and Materials
		NOT IN CONTRACT			
			0.746.07044		
				· ·	

			47007041-0		

Total,	Section	XZ	NIC

Section XZ - REUSABLE MATERIALS REMOVAL UNITS (continued)

VALUE AND DISPOSITION OF UNITS TO BE REMOVED

Assembly	Assembly	Charges to	Contractor	No. of	Credit To C	Contractor
Unit	Unit	No. of	Extended	Assembly	For Material	Turned In
Designation	Material	Assembly	Value	Units to	No. of	Extended
	Value	Units		Be Reused	Assembly	Value
					Units	
1	2	3	4	5	6	7
				[,	
		NOT	IN CONTR	ACT		
	i					

Note: Columns 1 through 7 should be filled in by Engineer.

LIST OF SPECIAL ASSEMBLY UNIT DRAWINGS AND SPECIAL GUIDE DRAWINGS

(NOTE: Engineer will indicate by listing below the special assembly unit drawings and special guide drawings which have been prepared. These drawings are considered to be a part of this Contract.)

1011- BM53L

LIST OF CHANGES, ADDITIONS, AND DELETIONS

The Bidder understands that the following changes, additions, or deletions have been made in the Contractor's Proposal, Description of Assembly Units, Engineering Details, Material and Installation Specifications, List of Construction Sheets, Assembly Unit Drawings and Guide Drawings, of the standard RUS Form 515 and the applicable Specification Packet(s) are considered to be part of this contract referred to hereof:

Pages with Notes Added: 31,43,45,47,59,61,65,73,83 and 137

Added Pages: 22a (Supplement A), 101a - 1011

Pages requiring signature: 13, 22, 113

LIST OF KEY AND DETAIL MAPS

Map Number	Description
NONE	
	·

LIST OF CABLE PLANT LAYOUT MAPS

Map Number	Description
Sheet 1 - 11	Cable Schematics

LIST OF CONSTRUCTION SHEETS

Map Number	Description
Sheets 1 through 104	Auburn CO Phase 2 FTTP

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LIST OF SPECIAL ARRANGEMENT UNITS

Map Number	Description

BD05

This unit has the same description as the BDO unit in the RUS Bulletin 1753F-150, RUS Form 515A, dated September 30, 2010, with the following modification:

This unit is for labor and material to furnish and install a standard metal RUS BD5 pedestal as listed on the latest RUS List of Acceptable Materials.

This unit also includes Labor and Materials for the following:

Furnish and install in the BDO5 a FIBRBox as manufactured by TYCO electronics (Part# FH6885-000, Item Description FIBRBox-C-12-1-AS). Labor and material to terminate fiber cable in the FIBRBox, storage of buffer tubes and bonding and grounding of the cable shield. Unit includes Labor and Material for a mounting bracket to secure the FIBRBox inside the BDO5 unit. Unit shall also include the appropriate number of splice trays. Splicing of the fibers will be paid under the HO1 unit.

Contractor shall furnish and install in each BDO unit, two (2) insect tags, as manufactured by Rainbow Technology or approved equivalent. One tag shall be placed inside the FIBRBox. The insect tag product number is 4049. Contractor shall also furnish and install in each BDO unit one (1) 4 ounce bag of fire ant and insect killer as manufactured by Rainbow Technology, product number 4480.

BFOV(x)H

This unit has the same description as the BFO unit in the RUS Bulletin 1753F-150, RUS Form 515A, dated, September 30, 2010, with the following modification:

This unit is for direct buried HDPE duct(s) placed by directional boring only. All BFOV units shall be placed a minimum of 30" below ground line. At ditch crossing where staking sheets show extra depth, the extra depth areas are included in the BFOV units. Where the inside diameter of the duct(s) are 1.25" or greater, they shall be rated as SDR11.

Where only one (1) duct is being placed, it shall be orange in color. Where two (2) or more ducts are placed in the same bore, the first duct shall be blue in color and all other

ducts shall be in the color that follows the standard telephony color code.

Any and all couplings required for joining ducts together shall be furnished and installed at the contractor's expense. All couplings used shall be as recommended and installed per manufacturer's specifications and allow for fiber optic cable to be blown into duct(s).

BHF(xx)

This unit has the same description as the BHF unit in the RUS Bulletin 1753F-150, RUS Form 515A, dated September 30, 2010, with the following modification:

This unit shall be manufactured by Highline Products. Highline Products part numbers are as follows:

- 1. BHF 12x12x12 Tier 8 flared CHA121212SO2-LT
- 2. BHF 22x42x30 Tier 15 CRA2230HO2-LTG
- 3. BHF 39x48x30 Tier 15 CRA3930HO2-LTG

For BHF units that do not have a BM53L unit installed contractor shall number on the lid of the BHF unit the route and BHF unit number with the same letters as used for Pedestals.

BM2

This unit has the same description as the BM2 unit in the RUS Bulletin 1753F-150, RUS Form 515A, dated September 30, 2010, with the following modification: Ground Rod $\frac{1}{2}$ " x 5' #611350 Eritech Ground Rod Clamp # EHL12FC1K Eritech

BM53, BM53L

This unit has the same description as the BM53 unit in the RUS Bulletin 1753F-150, RUS Form 515A, dated September 30, 2010, with the following modification:

BM53 and BM53L materials will be Owner-furnished under supplement A (see page 22a). Contractor shall furnish and install on the BM53 L units the route and handhole number. Numbers shall be the same as used on the pedestals and shall be black on orange background. See attached drawing on page 101 for the BM53L unit.

HBFO()G

This unit has the same description as the HBF unit in the RUS Bulletin 1753F-150, RUS Form 515A, dated September 30, 2010, with the following modification:

This unit includes labor and material to install a Preformed Line Products FiberLign Splice Closure for purposes of grounding only. The case part number shall be 8006041. This is a 6.5"x28" FiberLign splice case. Also furnish and install two(2) DLX Three Section End Plates with six (6) grounding inserts and four (4) L Brackets. The Three Section End Plate Part number shall be 80804986. These cases shall be used at the Central Office and will ground only the field side of the cable. This case shall be installed in the existing splice vault inside the Auburn Central Office. The bonding harness shall be a #6 AWG stranded insulated copper wire with compressed on ring terminals at both ends. The bonding harness shall be terminated to the field side of fiber optic cable and of sufficient length to be terminated to the CEGB in the Central Office. Each bonding harness shall be tagged with its route and cable count.

HBFOS, HBFOM, HBFOL, HBFOXL

This unit has the same description as the HBF unit in the RUS Bulletin 1753F-150, RUS Form 515A, dated September 30, 2010, with the following modification:

All HBFO units shall be FOSC450 or FOSC600 type cases by Tyco Electronics, as listed in the last RUS acceptable list of material. All splice cases shall be equipped with valves for flash testing. All cases shall be pressure tested per manufacturer instructions. Minimum number of splices per tray shall be 24. Splice Protection Sleeves as recommended by Tyco shall be used in splice trays. Contractor shall furnish and install, where fiber drops are entering case, the appropriate number of either 3 or 4 small cable sealing kit.

All vacant ports shall be sealed per manufacturer's instructions. This unit shall also include the required number and type of splice trays.

HBFOS shall be a FOSC450 B6 equipped with tall storage basket and be limited to 96 fiber splices. Part number: FOSC 450-B6-6-24-D-T3V

HBFOM shall be a FOSC450 C6 equipped with standard storage basket and be limited to 144 fiber splices. Part number: FOSC 450-C6-6-24-D-C6V

HBFOL shall be a FOSC450 D6 equipped with standard storage basket and be limited to 432 fiber splices. Part Number: FOSC 450-D6-6-72-D-D6V

HBFOXL shall be a FOSC600 Part Number: FOSC600-D8B-NT-0-D4V.

MDU12

This unit is for labor and material to mount and install an Owner furnished enclosure for a Fiber Optic splice-connection at a multi-dwelling premise. No grounding will be required.

The enclosure shall be furnished under "Supplement A" materials and will require Contractor to pick up these units at the Owner's warehouse.

Contractor shall splice 6 or 12 strand fiber cable to Owner furnished pigtails inside enclosure. Splicing of fiber shall not be included in this unit; a separate HO1 shall be paid for splicing and required tests.

NIDO

This unit is for labor and material to mount and install an Owner furnished enclosure for a Fiber Optic splice-connection at the subscriber premise. No grounding will be required. Drop cable locate wire shall be terminated inside enclosure.

The enclosure shall be furnished under "Supplement A" materials and will require Contractor to pick up these units at the Owner's warehouse.

Contractor shall furnish and install with each NIDO a Corning Clearcurve 1.6 mm pigtail, 1.5 meter in length, with SC/APC connector yellow covering. Connector insertion loss shall be a maximum of 0.5 dB. Splicing of fiber shall not be included in this unit; a separate HO1 shall be paid for splicing and required tests.

NIDO9

This unit is for labor and material to mount and install an Owner furnished enclosure for a Fiber Optic splice-connection at a mobile home. No grounding will be required. Drop cable locate wire shall be terminated inside enclosure.

The ONT enclosure shall be furnished under "Supplement A" materials and will require Contractor to pick up these units at the Owner's warehouse.

Contractor shall furnish and install with each NIDO a Corning Clearcurve 1.6 mm pigtail 1.5 meter in length with SC/APC connector yellow covering. Connector insertion loss shall be a maximum of 0.5 dB. Splicing of fiber shall not be included in this unit; a separate HO1 shall be paid for splicing and required tests.

The NIDO9 unit shall not require a trailer stake. The NIDO9 shall be mounted to a Contractor furnished and installed 6"x4"x6.5' treated yellow pine post. Post shall be set 24" deep. Post shall be included in the NIDO9 unit.

SEBO2, SEBO6

This unit has the same description and suffixes as the SEB unit as listed in the RUS Form 515d, dated September 2001, with the following exceptions:

This unit shall be for a buried, two (2) or six (6) strand fiber optic cable meeting the characteristics as listed on page 73 of this 515 contract. Splicing of the fiber shall not be included in this unit. A separate HO1 shall be paid for splicing, which shall include required test(s).

UD(4-3x2)

This unit is for two (2) of the Maxcell's Product Three duct fabric innerduct installed in a 4" existing conduit. This unit includes all labor and materials to furnish and install one (1) linear foot of the two (2) Maxcell 4"-3 fabric innerduct per manufacturer's instructions. Maximum cable diameter per cell shall be 1.75". Unit shall also include Labor and Material to terminate and seal both of the 4"-3's with inflatable bags per manufacturer's instructions.

- 1. All plow rips shall be walked down with a track type dozer of sufficient size to compact the rip. All plow rips shall be level.
- 2. Contractor shall complete all clean up behind plow before leaving construction site at the end of each workday.
- 3. Terra Tape Extra Stretch warning tape as manufactured by Reef Industries shall be plowed with all fiber except for drops or through bores. Message to read: CAUTION: FIBER OPTIC CABLE BURIED BELOW. The tape shall be 3" wide and orange in color with black lettering. Warning tape to be placed 12" above fiber.
- 4. All BM60 & BFOV(x)H units shall include sealing both ends of ducts after cable is placed so as to be water tight per the RUS 515a, dated 9-30-2010. All bores under state highways shall be 42" below bottom of the ditch. All bores under county or city roads shall be at 36" below bottom of ditch. No extra depth bore unit shall be paid for these bores. All duct for BM60 and BFOV units shall be SDR11 rating.
- 5. Where the BFOI cable enters pedestals and or handholes, the BFOV duct(s) shall be terminated inside the pedestals and or handholes. In pedestals, the BFOV duct shall be sealed with duct seal. Where the BFOV duct enters handholes, the duct(s) with fiber optic cable installed under the BFOI unit shall also require end caps that seal between fiber optic cable and duct so as to be waterproof. Where ducts are left vacant, they shall require end caps that keep the duct waterproof. Labor and material required to install end caps shall be included in this unit.

Contractor shall be required to proof all duct(s) left vacant by blowing a test mandrel through entire length of duct installed. Diameter of test mandrel shall be that it fills duct to 75% capacity. Ducts shall be continuous except at handholes or pedestals. All ducts shall be plugged so as to be water proof. All vacant ducts shall have a Poly Line pull string with a 240 lb. rated breaking strength that is rot and mildew resistant placed in vacant duct(s). On the BFOV unit that will be used for a buried service duct, there shall be a

Poly Line pull string with a 240 lb rated breaking strength that is rot and mildew resistant placed after all drops have been placed through the service duct.

The BFOV unit shall end where the lateral for the BDO or BHF units begins. The duct and trenching to reach the BDO and BHF unit shall be included in the cost of the BDO unit or BHF unit.

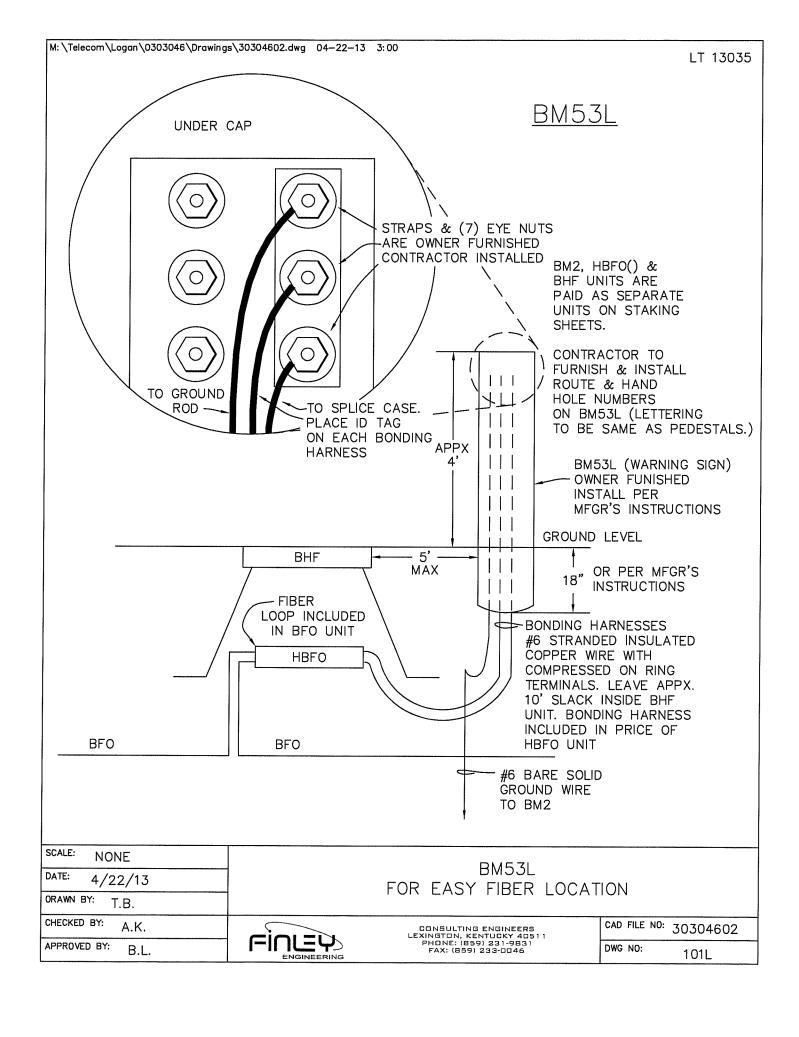
- 6. All pedestals shall be numbered with the route and pedestal number. BDO lettering shall be black letters on orange background.
- 7. All BM2 units shall use a 1/2" x 5' copper-covered steel rod (see BM2 unit description). Connections to ground rod shall be made with a hammerlock connection such as manufactured by Eritech #EHL12FC1K.
- 8. All BM2 and BM2A units shall use #6 AWG bare copper. All BM2A connections shall be made above ground, with Fargo clamps.
- 9. Black tie wraps shall be used to secure all cables in BDO units.
- 10. Color coded tie wraps shall be used for directional markings in all BDO and BHF units. Colors are as follows; Blue for C.O., Green for field, Orange for taps and Red for drops. Cable ties in pedestals and BHF units shall be Panduit #MP250W-175C.
- 11. Fiber Optic cable shall be installed according to cable manufacturer's specifications.
- 12. Pair saver shall be used in lieu of tape on all sheath openings.
- 13. All bond connectors shall be 3M 4462SN connectors.
- 14. Bonding harnesses for HBFO units shall be #6 AWG stranded insulated copper wire with compressed on ring terminals and be of sufficient length to reach bonding bar in BHF unit with splice case laying on the ground outside of BHF unit.

- 15. All fusion splices shall have a bi-directional maximum loss of 0.2 dB. For distribution fibers, Contractor shall perform OTDR readings one-way from the LCC or C.O. to the premise at 1310 and 1550 nm. If one way OTDR loss is above 0.2 dB, contractor shall perform OTDR test from premise back to LCC to verify bi-directional loss is 0.2 dB maximum. For feeder fibers, Contractor shall perform bidirectional OTDR readings at 1310 and 1550 nm. Contractor shall furnish OTDR plots for all fibers on compact disk (CD) with appropriate software. On all fibers that are terminated to a connector, Contractor shall perform light meter tests at 1310 and 1550 nm. Contractor shall furnish OTDR and light meter. Power and light meters shall be capable of bidirectional readings from one location. Power meter readings and 911 address shall be written inside the NIDO.
- 16. HO1 units shall not be paid for testing fibers that are terminated to bulkheads. HO1 units shall be paid for any bare fiber test.
- 17. All splice trays shall be labeled with a Dymo Rhino Pro 5000 label machine or approved equal, using %" wide Rhino flexible nylon water-resistant tape; black print on white tape. Each tray will have the count of the tray labeled. It shall also show the count of each drop and the 911 address of each drop. Each buffer tube shall be marked with directional tie wraps to indicate CO and field. Each drop will be labeled before entering tray with its 911 address. Locate wire for each drop shall be labeled with its 911 address. Drops passing through the BHF(12x12x12) units shall be labeled with their 911 address using the label machine.
- 18. If Subcontractors are used for fiber splicing, then the same Subcontractor shall perform all splicing on a given route including splicing at the NIDO locations.
- 19. Where the SEBO is placed through a landscaped area adjacent to an establishment, Contractor shall place a 1.25" orange duct through the landscaped area and extend 3' beyond landscaped area. Contractor shall install SEBO unit through

this section of duct. Labor and material to place this duct shall be included in the SEBO unit.

- 20. Most ONT installations will require the temporary relocation of existing NID and station wire to allow new ONT to be installed in its location. Use black tie wraps to secure existing NID in an upright position. This shall be included in cost of ONT installation.
- 21. The BM83 unit shall be a 5-foot section of schedule 40 % inch PVC, gray, sunlight-resistant electrical conduit. Conduit clamps shall be 3/4inch mini-strap (Steel City Part # 6HITB) galvanized steel threaded hanger rigid thin wall.
- 22. NIDO/MDU12 enclosures will be Owner-furnished under "Supplement A" materials. Contractor shall furnish all material required for mounting NIDO/MDU12 per manufacturer's instructions and RUS Form PC5A.
- 23. All materials bid that are not specifically called out must be on the latest issue of the List of Materials Acceptable for Use on Telecommunications Systems of RUS Borrowers IP 344-2. All items not on the list that are submitted for use on this contract must be approved by the Engineer prior to bid.
- 24. Upon receipt of "Supplement A" materials from the Owner, the Contractor shall assume full responsibility for the materials received.
- 25. The successful bidder shall furnish to the Owner a certificate or certificates evidencing compliance with 7 CFR, part 1788, Subpart C. The Contractor shall include as coinsured the Owner and their personnel and the Engineer and their personnel. The added costs shall be included in the bid price.

- 26. Contractor shall ascertain and pay all county, city and local license fees and payroll taxes.
- 27. Meeting notes from pre-bid conference shall become a part of the project specifications and contract.



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PROPOSAL SUMMARY

Section	A	•		•		•											•	•	•	**************************************
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PROPOSAL SUMMARY (continued)

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Section	UH			•				•		•							•	•		•	
Section	UM			•					•	•	•	•	•								
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- 2. The Bidder agrees to furnish and use in the construction of the Project under this Proposal, in the event the Contract is awarded to the Bidder, only such materials and equipment as are included in RUS Informational Publication (IP) 344-2, "List of Materials Acceptable for Use on Telecommunications Systems of RUS Borrowers," including revisions adopted prior to the Bid Opening, unless specific written approval has been granted by the Administrator of the Rural Utilities Service (hereinafter called the "Administrator").
- 3. The Bidder understands and agrees that the various Assembly Units on which bids are made in this Proposal are as set out in the "Description of Assembly Units" of the Specifications, that all said bids are on a unit basis, and that the Owner may specify any number or combination of Assembly Units that the Owner, with the approval of the Administrator, may deem necessary for the construction of the Project.
- 4. The Bidder has made a careful examination of the site of the Project to be constructed and of the Plans, Specifications, Descriptions of Assembly Units, Construction Sheets, and forms of Construction Agreement and Contractor's Bond attached hereto, and has become informed as to the location and nature of the proposed construction, the transportation facilities, the kind and character of soil and terrain to be encountered, and the kind of facilities required before and during the construction of the Project, and has become acquainted with the labor conditions which would affect work on the proposed construction.
- 5. The Bidder understands that the location shown on Construction Sheets for existing telecommunications plant and other utilities is approximate, and that the restrictions on cable placement shown on the Construction Sheets may be altered in accordance with Article V, Section A.1.3, as existing underground facilities are located by the Bidder during construction.
- 6. The Bidder agrees, in connection with pole and stub pole units, as follows:
 - (a) To furnish poles and stub pole units, in accordance with specifications, standards and requirements of the Administrator.
 - (b) That the prices for poles set forth herein include the cost of preservative treatment and inspection or insured warranty.
 - (c) To obtain from the Supplier copies of the inspection and treatment reports or insured warranties and to submit such reports or warranties to the Owner as one of the prerequisites to monthly and/or final payments.

- 7. The Bidder agrees to make such changes in construction previously installed in the Project by the Bidder as required by the Owner for prices arrived at as follows:
 - (a) For manhole units, or underground conduit units, the compensation for such change shall be as agreed upon, in writing, by the Bidder and the Owner and approved by the Administrator prior to the commencement of work in connection with such change.
 - (b) For all other units, the compensation for such change shall be the reasonable cost thereof, but in no event shall it exceed two (2) times the labor price quoted in the Proposal for the installation of the unit to be changed. Such compensation shall be in lieu of any other payment for the installation and removal of the original unit. (If a new or replacing unit is installed, payment for such new or replacing unit shall be made as shown in the final inventory.)

Where changes involve plant that is abandoned in place and is not inventoried, or where additional compensation is due as per the above, a Construction Change Order (RUS Form 216) shall be prepared and included with the Closeout Documents.

No payment shall be made to the Bidder for materials or labor involved in correcting errors or omissions on the part of the Bidder which result in construction not in accordance with the Plans and Specifications.

8. The Bidder also agrees that when it is necessary to construct units not shown in the Proposal it will construct such units for a price arrived at as follows:

The cost of materials shall be determined by the invoices.

The cost of labor shall be the reasonable cost thereof but in no event shall it exceed an amount determined by calculating the ratio of the total labor costs to the total material costs in the section of the Proposal involved, and multiplying the cost of materials for the unit in question by this ratio: Provided, however, that in respect of section BM, the ratio shall be calculated for only those units of the section which are similar to the new unit for which a price is to be determined.

9. This Proposal is made pursuant to the provisions of the Instructions to Bidders attached hereto and the Bidder agrees to the terms and conditions thereof.

10. The Bidder shall comply with all applicable construction codes.

Contractor's	License No.			ssued to	it by
the State of Project(s) is		said lic	cense expi	<u>in which</u>	ch the
	, 20				

(a) The Bidder warrants that it possesses

(b) The Bidder warrants that no license is required in the state in which the Project(s) is located.

(Bidder shall cross out that subsection that does not apply)

- 11. The Bidder warrants that this Proposal is made in good faith and without collusion or connection with any person or persons bidding for the same work.
- 12. The Bidder agrees that in the event this Proposal is accepted it will execute a Contract in the form on file with the Owner and that if awarded the Contract, it will make available for use in connection with the proposed construction:
 - a. All necessary tools and equipment.
 - b. Qualified superintendent and foreman.
- 13. The Bidder warrants that it possesses adequate financial resources and agrees that in the event this proposal is accepted it will furnish a Contractor's Bond in one of the forms (RUS Form 168b or 168c) attached hereto and in a penal sum not less than the Contract price, which is the sum of all labor and materials including owner-furnished materials installed in the Project, with a surety or sureties listed by the United States Treasury Department as Acceptable Sureties.

In the event that the surety or sureties on the Contractor's Bond delivered to the Owner contemporaneously with the execution of the Contract or any bond or bonds delivered in substitution therefore, or in addition thereto, shall, at any time, become unsatisfactory to the Owner or the Administrator, the Bidder agrees to deliver to the Owner another or an additional bond.

14. The Bidder agrees to commence the construction of the Project, on a date (hereinafter called the "Commencement Date") which shall be determined by the Engineer after notice, in writing, of approval of the Construction Contract by the Administrator and notice in writing from the Bidder that the Bidder has available sufficient materials to warrant commencement and continuation of construction, but in no event

will the Commencement Date be later than 45 calendar days after the date of approval of the Construction Contract by the Administrator.

The Bidder agrees to strive diligently to obtain materials to commence and maintain construction of the Project and agrees to prosecute diligently and to complete construction of the Project in strict accordance with the Plans, Specifications, Construction Sheets and Special Drawings

within one hundred and thirty (130) calendar days (excluding Saturdays, Sundays, and legal holidays) after the Commencement Date. Provided, however, that the Bidder will not be required to dig holes, set poles, install anchors or install underground conduit if there are more than 6 in. (15.2 cm) of frost in the ground nor to perform any construction on such days when in the judgment of the Engineer, snow, rain, or wind or the results of snow, rain, or frost make it impracticable to perform any operation of construction; provided further that the Bidder will not perform any plowing for the installation of buried cable on public roads or highways if there are more than 2 in. (5.08 cm) of frost in the ground.

To the extent of any time lost due to the conditions described herein and approved in writing by the Engineer, the time of completion set out above will be extended if the Bidder makes a written request therefore to the Owner as provided in Article II, Section 1(a) of the Construction Agreement.

- 15. The unit prices for Assembly Units in this Contractor's Proposal include provisions for the payment of all moneys which will be payable by the Bidder or the Owner in connection with the construction of the Project on account of taxes imposed by a taxing authority upon the sale, purchase or use of materials, supplies and equipment, or services or labor of installation thereof, to be incorporated in the Project as part of such Assembly Units. The Bidder agrees to pay all such taxes and to furnish to the appropriate taxing authorities all required information and reports pertaining thereto.
- 16. The Bidder understands and agrees that the quantities called for in this proposal are approximate, and that the total number of units upon which payment shall be made shall be as set forth in the

inventory based on the Construction Sheets, both of which shall be subject to approval by the Administrator.

If the Owner changes the quantity of any Assembly Unit or Assembly Units specified in this Proposal by more than five (5) percent, and the materials cost to the Bidder is increased thereby to an extent which would not be adequately compensated by application of the unit prices in this Proposal to the revised quantity of such unit or units, such change, to the extent of the quantities of such units in excess of such five (5) percent, shall be regarded as a change in the construction within the meaning of Article II, Section 1(d) of the Construction Contract.

17. The Bidder understands and agrees that approximately

0 miles (0 km) of proposed pole lines in the Project will be constructed along the same right-of-way as that occupied by existing telecommunications lines of the Owner. The Bidder will perform the work in such manner as not to cause interruption of service on such existing lines during the construction of the proposed lines of the Project occupying the same right-of-way. accomplish this, the Bidder may "lean" or alter the position of the existing poles and make other temporary adjustment to line or service wires required so as to permit c onstruction of the Project to proceed without interrupting service on the existing lines. The Bidder understands and agrees that the compensation for such temporary work is included in the unit price for Assembly Units in this Contractor's Proposal required for the construction of Project lines occupying the same right-of-way as existing telecommunications lines of the Owner and that Rearrangement (W) Units will not be applicable to such temporary work.

18. The Bidder understands and agrees that approximately

20.50 miles (_____ km) of proposed buried cable will be constructed along the same right-of-way and adjacent to existing buried telecommunications facilities of the Owner. The sizes and general locations of existing buried telecommunications facilities are shown on the Construction Sheets. It will be the Bidder's responsibility to perform the work in such a manner as not to cause interruption of service on existing buried facilities during the construction of the proposed buried cable. To accomplish this, the Bidder will furnish and operate any cable locating equipment necessary to establish the actual location of existing buried facilities. The bidder will be responsible for maintaining shield continuity and proper grounding of existing cables in the time frame between housing installation and splicing operations.

- 19. The Bidder will furnish, prior to the commencement of buried plant construction, proof, satisfactory to the Owner, of compliance with requirements of highway and road authorities having jurisdiction, including without limitation, the furnishing of a bond or other guaranty, and approval by such authorities of the equipment and methods of construction and repair to be used by the Bidder.
- 20. The Bidder will not perform any work hereunder on Saturdays, Sundays, and legal holidays unless there is urgent need for such work and the Owner consents thereto in writing. The time for completion specified in Paragraph 14 hereof shall not be affected in any way by inclusion of consent to work on the days specified above.
 - 21. The Bidder represents that:

It has \square , does not have \square , 100 or more employees, and if it has, that

It has \square , has not \square , furnished the Equal Employment Opportunity-Employers Information Report EEO-1, Standard Form 100, required of employers with 100 or more employees pursuant to Executive Order 11246 and Title VII of the Civil Rights Act of 1964.

The Bidder agrees that if it has 100 or more employees and has not submitted a report on Standard Form 100 for the current reporting year and that if this contract will amount to more than \$10,000, the Bidder will file such report, as required by law, and notify the Owner in writing of such filing prior to the Owner's acceptance of this Proposal.

The Bidder agrees that it will obtain, prior to the award of any subcontract for more than \$10,000 hereunder to a subcontractor with 100 or more employees, a statement, signed by the proposed subcontractor, that the proposed subcontractor has filed a current report on Standard Form 100.

22. The Bidder certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The Bidder certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it will not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The Bidder agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing

areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. The Bidder agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that it will retain such certifications in its files.

23. The Bidder represents that to the extent required by Executive Order 12549, Debarment and Suspension, and 7 CFR Part 3017, it has submitted to the Owner a duly executed Certification in the form prescribed in 7 CFR Part 3017. The Bidder shall not enter into any subcontract with any person or firm debarred from Government Contracts pursuant to Executive Order 11246.

Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

	Ву
Attest:	(Signature)
(Secretary)	(Name - Type or Print)
(Date)	(Title)
	(Name and Address of Bidder)

(The Proposal must be signed with the full name of the Bidder. In the case of a partnership, the Proposal must be signed in the firm name by each partner. In the case of a corporation the Proposal must be signed in the corporate name by a duly authorized officer and the Corporate seal affixed and attested by the Secretary of the Corporation.)

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CONSTRUCTION AGREEMENT

Agreement made, 20 14 , by and between
Logan Telephone Cooperative (hereinafter called the
"Owner"), a corporation organized and existing under the
laws of the State of Kentucky
and
*Individual *Corporation *Partnership
*Identify applicable organization type.
(hereinafter called the "Contractor"), organized and existing under
the laws of the State of
WHEREAS, the United States of America (hereinafter called the "Government") by the Administrator of the Rural Utilities Service has entered into a loan contract (hereinafter called the "Loan Contract") with the Owner providing for a loan to the Owner for the construction of a rural telecommunications project designated by the Rural Utilities Service as
Auburn CO Phase 2 FTTP .
NOW, THEREFORE, in consideration of the mutual undertakings herein contained, the parties hereto agree as follows:
Article I - ACCEPTANCE OF PROPOSAL
Section 1. Acceptance.
The Owner accepts the Contractor's Proposal and the parties hereto agree that the Assembly Units which shall be used in the construction of the Project, and to which the Unit Prices as set forth in said Proposal shall apply, are as follows, and that the materials which shall be used in the construction of the Project shall be as set forth in said Proposal.
Assembly Units:
Sections, BDO, BFO, BH, BM, HBF, HO, NID, SE, UD, UO, W, XX

For a more detailed description of said Assembly Units and materials reference shall be made to the Material and Construction Specifications, Construction Sheets and Plans, Special Drawings, and Description of Assembly Units. The Contractor shall report any error or ambiguity discovered in the Plans and Specifications to the Engineer before starting work.

Section 2. Description of Contract.

The Instructions to Bidders, the Proposal, Description of Assembly Units, Material and Construction Specifications, Construction Sheets and Plans, and Special Drawings are hereby by reference incorporated herein and together with the Construction Agreement constitute the Contract.

Article II - CONSTRUCTION

Section 1. Time and Manner of Construction.

- (a) The time for Completion of Construction set forth in the Contractor's Proposal shall be extended for the period of any reasonable delay which is due exclusively to causes beyond the control and without the fault of the Contractor, including acts of God, fires, floods, inability to obtain materials, and acts or omissions of the Owner with respect to matters for which the Owner is solely responsible: Provided, however, that no such extension of time for completion shall be granted the Contractor unless within ten (10) days after the happening of any event relied upon by the Contractor for such an extension of time the Contractor shall have made a request therefore in writing to the Owner, and provided further, that no delay in such time of completion or in the progress of the work which results from any of the above causes except acts or omissions of the Owner shall result in any liability on the part of the Owner.
- (b) The sequence of construction shall be as set forth below, the names being the designations of central office areas corresponding to the names shown on the maps attached hereto. For each central office area, the sequence of construction shall be designated by remote serving areas or Work Sectors shown on maps of the central office areas. If no sequence of construction is set forth below, the sequence shall be as determined by the Contractor, subject to the approval of the Engineer.

То	be	determined	at	Pre-Construction	conference

- (c) The Contractor shall perform work in such a manner as to maximize preservation of beauty and conservation of natural resources and minimize marring and scarring of the landscape and silting of streams. The Contractor shall not deposit trash in streams or waterways, and shall not deposit herbicides or other chemicals or their containers in or near streams, waterways or pastures. The Owner or Engineer shall also make available such other environmental information pursuant to the project as in the Environmental Report (ER) covering the project.
- The Owner, acting through the Engineer, and with the approval of the Administrator, may, from time to time, during the progress of the construction of the Project, make such changes, additions to, or subtractions from the Plans, Specifications, Construction Sheets, Special Drawings and cable placement locations which are part of the Contractor's Proposal and in the sequence of construction provided for in the preceding section as conditions may Provided, however, that if any change in the construction to be done shall require an extension of time, a reasonable extension will be granted if the Contractor shall make a written request therefore to the Owner within ten (10) days after any such change is made. And provided, further, that if the cost of materials to the Contractor is increased by such change or addition, the Owner shall pay the Contractor for the reasonable cost thereof, included, if necessary, in a construction contract amendment (RUS Form 526) signed by the Owner and the Contractor, and approved by the Administrator (see 7 CFR part 1753.11). Any claim for additional compensation for a change or addition will not be considered unless the Contractor shall have made a written request therefore and approved by the Owner prior to the commencement of work in connection with such change or addition (refer to Contractor's Proposal, Paragraph 16).
- (e) Except as otherwise agreed to by the Owner, all work shall be performed without interruption to or interference with existing telecommunications service, if any.

Section 2. Supervision and Inspection.

(a) The Contractor shall cause the construction work on the Project to receive constant supervision by a competent superintendent (hereinafter called the "Superintendent") who shall be present at the Project during working hours when construction is

being carried on. The Contractor shall also employ, in connection with the construction of the Project, capable, experienced and reliable foremen and such skilled workmen as may be required for the various classes of work to be performed. Directions and instructions given to the Superintendent shall be binding upon the Contractor.

- (b) The Owner reserves the right to require the removal from the Project of any employee of the Contractor if in the judgment of the Owner such removal shall be necessary in order to protect the interest of the Owner. The Owner shall have the right to require the Contractor to increase the number of its employees and to increase or change the amount or kind of tools and equipment if at any time the progress of the work shall be unsatisfactory to the Owner; but the failure of the Owner to give such directions shall not relieve the Contractor of its obligations to complete the work within the time and in the manner specified in this Contract.
- The manner of construction of the Project, and all materials and equipment used therein, shall be subject to the inspection, tests and approval of the Engineer and the Administrator, and the Contractor shall furnish all information required by the Engineer or by the Administrator concerning the nature or source of any materials incorporated or to be incorporated in the Project. Owner and the Administrator shall have the right to inspect all payrolls, invoices of materials, and other data and records of the Contractor and of any subcontractor, relevant to the construction of the Project. The Contractor shall provide all reasonable facilities necessary for such inspection and tests and shall maintain an office at the site of Project, with telecommunications service where obtainable, and at least one office employee to whom directions and instructions may be delivered. Delivery of such directions or instructions in writing to the employee of the Contractor at such office shall constitute delivery to the Contractor. The Contractor shall have an authorized agent accompany the Engineer when final inspection is made and, if requested by the Owner, when any other inspection is made.
- (d) In the event that the Owner shall determine that the construction contains or may contain numerous defects, it shall be the duty of the Contractor and the Contractor's surety or sureties to have an inspection made by an Engineer approved by the Owner and the Administrator for the purpose of determining the exact nature, extent and location of such defects.
- (e) The Engineer may recommend to the Owner that the Contractor suspend the work wholly or in part for such period or periods as may be deemed necessary due to unsuitable weather or such other conditions as are considered unfavorable for the satisfactory

prosecution of the work or because of the failure of the Contractor to comply with any of the provisions of the Contract: Provided, however, that the Contractor shall not suspend work pursuant to this provision without written authority from the Owner so to do. The time of completion hereinabove set forth shall be increased by the number of days of any such suspension, except when such suspension is due to the failure of the Contractor to comply with any of the provisions of this Contract. In the event that work is suspended by the Contractor with the consent of the Owner, the Contractor before resuming work shall give the Owner at least twenty-four (24) hours notice thereof in writing.

Section 3. Defective Workmanship and Materials.

- (a) The acceptance of any workmanship, materials, or equipment by the Owner or Engineer shall not preclude the subsequent rejection thereof if such workmanship, materials or equipment shall be found to be defective after delivery or installation, and any such workmanship, materials or equipment found defective before final acceptance of the construction shall be remedied or replaced, as the case may be, by and at the expense of the Contractor. Any condemned material or equipment shall be immediately removed from the site of the Project by the Contractor at the Contractor's expense. The Contractor shall not be entitled to any payment hereunder so long as any defective workmanship, materials or equipment in respect to the Project, of which the Contractor shall have had notice, shall not have been remedied or replaced, as the case may be.
- (b) Notwithstanding any certificate which may have been given by the Owner or Engineer, if any workmanship, material, or equipment which does not comply with the requirements of this Contract shall be discovered within one (1) year after completion of construction of the Project or Section, the Contractor shall remedy any such defective workmanship or replace such defective materials or equipment within thirty (30) days after notice in writing of the existence thereof shall have been given by the Owner. In the event of failure by the Contractor to do so, the Owner may remedy such defective workmanship or replace such defective materials or equipment, as the case may be, and in such event the Contractor shall pay to the Owner the cost and expense thereof. Except as otherwise agreed to by the Owner all such corrective work shall be performed by the Contractor without interruption to or interference with existing telecommunications service, if any.

Article III - PAYMENTS AND RELEASE OF LIENS

Section 1. Payments to Contractor.

- (a) Within the first fifteen (15) days of each calendar month, the Owner shall make partial payment to the Contractor for construction accomplished which includes cleanup during the preceding calendar month on the basis of completed Assembly Units invoiced by and certified to by the Contractor, recommended by the Engineer and approved by the Owner solely for purposes of payment. Provided, however, that such approval shall not be deemed approval of the workmanship or materials. Only ninety-five percent (95%) of each such invoice approved during the construction of the project shall be paid by the Owner to the Contractor prior to completion of the Contract. Upon completion by the Contractor of the construction of the Project, the Engineer will prepare a Final Inventory of the project showing the total number of and character of Assembly Units and, after checking such Inventory with the Contractor, will certify it to the Owner, together with a certificate of the total cost of the construction performed. Upon the approval of such certificates by the Owner and the Administrator, the Owner shall make payment to the Contractor of all amounts to which the Contractor shall be entitled thereunder which shall not have been paid: Provided, however, that such final payment shall be made not later than ninety (90) days after the date of completion of construction of the Project, as specified in the Certificate of Completion, unless withheld because of the fault of the Contractor. For purposes of payment pursuant to this Article III, Section 1(a), "Construction Accomplished" shall not include the delivery to the Project Site of cable, wire, and conduit materials for appropriate Assembly Provided, however, that payments to the Contractor for such cable, wire, and conduit materials delivered to the Project Site shall be made to the extent that the aggregate amount of all such payments shall not exceed eighty percent (80%) of the material costs, as set forth in the assembly unit prices, up to a maximum \$1,000,000. The payments shall be considered due and payable when placement of cable, wire, and conduit materials begin. When the amount of cable, wire, and conduit materials delivered to the Project Site exceed the \$1,000,000 initial payment or additional cable, wire, and conduit materials are delivered to the Project Site subsequent to the initial payment, additional payments will be made up to eighty percent (80%) of the material unit prices, only after \$100,000 or more of the cable, wire, and conduit materials have been incorporated into the Project. Payments made on account of such material shall be subtracted from the monthly estimates of completed Assembly Units.
- (b) The Contractor shall be paid on the basis of the number of Assembly Units actually installed at the direction of the Owner, as shown by the inventory based on the Construction Sheets and applicable construction change orders (RUS Form 216 attached hereto): Provided, however, that the total cost shall not exceed the maximum Contract price for the construction of the Project as

computed from the Proposal, unless such excess shall have been approved in writing by the Administrator. It is understood and agreed that this Contract price

- (c) Notwithstanding the provisions of Section 1(a) above, the Contractor may, by giving written notice thereof to the Owner, elect to receive payment in full for any Section of the Project upon:
 - (i) completion of construction of such Section as certified by the Engineer and approved by the Owner and the Administrator;
 - (ii) submission to the Owner and the Administrator of the releases of lien and the certificate referred to in Section 2 hereof;
 - (iii) approval by the Owner and the Administrator of the Final Inventory in respect to such Section; and
 - (iv) submission to the Owner and the Administrator of the consent in writing by the surety or sureties on the Contractor's Bond to payment in full for such Section prior to Completion of the Project.
- Interest at the rate of one and one-half percent (1-1/2%) per annum higher than the "Prime Rate" published in the Wall Street Journal in its first issue of the month, but in no event greater than that allowed by any Federal or State laws shall be paid by the Owner to the Contractor on all unpaid balances due on monthly estimates, commencing fifteen (15) days after the due date; provided the delay in payment beyond the due date is not caused by any condition within the control of the Contractor. Said interest rate shall be determined as of the first date interest becomes due. due date for purpose of such monthly payments shall be fifteen (15) days after submittal by the Contractor to the Owner of its certification of Assembly Units completed and approval by the Owner within fifteen (15) days of the Contractor's submittal. If, for reasons not due to the Contractor's fault, such approval shall have been given within fifteen (15) days of submittal, the due date for purposes of this subsection (d) shall be fifteen (15) days after submittal notwithstanding the absence of the approval of the certification.
- (e) Interest at the rate of one and one-half percent (1-1/2%) per annum higher than the "Prime Rate" published in the Wall Street Journal in its first issue of the month, but in no event greater than that allowed by any Federal or State laws shall be paid

by the Owner to the Contractor on the final payment for the Project or any completed Section thereof, commencing fifteen (15) days after the due date. Said interest rate shall be determined as of the first date interest becomes due. The due date for purposes of such final payment shall be the date of approval by the Administrator of all of the documents requiring such approval, as a condition precedent to the making of final payment, or ninety (90) days after the date of the completion of construction of the Project, as specified in the Certificate of Completion, unless withheld because of the fault of the Contractor, whichever date is earlier.

(f) No payment shall be due while the Contractor is in default in respect of any provisions of this Contract and the Owner may withhold from the Contractor the amount of any claim by a third party against either the Contractor or the Owner based upon an alleged failure of the Contractor to perform the work hereunder in accordance with the provisions of this Contract.

Section 2. Release of Liens and Certificate of Contractor. (See Form 224, Waiver and Release of Lien, and Form 231, Certificate of Contractor, attached hereto)

Upon the completion by the Contractor of the construction of the Project (or any Section thereof if the Contractor shall elect to receive payment in full for any Section when completed as provided above) but prior to payment to the Contractor of any amount in excess of ninety-five percent (95%) of the total cost of all Assembly Units comprising the completed Project or such Section, the Contractor shall deliver to the Owner, in duplicate, releases of all liens and of rights to claim any lien, in the form attached hereto, from all manufacturers, materialmen, and subcontractors furnishing services or materials for the Project or such Section and a certificate in the form attached hereto to the effect that all labor used on or for the Project or such Section has been paid and that all such releases have been submitted to the Owner.

Section 3. Payments to Materialmen and Subcontractors.

The Contractor shall pay each materialman, and each subcontractor if any, within five (5) days after receipt of any payment from the Owner, the amount thereof allowed the Contractor for and on account of materials furnished or construction performed by each materialman or each subcontractor.

Article IV - PARTICULAR UNDERTAKINGS OF THE CONTRACTOR

Section 1. Protection to Persons and Property.

The Contractor shall at all times take all reasonable precautions for the safety of employees on the work and of the public, and shall comply with all applicable provisions of Federal, State and Municipal safety laws, environmental regulations, and building and construction codes.

The following provisions shall not limit the generality of the above requirements:

- (a) The Contractor shall at no time and under no circumstances cause or permit any employee of the Contractor to perform any work upon poles carrying energized electric power lines, except on telecommunications system units having clearances from the electric power system equal to or greater than required by applicable provisions of Federal, State or Municipal laws or regulations and the National Electrical Safety Code (NESC).
- (b) The Contractor shall so conduct the construction of the Project as to cause the least possible obstruction of public highways.
- (c) The Contractor shall provide and maintain all such guard lights and other protection for the public as may be required by applicable statutes, ordinances and regulations or by local conditions.
- (d) The Contractor shall do all things necessary or expedient to protect properly any and all parallel, converging and intersecting lines, joint line poles, highways, other utilities and any and all property of others from damage, and in the event that any such parallel, converging and intersecting lines, joint line poles, highways, other utilities or other property are damaged in the course of the construction of the Project the Contractor shall at its own expense restore any or all of such damaged property immediately to as good a state as before such damage occurred.
- (e) Where the construction corridor of the Project traverses cultivated land, the Contractor shall limit the movement of its crews and equipment so as to cause as little damage as possible to crops, orchards, or property and shall endeavor to avoid marring the lands. All fences which are necessarily opened or moved during the

construction of the Project shall be replaced in as good condition as they were found and precautions shall be taken to prevent the escape of livestock. Except as otherwise provided in respect of buried plant in the description of Assembly Units, the Contractor shall not be responsible for loss of or damage to crops, orchards or property (other than livestock) on the construction corridor necessarily incident to the construction of the Project and not caused by negligence or inefficient operation of the Contractor. The Contractor shall be responsible for all other loss of or damage to crops, orchards, or property, whether on or off the construction corridor and for all loss of or damage to livestock caused by the construction of the Project.

- The Project, from the commencement of work to completion of construction, or to such earlier date or dates when the Owner may take possession and control in whole or in part as hereinafter provided shall be under the charge and control of the Contractor and during such period of control by the Contractor all risks in connection with the construction of the Project and the materials to be used therein shall be borne by the Contractor. The Contractor shall make good and fully repair all injuries and damages to the Project or any portion thereof under the control of the Contractor by reason of any act of God or other casualty or cause whether or not the same shall have occurred by reason of the Contractor's negligence. The Contractor shall hold the Owner harmless from any and all claims for injuries to persons or for damage to property happening by reason of any negligence on the part of the Contractor or any of the Contractor's agents or employees during the control by the Contractor of the Project or any part thereof.
- (g) Any and all excess earth, rock, debris, underbrush and other useless material shall be removed by the Contractor from the site of the Project or relocated (distributed) to the satisfaction of the Owner as rapidly as practicable as the work progresses.
- (h) Upon violation by the Contractor of any of the provisions of this Section, after written notice of such violation given to the Contractor by the Engineer or the Owner, the Contractor shall immediately correct such violation. Upon failure of the Contractor to do so, the Owner may correct such violation at the Contractor's expense. Provided, however, that the Owner may, if it deems it necessary or advisable, correct such violation at the Contractor's expense without such prior notice to the Contractor.
- (i) The Contractor shall immediately notify the Owner of any accidents, giving such data as may be prescribed by the Owner.
- (j) The Contractor shall not proceed with the cutting of trees or clearing of right-of-way without written notification from the

Owner that proper authorization has been received from the Owner of the Property, and the Contractor shall promptly notify the Owner whenever any landowner objects to the trimming or felling of any trees or the performance of any other work on its land in connection with the Project and shall obtain the consent in writing of the Owner before proceeding in any such case.

Section 2. Delivery of Possession and Control to Owner.

- (a) Upon written request of the Owner, the Contractor shall deliver to the Owner full possession and control of any portion of the Project, provided the Contractor shall have been paid at least ninety-five percent (95%) of the cost of construction of such portion. Upon such delivery of the possession and control of any portion of the Project to the Owner, the risk and obligations of the Contractor as set forth in Article IV, Section 1(f) hereof, with respect to such portion of the Project so delivered to the Owner shall be terminated: Provided, however, that nothing herein contained shall relieve the Contractor of any liability with respect to defective workmanship or materials as contained in Article II, Section 3, hereof.
- (b) Where the construction of a Section as defined in Article VII, Section 1(f) shall have been completed and tested by the Contractor, the Owner agrees, after receipt of a written request from the Contractor, to accept delivery of possession and control of such Section upon the issuance by the Engineer of a written statement that the Section has been inspected and found acceptable by the Engineer. For the purpose of the foregoing provision only, a Section may be considered completed even if telecommunications set assembly units have not been installed because the Owner's central office (CO) equipment has not been installed at the time the Section was constructed by the Contractor. Upon such delivery of the possession and control of any such Section to the Owner, the risk and obligations of the Contractor as set forth in Article IV, Section 1(f) hereof, with respect to such Section so delivered to the Owner shall be terminated: Provided, however, that nothing herein contained shall relieve the Contractor of any liability with respect to defective workmanship or materials as contained in Article II, Section 3, hereof.

Section 3. Pre-cutover Testing of the Project.

(a) Prior to the Completion of Construction of the Project, the Owner, acting in accordance with plans of the Engineer, upon written notice to the Contractor, may perform operational tests of any portion or portions thereof. During the period of such tests, the portion or portions of the Project being so tested shall be considered as within the possession and control of the Owner and

governed by the Provisions of Section 2 of this Article. Upon written notice to the Contractor by the Owner of the completion of such tests said portion or portions of the Project shall be considered as returned to the possession and control of the Contractor unless the Owner shall elect to continue possession and control in the manner provided in Section 2 of this Article.

(b) The Owner shall have the right to permanently place in service any portion or portions of the Project delivered to its possession and control pursuant to the provisions of Section 2 of this Article.

Section 4. Insurance.

During the Contractor's performance hereunder, the Contractor shall take out and maintain fully paid insurance providing not less than the minimum coverage required by 7 CFR part 1788, Subpart C.

[X] When checked by the Owner, with respect to the insurance required by 7 CFR part 1788, Subpart C, the Contractor shall include as co-insured the Owner, and their personnel, and the Engineer and their personnel. The added costs shall be included in the bid price.

The Owner shall have the right to require public liability insurance and property damage liability insurance in an amount greater than those required in 7 CFR Part 1788, Subpart C. The added costs shall be included in the bid price.

Upon request by the Administrator, the Contractor shall furnish to the Administrator a certificate in such form as the Administrator may prescribe, evidencing compliance with the foregoing requirements. (See 7 CFR part 1788.55)

Section 5. Purchase of Materials.

The Contractor shall purchase all materials and supplies outright and not subject to any conditional sales agreement, bailment lease, or other agreement reserving to the seller any right, title, or interest therein. All materials and supplies shall become the property of the Owner upon acceptance.

Section 6. Assignment of Guarantees.

All guarantees of materials and workmanship running in favor of the Contractor shall be transferred and assigned to the Owner upon completion of construction and at such time as the Contractor receives final payment.

Section 7. Patent Infringement.

The Contractor shall save harmless and indemnify the Owner from any and all claims, suits and proceedings for the infringement of any patent or patents covering any materials or equipment used in construction of the Project.

Section 8. Permits for Explosives.

All permits necessary for the handling or use of dynamite or other explosives in connection with the construction of the Project shall be obtained by and at the expense of the Contractor.

Section 9. Compliance with Statutes and Regulations.

The Contractor shall comply with all applicable statutes, ordinances, rules, and regulations pertaining to the construction of the Project.

Article V - ENGINEERING, CONSTRUCTION, AND INSPECTION DETAILS

A. Engineering and Construction.

Section 1. Staking of the Project.

- 1.1 The Engineer shall determine the locations and types of all unit assemblies to be installed. As a part of the release for construction, the Contractor shall receive from the Engineer five (5) complete sets of Construction Sheets including reference sketches showing the location of all assembly units.
- 1.2 The Construction Sheets showing the proposed plant shall be jointly reviewed in the field by the Contractor and the Engineer prior to construction. The Contractor shall at that time propose any changes or clarifications he feels desirable. These changes, if approved by the Engineer, will be made at that time and so recorded on the Construction Sheets and initialed by the Engineer and Contractor.
- 1.3 No changes in the construction proposed as set forth on the Construction Sheets shall be made by the Contractor without the prior approval of the Engineer. A representative of the Engineer will remain in the immediate vicinity of the construction activities at all times and will be available to consider and approve any changes proposed by the Contractor, if acceptable. The representative of the Engineer will also be available to inspect any damage to cable or wire and to approve the methods of repair or correction of such damage in accordance with the provisions of these Specifications.
- 1.4 Due to the necessity of making on-the-spot corrections and changes on Construction Sheets, it will not be possible for the Engineer to issue revised Construction Sheets to the Contractor in all cases. When changes are made, dated, and initialed by the Engineer on any set of the Contractor's Construction Sheets, it shall be the Contractor's responsibility to transfer these changes to all other sets of Construction Sheets being used by the Contractor for construction purposes.

Section 2. Construction Sheets and Maps.

The maps showing the location of the central offices and the general routes and locations of all lines in the Project are listed separately hereinafter and are part of the Plans and Specifications. No deviations from these maps, except for minor rerouting and minor changes dictated by field conditions and authorized by the Engineer, shall be made. The Construction Sheets showing types and details of construction to be used for various conditions along the lines are also listed separately hereinafter and are a part of these specifications.

Section 3. Cable Schematics and Assignment Information.

- 3.1 The Engineer will provide the Contractor with five (5) copies of cable schematics for each central office area at the time the Contractor is furnished Construction Sheets for the area. The cable schematics will show the following:
 - (a) Cable and wire sizes, gauges, and pair counts of copper cables.
 - (b) Number of optical fibers.
 - (c) Route designations.
 - (d) Housing or splice closure numbers.
 - (e) Pair counts to be terminated, spliced, or cross-connected at each housing or splice closure.
 - (f) Number of optical fibers to be spliced.
 - (g) Location of repeater points and electronic terminal equipment.
- 3.2 At a time agreed to by the Engineer and Contractor to coordinate with the Contractor's construction schedule, the Engineer shall provide the Contractor with five (5) sets of telephone numbers and cable pair assignment data.

Section 4. Outside Plant Inventory.

The Contractor shall provide a competent representative to work with the Engineer on the ongoing and final inventory and inspection of outside plant units. The wire and cable shall be inventoried immediately after the placement operation.

Section 5. Pre-installation Inspection of Cable.

- 5.1 The Contractor and Engineer shall jointly inspect a representative sample of cable and wire on reels prior to installation. Based on the inspection, the Engineer shall make a determination if the cable and wire are suitable for construction. Unsuitable reels of cable and wire shall be replaced by the Contractor. In the case of nonconformance of a minor nature not affecting performance of the cable, the Contractor and Owner may negotiate a basis for the use of these nonconforming cables. In such cases, the specific characteristic being waived shall be noted in writing.
- 5.2 The Engineer shall determine the degree of inspection and measurements necessary to make a judgment of cable and wire

suitability. This judgment should be based on past experience, current circumstances, and the results of the inspection and any measurements on the cable and wire. The following inspection guidelines are suggested:

- a. Make sure that cable and wire are identified properly on the reel identification labels. Does it contain the proper shield, number of pairs, gauge size, number of fibers, etc. Bi-metallic shields can be detected by using a magnet.
- b. Note any physical damage to the cable and wire. Pay special attention to cables and wires with damaged or weakened reels.
- c. End caps should be secured in place on both ends of the cable and wire. Also, the reel wrap, when present, shall be retained on the reel until the cable and wire are ready to be placed.
- d. Compare sequential markings with labels on reels and double check footages. Measure sequentials on a spot check basis to assure correct tolerances. Note quality and clarity of sequentials.
- e. Filled cable and wire shall be carefully checked for the presence of filling compound at the ends.
- f. Check for uniform jacket thickness and tightness of the jacket. Note any buckling of the jacket which would indicate possible problems with the shield.
- g. As the circumstances warrant, make electrical and/or optical measurements on a sample lot of cable and wire to determine that the appropriate RUS specification requirements are met. The physical inspection of the cable and past history should be used as a guide to determine (a) if any electrical or optical measurements are warranted; or (b) what degree of electrical or optical measurements are warranted. In general, extensive measurements of cable and wire are not recommended.

B. INSPECTIONS AND ACCEPTANCE TESTS

Section 1. General.

- 1.1 Except for the items mentioned in paragraph 1.2, the inspections and acceptance tests specified herein shall be made after the physical completion of the various types of outside plant facilities in each exchange area or work sector and shall not replace the normal supervision, inspection, and tests to be made by the Contractor and the Engineer during the progress of the construction work. Unless otherwise indicated, all inspection and acceptance tests specified herein shall be performed jointly by the Contractor and the Engineer under the direct supervision of the Engineer.
- 1.2 Buried splice closures shall be <u>individually</u> inspected during installation for proper encapsulation and flash tested when applicable. Cable and wire shield or armor continuity tests shall also be conducted on each length of cable or wire containing a buried splice immediately after installation and prior to backfilling. Tests for leakage, continuity, crosses, splits, etc., shall be made on all spliced pairs prior to backfilling.

Section 2. Inspections.

2.1 The Contractor and the Engineer shall jointly inspect splice closures, cable terminals, buried plant housings, Network Interface Devices, service entrances, and other housings applicable to the plant facilities constructed pursuant to the Contract. Except where otherwise stated these inspections shall be on a random sampling basis and the samples inspected in each instance shall consist of at least five percent (5%) of the specified assembly units installed in each exchange, but no fewer than ten (10) terminals, ready-access closures, housings, and Network Interface Device installations in each exchange. A written report giving the date, location of the plant inspected, and tabulated results of the inspections, signed by the Engineer and Contractor shall be presented to the Owner after the inspections are completed.

- 2.2 Where aerial copper cable is installed, a joint inspection shall be made of the sample terminals (including ready-access closures) selected at random throughout the exchange by the Engineer. This inspection shall be made to ensure that:
 - a. All pairs are terminated properly.

- b. Splices are free from reversed, transposed and split pairs.
- c. Shields of aerial cables and suspension strands are properly bonded and grounded and that the bonding harnesses have been properly installed.
- d. Specified pairs have been protected and proper protectors used.
- e. Pair splicing in ready-access closures is made in accordance with pair assignment data furnished to the Contractor by the Engineer.
- f. Specifications for terminal and ready-access closure installations have been met in every aspect in accordance with RUS Splicing Standard Bulletin 1753F-401 (PC-2).
- g. Good workmanship in the pole mounted terminal or closure installations has been performed.
- 2.3 Where aerial fiber cable and self supporting fiber optic cable is installed, a joint inspection shall be made of the sample splice closures selected at random throughout the exchange by the Engineer. This inspection shall be made to ensure that:
 - a. All optical fibers are terminated properly.
 - b. When present, armors of aerial cables and suspension strands are properly bonded and grounded and that the bonding harnesses have been properly installed.
 - c. The minimum bending radius of the buffer tubes is not exceeded.
 - d. Good workmanship in the closure installations has been performed.
- 2.4 Where buried copper cable or wire is installed, a joint inspection shall be made of the sample housings and splice closures selected at random throughout the exchange by the Engineer. This inspection shall be made to ensure that:

- a. Splices are free from reversed, transposed and split pairs.
- b. Pair splicing is made in accordance with pair assignment data issued to the Contractor by the Engineer.
- c. Cable and wire directional markings are as shown in the Construction Sheets.
- d. Shields are properly bonded and grounded and that the bonding harnesses have been properly installed.
- e. Specifications for cable and wire splicing installations have been met in every respect in accordance with RUS Splicing Standard Bulletin 1753F-401(PC-2).
- f. Good workmanship in the housing installations has been performed.
- g. Warning, cable route, and buried splice signs, and housing letters and numbers are properly installed.
- h. <u>All</u> buried splice closures have been installed properly and splices flash tested, when applicable. These inspections may be performed during and immediately after installation as stated in Paragraph 1.2.
- i. All buried service entrances are installed properly in housings at premises.
- 2.5 Where buried fiber optic cable is installed, a joint inspection shall be made of the sample housings and splice closures selected at random throughout the exchange by the Engineer. This inspection shall be made to ensure that:
 - a. All optical fibers are terminated properly.
 - b. Armors properly bonded and grounded and that the bonding harnesses have been properly installed.
 - c. The minimum bending radius of the buffer tubes is not exceeded.
 - d. Cable directional markings are as shown in the Construction Sheets.

- e. Warning, cable route, and buried splice signs, and housing letters and numbers are properly installed.
- f. $\underline{\text{All}}$ buried splice closures have been installed properly. These inspections may be performed during and immediately after installation as stated in Paragraph 1.2.
- g. Good workmanship in the closure installations has been performed.
- 2.6 Where a cable is installed over which electronic carrier systems will operate, an inspection shall be made jointly by the Engineer and the Contractor of the entire length of cable to ensure that:
 - a. All shields and armor are properly bonded and grounded and that the bonding harnesses have been properly installed.
 - b. The specified gauge and size of the copper cable and the number of optical fibers are installed in accordance with the Plans and Specifications.
 - c. No loading coils have been installed on the cable pairs over which the carrier equipment will operate.
 - d. The housings to which the carrier repeaters are to be connected are spaced at the proper intervals. Any minor deviations shall be noted and corrected on the cable schematics.
 - e. Cable directional markings are as shown on the Construction Sheets at each housing where a cable carrier repeater is to be installed.
- 2.7 Where Network Interface Devices are included under this Contract, a joint inspection shall be made of the sample installations selected at random throughout the exchange by the Engineer. The inspection shall be made to ensure that:
 - a. All wire runs have required clearances.
 - b. Aerial service wire spans have proper sags.
 - c. Correct wire fasteners have been used and at required intervals.
 - d. All wires on and in buildings have been installed in a neat and inconspicuous manner.

- e. The Network Interface Device (including its ground) has been properly located, installed, and wired and is of the proper type.
- f. The proper type and gauge of ground wire is used and properly routed and specified bonding is implemented.
- g. A ground rod of proper type is installed, if required.
- h. The buried service guard has been properly installed.
- i. Good workmanship has been used throughout the installation, and any damage to the premises or grounds has been adequately repaired.

Section 3. Acceptance Tests and Measurements.

All acceptance tests and measurements to be performed on the various portions of the outside plant construction pursuant to this Contract, and the party(s) who will participate in conducting the acceptance tests and measurements, shall be as checked in the Schedule of Acceptance Tests and Measurements Table listed below. All tests and measurements shall be conducted by the Engineer in accordance with RUS Bulletin 1753F-201(PC-4), "RUS Standard for Acceptance Tests and Measurements of Telecommunications Plant." A written report including the tabulated results of the acceptance tests and measurements on forms similar to those included in RUS Bulletin 1753F-201(PC-4), "RUS Standard for Acceptance Tests and Measurements of Telecommunications Plant" shall be signed by the Engineer and the Contractor and furnished to the Owner. Where Contractor participation is specified, compensation shall be included in the appropriate cable unit.

Schedule of Acceptance Tests and Measurements

	Test or	Measurer	ment	ent Participants			
Description of Test or	Subscri		Trunk				
Measurement	Loop Pl		Plant	Owner	Engineer	Contractor	
	Dist. Pairs	Feeder Pairs					
Copper Shield or					P	P	
Shield/Armor Continuity							
Conductor Continuity					P	Р	
Conductor Insulation					P	P	
Resistance							
DC Loop Resistance			N/A		P	Р	
DC Loop Resistance			N/A		P	P	
Unbalance							
Loop Measurements (Loop			N/A				
Checking)							
One-Person Open Circuit			N/A		P	P	
Measurement							
Cable Insertion Loss at Carrier Frequencies			N/A		P	P	
Fiber Armor Continuity	Х	Х	X		P	P	
Fiber Optic Splice Loss - Field	X	X	Х		P	P	
Fiber Optic Splice Loss - C.O.	Х	Х	X		Р	Р	
End-to-End Attenuation	Х	Х	Х		P	P	
End-to-End Fiber Signature	X	X	Х		P	P	
Signal-to-C Notched Noise(S/CNN)							
Signal-to-Intermodulation	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Distortion (S/IMD)		<u> </u>		<u> </u>			
Envelope Delay Distortion(EDD)							
Amplitude Jitter(AJ)							
Phase Jitter (PJ)							
Impulse Noise							
Shield or Armor Ground Resistance	Х	Х	Х		Р	Р	

Schedule of Acceptance Tests and Measurements (continued)

	Test or Measurement	Partici	pants	
Description of Test or Measurement		Owner	Engineer	Contractor
CO and Remote Switching			P	P
Terminal (RST) Ground				
Measurement				
Electronic Equipment			P	P
Ground Resistance				

Fiber	Splice	loss	tests	tc	be be	performed	at:	X	_1310nm	X	_1550nm
(Engin	eer to	check	one	or	both	wavelengt	hs	above)			

Engineer to check \square optional tests to be made.

- X These are standard tests and measurements required on facilities as designated by the Engineer, constructed or installed under this Contract.
- NA Not Applicable.
- * These tests will not be required on distribution pairs that are not cross-connected to feeder pairs at time of acceptance testing.
- P Indicates participation in conducting acceptance tests and measurements.

HO1's shall not be paid for testing fibers that are terminated to bulkheads. HO1's shall be paid for any bare fiber test.

Please refer to Special Construction Notes and Special Arrangement Units for additional information.

Article VI - REMEDIES

Section 1. Completion of Contractor's Default.

If default shall be made by the Contractor or by any subcontractor in the performance of any of the terms of this Contract, the Owner, without in any manner limiting its legal and equitable remedies in the circumstances, may serve upon the Contractor and the surety or sureties upon the Contractor's Bond or Bonds a written notice requiring the Contractor to cause such default to be corrected forthwith. Unless within twenty (20) days after the service of such notice upon the Contractor such default shall be corrected or arrangements for the correction thereof, satisfactory to both the Owner and the Administrator, shall be made by the Contractor or its surety or sureties, the Owner may take over the construction of the Project and prosecute the same to completion by contract or otherwise for the account and at the expense of the Contractor, and the Contractor and its surety or sureties shall be liable to the Owner for any cost or expense in excess of the contract price occasioned thereby. In such event the Owner may take possession of and utilize, in completing the construction of the Project, any materials, tools, supplies, equipment, appliances, and plant belonging to the Contractor or any of its subcontractors, which may be situated at the site of the Project. The Owner in such contingency may exercise any rights, claims or demands which the Contractor may have against third persons in connection with this Contract and for such purpose the Contractor does hereby assign, transfer, and set over unto the Owner all rights, claims, and demands.

Section 2. Liquidated Damages.

The time of the Completion of the Construction of the Project is of the essence of this Contract. Should the Contractor neglect, refuse or fail to complete the construction within the time herein agreed upon, after giving effect to extensions of time, if any, herein provided, then in that event and in view of the difficulty of estimating with exactness damages caused by such delay, the Owner shall have the right to deduct from and retain out of such moneys which may be then due, or which may become due and payable to the

Contractor the sum of One Thousand Eight Hundred and 00/100 dollars

(\$\frac{1,800.00}{\text{such construction is delayed in its completion beyond the specified time, as liquidated damages and not as a penalty; if the amount due and to become due from the Owner to the Contractor is insufficient to pay in full any such liquidated damages, the Contractor shall pay

to the Owner the amount necessary to effect such payment in full: Provided, however, that the Owner shall promptly notify the Contractor in writing of the manner in which the amount retained, deducted, or claimed as liquidated damages was computed.

Section 3. Cumulative Remedies.

Every right or remedy herein conferred upon or reserved to the Owner or the Government or the Administrator shall be cumulative, shall be in addition to every right and remedy now or hereafter existing at law or in equity or by statute and the pursuit of any right or remedy shall not be construed as an election: Provided, however, that the provisions of Section 2 of this Article VI shall be the exclusive measure of damages for failure by the Contractor to complete the construction of the Project within the time therein agreed upon.

Article VII - MISCELLANEOUS

Section 1. Definitions.

- (a) The term "Administrator" shall mean the Administrator of the Rural Utilities Service of the United States of America and his duly authorized representatives or any other person in whom or authority in which may be vested the duties and functions which the Administrator is now authorized by law to perform.
- (b) The term "Engineer" shall mean the engineer employed by the Owner to provide engineering services for the Project, and said Engineer's duly authorized assistants and representatives.
- (c) The term "Supervisor" shall mean the person, if any, appointed by the Administrator as the representative of the Government under the provisions of the Loan Contract providing for such appointment in special cases. The term is limited to such special representative of the Government, if any, who is responsible exclusively to the Administrator and does not refer to the manager or any other person employed by the Owner and responsible to it. Every right or remedy conferred upon or reserved to the Owner hereunder may be exercised by the Supervisor, if any.

- (d) The term "Contractor's Proposal" shall mean the proposal of the Contractor including all accompanying documents as therein referred to, a copy of which is attached to and made a part hereof, and upon which the award of the Contract was made.
- (e) The term "Project" shall mean the rural telephone system, or portion thereof, described in the Plans and Specifications, Construction Sheets, and Maps.
- (f) The term "Section" shall mean a central office area of the $\mbox{Project.}$
- (g) The term "Completion of Construction" shall mean full performance by the Contractor of the Contractor's obligations under the Contract and all amendments and revisions thereof except the Contractor's obligations in respect of (i) Releases of Liens and Certificate of Contractor under Article III, Section 2, hereof; (ii) the Inventory referred to in Article III, Section 1, hereof; and (iii) other final documents. The term "Completion of the Project" or "Completion of a Section" shall mean full performance by the Contractor of the Contractor's obligations under the Contract and all amendments and revisions thereof. The Certificate of Completion, signed by the Engineer and approved in writing by the Owner and the Administrator, shall be the sole and conclusive evidence as to the date of Completion of Construction and as to the fact of Completion of the Project or Section.
- (h) The term "Cleanup" shall mean all work necessary to enable the Assembly Units called for on the Construction Sheets to meet specifications as built and to restore the terrain to an acceptable condition.
- (i) The term "Work Sector" shall mean a localized portion of the project for purposes of specifying sequence of construction and shall be shown on the maps.
- (j) The term "Construction Corridor" shall mean a minimum width of 1 rod (5.0 meters) along the designated route for buried cable and wire placement, which permits passage and operation of the construction equipment. Construction Corridors that equal or exceed the minimum width will not be designated on the Construction Sheets.
- (k) The term "Reduced Construction Corridor" shall mean widths less than the standard "Construction Corridor". The approximate width applicable to "Reduced Construction Corridor" shall be shown on the Construction Sheets.

- (1) The term "Restricted Construction Corridor" shall mean a "Construction Corridor" or "Reduced Construction Corridor" where the location within the corridor of cable to be placed is specified due to the presence of existing telecommunications plant or the facilities of other utilities, right-of-way restrictions or other factors. The nature of the restriction and the approximate location of the cable placement within the "Restricted Corridor" shall be shown on the Construction Sheets.
- (m) The term "Unobtained Construction Corridor" shall mean a "Construction Corridor" where the right-of-way has not been obtained. Unobtained Construction Corridors shall be shown on the Construction Sheets.
- (n) The term "Construction Sheets" shall mean staking sheets, strip maps or other sheets provided by the Engineer and designated as work sheets for construction purposes.
- (o) The term "Cable Placement Operation" shall mean a construction crew whose sole responsibility is the installation of telecommunications cable which requires an inspector present during the activity. Other activities not requiring an inspector, such as boring without the installation of a cable, pedestal installation, asphalt repairs, clean up, and splicing shall not be considered cable placement operations.
- (p) The term "Eligible Country" shall mean any country that applies with respect to the United States an agreement insuring reciprocal access for United States products and services and United States suppliers to the markets of that country, as determined by the United States Trade Representative.

Section 2. Materials and Supplies.

In the performance of this Contract there shall be used only such unmanufactured articles, materials, and supplies as have been mined or produced in the United States or an eligible country, and only such manufactured articles, materials, and supplies as have been manufactured in the United States or an eligible country, substantially all from articles, materials, or supplies mined, produced, or manufactured, as the case may be, in the United States or an eligible country; Provided, that articles, materials, or supplies not produced or manufactured in the United States, or an eligible country, may be used in the event and to the extent that the Administrator shall expressly in writing authorize such use as pursuant to the provisions of the Rural Electrification Act of 1938, being Title IV of Public Resolution No. 122, 75th Congress, approved June 21, 1938. The Contractor agrees to submit to the Owner such

certificate or certificates (RUS Form 213, attached hereto), signed by the Contractor and all subcontractors, with respect to compliance with the foregoing provisions as the Administrator from time to time may require.

Section 3. Nonassignment of Contract.

The Contractor shall perform directly, and without subcontracting, not less than fifty percent (50%) of the labor required for the construction of the Project, to be calculated on the basis of that portion of the contract price constituting total labor costs of the Project. The Contractor shall not assign this Contract or any interest in any funds that may be due or become due hereunder or enter into any Contract with any person, firm, or corporation for the performance of the Contractor's obligations hereunder or any part thereof, without the approval in writing of the Owner and the Administrator and of the surety or sureties on any bond furnished by the Contractor for the faithful performance of the Contractor's obligations hereunder. If the Contractor, with the consent of the Owner, the Administrator, and any surety or sureties on the Contractor's Bond or Bonds, shall enter into a subcontract (RUS Form 282, attached hereto) with any subcontractor for the performance of any part of this Contract, the Contractor shall be as fully responsible to the Owner and the Government for the acts and fully responsible to the Owner and the Government for the acts and omissions of such subcontractor and of persons employed by such subcontractor as the Contractor would be for its own acts and omissions and those of persons directly employed by it.

Section 4. Equal Opportunity Clause.

During the performance of this contract, the Contractor agrees as follows:

(a) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- (b) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (c) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union workers' representative of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (d) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and by rules, regulations, and relevant orders of the Secretary of Labor.
- (e) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (f) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.
- immediately preceding paragraph (a) and the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the

administering agency, the Contractor may request the United States of America to enter into such litigation to protect the interest of the United States.

Section 5. Anti-Kickback Acts.

The Contractor acknowledges that it is familiar with the Rural Electrification Act of 1936, as amended, the Anti-Kickback Acts, as amended (40 USC 276c; 41 USC 51 et seq.), and regulations issued pursuant thereto, and 18 USC Sections 287, 874, 1001, as amended. The Contractor understands that the obligations of the parties hereunder are subject to the applicable regulations and orders of the Governmental agencies having jurisdiction in the premises.

Section 6. Franchises and Rights-of-Way.

The Contractor shall be under no obligation to obtain or assist in obtaining: Any franchises, authorizations, permits, or approvals required to be obtained by the Owner from Federal, State, County, Municipal, or other authorities; any rights-of-way over private lands; or any agreements between the Owner and third parties with respect to the joint use of poles, crossings, or any other matter incident to the construction and operation of the Project.

Section 7. Extension to Successors and Assigns.

Each and all of the covenants and agreements herein contained shall extend to and be binding upon the successors and assigns of the parties hereto.

Section 8. Approval of This Contract by the Administrator

This Contract shall become effective only upon the approval in writing of the Administrator: <u>Provided, however,</u> that no obligations shall arise hereinunder unless such approval is given within ninety (90) days from the date of execution by the parties as indicated herein.

Where Contractor is a Corporation,	, this section to be used.		
	-		
Attest: Logan Telephone Cooperative Corporation			
	(Owner)		
Ву	<i>!</i>		
(Secretary)	(President)		
Attest:			
	(Contractor)		
(Secretary)	(President)		
Where Contractor is an individual be used. If partnership, all part			
IN WITNESS WHEREOF, the Owner has in its corporate name by its Presidereunto affixed and attested by its Contractor(s) has (have) hereunto the day and year first above written	dent and its corporate seal to be its Secretary, and the set his (their) hand(s), all as of		
Attest:			
	(Owner)		
D.			
(Secretary)	(President)		
	(Contractor)		
	(Owner or Partners)		

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U.S. Department of Agriculture Rural Utilities Service

CERTIFICATE OF CONTRACTOR

	certifies that he or she is the
	NAME OF CONTRACTOR
the Contractor, in a Construction Contract No	
dated	, 20, entered into between the Contractor and
	the Owner, for the construction of
NAME OF BORROWER	
a Project, which bears the Rural Utilities Service Proj	iect Designation
the Owner to make payment to the Contractor, in acco	certification on behalf of said Contractor in order to induce ordance with the provisions of said Construction Contract.
paid in full, that the names of manufacturers, material	rnished labor in connection with said construction have been suppliers, and subcontractors that furnished material or and the kind or kinds of material or services or both so
NAME	KIND OF MATERIAL OR SERVICES
	-
and that the releases of liens executed by all such man furnished the Owner.	ufacturers, material suppliers, and subcontractors have been
 Date	Signature

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U.S. Department of Agriculture Rural Utilities Service

WAIVER AND RELEASE OF LIEN

WHEREAS the undersigned,	
NAME OF	MANUFACTURER, MATERIAL SUPPLIER OR SUBCONTRACTOR
has furnished to	the following:
NAME C	OF CONTRACTOR
	T.
KIND OF MATERIAL AN	ID SERVICES FURNISHED For
Use in the construction of a project belonging to	NAME OF BORROWER
And designated by the Rural Utilities Service as	
NOW, THEREFORE, the undersigned.	
NOW, THEREFORE, the undersigned,	NAME OF MANUFACTURER, MATERIAL SUPPLIER, OR SUBCONTRACTOR
for and in consideration of \$	and other good and valuable
consideration the receipt whereof is hereby acknowle	edged, do(es) hereby waive and release any and all liens, or
	ct and premises, under any law, common or statutory, on
	hereafter furnished by the undersigned to or for the account of
decount of the or materials, or both, heretofore or r	icreases surmaned by the undersigned to or for the account of
saidNAME OF CO	for said project.
NAME OF CO	ONTRACTOR
Given under my(our) hand(s) and seal(s) this	day of
	Name of Manufacturer, Material Supplier, or Subcontractor
By	
	President, Vice President, Partner or Owner
	If signed by other than one of foregoing, accompanied by
	power of attorney signed by one of the foregoing in favor of
	the signer. (Use applicable designation.)

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U.S. Department of Agriculture Rural Utilities Service

CONTRACTOR'S BOND

Know all men that we,	, as
Principal, and, as	s Surety,
are held and firmly bound unto Logan Telephone Cooperative Corporation, Inc. (he called the "Owner") and unto the United States of America (hereinafter called the "Government", persons, firms and corporations who or which may furnish materials for or perform labor on a	
Rural Utilities Service project known as Auburn CO Phase 2 FTTP	
and to their successors and assigns, in the penal sum of	
dollars (\$) hereinafter	r set forth and
for the payment of which sum well and truly to be made we bind ourselves, our executors, admini.	istrators,
successors and assigns jointly and severally by these presents. Said project is described in a cert	
construction contract (hereinafter called the "Construction Contract") between the Owner and the dated, 2014, pursuant and subject to a certain loan contract (hereinafter	
"Loan Contract") between the Owner and the Government, acting through the Administrator of the	
Utilities Service (hereinafter called the "Administrator").	no itan ar
,	
The condition of this obligation is such that if the Principal shall well and truly perform and fulfil undertakings, covenants, terms, conditions and agreements of the Construction Contract and any thanto whather such amondments are for additions, decreases or charges in materials, their age	amendments

- 2. thereto, whether such amendments are for additions, decreases, or changes in materials, their quantity, kind or price, labor costs, mileage, routing or any other purpose whatsoever, and whether such amendments are made with or without notice to the Surety, and shall fully indemnify and save harmless the Owner and the Government from all costs and damages which they, or either of them, shall suffer or incur by reason of any failure so to do, and shall fully reimburse and repay the Owner and the Government for all outlay and expense which they, or either of them shall incur in making good any such failure of performance on the part of the Principal, and shall promptly make payment to all persons working on or supplying labor or materials for use in the construction of the project contemplated in the Construction Contract and any amendments thereto, in respect of such labor or materials furnished and used therein, to the full extent thereof, and in respect of such labor or materials furnished but not so used, to the extent of the quantities estimated in the Construction Contract and any amendments thereto to be required for the construction of the project, and shall well and truly reimburse the Owner and the Government, as their respective interests may appear, for any excess in cost of construction of said project over the cost of such construction as provided in the Construction Contract and any amendments thereto, occasioned by any default of the Principal under the Construction Contract and any amendments thereto, then this obligation shall be null and void, but otherwise shall remain in full force and effect.
- 3. It is expressly agreed that this bond shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon any amendment to the Construction Contract, so as to bind the Principal and the Surety to the full and faithful performance of the Construction Contract as so amended, provided only that the total amount of all increases in the cost of construction shall not exceed 20 percent of the amount of the maximum price set forth in the Construction Contract. The term "Amendment," wherever used in this bond, and whether referring to this bond, the Construction Contract or the Loan Contract shall include any alteration, addition, extension, modification, amendment, rescission, waiver, release or annulment, of any character whatsoever.
- 4. It is expressly agreed that any amendment which may be made by agreement or otherwise between the Principal and the Owner in the terms, provisions, covenants and conditions of the Construction Contract, or in the terms, provisions, covenants and conditions of the Loan Contract (including, without limitation, the granting by the Administrator to the Owner of any extension of time for the performance of the obligations of the Owner under the Loan Contract or the granting by the Administrator or the Owner to the Principal of any extension of time for the performance of the obligations of the Principal under the Construction Contract, or the failure or refusal of the Administrator or the Owner to take any action, proceeding or step to enforce any

1.

remedy or exercise any right under either the Construction Contract or the Loan Contract, or the taking of any action, proceeding or step by the Administrator or the Owner, acting in good faith upon the belief that the same is permitted by the provisions of the Construction Contract or the Loan Contract) shall not in any way release the Principal and the Surety, or either of them or their respective executors, administrators, successors or assigns, from liability hereunder. The Surety hereby acknowledges receipt of notice of any amendment, indulgence or forbearance, made, granted or permitted.

5. This bond is made for the benefit of all persons, firms and corporations who or which may furnish any materials or perform any labor for or on account of the construction to be performed under the Construction Contract and any amendments thereto, and they, and each of them, are hereby made obligees hereunder with the same force and effect as if their names were written herein as such, and they and each of them may sue hereon.

In witness we are of the anadomic and home organized the instrument to be asserted and their managiness are and a self-

	day of	, 20
	_	Principle (Sea.
ATTEST:	By_{\perp}	
Secretary		
	_	Surety (Sea.
ATTEST:	By_{\perp}	
Secretary		
	_	Address of Surety's Home Office
	By_{\perp}	Resident Agent of Surety

Signatures: The Contractor's Bond must be signed with the full name of the Contractor. If the Contractor is a partnership the Contractor's Bond must be signed in the partnership name by a partner. If the Contractor is a corporation the Contractor's Bond must be signed in the corporate name by a duly authorized officer and the corporate seal affixed and attested by the Secretary of the corporation. A typewritten copy of all such names and signatures shall be appended.

Power of Attorney: The Contractor's Bond must be accompanied by a power of attorney authorizing execution on behalf of the Surety and, in jurisdictions so requiring should be countersigned by a duly authorized resident agent of the Surety.

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Rural Utilities Service

CONTRACTOR'S BOND

(Use only when contract is less than \$1 million and Surety has accepted an SBA* Guarantee)

1.	Know all men that we,, as
	Principal, and, as Surety,
	are held and firmly bound unto
	on a
	Rural Utilities Service project known as
	and to their successors and assigns, in the penal sum of
	dollars (\$), as hereinafter set forth and for the payment of which sum well and truly to be made we bind ourselves, our executors, administrators, successors and assigns jointly and severally by these presents. Said project is described in a certain construction contract (hereinafter called the
	"Construction Contract") between the Owner and the Principal, dated, 20, pursuant and subject to a certain loan contract (hereinafter called the "Loan Contract") between the Owner and the Government, acting through the Administrator of the Rural Utilities Service (hereinafter called the "Administrator").
2.	The condition of this obligation is such that if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of the Construction Contract and any amendments thereto, whether such amendments are for additions, decreases, or changes in materials, their quantity, kind or price, labor costs, mileage, routing or any other purpose whatsoever, and whether such amendments are made with or without notice to the Surety, and shall fully indemnify and save harmless the Owner and the Government from all costs and damages which they, or either of them, shall suffer or incur by reason of any failure so to do, and shall fully reimburse and repay the Owner and the Government for all outlay and expense which they, or either of them shall incur in making good any such failure of performance on the part of the Principal, and shall promptly make payment to all persons working on or supplying labor or materials for use in the construction of the project contemplated in the Construction Contract and any amendments thereto, in respect of such labor or materials furnished and used therein, to the full extent thereof, and in respect of such labor or materials furnished and used therein, to the full extent thereof, and in respect of such labor or materials furnished but not so used, to the extent of the quantities estimated in the Construction Contract and any amendments thereto to be required for the construction of the project, and shall well and truly reimburse the Owner and the Government, as their respective interests may appear, for any excess in cost of construction of said project over the cost of such construction as provided in the Construction Contract and any amendments thereto, occasioned by any default of the Principal under the Construction Contract and effect.
<i>3</i> .	Provided, that the liability of the Principal and Surety hereunder to the Government shall be subject to the same limitations and defenses as may be available to them against a claim hereunder by the Owner, provided, however, that the Government may, at its option, perform any obligations of the Owner required by the contract.
4	It is expressly agreed that this bond shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon any amendment to the Construction Contract, so as to bind the Principal and the Surety to the full and faithful performance of the Construction Contract as so amended, provided only that the total amount of all increases in the cost of construction shall not exceed 20 percent of the

* Small Business Administration

amount of the maximum price set forth in the Construction Contract. The term "Amendment," wherever used in this bond, and whether referring to this bond, the Construction Contract or the Loan Contract shall include any alteration, addition, extension, modification, amendment, rescission, waiver, release or annulment, of any character whatsoever.

- 5. It is expressly agreed that any amendment which may be made by agreement or otherwise between the Principal and the Owner in the terms, provisions, covenants and conditions of the Construction Contract, or in the terms, provisions, covenants and conditions of the Loan Contract (including, without limitation, the granting by the Administrator to the Owner of any extension of time for the performance of the obligations of the Owner under the Loan Contract or the granting by the Administrator or the Owner to the Principal of any extension of time for the performance of the obligations of the Principal under the Construction Contract, or the failure or refusal of the Administrator or the Owner to take any action, proceeding or step to enforce any remedy or exercise any right under either the Construction Contract or the Loan Contract, or the taking of any action, proceeding or step by the Administrator or the Owner, acting in good faith upon the belief that the same is permitted by the provisions of the Construction Contract or the Loan Contract) shall not in any way release the Principal and the Surety, or either of them or their respective executors, administrators, successors or assigns, from liability hereunder. The Surety hereby acknowledges receipt of notice of any amendment, indulgence or forbearance, made, granted or permitted.
- 6. This bond is made for the benefit of all persons, firms and corporations who or which may furnish any materials or perform any labor for or on account of the construction to be performed under the Construction Contract and any amendments thereto, and they, and each of them, are hereby made obligees hereunder with the same force and effect as if their names were written herein as such, and they and each of them may sue hereon.
- 7. Provided, further, that no suit or action shall be commenced hereunder by any person, firm, or corporation who performed work or labor or who furnished materials for the project: (a) Unless such person, firm, or corporation, other one having a direct contract with the Principal (or with the Government in the event the Government is performing the obligation of the Owner), shall have given detailed written notice of claim to: The Principal, and the Owner, within ninety (90) days after such person, firm, or corporation did or performed the last of the work or labor, or furnished the last of the materials for which such claim is made. (b) After the expiration of one (1) year following the date on which Principal ceased work on said contract, it being understood, however, that if any limitation embodied in the Bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to equal to the minimum period of limitation permitted by such law.

In witness whereof, the undersigned have caused this instrument to be executed and their respective corporate seals

	day of		, 20	
			Principle	(Seal)
ATTEST:		Ву	Ттистріє	
Secretary		***************************************		
			Control	(Seal)

Ву
Address of Surety's Home Office
By

Signatures: The Contractor's Bond must be signed with the full name of the Contractor. If the Contractor is a partnership the Contractor's Bond must be signed in the partnership name by a partner. If the Contractor is a corporation the Contractor's Bond must be signed in the corporate name by a duly authorized officer and the corporate seal affixed and attested by the Secretary of the corporation. A typewritten copy of all such names and signatures shall be appended.

Power of Attorney: The Contractor's Bond must be accompanied by a power of attorney authorizing execution on behalf of the Surety and, in jurisdictions so requiring should be countersigned by a duly authorized resident agent of the Surety.

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U.S. Department of Agriculture Rural Utilities Service

SUBCONTRACT

(Under Construction or Equipment Contracts)

AGREEMENT made this	day of	, by and
Between	a (partnership	, individual,
Corporation), (hereinafter called the "Contractor") and		
(hereinafter called the "Subcontractor").		
WHEREAS, the Contractor has entered into a Construction Cont	tract or Equipment Contract h	ereinafter
called the "Contract") dated	,,	, with
		; and
WHEREAS, the Contractor and the Subcontractor desire that a regard to certain work under the Contract be performed by the Subcontra		ns with
NOW, THEREFORE, in consideration of the mutual undertaking agree as follows:	s herein contained, the parties	s hereto
SECTION 1. The Subcontractor agrees to perform the Contractor by this reference, is made a part hereof as though set out in its entirety with		tract which,
SECTION 2. The Subcontractor agrees that all of the work to be	done hereunder shall be carr	ied out as

directed by the Engineer of the Owner in full accordance with the terms and provisions of the Contract.

SECTION 3. The Subcontractor shall maintain all insurance required under the Contract and shall hold the Contractor and the Owner harmless from any and all claims for injuries to persons or for damage to property happening by reason of any negligence, default or misconduct on the part of the Subcontractor, his agents or employees during the performance of this Agreement.

reunder the sum of	
	 Payable as follows:

SECTION 5. The work to be performed hereunder shall be completed to the satisfaction of the Contractor and the Owner within the time specified in the Contract. In the event additions to or alterations in the work to be performed hereunder are made necessary by changes in the Contract, the Subcontractor agrees to perform such additional or alternative work in the same manner and under the same terms and conditions as the Contractor would be required so to perform.

SECTION 6. Upon approval of this Agreement by the Owner, the surety company, if any (hereinafter called the "Surety") furnishing the Performance Bond required by the Contract, and the Administrator of the Rural Utilities Service (hereinafter called the "Administrator"), the Subcontractor shall, if required by Contractor, furnish to the Contractor a Performance Bond in form and substance satisfactory to the Contractor.

SECTION 7. This agreement shall not become effective until consented to and approved in writing by the Owner, the Surety if any, and the Administrator; provided, however, that consent to and approval hereof by the Owner and the Administrator shall in no way operate to release the Contractor from the Contractor's duties and obligations to the Owner under the Contract or operate to release the Surety if any, from its obligations under the Performance Bond required by and relating to the Contract.

RUS FORM **282** Rev. 11-53

¹ Attach power of attorney in favor of person signing for Surety.

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		DATE	
DEPARTMENT	DE ACDICULTUDE		
RURAL UTILI	DF AGRICULTURE TIES SERVICE		
	CHANGE ORDER		
PROJECT	LINE	SHEET NO.	
ORDER NO.	POLES NO.	REFER TO ITEM NO.	
CIDENTO.	POLES NO.	REFER TO TEM NO.	
CHANGE			
İ			
-			
REASON FOR CHANGE			
į –			
]			
CHANGE AUTHORIZED BY:			
CIVINGE ACTIONIZED BY:			
GIANGE ASTRONIZES ST.			
OF WINDER AS THORIZED ST.	The state of the s		
SYSTEM MANAGE	ir	BORROWER'S ENGINEER	
		BORROWER'S ENGINEER	
		OF ABOVE ORDER	

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RUS FORM 526		1. PROJECT	1. PROJECT DESIGNATION				
REV. 8-66							
U. S. DEPARTMENT OF AGR RURAL UTILITIES SER							
			2. AMENDMENTALO				
CONSTRUCTION CONTRACT A	AMENDMENT	2. AMENDN	2. AMENDMENT NO. 3. DATE				
INSTRUCTIONS – Submit three (3) copies	of this form						
And three (3) copies of all attachments. To: THE ADMINISTRATOR		— 4.					
RURAL UTILITIES SERVICE			DETAILS OF CHANGES ARE TABULATED ON SHEET 2 TO ATTACHED AND ARE PART OF THIS AMENDMENT.				
U. S. DEPT. OF AGRICULTURE , WASHI	NGTON, D.C. 2025						
5.							
THE FOLLOWING CHANGES IN CONSTRUCT	TON CONTRACT NU	MBER	DATED	,			
ARE HEREBY MERELY SUBMITTED FOR YO							
6. DATA PERTINENT TO THE ORIGINAL CON BE PRECEDED BY (-) MINUS SIGN).	ITRACT, AND AMEN	DMENTS INCLUDING	G THIS AMENDMENT AI	RE AS FOLLOWS (DECREASE TO			
	ROUTE	SUI	SUBSCRIBERS				
	MILES	SIGNED	POTENTIAL	PRICE			
ORIGINAL CONTRACT				\$			
AMENDMENT NO.1							
AMENDMENT NO. 2							
AMENDMENT NO. 3							
AMENDMENT NO. 4							
AMENDMENT NO. 5							
AMENDMENT NO. 6							
TOTAL WITH THIS AMENDMENT				\$			
7. FOR ADDITIONAL DATA REFER TO STATE		CTION, RUS FORM 5	27 DATED	, WHICH			
ARE ATTACH ED HEREBY AND MADE A PAR							
8. BOND EXTENSION ATTACHED YES NO	9. THE	CONSTRUCTION PER	RIOD WILL BE CHANGE	TO DAYS.			
10. NEW COUNTIES (IF							
ANY)]							
II DESCRIPTION AND REASON FOR GUANG	***						
11. DESCRIPTION AND REASON FOR CHANG	E:						
This amendment, providing for an increa	ase/decrease of \$		in the amou	int of said construction			
Contract, is submitted pursuant to the pr							
America and the undersigned Borrower.							
To delete such items as do not meet with	ı your approval. T	o the extent the ite	ems hereof are approv	ved by you, the construction			
Contract shall be amended.		ACCEPTED					
	f	ACCES TED					
Ву		Ву					
CONTRACTOR				RROWER			
By	4 DTMPD+						
PRESIDENT OWNER PARTNER*		Ву	DDCGID	T'S I'T'			
			PRESID	ESIN I			
	A	APPROVED					
	·····						
DATE			ENGINEER FOR	THE BORROWER			

*Strike out inapplicable tittle. If signed by other than above, power of attorney should be attached or on file with RUS.

L'L	13	UΒ	,

			SHEET OF
RUS FORM 526 REV 8-66 ATTACHMENT	U.S. DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE	PROJECT DESIGNATION	AMENDMENT NUMBER
	CONSTRUCTION CONTRACT AMENDMENT		

DETAILS OF CONTRACT AMENDMENT

				LB OF COI	1 1 1 1 1 1 1	1 1111111	11 10 111 111			
	ACCEMBLA	OUANTERV	NET CHANCE	*CONTRACT AMENDED TO READ			TOTAL	TOTAL		
ITEM NO.		NUMBER UNIT PRICE OF UNITS			TOTAL PRICE	TOTAL INCREASE PRICE	TOTAL DECREASE PRICE			
				OF UNITS	LABOR	MATERIAL	TOTAL	INCL		
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^{*} Show quantities and prices as revised by this amendment.

^{**}Carried forward from previous page.

U.S. Department of Agriculture Rural Utilities Service

CERTIFICATE

With respect to compliance with the second paragraph of the Rural Electrification Act of 1938, being Title IV of the Work Relief and Public Works Appropriation Act of 1938 (Public Resolution No. 122, 75th Congress, approved June 21, 1938).

Rural Utilities Service Project	
The undersigned, being, the	
In a certain contract No dated	, between the undersigned
And	2,
articles, materials or supplies which have not been mined and no manufactured articles, materials or supplies which eligible country substantially all from articles, materials obe, in the United States or in any eligible country, except to Rural Electrification Act of 1938, being Title IV of the Work Resolution No. 122, 75th Congress, approved June 21, 19. Service. For purposes of this certificate, an "eligible country to the service of	tract there have been used or furnished no unmanufactured or produced in the United States ³ or in any eligible country have not been manufactured in the United States or in any r supplies mined, produced or manufactured, as the case may of the extent that compliance with the second paragraph of the rk Relief and Public Works Appropriation Act of 1938 (Public 88) has been waived by the Administrator of the Rural Utilities altry" is any country that applies with respect to the United I States products and services and suppliers to the markets of presentative. ⁴
	By
Date	<i>By</i>

 $^{^{1}}$ Insert "Contractor," "Subcontractor," "Seller," Or "Material Supplier," as the case may be.

Insert the name of the RUS Borrower.

United States means United States, its territories and possessions.

 $^{^{4}}$ A current list of eligible countries may be obtained by contacting RUS.