

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

CALL FOR BIDS

THE UTILITY BOARD OF THE CITY OF KEY WEST, FLORIDA, operator of Keys Energy Services (KEYS), hereby gives notice to prospective bidders that sealed proposals will be received by **KEYS** electronically until 1:30 p.m. on **October 22, 2021** for:

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

KEYS has instituted VendorLink and DemandStar systems to provide current information to potential bidders. These systems will allow you to receive bid information quickly and at your convenience 24 hours a day, 7 days a week. Specifications may be obtained from their websites at www.myvendorlink.com or www.DemandStar.com. Registered vendors will be notified automatically of all Requests for Proposals. You may also visit www.KeysEnergy.com for links and download information for all KEYS bid specifications.

It shall be the sole responsibility of each bidder to have their bid electronically delivered on or before the time for opening proposals last announced to bidders. Bid bonds and/or cashier's checks are to be delivered via FedEx or UPS to:

Keys Energy Services
Bid Opening Committee – KEYS Bid 32-21
6900 Front Street Extended
Key West, FL 33040
Note: This address does not receive US Postal Service.

Any proposal received after the time last announced for opening proposals may be retained by KEYS or returned to the bidder, but such proposal may be rejected as not responsive.

Vendors with questions pertaining to this bid specification must submit them in writing via email to purchasing@keysenergy.com no later than **October 8, 2021 at noon**. Any questions received after noon on October 8, 2021 will not be addressed.

Each proposal should be accompanied by a Certified Check or Bid Bond payable to the **UTILITY BOARD OF THE CITY OF KEY WEST** in an amount not less than five (5%) percent of the amount of the proposal as security.

Each proposal should constitute an offer to **KEYS**, as outlined therein, and should be irrevocable after the time announced for the opening thereof.

At a meeting of the **BID OPENING COMMITTEE** to be held virtually on **October 22, 2021 at 1:30 p.m.** Proposals will be opened and vendor names will be publicly read aloud.

KEYS reserves the right to reject any or all proposals, to waive irregularities and informalities in any or all proposals, and to separately accept or reject any item, items, bid schedule or bid schedules of the proposal which KEYS deems to be in the best interest of the Utility Board.



Tyler Randolph, Purchasing Supervisor

GENERAL

Keys Energy Services (KEYS) is a municipal electric utility supplying power to residents of the lower Florida Keys. KEYS is located in the extreme Southern tip of peninsular Florida, situated in Monroe County, Florida, primarily what is considered the "Lower Keys", which extends eastwardly from Key West to the east end of the Seven-Mile Bridge. Corporate Offices are located in Key West, Florida and the T&D Facility is located on Stock Island at 6900 Front Street Extended, Key West, Florida 33040.

KEYS and its representatives have exercised due care in preparing this Request for Proposals (RFP). All information contained herein is believed to be substantially correct. However, bidders should verify information independently if desired. KEYS and its representatives do not warrant the accuracy of information contained herein.

SPECIFICATIONS

1.0 INTRODUCTION

1.1 PURPOSE AND INTENT

1.1.1 The sole purpose and intent of this Request for Proposal (RFP) is to secure unit pricing and establish a contract for the procurement, installation, and repair of a Fiber Network system. This RFP is also for the purpose of obtaining fixed pricing for the cable, material, equipment and fixed price labor rate(s) for the installation, repair and support services associated with this bid and resulting term contract.

1.1.2 Individual task orders will be issued for each situation that arises during the contract period.

As need arises, notification will be made by telephone, email, or faxed documents to the person listed as the contact person on Proposal Page. If there are other employees that need to be notified please supply their contact information with proposal.

1.2 SCOPE

1.2.1 This RFP delineates the requirements for the material, labor and support services to be provided.

1.2.2 The successful bidder shall, on an as needed basis, be responsible for the integration, supply and/or installation, connection, and maintenance/repair for various types of fiber optic cable, equipment and supplies, and general network-type cabling systems.

Most of the Fiber Network Systems' architecture is aerial but there is some underground. Please note, some customers may require their line extension be run underground. While all of these run over the fiber for

our internal communication, we do not provide any of these services to other agencies; KEYS leases dark fiber..

- 1.2.3** The successful bidder will be required to provide services as specified, on a time and material basis, within the City of Key West to Marathon, Florida within Monroe County.

KEYS has 65 miles of 96 strand fiber that KEYS owns. KEYS has 11 substations and two major properties that the fiber runs through. There are multiple line extensions connecting multiple field devices as well as delivering dark fiber to other government agencies for their own internal communication.

NOTE: KEYS fiber backbone is all dielectric self-supporting (ADSS) cable installed in the supply space as defined in the National Electric Safety Code. Individuals working in this space must be qualified workers.

- 1.2.4** The overall scope includes, but is not limited to, providing and/or installing (including: inter-building, intra-building, fiber optic cabling) fiber optic equipment, and maintenance/repair services. When practical and possible the successful bidder will utilize existing cable runs and conduits, unless directed otherwise by KEYS.
- 1.2.5** Keys Energy Service (KEYS) will periodically notify the successful bidder of required work to be performed.

2.0 SPECIFICATIONS – GENERAL

2.1 ACCEPTANCE

- 2.1.1** Any discrepancies in equipment, defects in cabling, operational difficulties or other problems encountered during final testing, installation of computer and network hardware, inventory, and post operation evaluation will be furnished to the successful bidder in writing, per project phase.
- 2.1.2** Resolution of these items to the satisfaction of KEYS is required prior to system acceptance. KEYS staff shall verify each of the major components, including but not limited to performing random testing of the fiber optic cable.
- 2.1.3** The date of "acceptance" is defined as the date all required cabling, material, and information outlets have been installed, tested, operationally activated (when requested), the required documentation presented to KEYS and all identified discrepancies have been satisfactorily completed, on a per-project basis.

3.0 PROJECT SPECIFICATIONS

3.1 MATERIAL AND WORKMANSHIP

3.1.1 The successful bidder shall schedule and coordinate all installation, rearrangement, removal, or repair activity of any/all equipment, through KEYS.

3.1.2 All work shall be performed in a professional manner that is compatible with Keys Energy Service's normal business.

3.1.3 The successful bidder shall comply with all applicable national, Federal, State, and local rules, regulations, codes, and standards for safety, cyber security, building, electrical, fire, communications low voltage wiring, and installation work. The successful bidder also understands and agrees that all equipment and/or services provided to KEYS shall comply with specifications set forth in the applicable sections of the Federal Communications Commission Rules and Regulations. In addition, work performed shall be in accordance with industry accepted practices and standards, such as those set forth in EIA/TIA, BISCI. Additionally, all cable, wire, and associated material and equipment provided and installed by the successful bidder is to have been tested by an approved testing facility and listed for the intended use. Additional information relating to codes, etcetera is contained in the following Section (3.1.4).

3.1.4 Installations/Products are to be in accordance with the following codes and standards. Where there is a conflict between the bid document and the applicable code, the most stringent shall govern:

- American National Standards Institute (ANSI). TIA/EIA – Telecommunications Industry Association/Electronics Industries Association
- ANSI/TIA/EIA-569-A – Commercial Building Standard for Telecommunications Pathways and Spaces, latest editions
- ANSI/TIA/EIA-606 – The Administration Standard for Telecommunications Infrastructure of Commercial Building, latest edition
- ANSI/TIA/EIA-607 – Commercial Building Grounding and Bonding Requirements for Telecommunications, latest editions
- ANSI/TIA/EIA TSB 72 – Centralized Optical Fiber Cabling Guidelines

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

- ANSI/TIA/EIA TSB 75 – Additional Horizontal Cabling Practice for Open Offices
- ANSI/NFPA 70 Article 318 – Cable Trays
- American Society for Testing and Material (ASTM)
- Building Industry Consulting Service International (BISCI)
 - “Telecommunications Distribution Methods Manual”
 - “Telecommunications Installation Manual”
 - “Customer-Owned Outside Plant Design Manual”
- Underwriters Laboratories (UL)
- Federal Communications Commission (FCC)
- Americans with Disabilities Act Requirements (ADA)
- Occupational Safety and Health Administration Regulations (OSHA)
- National Fire Protection Association (NFPA)
- Institute of Electrical and Electronic Engineers (IEEE) Applications standards including, but not limited to LAN Standard for Ethernet IEEE 802.3
- National Electrical Manufacturers Association (NEMA)
- National Electrical Code (NEC)
- National Electrical Safety Code (NESC)
- ISO/IEC – International Standard Organization and International Electro technical Commission

3.1.5 All cable, equipment, material, components provided by the successful bidder, shall be guaranteed to be new. KEYS reserves the right to supply any/all cable, equipment, material or components out of existing stock.

3.1.6 No cable, equipment, material, components shall be borrowed, substituted, or removed without the express knowledge and consent of KEYS.

3.1.7 The successful bidder shall insure that all personnel assigned to projects have the expertise to perform the services, and have the ability to operate any

and all tools and equipment utilized in conjunction with this service, and all personnel on a job site have appropriate identification clearly identifying the individuals and the firm they represent available upon request. **NOTE:** Bidders employee's shall be required to comply with Keys Energy Service's ordinance/policies regarding access to KEYS facilities and as such will be required to comply with those requirements prior to having access to KEYS facilities.

3.1.8 All inside/outside plant installation personnel for inside plant cabling shall be required to wear uniforms on site. The company's name shall be predominately displayed. KEYS vendor badges are to be worn at all times.

3.1.9 Any and all equipment, material, components, cable, etcetera, provided and installed and operationally activated by the successful bidder that is deemed unacceptable by KEYS or does not comply with the specifications herein and rules, regulations, codes, ordinances, or standards as indicated in other sections of this document will be replaced, with appropriate and compliant products, by the bidder, at no cost whatsoever to KEYS, prior to system acceptance.

3.1.10 All installed backbone fiber cabling shall be end to end tested. Fiber links shall meet the EIA/TIA requirements for connector mated pair reflection loss and splice loss as applicable.

3.1.11 Consumables – Items used for the installation of fiber infrastructure that are expended to complete an installation process are the sole responsibility of the successful bidder. Examples of these items are: jet line, electrical tape, label tape, solvents, cleaners, cable lube, polishing paper, etc...

3.2 MANUALS AND DOCUMENTATION

3.2.1 It will be the responsibility of the successful bidder to provide the test results documentation. Test results should be understood to be part of the work units authorized by KEYS staff.

4.0 RESPONSE TIMES

4.1 INSTALLATIONS/REARRANGEMENTS/REPAIRS

4.1.1 All repairs shall be made using Original Equipment Manufacturer (OEM) components. Substitutes, unless designated as a replacement by the manufacturer of the equipment, are not acceptable.

4.1.2 The successful bidder shall provide service as required/requested and in accordance with manufacturer and warranty standards. Such action shall be continuous until the problem, or problems, are 100% corrected. There will be no charge for any work that is covered under the warranty period.

The successful bidder will be responsible for all warranty work even when contract expires if work/materials are still under warranty.

4.1.3 Should any condition exist which precludes or inhibits the successful bidder's ability to satisfy the required response times, the successful bidder shall inform KEYS in writing within twenty-four (24) clock hours.

4.1.4 The successful bidder must initiate repair and time and material service, after KEYS requests service as follows:

Trouble Service: Within twenty-four (24) clock hours of reported trouble

Time & Material Service: Within ten (10) work days of requested work

4.1.5 Trouble Service: A trouble service is defined as the failure of the network fiber which renders an entire area incapable of performing any of its functions (e.g., a zone, floor, or communications between sites).

A qualified technician must be onsite with a single/multi-mode optical time domain reflectometer (OTDR) and a fusion splicer within twenty-four hours for fault isolation.

Personnel should remain on-site until repairs can be completed, or rest-time is required. Personnel should return to work after completion of rest-time.

4.1.6 Time and Material Service (BAU): Response to BAU requests must be within ten (10) work days of the requested service.

4.1.7 Should any condition exist that would preclude or inhibit the successful bidder's ability to satisfy the maintenance or order work activity within the above specified time frames, the successful bidder shall notify KEYS immediately. Additionally, a description of the limiting or exempting condition(s) must be provided to KEYS with a revised completion date of the required work activity. Furthermore, if such constraining conditions are temporary in nature, the successful bidder shall indicate when and/or under what conditions he would again become fully compliant with required response times.

5.0 COMMENCEMENT OF WORK NOTIFICATION

5.1 KEYS will call the successful bidder's service center, to report troubles and request all repair and maintenance service. KEYS will provide the location and all pertinent information related to the trouble report.

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

- 5.2** KEYS will contact the successful bidder's service center via fax/e-mail, to request T&M service activity. The fax/e-mail transmittal will contain all information necessary for scheduling and responding to the request, including location where work is to be performed, the requesting KEYS contact person's name and telephone number, on site (work location) contact name & telephone number, description of work activity to be performed and/or listing of material to be procured and/or installed, and drawing of the installation location where work is to be performed.
- 5.3** The successful bidder shall meet (and/or discuss project activity/requirements) with KEYS representative prior to the commencement of any project. Furthermore, the successful bidder's Project Manager shall keep KEYS representative advised of work progress from commencement through completion.
- 5.4** Upon request, the successful bidder shall provide a complete itemized estimate, including scope of work, parts, professional services, etc., per project. These per project, estimates shall be approved in writing, by KEYS authorized personnel, prior to commencement of any project. Additionally, there may be instances where KEYS will request a "not-to-exceed" cost for material and labor on a specific project. The successful bidder will be required to provide the "not-to-exceed" cost then, if directed to by KEYS, to complete the specific project for no more than the "not-to-exceed" dollar amount submitted prior to work commencement.
- 5.5** For installed products, "Operational Date" is the date all fiber is ready for use and test results have been provided.

6.0 INVOICING AND BILLING REQUIREMENTS

- 6.1** Please see Payment Procedures and Related Forms in the Terms and Conditions.

7.0 PROJECT SPECIFICATION - TECHNICAL

- 7.1** This "overall" project, with its individual work requests, will consist of, but not be limited to, the procurement, delivery, installation and testing, of fiber optic cables, fiber optic cable terminations and terminating equipment and hardware, etcetera.

7.2 TESTING REQUIREMENTS

- 7.2.1** The successful bidder is required to perform tests on all fiber installed, to ensure operational and technical conformity. Dispersion, splice loss, and optical time domain tests will be performed on all fiber optic cable installed.

7.3 FIBER OPTIC CABLING AND RELATED ITEMS

7.3.1 General Requirements

Furnish, install, splice, and test all fiber optic cable, fiber optic assemblies, patch cords, and all passive network infrastructures including, but not limited to splice trays and closures, patch panels, fan-outs, terminations, and fusion splices.

Install all items in accordance with the manufacturer's instructions or as directed by KEYS.

7.3.2 Above Ground Conduit

Furnish and install conduit for the above ground use (a riser assembly on a utility service poll) consisting of Schedule 80 PVC conduit in accordance with ASTM D 1785, as approved by KEYS.

No reducing couplings or reduction in the inside diameter of conduit shall be permitted. No intermediate metallic conduit (IMC) or thin – wall type electrical conduit shall be permitted for outdoor use.

7.3.3 Fiber Optic Cable Specifications

The following table presents the optical requirements of the single mode fiber:

Optical Specifications

Fiber Attenuation

Maximum Attenuation

Wavelength (nm)	Maximum Value* (dB/km)
1310	0.33 – 0.35
1383**	0.31 – 0.35
1550	0.19 – 0.20
1625	0.20 – 0.23

*Maximum specified attenuation value available within the stated ranges.

**Attenuation values at this wavelength represent post-hydrogen aging performance.

Alternate attenuation offerings available upon request.

Attenuation vs. Wavelength

Range (nm)	Ref. λ (nm)	Max. α Difference (dB/km)
1285 – 1330	1310	0.03
1525 – 1575	1550	0.02

The attenuation in a given wavelength range does not exceed the attenuation of the reference wavelength (λ) by more than the value α .

Macrobend Loss

Mandrel Diameter (mm)	Number of Turns	Wavelength (nm)	Induced Attenuation* (dB)
32	1	1550	≤ 0.05
50	100	1310	≤ 0.05
50	100	1550	≤ 0.05
60	100	1625	≤ 0.05

*The induced attenuation due to fiber wrapped around a mandrel of a specified diameter.

Point Discontinuity

Wavelength (nm)	Point Discontinuity (dB)
1310	≤ 0.05
1550	≤ 0.05

Cable Cutoff Wavelength (λ_{ccf})

$$\lambda_{ccf} \leq 1260 \text{ nm}$$

Mode-Field Diameter

Wavelength (nm)	MFD (μm)
1310	9.2 ± 0.4
1550	10.4 ± 0.5

Dispersion

Wavelength (nm)	Dispersion Value [ps/(nm \cdot km)]
1550	≤ 18.0
1625	≤ 22.0

Zero Dispersion Wavelength (λ_0): $1302 \text{ nm} \leq \lambda_0 \leq 1322 \text{ nm}$

Zero Dispersion Slope (S_0): $\leq 0.089 \text{ ps}/(\text{nm}^2 \cdot \text{km})$

Polarization Mode Dispersion (PMD)

	Value (ps/ $\sqrt{\text{km}}$)
PMD Link Design Value	$\leq 0.06^*$
Maximum Individual Fiber	≤ 0.2

*Complies with IEC 60794-3: 2001, Section 5.5, Method 1, ($m = 20$, $Q = 0.01\%$), September 2001.

The PMD link design value is a term used to describe the PMD of concatenated lengths of fiber (also known as PMD_Q). This value represents a statistical upper limit for total link PMD. Individual PMD values may change when fiber is cabled. Corning's fiber specification supports network design requirements for a 0.20 ps/ $\sqrt{\text{km}}$ maximum PMD.

Dimensional Specifications

Glass Geometry

Fiber Curl	≥ 4.0 m radius of curvature
Cladding Diameter	125.0 ± 0.7 μm
Core-Clad Concentricity	≤ 0.5 μm
Cladding Non-Circularity	≤ 0.7%

Coating Geometry

Coating Diameter	245 ± 5 μm
Coating-Cladding Concentricity	<12 μm

Environmental Specifications

Environmental Test	Test Condition	Induced Attenuation
		1310 nm, 1550 nm & 1625 nm (dB/km)
Temperature Dependence	-60°C to +85°C*	≤0.05
Temperature Humidity Cycling	-10°C to +85°C* up to 98% RH	≤0.05
Water Immersion	23 ± 2°C	≤0.05
Heat Aging	85 ± 2°C*	≤0.05
Damp Heat	85°C at 85% RH	≤0.05

Performance Characterizations

Characterized parameters are typical values.

<i>Core Diameter</i>	8.2 μm
<i>Numerical Aperture</i>	0.14 <i>NA is measured at the one percent power level of a one-dimensional far-field scan at 1310 nm.</i>
<i>Zero Dispersion Wavelength (λ_0)</i>	1313 nm
<i>Zero Dispersion Slope (S_0)</i>	0.086 ps/(nm ² •km)
<i>Refractive Index Difference</i>	0.36%
<i>Effective Group Index of Refraction (N_{eff})</i>	1310 nm: 1.4677 1550 nm: 1.4682
<i>Fatigue Resistance Parameter (N_f)</i>	20
<i>Coating Strip Force</i>	Dry: 0.6 lbs. (3N) Wet, 14-day room temperature: 0.6 lbs. (3N)
<i>Rayleigh Backscatter Coefficient (for 1 ns Pulse Width)</i>	1310 nm: -77 dB 1550 nm: -82 dB
<i>Individual Fiber Polarization Mode Dispersion</i>	0.02 ps/ $\sqrt{\text{km}}$

Mechanical Specifications

Proof Test

The entire fiber length is subjected to a tensile stress ≥ 100 kpsi (0.7 GPa)*.

*Higher proof test levels available.

Length

Fiber lengths available up to 50.4* km/spool.

*Longer spliced lengths available.

Formulas

Dispersion

$$\text{Dispersion} = D(\lambda): \approx \frac{S_0}{4} \left[\lambda - \frac{\lambda_0^4}{\lambda^3} \right] \text{ps}/(\text{nm}\cdot\text{km}),$$

for $1200 \text{ nm} \leq \lambda \leq 1625 \text{ nm}$

λ = Operating Wavelength

Cladding Non-Circularity

$$\text{Cladding Non-Circularity} = \left[1 - \frac{\text{Min. Cladding Diameter}}{\text{Max. Cladding Diameter}} \right] \times 100$$

7.3.4 Fiber Optic Cable Outside Plant (OSP)

Fibers in the fiber optic cable shall be spliced and/or terminated as specified by KEYS/designer.

All optical glass shall be of the same manufacturer.

The cable shall be capable of withstanding a minimum – bending radius of 10 times its outer diameter during operation and 20 times its outer diameter during installation without changing the characteristics of the optical fibers.

All fibers are to be single mode unless specifically noted on plans by KEYS.

Unless specified otherwise, provide cable of water-blocked, loose tube construction with buffer tubes wrapped around a dielectric central strength member. All fiber(s) shall be contained within buffer tubes, and each buffer tube shall have an inside diameter much greater than the total diameter(s) of the fiber(s) it supports. The fiber optic cable shall have a reverse oscillation or planetary stranding structure.

The buffer tubes and all fibers shall be color coded in compliance with EIA/TIA – 598 "Color Coding of Fiber Optic Cables".

Jacket construction and configuration of the groups shall be such that they can easily be separated at splice points, permitting one set of fibers to be cut and spliced while the others remain continuous.

Submit proposed cable designs for KEYS approval prior to procurement and installation of cable plant if the cable is something other than what is normally used.

The cable shall have a water-block tape over the buffer tubes and throughout the remainder of the cable to prevent entry of water.

Each fiber or group of fibers shall be free-floating within the tubes such that all mechanically or environmentally induced stress placed upon the cable is decoupled from the fibers. The air within the buffer tubes shall be displaced with a gel to prevent entry by water and to facilitate free movement of the fiber(s) within.

The cable shall be capable of withstanding a pull tension of 2700 N (600 pounds) under load condition and 600 N (135 pounds) under static conditions and a crush resistance of 220 N/cm (length of cable), without changing the characteristics of the optical fibers.

The outer jacket shall be UV and fungus resistant.

7.3.5 List of Items for Fiber Optics Cabling

The items and services listed below are **not** an all-inclusive list. Furnish, install, splice, and test all fiber optic cable, fiber optic assemblies, patch cords, and all passive network infrastructures including, but not limited to splice trays and closures, patch panels, fan-outs, terminations, and fusion splices. The fiber-optic cables listed below must conform to the specifications in section 7.5.2.

24 fiber, SM, loose – tube construction (underground placement)

24 fiber, SM, all dielectric self-supporting construction (aerial placement)

96 fiber, SM, all dielectric self-supporting construction (aerial placement) (provide by KEYS)

24 fiber, SM, plenum construction

24 fiber, MM, plenum rated construction

7.4 Cable Pulling

Before starting any construction, all of the successful bidder's personnel (including subcontractors) shall be thoroughly familiar with and shall comply with Occupational Safety and Hazard Act (OSHA) regulations, FDOT safety practices and policies, and the Florida State "One-Call" System requirements.

Perform the cable pulling operation in such a manner that the minimum-bending radius of the cable shall not be exceeded in the unreeling and pulling operations. Use entry guide chutes to guide the cable into the pullbox conduit ports. Utilize lubricating compound to minimize cable-to-conduit friction. Lubricating compound must be a water-based compound specifically produced for fiber optic cable lubrication. Lubricants such as dish soap and other substitutes are not allowed.

Corner rollers (wheels), if used, shall not have radii less than the minimum installation bend radius of the cable. A series array of smaller wheels can be used for accomplishing the bend if the cable manufacturer specifically approves the array. Continuously measure the cable pulling tension; the pulling process shall not be allowed to exceed the maximum tension specified by the manufacturer of the cable.

7.5 Optical Splicing and Termination Requirements

Utilize the fusion technique for all splices. Utilize fusion splicing equipment that has been cleaned, calibrated and specifically adjusted to the fiber and environmental conditions. Provide splice enclosures, organizers and incidentals, and cable and preparation tools and procedures, compatible with the cable type being delivered. Maximum allowable splice loss is .04db.

Each spliced fibers shall be packaged in a heat shrinkable splice protection sleeve with strength member. The protection sleeve shall cover the splice and have any bare fiber stripped of its coding.

The use of RTV or silicon is strictly prohibited.

7.5.1 Splice enclosures

Provide and install outdoor optical splice enclosures (3M 2178 or equivalent) capable of aerial, duct, or buried applications. The splice enclosure shall provide space enabling entry of fiber optic cable without exceeding the minimum bend radius of the cable. The splice enclosure shall be capable of through, branch, or mid-span type splice locations. Only one (1) cable per entry port shall be allowed. Furnish and install the splice

closure with the correct number of entry ports as dictated by each fiber optic splice location.

The splice enclosure shall be designed to permit selective fiber splicing (looping of backbone cable in and out while only cutting the desired fibers). The splice enclosure shall allow splicing of all fibers in the cables being terminated.

The enclosure shall be waterproof and re-enterable and shall be designed to protect the buffer tubes in the splice trays.

The splice trays within the enclosure shall be capable of accommodating the required number of splices including storage and protection of slack fiber.

All bids for fiber count splices as listed in Section 7.7.8 are to be inclusive of all necessary labor and materials needed to complete the job. This includes, but is not limited to, labor, splice enclosures, trays, inserts, splice sleeves and all other hardware and consumables.

7.5.2 Splice slack

A maintenance loop at each pull box or fiber optic splice box shall be at least fifty (50) feet of cable (or specified by KEYS/designer); this slack cable shall be coiled and neatly placed in the splice box. This will allow for future splices in the event of a damaged splice. Additionally, every effort shall be made to maintain a minimum of ten (10) feet of cable from each cable's entering the enclosure shall be prepared and installed within the enclosure.

7.5.3 Splice loss

Individual splice loss shall not exceed .04 dB loss.

7.5.4 Installation slack

For all fiber runs approximately 10% slack will be evenly distributed along the path for future repairs or relocations. Aerial locations will utilize "snow shoes" and underground will utilize pull boxes.

7.5.5 Optical termination requirements

ST fiber optic connectors are standard for use on each project and should be utilized by function in the following manner or as specified by KEYS/designer. Utilize ST type fiber optic connectors at the field device level. ST connectors shall be comprised of a ceramic ferrule, nickel plated zinc, or composite connector body to accommodate a field bayonet connection.

Utilize factory pre-terminated assemblies that adhere to the applicable cable, cordage and fiber specifications of this document. All inside plant (IP) assemblies shall meet NEC jacketing requirements and shall have outer jacket coloration of yellow for single mode. No splices of any type are allowed within an assembly. Each assembly is to be individually packaged within a plastic bag, and that bag is to have the submitted manufacturer's part number marked clearly on the outside of said bag. Each assembly shall be labeled as directed by KEYS.

7.5.6 List of Items for Optical Splicing and Termination

The items and services listed below are **not** an all-inclusive list. Furnish, install, splice, and test all fiber optic cable, fiber optic assemblies, patch cords, and all passive network infrastructures including, but not limited to splice trays and closures, patch panels, fan-outs, terminations, and fusion splices. The fiber-optic cables listed below must conform to the specifications in section 7.5.X

24 fiber, SM termination
 96 fiber, SM termination
 24 fiber, SM splice
 96 fiber, SM, splice
 06 fiber, SM, buffer fan-out kit
 12 fiber, SM, buffer fan-out kit
 FO Connector – ST type, SM, Unicam connector
 FO Closure – splice tray, fusion heat shrink, 24 fiber, 12 inch size
 FO Splice – fusion splice, heat shrink <0.04 db, OSP including detail as needed

LABOR

Contractor shall supply pricing for labor. The labor rates shall include the cost of:

- Personal safety equipment, as required by OSHA, and the American Public Power Association (APPA) safety manual, latest revision.
- Standard tools for maintenance work including personal tools and gear are included in labor rates.

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

- Standard safety equipment
- Necessary equipment for night work (e.g. spotlights)
- Necessary personal gear for inclement weather (i.e. raingear, winter clothing, etc.)

Labor rates shall be paid at an hourly rate.

SCHEDULE

As need arises, notification will be made by telephone or email to the person listed as the contact person on your proposal. If you have other employees you would like notified please include their contact information on a separate sheet in your proposal.

PROPOSAL CONTENTS & EVALUATION

The proposal should include a description of the firm's capabilities and experience with providing the requested services, including a description of any special qualifications which are indicative of working familiarity with similar projects.

The proposals will be evaluated by a review team. The evaluation criteria will include a variety of considerations, including, but not limited to:

- a. Experience with similar projects;
- b. Range and suitability of services provided;
- c. Project management approach;
- d. Pricing;
- e. References.

BID SUBMITTAL

Proposals shall be submitted electronically via VendorLink or DemandStar prior to the opening date and time. Emailed proposals will not be accepted. Should a vendor not be able to submit via VendorLink or DemandStar, paper submittals will be accepted. Paper submittals must be received prior to the opening date and time in order to be considered.

Bid bonds and/or cashier's checks must be sent via **FedEx or UPS only** to:

Keys Energy Services
Bid Opening Committee
6900 Front Street Extended
Key West, Florida 33040

In addition to the Proposal Page, Bidders shall also submit the following:

1. Bid Bond or Cashier's Check for 5% of Total
2. Proposal Page
3. Bidder's Statement
4. Public Entity Crimes Sworn Statement
5. Drug-Free Workplace Statement
6. Safety Compliance Affidavit
7. Insurance Agent's Statement

KEYS ENERGY SERVICES **GENERAL TERMS & CONDITIONS**

ADDITIONS/DELETIONS

KEYS reserves the right to add or delete any item from this bid or resulting contract when deemed to be in the best interest of KEYS.

ALTERATIONS IN PROPOSAL

Except as otherwise provided herein, Proposals which are conditional in any way, or which contain erasures or interlineations not authenticated as provided herein, or which contain items not called for, items not in conformity with applicable laws, changes, additions, recapitulations, alternative Proposals, or any other modifications of the Proposal forms which are not specifically called for in the Contract Documents, will be rejected as not responsive unless specifically agreed to in writing by KEYS. Erasures, interlineations or other corrections shall be authenticated by affixing in the margin immediately opposite the correction, the handwritten initials of each person executing the Proposal.

APPLICABLE LAW

This Contract shall be interpreted in accordance with the law of the State of Florida.

ASSIGNMENT

No contract awarded under these terms, conditions, and specifications, may be sold, transferred or assigned in full or part without the written permission of KEYS. Such written permission shall not relieve contractor from its obligations and liabilities.

ATTORNEY FEES

The prevailing party in any litigation or mediation relating to the contract shall be entitled to recover its reasonable attorney fees and costs from the other party for all matters, including, but not limited to, appeals.

BASIS OF AWARD

- A. The award will be made by KEYS on the basis of the Proposal from the lowest responsive* responsible**, Bidder which, in KEYS' sole and absolute judgment, will best serve the interest of KEYS.
- B. KEYS reserves the right to accept or reject any or all Proposals, and to waive any informalities and irregularities in said Proposal.
*Responsive Bidder: Any person, firm, or corporation submitting a bid for the work contemplated whose bid form is complete and regular, free of excisions or special conditions and has no alternative bids for any item unless requested in the technical specifications.
**Responsible Bidder: Any person, firm, or corporation submitting a bid for the work contemplated who maintains a permanent place of business, has adequate manpower and equipment to do the work properly and within the time limit that is established, has adequate financial status to meet his obligations contingent to the work and has a history of performance of like contracts (acceptable to KEYS).
- C. Evaluation: The lowest evaluated price shall be determined from an analysis which assesses the impact of the contract price, operational and maintenance costs.

BID BOND/CERTIFIED CHECK

Each proposal should be accompanied by a Bid Bond or Certified Check payable to the UTILITY BOARD OF THE CITY OF KEY WEST in an amount not less than five (5%) percent of the amount of the proposal as security.

BID PROPOSAL PRICING

All bid proposals must remain firm for 120 days minimum.

BIDDER QUALIFICATIONS

If a pre-bid meeting is held, please provide the following information: a brief description of company and verifiable references for projects of a similar nature performed over the last three years. If no pre-bid meeting is held, please provide this information in your bid response.

CITY/COUNTY LICENSING

For the term of the contract, Contractor shall maintain City of Key West and Monroe County licenses and/or other requirements to work within the City or County limits. Contractor should provide KEYS with a copy of all licenses.

COMPLETENESS OF PROPOSAL

- A. Each Bidder shall respond to all items on Proposal Page. When quoting on all items including optional items, bidders shall insert the words "No Bid" in the space provided for any item for which no offer is made. Failure to do so may result in the Proposal being rejected as not responsive.
- B. KEYS will consider alternative, additive, or deductive options with no initial pricing.
- C. Each Proposal shall include specific acknowledgment of receipt of all Addenda issued during the bidding period. Failure to do so may result in the Proposal being rejected as not responsive.
- D. Each Bidder shall furnish information relating to its experience, facilities, material, equipment and business as is required by the Proposal form. Failure to do so may result in the Proposal being rejected as not responsive.
- E. Additional technical data furnished by a Bidder, but not required by the Request for Proposal (RFP), may at KEYS' option be considered part of the Proposal to the extent that it is supplementary to, is consistent with and not contrary to the RFP.

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

CONTACT REFERENCES

KEYS contact for bidding requirements and technical specifications: Tyler Randolph, Supervisor of Purchasing, Tyler.Randolph@keysenergy.com or purchasing@keysenergy.com.

CONTRACT DURATION

The duration of the base contract shall be from the date of execution by the Utility Board through September 30, 2024. The contract can be extended for two (2) additional one (1) year terms. If this contract is for a unit price and estimated quantities and if KEYS desires, KEYS and Contractor can extend the contract at the same unit price. KEYS reserve the right to cancel this contract without cause with 30 days written notice and with cause within 10 days.

CONTRACT CHANGES

No changes, over the contract period, shall be permitted unless prior written approval is given by the Utility Board of the City of Key West, Florida. No Contractor shall assign the contract or any rights or obligations there under without the written consent of KEYS. In the event of such approved subcontracting, contractor agrees to provide KEYS with written documentation relative to the Subcontractor(s) employed in this contract.

CONTRACT COMPLIANCE

All contracts are subject to the terms and conditions of the Fair and Accurate Credit Transactions Act of 2003. The said provisions and compliance therewith are expressly made part of the contract and are binding covenants on the party contracting with KEYS.

CONTRACTOR LIABILITY

In the event of default by contractor, KEYS reserves the right to utilize the next lowest Bidder as the new Contractor. In the event of this occurrence, the next lowest Bidder, if it wishes the award, shall be required to provide the bid items at the prices as contained on its proposal or bid for this specification.

CONTRACTOR'S RESPONSIBILITIES

- A. Contractor shall be responsible for all loss, damage, vandalism, theft, etc. for all equipment, tools, materials, etc. left on the job site.
- B. Contractor shall be responsible for maintaining the site in a clean condition during installation. Contractor and KEYS at which time the site should be cleaned up will make a final walk down of the sites.
- C. Prior to completion of demobilization, Contractor shall remove all construction materials, waste, demolition debris, excess materials, temporary installation, etc. that have not been specifically turned over and accepted by KEYS.
- D. Contractor shall be responsible for any and all costs for cleanup of oil or gasoline spills which result from his equipment or from any work performed as part of this contract.
- E. Permit violations or environmental damage caused by contractor shall be mitigated or repaired by contractor, at contractor's expense, to the satisfaction of the governing authority citing such damage.
- F. Items discussed in this section are not intended to be all-inclusive of Federal, State, and Local Laws and Regulations. Information is provided as anticipated minimum requirements. Contractor shall be familiar and comply with all requirements of applicable laws and regulations.
- G. Contractor will assume total responsibility for materials, delivery to/from job site, installation, and testing of system.

DELIVERY

- A. Delivery, inspection and acceptance - delivery, inspections and acceptance will be at destination, F.O.B. Key West as specified in the RFP, KEYS Warehouse, unless otherwise provided. Until delivery and acceptance and after any rejections, risk of loss will be on the Vendor, unless loss results from negligence of KEYS.
- B. Notwithstanding the requirements for any KEYS inspection and test contained in the specifications applicable to this proposal, except where specialized inspections or tests are specified for performance solely by KEYS, contractor shall perform or have performed the inspections and tests required to substantiate that the supplies and services provided under this proposal conform to the drawings, specifications and proposal requirements listed herein, including if applicable, the technical requirements for the manufacturer's part numbers specified herein.
- C. Delivery of Excess Quantities – Contractor is responsible for the delivery of each item quantity within allowable variations, if any. If contractor delivers and KEYS receives quantities of any item in excess of the quantity called for (after considering any allowable variations of quantity) such excess quantities will be treated as being delivered for the convenience of contractor. KEYS may retain such excess quantities without compensating the interests herein. Quantities in excess, will at the option of KEYS, either be returned at contractor's expense, or retained and paid for by KEYS at the contract unit price.
- D. Deliveries – In the event of failure to deliver material of the quality or within the time specified, KEYS may cancel the order and buy elsewhere. Contractor will be responsible for any cost differences encountered in the procurement of materials. Failure of KEYS to exercise this option with respect to any installment shall not be deemed a waiver with respect of future installments, if any.
- E. Delivery tickets – All shipments under this agreement shall be accompanied with delivery tickets, or packing slips, in triplicate, which shall contain the following minimum information: name of supplier, purchase order number, date of order, date of delivery or shipment, itemized list of supplies or services furnished, quantity, unit price, and extension of each line item. Upon delivery, the Warehouse will retain a copy of the related delivery ticket.
- F. Inspection, Acceptance and Title – Inspection and acceptance will be at destination, unless otherwise provided. Title and risk of loss or damage to all items shall be the responsibility of the contract supplier until accepted by KEYS in writing.

ENTIRE AGREEMENT

The terms, specifications and/or drawings included in a duly executed contract will constitute the entire agreement between the parties. No modification or waiver of terms of this agreement shall be binding, unless in writing, signed by a duly authorized representative of KEYS.

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

ERROR IN BID CALCULATION

In the event there is a mathematical error in the bid, KEYS will recalculate using the line items and correct the total.

EXECUTION OF PROPOSAL

If a Proposal is made by a partnership, it shall contain the name and address of each partner and shall be executed in the partnership name, followed by the handwritten signature of a partner authorized to execute the Proposal for the partnership. If a Proposal is made by a corporation, it shall be executed in the name of the corporation, followed by the handwritten signature of an officer authorized to execute the Proposal for the corporation, and the printed or typewritten designation of the office he holds in corporation. Another partner of the partnership or official of the corporation shall attest to the authority of the person executing the Proposal. KEYS may require any Bidder to furnish certified copies of extracts of the minutes of meetings of the governing body of the Bidder authorizing execution of the Proposal and Contract Documents.

FORCE MAJEURE

KEYS shall not be liable in any way to contractor as a result of an event, circumstance or act of a third party that is beyond a party's reasonable control (e.g. an act of God, and act of the public enemy, an act of a government entity, strikes or other labor disturbances, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war and riots).

LITIGATION SEARCH

KEYS reserve the right to conduct a litigation search on contractor's history of past litigation.

LIQUIDATED DAMAGES

In the event the Scope of Work is not substantially complete on or before the mutually agreed completion date established for each job, liquidated damages shall be payable by Contractor to KEYS in the amount of \$250.00 per day for each day the Scope of Work is not substantially complete.

The parties recognize that the damages to be incurred by KEYS as a result of delay in completion of the Scope of Work are difficult to estimate at this time and would be difficult for KEYS to prove. The parties intend that the payment of Liquidated Damages set forth above would serve to compensate KEYS for its damages resulting from such delay in completion, and constitutes a reasonable, good faith approximation of such damages. The liquidated damages set forth herein are not intended to, nor shall be construed to, function as a penalty, and shall not preclude other remedies available to KEYS at law or in equity.

MATERIAL

No goods or materials provided pursuant to the proposal shall consist of or contain any equipment which has been manufactured or supplied by persons or entities owned by, controlled by, or subject to the jurisdiction or direction of the government of the People's Republic of China.

MODIFICATION OF PROPOSAL

A modification of a proposal already received will be considered only if the modification is received prior to the time last announced for opening Proposals. All modifications shall be made in writing, executed and submitted in the same form and manner as the original proposal, fax or E-mail. Phone modifications will not be considered.

NOTICE TO PROCEED

KEYS will issue the successful bidder a Notice to Proceed after the following activities have been completed: 1) the Performance Bond and Insurance Certificates have been reviewed, 2) a Pre-Construction meeting has been held and issues regarding environmental, lien releases, payment procedures, safety, security, and use of sub-contractor notification were discussed. Two copies of this document will be provided. The successful bidder will be asked to complete the signature block on both documents and return one signed original document to acknowledge receipt of this notice.

OPENING PROPOSALS

At the time and place last announced for opening Proposals, each Proposal which has been received prior to the time last announced for opening Proposals, except those which have been properly withdrawn, will be publicly opened, irrespective of any irregularities or informalities in such Proposals.

KEYS INSPECTIONS/MEETINGS

KEYS will make inspections and/or meetings as deemed necessary to ensure that all work is being performed in compliance with these specifications and guarantees.

PAYMENT

Payment will be made after acceptance of services and materials and within 30 days after receipt of invoice. KEYS will hold 10% retention until 30 days after project completion and final acceptance. Contractor will complete and submit the provided Contractor's Request for Payment form, prior to any payment of draw request. Contractor's request for payment shall be accompanied by a breakdown of material and labor associated with that particular request. KEYS does not pay service charges on late payments.

PENALTIES

KEYS reserves the right to increase or decrease quantities shown without penalties.

PERFORMANCE BOND

Within ten (10) days after contractor receives the Notice of Utility Board Approval and prior to the execution of the Contract, contractor shall furnish a Performance and Payment Bond in the form acceptable to KEYS, with corporate Surety satisfactory to KEYS such bond shall insure

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

the full and faithful performance of the Contract, including the payment of faithful performance of the Contract, including the payment of all obligations arising there under, and shall be in an amount equal to (one hundred) 100% of the Total Contract Amount unless otherwise provided in these specifications. Such bond shall further comply in all respects with the laws of the State of Florida.

PERSONNEL

- A. The project supervisor must be capable of communicating fluently in English at all times.
- B. On a project, the foreman must be capable of communicating fluently in English.
- C. All employees of company must be United States Citizens or legally authorized to reside and work in the United States.
- D. KEYS may request at any time throughout the contract the following within eight (8) hours:
 - Proof of citizenship for all employees
 - Proof of employee's salary is at or above state and federal minimum requirements
 - Proof of eligibility to legally work in the United States

POSTPONEMENT OF OPENING

KEYS reserves the right to postpone the date and time last announced for opening Proposals and such postponement may be made at any time prior to the time last announced for opening Proposals. KEYS will give written notice in the form of an Addendum by email to each party to whom Contract Documents have been issued in addition to posting the Addendum on DemandStar, Vendorlink, and Keysenergy.com websites, stating the change in date and time of any such postponement.

PRICES

- A. All prices bid shall be firm unless the conditions of the RFP permit price escalation. If an escalation method or indices are specified, the Bidder shall indicate in its bid the specific items subject to escalation, and shall give the method and indices to be used in computing the amount thereof.
- B. The vendor shall provide the proposal price in U.S. dollars only.

PROPOSAL GUARANTEE

- A. The Proposal Guarantee shall be the cashier's check or Bid Bond required in the Notice to Bidders. A bid bond or cashier's check in lieu of a surety bond in the amount of (five) 5% of the proposal shall be submitted with all proposals. This bid bond requirement is to be used as security and will be returned to bidder after KEYS enters into a Contract with the successful bidder. This (five) 5% shall be based on the total bid price. The bid bond or cashier's check shall be valid for a period of no less than 120 days after bid opening date.
- B. KEYS may reject all Proposals, and in such event, all cashier's checks and Bid Bonds will thereupon be returned to the Bidders.
- C. When a Proposal is accepted, all checks and Bid Bonds will thereupon be returned to the bidders, except for the approved proposal. The cashier's check or Bid Bond of the approved Bidder will be returned after completion of the requirements in the following paragraph.
- D. Within (ten) 10 days after delivery of Notice of Utility Board Approval, or such additional time as is allowed by KEYS, the Bidder shall furnish satisfactory Performance and Payment Bond, Insurance Certificate and Insurance Policies.

PROTESTS

Any bidder who believes he has been aggrieved in connection with the staff recommendation or award of a contract may protest in writing to the KEYS Purchasing Department. The deadline for filing a protest is prior to the commencement of the Utility Board meeting wherein the award is to be considered. It is the responsibility of the bidder to ascertain the bid award information from DemandStar or VendorLink. Protests shall specifically describe the subject matter and facts giving rise to the protest.

PUBLIC RECORDS ACT

Pursuant to F.S. 119.0701 of the Public Records Act, any request to inspect or copy public records relating to a public agency's contract for services must be made directly to the public agency. Contractors is required to comply with public records laws and upon request by the public records custodian, shall provide a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost not to exceed the cost provided in Ch. 119, F.S. or as otherwise provided by law. A contractor who fails to provide the records to the agency within a reasonable time may be subject to penalties as provided in F.S. 119.10

IF CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

**KEYS ENERGY SERVICES
P.O. BOX 6100
Key West, FL 33041-6100
(305) 295-1067
Gricel Owen**

Email: gricel.owen@keysenergy.com

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

PUBLIC ENTITY CRIME CLAUSE

Any person submitting a bid or proposal in response to this invitation must execute the enclosed form **FOR 094, SWORN STATEMENT UNDER SECTION 287.133 (3) (a), FLORIDA STATUTES ON PUBLIC ENTITY CRIMES**, including proper check(s), in the space(s) provided, and enclose it with his bid proposal. If you are submitting as bid or proposal on behalf of dealers or suppliers who will ship commodities and receive payment from the resulting contract, it is your responsibility to see that copies of the form are executed by them and are included with your bid or proposal. Corrections to the form will not be allowed after the bid or proposal opening time and date. Failure to complete this form may result in immediate disqualification of your bid or proposal.

QUALITY ASSURANCE PROVISIONS

A system of test and inspection shall be used to insure receipt of the quality and quantity of material(s)/service(s) purchased. Material(s)/service(s) will be promptly inspected and any discrepancies from the purchase order and/or the supplier's invoice shall be reported immediately to the Director of Administration, Compliance & Internal Policies.

RELEASE OF LIENS

Contractor is to furnish a release of liens for sub-contractual materials and labor prior to each payment. In addition, contractor is to furnish the standard form of "Statement Concerning Claims."

REJECTION

The Utility Board reserves the right to reject any or all proposals, to waive irregularities and informalities in any or all proposals, and to separately accept or reject any item, items, bid schedule or bid schedules of the proposal which the Utility Board deems to be in the best interest of the Utility Board.

RETAINAGE

A 10% retainage fee will be applied to all payment requests.

SAFETY/MAINTENANCE OF TRAFFIC (MOT)

Contractor is to provide all required Safety and Traffic Control equipment as required by FDOT, City of Key West, or Monroe County MOT. Personnel are required to be trained in MOT as required. Contractor is to provide copies of certification of MOT training.

SAFETY AND PROTECTION

Examination of existing facilities: After the Contract is awarded and before commencement of the work, Contractor and KEYS shall make thorough examination of all existing structures and facilities associated with the project.

Safety requirements: Contractor shall do whatever work is necessary for safety and be solely and completely responsible for conditions of the job site, including safety of all persons (including employees) and property during the project period. This requirement shall apply continuously and not be limited to normal working hours.

Safety provisions shall conform to Federal and State Departments of Labor, Occupational Safety and Health Act (OSHA), and other applicable Federal, State, County, and Local Laws, Ordinances, Codes, requirements set forth herein, and regulations that may be specified in other parts of these specifications. Where these are in conflict, the more stringent requirement shall be followed. Contractor shall become thoroughly familiar with governing safety provisions and shall comply with the obligations set forth therein.

Contractor shall develop and maintain for the duration of the project, a safety program that will effectively incorporate and implement required safety provisions of the American Public Power Association (APPA) Safety Manual. Contractor is responsible for obtaining the latest edition of the APPA Safety Manual at their expense from APPA at <http://www.publicpower.org/topics/landing.cfm?ItemNumber=38512>. Contractor shall appoint a qualified employee who is authorized to supervise and enforce compliance with the APPA safety Manual. It is not the responsibility of KEYS to review or police contractor's implementation of the APPA Safety Manual's protocols.

SCOPE OF WORK

While KEYS has tried to anticipate all Work required under and during the term of this contract, the parties understand and agree that the Work required herein may require without notice to contractor, the performance of Extra Work or the omission of Work previously required. KEYS may at any time and without notice to contractor, require changes in the scope of Work under this contract as KEYS may find necessary or desirable. Such changes may include the omission of Work previously required.

- A. KEYS shall notify contractor of the change in scope work via Change Order, which shall become part of the Contract Documents. If a Change Order directs Contractor to omit Work, contractor shall refrain from performing it.
- B. Contractor shall perform Extra Work only pursuant to the issuance by KEYS of Change Order. Records of any Extra Work performed by contractor shall be reviewed daily by contractor and KEYS, duplicate copies of accepted records made and signed by both contractor or his representative and KEYS, and one (1) copy retained by each.

SECURITY/BACKGROUND CHECK

KEYS may require successful bidders to supply a complete listing of all individuals that will perform work at the various sites. KEYS may run DMV and mandatory felony and misdemeanor background checks due to security reasons. The successful bidder must expressly agree to the right for KEYS to run the aforementioned checks.

KEYS reserve the right to perform background checks during the entire duration of the contractual agreement. Contractor will advise KEYS immediately of any employee staff changes before they are permitted on-site. Non-compliance of security/background check portion of the bid specifications will result in rejection of the proposal or termination of awarded contractual agreement.

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

SEVERABILITY

If any of these General Terms & Conditions is determined to be invalid, illegal or enforceable, the remaining provisions of these General Terms & Conditions remain in full force to the extent permitted by law.

SUBCONTRACTORS

Each Bidder shall list on the Proposal form the name of each construction subcontractor who will furnish in excess of 10% of the Project. Failure to do so shall entitle KEYS, at its option, to reject the bid.

SUBMISSION OF PROPOSAL

It is the sole responsibility of each Bidder to deliver its Proposal to KEYS at the place designated for receiving Proposals and prior to the time for opening Proposals last announced to Bidders. Any Proposal received after the time last announced for opening Proposals may be retained by KEYS or returned to the Bidder, but such Proposal shall be rejected as not responsive.

TAX

The prices of materials set forth herein shall not include state sales tax or local option tax. KEYS is generally exempt from state sales tax, (sales tax number 85-8012621609C-2), and local option tax. However; any purchases of materials for construction of new electrical transmission and distribution facilities are subject to state sales tax and local option tax.

TERMINATION OF CONTRACT

When deemed to be in the best interest of KEYS, any awards or contracts resulting from this specification may be cancelled by KEYS by the following means: 1) ten (10)-day written notice with cause; or 2) thirty (30)-day written notice without cause.

WARRANTY

- A. Contractor warrants to KEYS that the Material and Equipment to be furnished under the Contract shall be designed and fit for the purpose specified when operated in accordance with contractor's specific operating instructions or, in the absence thereof, in accordance with generally accepted operating practices; free from defects in material, workmanship, and title; shall meet all specifications, including those relating to performance, contained or incorporated by reference in the Contract; and that the technical direction of installation on KEYS' premises when furnished by contractor shall be performed in a competent, diligent manner in accordance with generally accepted professional practices.
- B. The foregoing warranties, except as to title, shall apply to defects or deficiencies occurring within a period of **1** year from Final Acceptance provided the same is not unreasonably delayed by the KEYS or others. If, however, during the above **1** year warranty period the Equipment is not available for operation due to a failure to meet such warranties, such time of unavailability shall not be counted as part of the warranty period. The condition of any field tests shall be mutually agreed upon, and Contractor shall be notified of and may be represented at all tests that may be made.
- C. If the equipment and materials furnished hereunder does not meet the warranties specified above when it has normal and proper use and maintenance, KEYS shall promptly notify contractor and make the Equipment available for correction. Contractor shall thereupon within a reasonable time correct all defects, including nonconformance with the Engineering Specifications, by either repairing or replacing any defective or damaged parts of the Equipment.
The cost of Labor, Materials and Equipment components directly associated with such repair or replacement of the Equipment, including removal, loading and unloading, transportation to and from the repair site and reinstallation, shall be borne by contractor.
- D. Any repaired or replacement part furnished under the foregoing warranty shall carry warranties on the same terms as set forth above for **1** years from the date of its Final Acceptance.
- E. Contractor shall obtain written warranties from its Subcontractors and suppliers of Materials, Labor and Equipment components where such warranties are obtainable and shall deliver the original warranties to KEYS.
- F. Neither the final payment, nor any other provision of the Contract, nor partial or entire use of the Material and Equipment by KEYS shall relieve contractor of liability with respect to the warranties referred to in the Contract or any other warranties, express or implied.

WITHDRAWAL OF PROPOSAL

Each Proposal shall constitute an offer to KEYS as outlined therein and shall be irrevocable after the time last announced for opening Proposals. Any Bidder may withdraw its Proposal by giving written notice to KEYS at the place such Proposals are to be received and at any time prior to the time last announced for opening Proposals. After the time last announced for opening Proposals and until execution of the Contract, no Bidder will be permitted to withdraw its Proposal for a period exceeding 120 days after the time last announced for opening Proposals.

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

INSURANCE SECTION

INDEMNITY AND INSURANCE REQUIREMENTS

By the signing of this contract and these indemnity and insurance requirements, the vendor agrees with the provisions shown below.

INDEMNITY

Contractor shall indemnify, defend and hold harmless KEYS and their officers, partners, agents, employees and servants from and against any and all claims, judgments, liens, loss, damage, cost, charge or expense, including defense costs, court costs and attorneys' fees, whether direct or indirect, by reason of liability imposed by law or by bodily injuries, including death at any time resulting there from, sustained by any person or persons or on account of damages to property, including loss of use thereof, arising out of or in consequence of the performance of the Contract, whether such injuries to or death of persons or damages to property are due or are claimed to be due to operations, errors, omissions, or negligent acts of KEYS or any of their officers, partners, agents, employees or servants, excepting only such injuries or damages as shall have been finally determined to have resulted solely from errors, omissions or negligent acts of KEYS or of their officers, partners, agents, employees or servants or independent contractor directly responsible to KEYS. For this indemnity, the Utility Board of the City of Key West will pay the sum of ten dollars (\$10.00). The bidder shall add this amount (\$10.00) to their base bid proposal, which will be included in payment to firm.

INSURANCE REQUIREMENTS

The insurance provided by the Vendor pursuant to this Contract shall apply on a primary basis and any other insurance provided by KEYS shall be excess of and not contributory to the insurance provided by the Vendor.

During the term of this agreement, except as specifically provided herein, contractor shall provide and maintain, at his sole cost and expense, insurance in the following types and amounts to cover all work under this agreement, including that done by sub-contractors.

The Vendor shall not commence any work on the contract until he has provided KEYS with proof of coverage's required, in the form an original certified Certificate of Insurance properly signed by the authorized agent of the insurance company. The insurance company must be an eligible surplus lines company or a company authorized by the Florida State Department of Insurance to sell the specific insurance required or with respect to Workers' Compensation authorized as a group self-insurer by Florida Statue 440.57. The agent of the insurance company must be licensed to sell the insurance coverage's required under this contract. Without limiting any of the other obligations or liabilities of the Vendor, the following insurance coverage's with indicated limits of liability are mandatory under this contract. Those coverage's with no limits shown are not required.

VENDOR'S ENVIRONMENTAL IMPAIRMENT RESPONSIBILITY

- A. The Vendor acknowledges that the performance of this contract is, or may be, subject to Federal, State, and Local laws and regulations enacted for the purpose of protecting, preserving, or restoring the environment. The Vendor shall, at his sole cost, will be responsible for full compliance with any such laws or regulations.
- B. The Vendor's performance under this contract shall include, but not be limited to:
1. Performance in a manner to minimize disturbance of or damage to the environment.
 2. To the extent caused by the performance of this contract by or on behalf of the Vendor, the clean-up, repair or restoration of the environment to the extent required by any Federal, State, or Local laws or regulations.
- C. The Vendor shall be responsible for any fines, penalties, damage, or assessments made against the Vendor or KEYS resulting from the performance of this contract by or on behalf of the Vendor.
- D. The Vendor's obligation under paragraph B and C above shall survive the contract and shall not be limited in any manner by acceptances of final payments.

WORKERS COMPENSATION--EMPLOYER'S LIABILITY INSURANCE

Shall provide benefits consistent that will respond to all benefits as prescribed by Florida Statues. To include employers Liability Insurance shall be provided in accordance with statutes of the Florida Workers Compensation Act, Federal Employers Liability Act and any other applicable federal or state laws. Customarily provided under the standard Workers Compensation Policy shall provide the following limits:

- Each Accident \$ 1,000,000.00
- Disease-Policy Limit \$ 1,000,000.00
- Disease-Each Employee \$ 1,000,000.00

COMMERCIAL GENERAL LIABILITY INSURANCE

This insurance shall cover those sources of liability which would be covered by the latest edition of the standard Commercial General Liability Coverage Form as published by the Insurance Services Office (ISO) as filed for use in Florida without the attachment of restrictive endorsements other than the elimination of medical payments and fire damage legal liability.

General Aggregate	\$ 2,000,000.00
Limit of Insurance per project	
Products/Completed Operation	\$ 2,000,000.00
(Coverage for 3 yrs. after contract completion)	
Personal & Advertising Injury	\$ 1,000,000.00
Each Occurrence	\$ 1,000,000.00

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

BUSINESS AUTOMOBILE POLICY

This insurance shall cover those sources of liability which would be covered by Part IV of the latest edition of the standard business auto policy form (ISO) as filed for use in Florida without attachments of restrictive endorsements. Coverage's shall include owned, non-owned, and hired autos.

The policy shall be endorsed to include coverage as required by Section 29 and 30 of the Motor Carrier Act of 1980 (MCS 90).

Each Occurrence Bodily Injury and Property Damage Liability Combined \$ 1,000,000.00

ADDITIONAL INSURED

The Utility Board of the City of Key West shall be included as an additional insured for Comprehensive General Liability Form (ISO).

WAIVER OF SUBROGATION

Contractor's Workers Compensation and Commercial General Liability insurance shall include a Waiver of Transfer of RIGHTS OF Recovery against others to KEYS (ISO Form). The Utility Board of the City of Key West must be named in the schedule for the specific project involved.

INSURANCE AGENT'S STATEMENT

I have reviewed the above requirements with the bidder named below. The following limits apply to the corresponding policy for the following company:

DATE: _____ FIRM NAME: _____

POLICY (Type /Number)

LIMITS

POLICY (Type /Number)	LIMITS
_____	_____
_____	_____
_____	_____
_____	_____

Acknowledgement of the additional insured and waiver of subrogation requirements: _____
Initials

Liability policies are _____ Occurrence _____ Claims Made

Name of Insurance Agency

Signature of Insurance Agent

SUBMITTED BY: _____
Print Name & Title

NOTE: EACH BIDDER SHALL PROVIDE A COPY OF COMPLETED CERTIFICATE OF INSURANCE COMPLYING WITH THE AFOREMENTIONED INSURANCE REQUIREMENTS OR SIGN AND DATE THE ABOVE INSURANCE AGENT'S STATEMENT AND AGREE TO PROVIDE A VALID CERTIFICATE OF INSURANCE UPON NOTIFICATION OF CONTRACT AWARD.

BIDDER'S STATEMENT

In consideration of this contract, if awarded, the Vendor agrees without reservation to KEYS' Terms & Conditions, Indemnification Clause, and insurance clause herein. The signing of this statement confirms the Vendor's acceptance, which will become a part of the contract.

DATE: _____

FIRM NAME: _____ EMAIL: _____

SUBMITTED BY: _____
Print Name & Title

SIGNATURE: _____

WITNESS: _____

NOTICE: THIS SIGNATURE PERTAINS TO THE ACKNOWLEDGEMENT AND ACCEPTANCE OF THE ENTIRE TERMS & CONDITIONS. ANY EXCEPTIONS TO THIS AGREEMENT SHOULD BE NOTED SEPARATELY.

FAILURE TO COMPLETE ABOVE NOTED DOCUMENT WILL RESULT IN NON-COMPLIANCE WITH THESE SPECIFICATIONS.

Keys Energy Services
Safety Compliance Affidavit

Keys Energy Services [KEYS] requires all Contractors to follow the American Public Power Association (APPA) Safety Manual while working for KEYS on all projects.

It is solely contractor's Responsibility to:

1. Obtain the latest edition of the APPA Safety Manual at their expense from the American Public Power Association (<http://www.publicpower.org/Topics/Landing.cfm?ItemNumber=38512>)
2. Comply to the required safety protocols described in the APPA Safety Manual – for contractor's employees and sub-contractors;
3. Appoint a qualified employee who is authorized to monitor, supervise and ensure compliance to APPA Safety Manual's protocols on the job site and
4. Do whatever is necessary for safety compliance and be solely and completely responsible for conditions of the job site, including safety of all persons and property during the project's duration.

It is not the responsibility of KEYS to review or police contractor's implementation of the APPA Safety Manual's protocols.

As the person authorized to sign this affidavit, I certify that this firm understands and will fully comply with the above requirements.

Company Name: _____

Representative's Printed Name: _____

Representative's Signature: _____

Date Signed: _____

DRUG-FREE WORKPLACE STATEMENT

Preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids which are equal with respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

The undersigned vendor in accordance with Florida Statutes Section 287.087 hereby certifies that

_____ does:
(Name of Business)

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in Subsection 1.
4. In the statement specified in Subsection 1, notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 1893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Print Name _____

Vendor's Signature _____

Date: _____

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

**SWORN STATEMENT PURSUANT TO SECTION 287.133(3)(a),
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES**

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted to _____
(print name of public entity)

by _____
(print individual's name and title)

for _____
(print name of entity submitting sworn statement)

whose business address is _____

and (if applicable) its Federal Employer Identification Number (FEIN) is _____

If the entity has no FEIN, include the Social Security Number of the individual signing sworn statement: _____

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
3. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
4. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:
 - a. A predecessor or successor of a person convicted of a public entity crime; or
 - b. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employee, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
5. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statutes, means:

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

a. any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity.

b. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies):

_____Neither the entity submitting this sworn statement, nor any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with the convicted of a public entity crime subsequent to July 1, 1989.

_____The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of public entity crime subsequent to July 1, 1989.

_____The entity submitting this sworn statement, or one or more of its officers, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer, determined that is was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (Attach a copy of the final order).

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IN PARAGRAPH ONE (1) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDE IN SECTION 287.017, FLORIDA STATUTES FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

(Signature)

(Date)

STATE OF _____

COUNTY OF _____

PERSONALLY APPEARED BEFORE ME, the undersigned authority, _____
who, after first being sworn by me, affixed his/her signature in the space provided above on this
_____ day of _____ of 20_____.

NOTARY PUBLIC

My Commission Expires:

PAYMENT PROCEDURES & RELATED FORMS

Payments:

Contractor is required to submit the following documents:

- Breakdown of Material and Labor
- "Contractor's Request For Payment"
- "Sworn Statement Concerning Claims"
- "Release Of Lien"

"Contractor's Affidavit and Request for Payment"

Complete this form for work completed to date. Attach appropriate documentation to support this request. Retainage of not less than 10% will be deducted until final inspection by KEYS has been completed and all items are satisfactory. It must be signed by a corporate official and be notarized and signed by the notary.

"Sworn Statement Concerning Claims"

The prime contractor must complete this form for each sub-contractor. This must be done each time a request for payment is made. It must be signed by a corporate official, contain the raised corporate seal, be notarized and signed by the notary.

"Release Of Lien"

The prime contractor is responsible for obtaining and forwarding a release of lien for every sub-contractor on the job, which is to be submitted with each invoice. This is only required when there is a sub-contractor. The release of lien must be unconditional and must contain a date from the sub-contractor, which coincides with the date of the payment request. It must be signed by a corporate official, contain the raised corporate seal, be notarized and signed by the notary.

Final Payments:

Contractor is required to submit the following documents:

- Breakdown of Material and Labor
- "Contractor's Request For Payment"
- "Sworn Statement Concerning Claims"
- "Final Release Of Lien"
- "Contractor's Affidavit Of Contract Completion"

"Contractor's Affidavit and Request for Payment"

Complete this form. Attach appropriate documentation to support this request.

"Final Release Of Lien"

The prime contractor is responsible for obtaining and forwarding a final release of lien for every sub-contractor on the job, which is to be submitted with each invoice. This is only required when there is a sub-contractor. The release of lien must be unconditional. It must be signed by a corporate official, contain the raised corporate seal, be notarized and signed by the notary.

"Contractor's Affidavit Of Contract Completion"

The prime contractor must complete this form. It must be signed by a corporate official, contain the raised corporate seal, be notarized and signed by the notary.

A sample of each of these forms follows.

Each payment request packet is sent to accounts.payable@keysenergy.com for processing.

APPLICATION AND CERTIFICATE FOR PAYMENT

TO Accounts Payable
 Keys Energy Services
accounts.payable@keysenergy.com

BID NO. _____
CONTRACT NO. _____
PROJECT TITLE _____
PURCHASE ORDER NO. _____
APPLICATION NO. _____
WORK PERIOD _____
INVOICE DATE _____

FROM *Contractor Name*
Contractor Address
Contractor City, State Zip
Contractor Number and Email

CONTRACTOR'S APPLICATION FOR PAYMENT

1	Original Contract Total	_____
2	Total of Change Orders to Date	_____
3	Contract Total (line 1 +2)	_____
4	Total Amount Completed to Date	_____
5	Retainage (10% of line 4)	_____
6	Total Earned less Retainage (line 4 - line 5)	_____
7	Less Previous Payment Requests (line 6 from previous payment request)	_____
8	Current Payment Due	_____
9	Balance to Finish, Plus Retainage (line 3 - line 6)	_____

We hereby represent that the above contractor's request is a true estimate of work completed under the above contract to date and hereby release KEYS from any claims for materials or labor furnished or expense incurred to date which is not included in requests and payment to date, except for integrated units of construction partially completed for which no request for payment has been made.

Signature _____

Printed Name, Title _____

Date _____

FOR KEYS USE ONLY

Notice to Owner received? _____

Release of Lien received, if applicable? _____

Sworn Statement Concerning Claims received? _____

Contractor's Affidavit of Completion received, if applicable? _____

Quantities Verified? _____

Price Verified? _____

Release Retainage, if applicable? _____

 Purchasing Supervisor, Date

 Project Manager, Date

Routing: Contractor > Accounts Payable > Purchasing > KEYS Project Manager > Accounts Payable

UTILITY BOARD OF THE CITY OF KEY WEST, FLORIDA
SWORN STATEMENT CONCERNING CLAIMS

PROJECT AND TITLE: _____

SUB -CONTRACTOR: _____

CONTRACT FOR: _____

CONTRACT DATE: _____ CONTRACT AMOUNT: \$ _____

To: Utility Board of the City of Key West ("Keys Energy Services")

Post Office Box 6100

Key West, Florida 33041

In response to your demand, the undersigned contractor or material man _____
_____ submits the following statement of account for:

(Sub Contractor Name) _____

Labor performed to date consists of the following: _____
_____.

Material furnished to date consists of the following: _____
_____.

Labor still to be performed consists of the following: _____
_____.

Material still to be furnished consists of the following: _____
_____.

Amount paid on account to date: \$ _____, Amount now due: \$ _____,

Amount to become due: \$ _____.

[Signature]

[Date]

The State of _____

County of _____

_____, being first duly sworn, deposes and states that _____ [he or she] is the lien holder named in the forgoing statement of account; that _____ [he or she] has read the statement of account and has knowledge of its contents; that the statements contained in the statement of account are true; and that the sum of \$ _____ as set forth in the statement of account is due and owing to lien holder.

Contractor(s), who, being by me duly sworn, subscribed to the foregoing affidavit in my presence.

(Notary Public)

Print Name: _____

My Commission Expires: _____

UTILITY BOARD OF THE CITY OF KEY WEST, FLORIDA
CONDITIONAL RELEASE OF LIEN

PROJECT AND TITLE: _____

SUB -CONTRACTOR: _____

CONTRACT FOR: _____

CONTRACT DATE: _____ CONTRACT AMOUNT: \$ _____

To: Utility Board of the City of Key West ("Keys Energy Services")

Post Office Box 6100

Key West, Florida 33041

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, upon future payment of the sum \$ _____
and _____ (\$ _____) paid by _____ the
prime contractor, will be deemed to have fully released and quit claimed to The Utility Board of the City of
Key West, the KEYS, all liens, lien rights, claims or demands of any kind whatsoever, which the undersigned
now has or might have against the project on account of labor performed and/or material furnished by the
undersigned in the construction of said project through _____.

In witness whereof, I have hereunto set my seal this _____ day of _____, 20____.

Witness:

_____ (SEAL)

_____ by _____

The State of _____

County of _____

_____, being first duly sworn, deposes and states that _____ [he or she] is the lien
holder named in the forgoing statement of account; that _____ [he or she] has read the statement of
account and has knowledge of its contents; that the statements contained in the statement of account are
true; and that the sum of \$ _____ as set forth in the statement of account is due and owing to lien
holder.

Contractor(s), who, being by me duly sworn, subscribed to the foregoing affidavit in my presence.

(Notary Public)

Print Name: _____

My Commission Expires: _____

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

UTILITY BOARD OF THE CITY OF KEY WEST, FLORIDA
RELEASE OF LIEN

PROJECT AND TITLE: _____

SUB -CONTRACTOR: _____

CONTRACT FOR: _____

CONTRACT DATE: _____ CONTRACT AMOUNT: \$ _____

To: Utility Board of the City of Key West ("Keys Energy Services")

Post Office Box 6100

Key West, Florida 33041

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, for and in consideration of payment of the sum \$ _____ and _____ (\$ _____) paid by _____ the prime contractor, receipt of which is hereby acknowledged, hereby releases and quit claims to The Utility Board of the City of Key West, the KEYS, all liens, lien rights, claims or demands of any kind whatsoever, which the undersigned now has or might have against the project on account of labor performed and/or material furnished by the undersigned in the construction of said project have been fully paid for.

In witness whereof, I have hereunto set my seal this ____ day of _____, 20 ____.
Witness:

_____ (SEAL)
by _____

The State of _____

County of _____

_____, being first duly sworn, deposes and states that _____ [he or she] is the lien holder named in the forgoing statement of account; that _____ [he or she] has read the statement of account and has knowledge of its contents; that the statements contained in the statement of account are true; and that the sum of \$ _____ as set forth in the statement of account is due and owing to lien holder.

Contractor(s), who, being by me duly sworn, subscribed to the foregoing affidavit in my presence.

(Notary Public)
Print Name: _____
My Commission Expires: _____

UTILITY BOARD OF THE CITY OF KEY WEST, FLORIDA
****FINAL** RELEASE OF LIEN**

PROJECT AND TITLE: _____

SUB -CONTRACTOR: _____

CONTRACT FOR: _____

CONTRACT DATE: _____ CONTRACT AMOUNT: \$ _____

To: Utility Board of the City of Key West ("Keys Energy Services")

Post Office Box 6100

Key West, Florida 33041

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, for and in consideration of payment of the sum \$ _____ and _____ (\$ _____) paid by _____ the prime contractor, receipt of which is hereby acknowledged, hereby releases and quit claims to The Utility Board of the City of Key West, the KEYS, all liens, lien rights, claims or demands of any kind whatsoever, which the undersigned now has or might have against the project on account of labor performed and/or material furnished by the undersigned in the construction of said project have been fully paid for.

In witness whereof, I have hereunto set my seal this ____ day of _____, 20 ____.
Witness:

_____ (SEAL)
by _____

The State of _____

County of _____

_____, being first duly sworn, deposes and states that _____ [he or she] is the lien holder named in the forgoing statement of account; that _____ [he or she] has read the statement of account and has knowledge of its contents; that the statements contained in the statement of account are true; and that the sum of \$ _____ as set forth in the statement of account is due and owing to lien holder.

Contractor(s), who, being by me duly sworn, subscribed to the foregoing affidavit in my presence.

(Notary Public)
Print Name: _____
My Commission Expires: _____

UTILITY BOARD OF THE CITY OF KEY WEST, FLORIDA
KEYS ENERGY SERVICES

CONTRACTOR'S AFFIDAVIT OF CONTRACT COMPLETION

PROJECT AND TITLE: _____

CONTRACTOR: _____

CONTRACT FOR: _____

CONTRACT DATE: _____ CONTRACT AMOUNT: _____

CONTRACTOR'S AFFIDAVIT

I solemnly swear and affirm: That the work under the above named Contract and all amendments thereto have been completed in accordance with the requirements of said Contract; that all costs incurred for equipment, materials, labor, and services against the project have been paid; that no liens have been attached against the project; that no suits are pending by reason of work on the project under the Contract; that all Workmen's Compensation claims are covered by Workmen's Compensation insurance as required by law; that all public liability claims are adequately covered by insurance, and that contractor shall save, protect, defend, indemnify and hold the KEYSs harmless from and against any and all claims which arise as a direct or indirect result of any transaction, event or occurrence related to performance of the work contemplated under said Contract.

CONTRACTOR:

_____ (SEAL)

Title: _____

Date: _____

STATE OF _____

COUNTY OF _____

Personally appeared before me this _____ day of _____ 20____, _____ known (or made known) to me to be the:

(Partner) (Corporate Officer-Title)

(Name of Contractor(s))

Contractor(s), who, being by me duly sworn, subscribed to the foregoing affidavit in my presence.

(Notary Public)

Print Name: _____

My Commission Expires: _____

Per attached Sworn Statement(s) Concerning Claims

Proposal Page 1 of 3

Pursuant to and in compliance with your advertisement for bids and other contract documents relating thereto, the undersigned bidder, having familiarized himself with the terms and conditions affecting the performance of the contract contained in the specifications, hereby proposes and agrees to perform within the contract documents, schedules, and specifications for the following amounts.

SECTION A

ITEM	ITEM DESCRIPTION	ESTIMATED ANNUAL QUANTITY	UNIT	UNIT PRICE	EXTENDED PRICE
1.	Mobilization/ Demobilization Charge (per Service Visit)	2	SV	\$	
LABOR					
2.	Labor – Engineering Florida PE Services, (per Hour)	0	HR	\$	
3.	Labor – BICSI RCDD, (per Hour)	0	HR	\$	
4.	Labor – CADD Operator, (per Hour)	0	HR	\$	
5.	Labor – Clerical Support Services, (per Hour)	0	HR	\$	
6.	Labor - Comm. Cable – Electronics Technician (per Hour)	40	HR	\$	
7.	Labor - Comm. Cable Installer (per Hour)	40	HR	\$	
8.	Labor - Comm. Duct Installer (per Hour)	0	HR	\$	
9.	Labor - OSP ROW Strand Mapping	0	MILE	\$	
10.	Labor - OSP ROW Design and Permitting	0	MILE	\$	
11.	Labor - OSP GPS Survey	0	MILE	\$	
12.	Labor - OSP GIS Technician	0	MILE	\$	

Please attach a contractor rate sheet for company positions not specified above.

Please specify when other rate schedules beyond straight time will apply:

SECTION B

ITEM	ITEM DESCRIPTION	ESTIMATED ANNUAL QUANTITY	UNIT	UNIT PRICE	EXTENDED PRICE
	FIBER OPTIC CABLES				
13.	FO Cable – 24 fiber, Single-Mode, Loose tube construction, Underground Placement, per Foot (Furnished and Installed)	200	LF	\$	
14.	FO Cable – 24 fiber, Single-Mode, All Dielectric Self Supporting Construction, Aerial Placement, per Foot (Furnished and Installed)	1000	LF	\$	
15.	FO Cable – 96 fiber, Single-Mode, All Dielectric Self Supporting Construction, Aerial Placement, per Foot (Installed)	0	LF	\$	
	OPTICAL SPLICING & TERMINATION				
16.	FO Cable – 24 fiber, Single-Mode or MultiMode, Termination, Wall / Rack Cabinet, trays, pigtails, splices, tests, per Each (Furnished and Installed)	96	EACH	\$	
17.	FO Cable – 96 fiber, Single-Mode or MultiMode, Termination, Wall / Rack Cabinet, trays, pigtails, splices, tests, per Each (Furnished and Installed)	0	EACH	\$	
18.	FO Cable – 06 fiber, Single-Mode, Buffer fan-out kit, per Each (Furnished and Installed)	8	EACH	\$	
19.	FO Cable – 12 fiber, Single-Mode, Buffer fan-out kit, per Each (Furnished and Installed)	4	EACH	\$	
20.	FO Connector – ST type, Multi-Mode, Unicam connector, per Each (Furnished and Installed)	48	EACH	\$	

KEYS BID 32-21 SPECIFICATIONS FOR FIBER OPTIC SERVICES AND MATERIAL

Proposal Page 3 of 3

21.	FO Connector – ST type, Single-Mode, Unicam connector, per Each (Furnished and Installed)	48	EACH	\$	
22.	FO Closure – Splice Closure, 24 fiber, Aerial or UG installation, trays, splices, tests, per Each (Furnished and Installed)	1	EACH	\$	
23.	FO Closure – Splice Closure, 96 fiber, Aerial or UG installation, trays, splices, tests, per Each (Furnished and Installed)	2	EACH	\$	
24.	FO Splice – OTDR Test any wavelength, one direction, bare fiber, per Each (Furnished & Installed)	96	EACH	\$	
25.	FO Closure – Splice Tray, Fusion Heatshrink, 24 fiber, 12" size, per Each (Furnished and Installed)	0	EACH	\$	
26.	FO Splice – Fusion Splice, Heat Shrink < 0.04 db, OSP, including pigtail as needed, per Each (Furnished and Installed)	0	EACH	\$	
27.	% Overhead for material installed but not included here in Cost + _____%	x	%		
Total Estimated Annual Cost					

Company: _____

Contact Person: _____

Telephone: _____

Email: _____

Address: _____

Submitted by: _____
(Signature and Print Name)

Bid Bond Enclosed (Yes / No) or Cashier's Check: \$ _____

KEYS reserves the right to accept and/or reject any proposal or any portion of a proposal. Bidder shall submit with the proposal any constraints, if any.