



Power Warehouse

ADDENDUM NO. 01

DATE: 12/27/2023

REVISIONS TO:

Request for Bids - Specification No. TP23-0323N

Telecommunication Supplies (Stock), Hardware Non-Electrical Supplies (Stock), and Electrical Hardware Supplies (Stock)

NOTICE TO ALL BIDDERS:

This addendum is issued to clarify, revise, add to or delete from, the original specification documents for the above project. This addendum, as integrated with the original specification documents, shall form the specification documents. The noted revisions shall take precedence over previously issued specification documents and shall become part of this contract.

REVISIONS TO THE SUBMITTAL DEADLINE:

The submittal deadline has been changed to 11:00 a.m., Pacific Time, Wednesday, January 3, 2024

REVISIONS TO THE SPECIFICATIONS:

Please see attached specifications for line item #10.

NOTE: Acknowledge receipt of this addendum by initialing the corresponding space as indicated on the signature block on the first page. Vendors who have already submitted their bid/proposal may contact the Purchasing Division at 253-502-8468 and request return of their bid/proposal for acknowledgment and re-submittal. Or a letter acknowledging receipt of this addendum may be submitted in an envelope marked Request for Bids - Specification No. TP23-0323N Addendum No. 01. The City reserves the right to reject any and all bids, including, in certain circumstances, for failure to appropriately acknowledge this addendum.

cc: Keith Wawrin



CITY OF TACOMA

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THIS IS NOT AN ORDER
All prices quoted shall be F.O.B.
Destination, Freight Prepaid and Allowed

All responses & inquiries must be
plainly marked with this

REQUEST FOR QUOTATION 6000052491

Return Bids By 11:00 AM, 01/03/2024
to: sendbid@cityoftacoma.org

Merry Elizabeth Mitchell
Power Warehouse
ABN 4th Floor NE
3628 South 35th Street
Tacoma WA 98409

Material will ship to:

Power Warehouse
3628 S 35th St (Rear)
Tacoma WA 98409

RFQ Information

Collective Bid #	TP23-0323N
Bid Issue Date	12/19/2023
Vendor Number	109226 WEB VENDOR FOR RFQ

Vendor Information (vendor to complete)

Firm Name:	
Address:	
City/State/Zip	/ /
Phone/Fax	/
E-Mail	
Contact Name	
Payment Terms	%, days (e.g. 2% 10,N30)
Tacoma Bus. Lic. #	
Taxpayer ID #	

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS BID

x _____ DATE: ____ / ____ / ____
NAME : _____ Addendum No. 1: _____
TITLE : _____ initial

Item #	Material# Description	Delivery Date	QTY	UM	Net Price	Total
	<p>Addendum No. 1</p> <p>The City of Tacoma is soliciting bids for purchase of Telecommunication Supplies (Stock), Hardware Non-Electrical Supplies (Stock), and Electrical Hardware Supplies (Stock)</p> <p>Submittals may be e-mailed to sendbid@cityoftacoma.org for this solicitation.</p> <p>Please include the Collective Bid Number, TP23-0323N, in the subject line of your e-mail.</p> <p>Bids are subject to the submittal deadline noted in the bid solicitation document. The time of e-mail receipt will be considered as the time of submittal. The City accepts no responsibility for transmission errors.</p> <p>We are unable to verify receipt of submittals due to the large volume of submittals received.</p> <p>Extend net price and provide net total value. All bid pricing shall be FOB Destination, freight prepaid and included in the unit price.</p>					

Materials must be new and unused. No substitutes are allowed.



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Item #	Material# Description	Delivery Date	QTY	UM	Net Price	Total
	<p>Substitute items will be returned at vendor's expense.</p> <p>Delivery date will default to two weeks ARO if vendor fails to provide.</p> <p>Please Circle or underline the part number and manufacturer quoted or bid may be considered non-responsive.</p> <p>If applicable, you must select from the approved manufacturer(s) listed. Substitutions will not be approved at the time of the bid awarding. If you have a material that you would like to have added, it must be submitted for review and approved by the City of Tacoma's Material Committee before the bid issue date listed on this request for quotation. For more information regarding this process, please contact: Merry Mitchell, mmitchell@cityoftacoma.org</p> <p>Responses MUST BE SUBMITTED on the provided City of Tacoma bid solicitation form. Vendor signature is MANDATORY.</p> <p>Bid results will be posted at: http://www.cityoftacoma.org/government/city_departments/finance/procurement_and_payables_division/purchasing/bid_results/</p> <p>Note: You must register at this website as a bid holder for each solicitation of interest in order to receive notification regarding amendments or other updates to the original bid solicitation documents.</p> <p>City Contact: Merry Mitchell, mmitchell@cityoftacoma.org</p>					



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Item #	Material#	Description	Delivery Date	QTY	UM	Net Price	Total
10	48080	CABLE,FO,96 CT,NON-ARMORED,RIBBON CABLE, FIBER OPTIC, 96 COUNT, NON-ARMORED, SINGLE-MODE. MDPE OUTER SHEATH. UV-RESISTANT, RIBBON FIBER IN CENTRAL TUBE, WITH 100% DRY WATERBLOCKING MATERIAL FOR OSP, GEL FREE. 12 FIBERS PER RIBBON WITH PEELABLE RIBBON MATRIX, MAXIMUM 12 FIBERS PER RIBBON, OPTICAL LOSS SHALL NOT EXCEED 0.35 DB/KM AT 1310 NM AND 0.25 DB/KM AT 1550 NM. NOMINAL OUTER DIAMETER NOT TO EXCEED 0.80 INCHES. MINIMUM BEND RADIUS: 20X CABLE OD DURING INSTALLATION, 10X CABLE OD DURING SERVICE. MAXIMUM REEL SIZE 72 INCHES HIGH X 52 INCHES WIDE. MAXIMUM LENGTH NOT TO EXCEED 25,000 FEET. ACTUAL REEL LENGTHS TO BE DETERMINED AT TIME OF RELEASE. FOR VISUAL IDENTIFICATION, VERBIAGE STATING "TACOMA PUBLIC UTILITIES - TELECOM" IS REQUIRED. CABLE SHALL BE DESIGNED AND TESTED TO ANSI/ICEA S-87-640 FOR OUTSIDE PLANT CABLES. +++++ <u>Not</u> acceptable - Superior Essex +++++ Material # Manf Part# Manufacturer Name 10007895 PER CLICK SPECIFICATION DRAKA CABLETEQ USA 10007517 PER CLICK SPECIFICATION SUMITOMO 10007516 PER CLICK SPECIFICATION PRYSMIAN 10007515 PER CLICK SPECIFICATION CORNING CABLE SYSTEMS 10007514 PER CLICK SPECIFICATION OFS OPTICS		20,000	FT		
20	34834	LUMINAIRE,146W,LED LUMINAIRE, 146 WATT LED(400 WATT EQUIVALENT), FLOODLIGHT STYLE. MULTIVOLTAGE 120V-277V. COLOR TEMPERATURE 4000K, WITH PAINTED YOKE AND FIXTURE, GRAY IN COLOR. WITH 3 OR 7 PIN ANSI C136.1 PHOTOCONTROL RECEPTACLE. 6 FOOT, 14-3 CORD. Material # Manf Part# Manufacturer Name 10002422 EFM1010DD65740AAT1GRAYLR006 GENERAL ELECTRIC 10012110 MP-FL130UW40STSRPC-C MAXLITE		56	EA		



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Item #	Material#	Description	Delivery Date	QTY	UM	Net Price	Total
30	18941	CROSSARM,8FT STD,FIR CROSSARM, 8 FT STANDARD, DOUGLAS FIR, 4-1/2IN X 3-1/2IN X 8FT, 4 PIN, FULLY PRESSURE TREATED WITH PENTACHLOROPHENAL AWP A STD P35 OR DCOI AWP A STD P39, MEETS AWP A STDS U1 AND T1 SAWN PRODUCTS USE CATEGORY 3B, MANUFACTURED PER ANSI STANDARD O5.3 INCLUDING 3/8 INCH CHAMFER, REFER TO TACOMA POWER CONSTRUCTION STANDARD A-OH-1300 FOR DIMENSIONS AND HOLE SPACING/DIAMETERS, ALL CROSSARMS MUST BE SHIPPED ON FLATBED TRAILERS - NO ENCLOSED TRAILERS, MSDS MUST BE PROVIDED WITH FIRST SHIPMENT		200	EA		
40	79743	RECLOSER,1PH,15KV,CUTOUT-MOUNTED,100A RECLOSER, SINGLE PHASE, 15KV, CUTOUT-MOUNTED, 100 AMP CONT., 110KV BIL, 6300A INTERR. SYM., WITH NEMA TYPE-B MOUNTING BRACKET Material # Manf Part# Manufacturer Name 79743 990211-P-C S & C ELECTRIC		4	EA		

Net Value	\$
Plus Tax at _____%	\$
Total Amount	\$



Ultra-High-Density Microduct Optic Cable with Freeform Ribbons for Air-Blown Installation

Yohei SUZUKI*, Toyoaki KIMURA, Fumiaki SATO, Ken TAKAHASHI, Yuji NORISUGI, and Takao HIRAMA

This paper describes newly designed ultra-high-density (UHD) microduct optic cables that are installed into microducts using air-blown technique in order to efficiently build optical transmission capacity in data centers and other facilities. Our microduct cables range from 96-fiber to 864-fiber cables, including 288-fiber cable with flame retardant properties. The UHD microduct cables employ Freeform Ribbon, in which fibers meet and split out repetitively in longitudinal and transverse directions, allowing high fiber density and efficient fusion splicing. In order to enhance the cable-blowing performance, we choose a thin and lightweight cable design with low friction jacket material. These microduct fiber optic cables can be used in various environments, contributing to the efficient and flexible network designs suited to data centers and other customer needs.

Keywords: 12-fiber Freeform Ribbon, high-fiber-count, air blowing, microduct, outdoor/indoor

1. Introduction

In Europe and North America, microduct optical cables are in widespread use in building optical cable networks. Once a duct (microduct) is installed, the cable can later be installed without extra road works, making it possible to construct networks economically. Meanwhile, in recent years, communication traffic has increased rapidly due to progress in cloud computing, video streaming services, and support for 5G. There has been a growing need to increase the fiber count and density of microduct optical cables due to physical constraints in the internal spaces of ducts. Because a cable is pushed into a duct by feeding high-pressure compressed air (air-blowing method, see Figs. 1 and 2) for installation, it must be thin and lightweight, its jacket must have low friction, and adequate rigidity must be ensured to prevent the cable from kinking when pushed into a duct. We have developed Freeform Ribbon microduct optical cables (from 96-fiber to

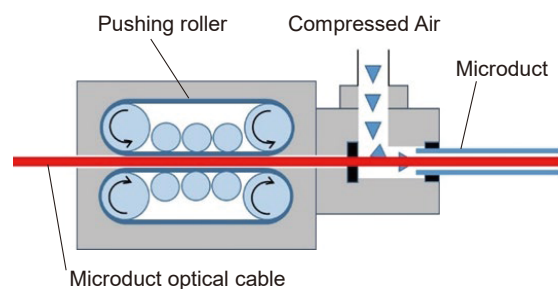


Fig. 2. Schematic diagram of the cable blower

864-fiber) for the above-mentioned air-blowing method, that reduce the connection cost than the conventional single-fiber optical cables. This paper also reports the development of outdoor/indoor microduct optical cables, which can be used in both outdoor and indoor environments, and employ a flame-retardant jacket to reduce the construction cost by eliminating connection points from outdoors into a building.

2. Structure

2-1 Design of a Freeform Ribbon

The newly developed optical cables employ a Freeform Ribbon, shown in Fig. 3 (a) and (b).⁽¹⁾ This ribbon contains 12 fibers that is mainly used in the world. It has splits in the longitudinal direction for every two fibers to ensure both flexibility and ease of mass fusion splicing. These characteristics are controlled by optimizing the ratio and length of the split section and the non-split section. As shown in Fig. 4, a bar-shaped marking is provided on the surface of a ribbon, making it possible to identify a ribbon from multiple ribbons in a cable. We have developed optical cables using 200 μm and 250 μm fibers to meet

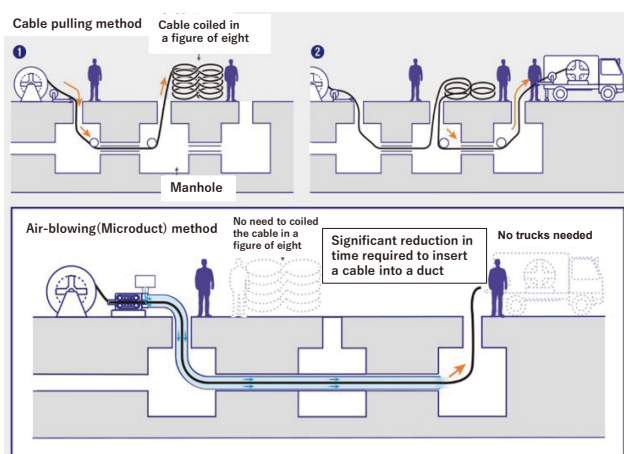


Fig. 1. Comparison between the cable pulling method and the air-blowing method

various needs, including ease of identification in mass fusion splicing, customers' preferences in terms of handling, and compliance with international standards and end-user specifications.

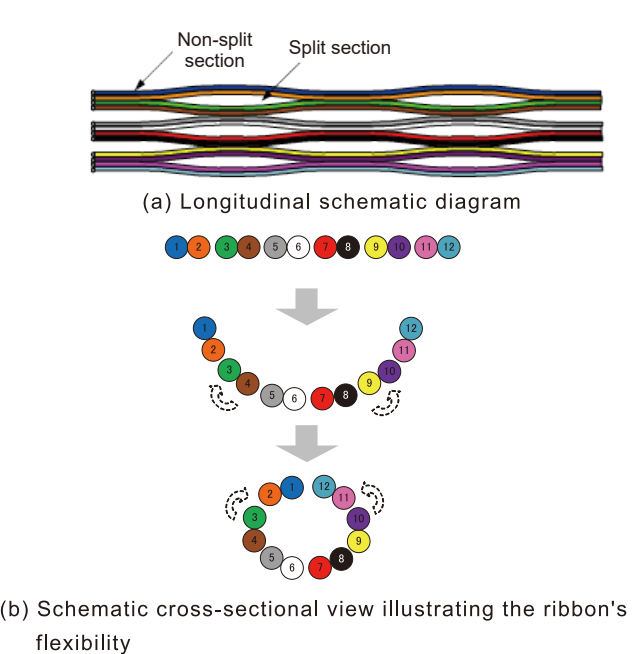


Fig. 3. Schematic diagram of 200 μm 12-fiber Freeform Ribbon

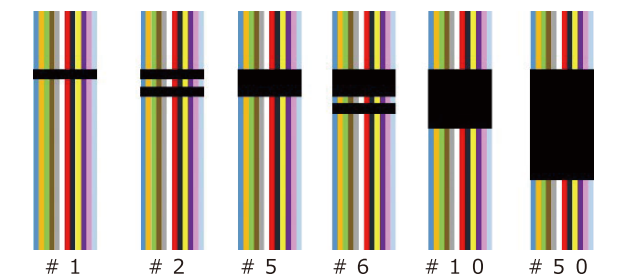


Fig. 4. Fiber Ribbon identification marking

2-2 Structure of optical cables

In this newly developed cable, a monotube structure (Fig. 5) is used to prioritize meeting the thin-diameter and light-weight requirements for air-blowing performance.⁽²⁾ The thin strength members*¹ arranged in the jacket provide adequate rigidity for cable installation in the duct and reduce installation resistance that occurs in the bending direction. Regarding the jacket material, a low-friction material are used to improve the air-blowing performance. The friction coefficient of the low-friction jacket material is about one-fourth of that of a conventional general-purpose jacket material. For Outdoor/Indoor cables, a flame-retardant jacket material is used to impart flame-retardant performance, which is required of cables for installation in buildings. In general, the percentage of the amorphous region is high in flame-retardant jacket material and a decrease in the elasticity coefficient results in lower cable

rigidity. Thus, we adopted a jacket material whose elasticity coefficient is more than double that of a conventional general-purpose flame-retardant jacket material.

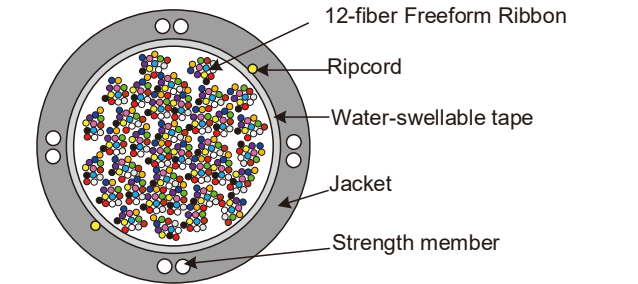


Fig. 5. Schematic cross section of a microduct optical cable (example)

To confirm the influence of the cable structure on air-blowing performance, the air-blowing installation was performed using cables whose outer diameter was between 9.5 mm and 10.5 mm to compare the air-blowing distance. 432-fiber optical cables packaging 200 μm fibers were used for the experiment. Three types of cable structures with different outer diameters, jacket materials, and rigidity levels were prepared (Table 1).

Table 1. Cable structures for evaluating air-blowing performance

Cable	Cable Diameter (mm)	Dynamic CoF [†] of the jacket material	Cable Stiffness (Nm ²)
Cable A	9.5	0.1	0.7
Cable B	10.5	0.1	0.8
Cable C	10.5	0.2	0.5

[†] Coefficient of Friction

These three types of cables were used to perform air-blowing installation in an air-blowing test circuit (length: 500 m) shown in Fig. 6. Figure 7 shows the relation of air-blowing distance to cable pushing force as test results. The inside diameter of the microduct was 13 mm.

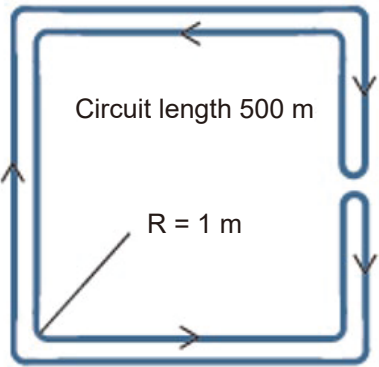


Fig. 6. Air-blowing test circuit

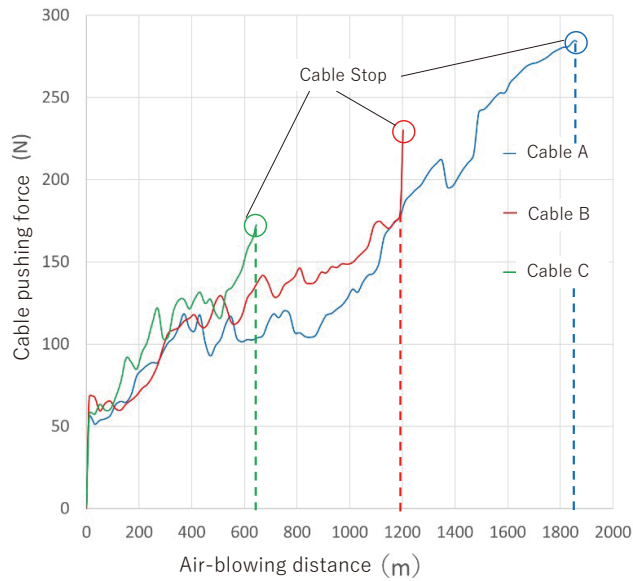


Fig. 7. Air-blowing test results

Cable A attained the longest air-blowing distance, followed by Cables B and C. Cable A, whose fill ratio was about 73%, achieved sufficient air-blowing capacity. Cables B and C, whose fill ratio was over 80%, were far inferior to Cable A in terms of the air-blowing distance. Adequate cable rigidity was required to push a cable into a microduct, and the dynamic friction coefficient of the jacket surface also had an influence. Accordingly, the air-blowing distance of Cable B was about double that of Cable C. Based on the above, the effective designs for microduct cable is a thin cable structure keeps the cable occupancy rate into microduct low, and to adopt a jacket material with the performance of both adequate rigidity and low friction. The same design was applied to all the newly developed cables (from 96-fiber to 864-fiber).

3. Cable Test Results

3-1 Transmission characteristics, mechanical characteristics, and air-blowing performance

Table 2 shows the evaluation results of the transmission characteristics, mechanical characteristics, and environmental characteristics of the newly developed optical cables (96-fiber to 864-fiber). The respective items were evaluated in accordance with the IEC standard. It was confirmed in all the tests that these cables have satisfactory characteristics.

The air-blowing test results are presented in Table 3. In a test circuit of 500 m (Fig. 6), it was confirmed that the air-blowing distances of 1.5 km or more, and 1 km or more were attained for outdoor cables and Outdoor/Indoor cables, respectively, at an air pressure of 14 MPa or less inside the duct, and a cable pushing force of 300 N or less.

3-2 Flame-retardant characteristics

Table 4 shows the results of the combustion and smoke tests on outdoor/indoor cables. It was confirmed that the cables met the combustion test standard of IEC

Table 2. Characteristics evaluation results

Item	Test Method	Evaluation Result
Attenuation Coefficient	IEC60793-1-40 $\lambda = 1550 \text{ nm}$	$< 0.30 \text{ dB/km}$
Temperature cycling	IEC60794-1-22-F1 $-30 \sim +70^{\circ}\text{C}$, 2 cyc. $\lambda = 1550 \text{ nm}$	Loss variation $< 0.3 \text{ dB/km}$
Compressive Loading	IEFC60794-1-21-E3 1000 N / 100 mm $\lambda = 1550 \text{ nm}$	Loss variation $< 0.15 \text{ dB}$ No faulty condition in cable appearance
Impact Test	IEC60794-1-21-E4 2.5 N·m, 2 drop impacts $\lambda = 1550 \text{ nm}$	
Cyclic Flexing	IEC60794-1-21-E6 Bending radius 20 D, 25 cycles ("D" denotes the outer diameter of the cable.) $\lambda = 1550 \text{ nm}$	
Cable Twist Test	IEC60794-1-21-E7 $\pm 180^{\circ}$, Tension 100 N $\lambda = 1550 \text{ nm}$	$\leq 60\%$ of fiber proof level
Long Tensile Loading and Fiber Strain Test	EIA/TIA-455-33 Tension: 1334 N	

Table 3. Air-blowing performance test results

Fiber Dia. 200 μm						
Usage	Outside Plant					Outdoor/Indoor
Fiber Count	96/144	192	288	432	864	288
Diameter	7.2 mm	8.2 mm	9.0 mm	9.5 mm	12.5 mm	10.5 mm
Duct Size	14/10 mm	14/10 mm	16/13 mm	16/13 mm	22/18 mm	16/13 mm
Air Blown Distance	$\geq 1.5 \text{ km}$	$\geq 1.5 \text{ km}$	$\geq 1.5 \text{ km}$	$\geq 1.5 \text{ km}$	$\geq 1.5 \text{ km}$	$\geq 1.0 \text{ km}$

Fiber Dia. 250 μm						
Usage	Outside Plant					
Fiber Count	96	144	192	288	432	864
Diameter	7.6 mm	8.2 mm	8.7 mm	10.5 mm	12.0 mm	14.9 mm
Duct Size	14/10 mm	14/10 mm	16/13 mm	16/13 mm	22/18 mm	22/18 mm
Air Blown Distance	$\geq 1.5 \text{ km}$	$\geq 1.5 \text{ km}$	$\geq 1.5 \text{ km}$	$\geq 1.5 \text{ km}$	$\geq 1.5 \text{ km}$	$\geq 1.0 \text{ km}$

Table 4. Combustion/smoke test evaluation results

Item	Test Standard	Test Result
Combustion Test	IEC60332-3 Part3 Category C Flame propagation distance $\leq 2.5 \text{ m}$	Pass
	UL1666 Flame propagation distance $< 366 \text{ cm}$	Pass
Smoke Test	IEC61034 Minimum light Transmittance $\leq 60\%$	Pass

60332-3 Part 3 Category C (vertical-tray flame test), which applies around the world, and the high-flame-retardant characteristics of UL 1666 (riser cable flame test), which applies mainly in the U.S. Regarding EN 50399, which must be met in applications as construction materials in Europe, there would be got a prospect of fulfilling C_{ca} in the combustion test and ES2 in the smoke test.

4. Comparison of Work Time

We calculated the effect of reducing the installation time by using the outdoor/indoor cables. By imparting flame-retardant performance to the cables, it has become possible to install cables from the outdoors into a building without a connection point (Fig. 8). As shown in Fig. 9, the

installation work time is expected to be reduced by about 33% for mass fusion splicing and by about 28% for installation work. There is a prospect of reducing work time by about 31% in total (compared to conventional products of Sumitomo Electric Industries, Ltd.).

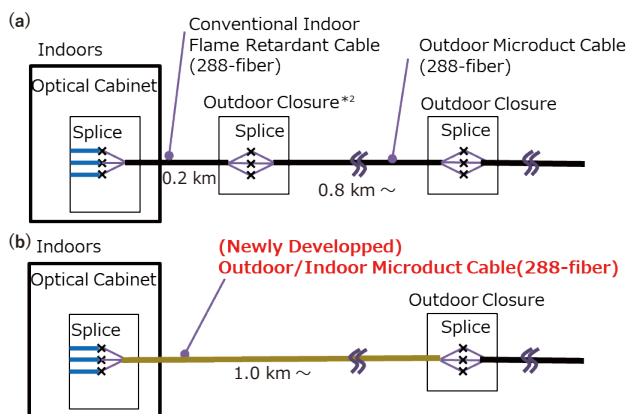


Fig. 8. Changes in the cable wiring style

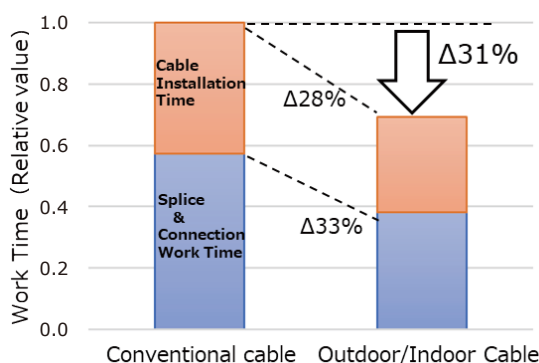


Fig. 9. Comparison of the work time

5. Conclusion

With the diversification of cable installation methods, the air-blowing installation has been performed on optical cables of various fiber counts, including low- and high-fiber-count cables. The cable structures have been optimized by improving air-blowing distance and high-fiber-count (up to 864-fiber) microduct cables have been newly developed. Outdoor/indoor microduct cables (flame-retardant microduct cables) have also been developed successfully to reduce construction work time by enabling direct installation into a building. Regarding flame-retardant microduct cables, 288-fiber cables are expected to reduce work time by 31% and come into frequent use to meet various needs. Although using a flame-retardant jacket increases the cable mass because its specific gravity is higher than that of a conventional non-flame-retardant jacket, an air-blowing distance of 1 km or more can be achieved. The combination with outdoor microduct cables makes it possible to build networks inexpensively and achieve flexible cabling configurations.

• Freeform Ribbon is a trademark or registered trademark of Sumitomo Electric Industries, Ltd.

Technical Terms

- *1 Strength member: This component relieves the tension applied to optical fibers during installation.
- *2 Closure: This refers to a terminal box which is installed at connection and branch points of optical cables and in which optical fibers are connected. Closures are mainly used outdoors.

References

- (1) F. Sato et al, "Characteristics of Ultra-High-Fiber-Count and High-Density Optical Cables with Pliable Ribbons," International Cable and Connectivity Symposium (2017), p.304
- (2) F. Sato et al, "Ultra-Hig-Density Microduct Optic Cable with 200 μ m Freeform Ribbons for Air-Blown Installation," SEI TECHNICAL REVIEW No. 89 (Oct 2019)

Contributors

The lead author is indicated by an asterisk (*).

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Y. NORISUGI

• Optical Fiber & Cable Division



T. HIRAMA

• Assistant General Manager, Optical Fiber & Cable Division





Single-Mode Optical Fiber (SMF)



Issue date: 08/10
Supersedes: 05/09

Single-Mode Optical Fiber (SMF)

First class reliability thanks to Draka proprietary processes and coating system

Product Type: G.652.B

Coating Type: ColorLock-XS and Natural

Issue date: 08/10

Supersedes: 05/09

Optical Specifications

Attenuation	
Attenuation at 1310 nm	0.33 – 0.35 dB/km
Attenuation at 1383 nm	1 dB/km
Attenuation at 1550 nm	0.19 – 0.22 dB/km
Attenuation at 1625 nm	0.21 – 0.24 dB/km

Other values available on request

Attenuation vs. Wavelength

Maximum attenuation change over the window from reference

Wavelength range (nm)	Reference λ (nm)	(dB/km)
1285 – 1330	1310	≤ 0.03
1525 - 1575	1550	≤ 0.02
1550 - 1625	1550	≤ 0.03

Point discontinuities

No point discontinuity greater than 0.05 dB at 1310 nm and 1550 nm.

Attenuation with Bending

Number of Turns	Mandrel Radius (mm)	Wavelength (nm)	Induced Attenuation (dB)
100	25	1310	≤ 0.05
100	25	1550	≤ 0.05
100	30	1625	≤ 0.05

Cutoff Wavelength

Cable Cutoff wavelength (Accf)	≤ 1260 nm
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Mode Field Diameter

Wavelength (nm)	MFD (μ m)
1310	9.0 ± 0.4
1550	10.1 ± 0.5

Chromatic Dispersion

Wavelength (nm)	Chromatic Dispersion (ps/(nm.km))
1285 – 1330	$\leq 3 $
1550	≤ 18.0
1625	≤ 22.0

Zero Dispersion Wavelength (λ_0):	1300 - 1322 nm
Slope (S_0) at λ_0 :	≤ 0.090 ps/(nm ² .km)

Polarization Mode Dispersion (PMD)

PMD Link Design Value* (ps√km)	≤ 0.08
Max. Individual Fiber (ps√km)	≤ 0.20

* According to IEC 60794 –3, Ed 3 (Q=0.01%)

Geometrical Specifications

Glass Geometry	
Cladding Diameter	125.0 ± 1.0 μ m
Core/Cladding Concentricity Error	≤ 0.6 μ m
Cladding Non-Circularity	≤ 1.0 %
Fiber Curl (Radius)	≥ 4 m
Coating Geometry	
Coating Diameter	242 ± 7 μ m
Coating/Cladding Concentricity Error	≤ 12 μ m
Coating Non-Circularity	≤ 5 %
Length	Standard lengths up to 50.4 km

Mechanical Specifications

Proof Test

The entire length is subjected to a tensile proof stress ≥ 0.7 GPa (100 kpsi); 1% strain equivalent

Tensile Strength

Dynamic tensile strength (0.5 meter gauge length):

Aged** and unaged:	median > 3.8 GPa (550 kpsi)
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** Aging at 85°C, 85% RH, 30 days

Dynamic and Static Fatigue

Dynamic fatigue, unaged and aged**	$n_d \geq 20$
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Static fatigue, aged**	$n_s \geq 23$
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Coating Performance

Coating strip force unaged and aged***:

- Average strip force:	1 N to 3 N
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- Peak strip force:	1.2 N to 8.9 N
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*** Aging:

- 0°C and 45°C
- 30 days at 85°C and 85% RH
- 14 days water immersion at 23°C
- Wasp spray exposure (Telcordia)

Environmental Specifications

Environmental Test	Test Conditions	Induced Attenuation at 1310, 1550 nm (dB/km)
Temperature cycling	- 60°C to 85°C	≤ 0.05
Temperature-Humidity cycling	- 10°C to 85°C, 4-98% RH	≤ 0.05
Water Immersion	14 days; 23°C	≤ 0.05
Dry Heat	30 days; 85°C	≤ 0.05
Damp Heat	30 days; 85°C; 85% RH	≤ 0.05

Typical Values

Miscellaneous	
Nominal Zero Dispersion Slope	0.085 ps/(nm ² .km)
Effective group index @ 1310 nm	1.467
Effective group index @ 1550 nm	1.468
Effective group index @ 1625 nm	1.468
Rayleigh Backscatter Coefficient for 1 ns pulse width:	
@ 1310 nm	- 79.4 dB
@ 1550 nm	- 81.7 dB
@ 1625 nm	- 82.5 dB
Median Dynamic Tensile Strength	5.3 GPa (750 kpsi)
(Aged at 85°C, 85% RH, 30 days; 0.5 m gauge length)	

CORNING



Corning® SMF-28® Ultra optical fiber was the first to market to combine the benefit of industry-leading attenuation and improved macrobending performance while maintaining compatibility with the existing installed fiber base. This full-spectrum all-in-one fiber is advantaged for operation in fiber to the home (FTTH), mobile, access, metro, regional and long haul networks. SMF-28 Ultra fiber has bend performance that exceeds Recommendation ITU-T G.657.A1, and is compatible and fully compliant with Recommendation ITU-T G.652.D.

Optical Specifications

Maximum Attenuation

Wavelength (nm)	Maximum Value* (dB/km)
1310	≤ 0.32
1383**	≤ 0.32
1490	≤ 0.21
1550	≤ 0.18
1625	≤ 0.20

*Alternate attenuation offerings available upon request.

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

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_r) by more than the value α .

Macrobend Loss

Mandrel Radius (mm)	Number of Turns	Wavelength (nm)	Induced Attenuation* (dB)
10	1	1550	≤ 0.50
10	1	1625	≤ 1.5
15	10	1550	≤ 0.05
15	10	1625	≤ 0.30
30	100	1625	≤ 0.1

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

Point Discontinuity

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

Cable Cutoff Wavelength (λ_{cc})

$\lambda_{cc} \leq 1260$ nm

Mode Field Diameter

Wavelength (nm)	Mode Field Diameter (μ m)
1310	9.2 ± 0.4
1550	10.4 ± 0.5

Dispersion

Wavelength (nm)	Dispersion Value [ps/(nm·km)]
1550	≤ 18
1625	≤ 22

Zero Dispersion Wavelength (λ_0): 1304 nm ≤ λ_0 ≤ 1324 nm
Zero Dispersion Slope (S_0): ≤ 0.092 ps/(nm²·km)

Polarization Mode Dispersion (PMD)

	Value (ps/√km)
PMD Link Design Value	≤ 0.04*
Maximum Individual Fiber PMD	≤ 0.1

*Complies with ITU-T G.650-2 Appendix IV, (m = 20, Q = 0.01%), August 2015.

The PMD link design value is a term used to describe the PMD of concatenated lengths of fiber (also known as PMD₀). This value represents a statistical upper limit for total link PMD. Individual PMD values may change when fiber is cabled.

ColorPro® Identification Technology

SMF-28 Ultra fiber is also available in colored and ringmarked variants, enabled by ColorPro® Identification technology. Corning fibers with ColorPro® Identification technology deliver better efficiency in cable manufacturing, simplify inventory management, and leverage an enhanced fiber product offering.

How to Order

Contact your sales representative, or call the Optical Fiber Customer Service Department:
Ph: 1-607-248-2000 (U.S./Can.)
+44-1244-525-320 (Europe)
Email: cofic@corning.com
Please specify the fiber type, attenuation, and quantity when ordering.

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	$\leq 0.7\%$

Coating Geometry

Coating Diameter	242 ± 5 μm
Coating-Cladding Concentricity	< 12 μm

Environmental Specifications

Environmental Test	Test Condition	Induced Attenuation 1310 nm, 1550 nm, and 1625 nm (dB/km)
Temperature Dependence	-60°C to $+85^{\circ}\text{C}^*$	≤ 0.05
Temperature Humidity Cycling	-10°C to $+85^{\circ}\text{C}$ up to 98% RH	≤ 0.05
Water Immersion	$23^{\circ}\text{C} \pm 2^{\circ}\text{C}$	≤ 0.05
Heat Aging	$85^{\circ}\text{C} \pm 2^{\circ}\text{C}$	≤ 0.05
Damp Heat	85°C at 85% RH	≤ 0.05

Operating Temperature Range: -60°C to $+85^{\circ}\text{C}$

*Reference temperature = $+23^{\circ}\text{C}$

Mechanical Specifications

Proof Test

The entire fiber length is subjected to a tensile stress ≥ 100 kpsi (0.69 GPa). Higher proof test levels are available.

Length

Fiber lengths available up to 50.4 km/spool.

Performance Characterizations

Characterized parameters are typical values.

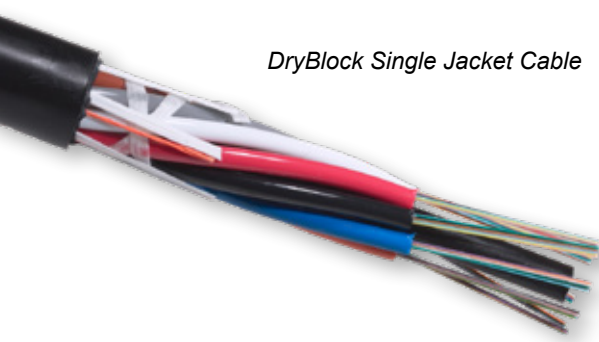
Core Diameter	8.2 μm
Numerical Aperture	0.14 NA is measured at the one percent power level of a one-dimensional far-field scan at 1310 nm.
Effective Group Index of Refraction (n_{eff})	1310 nm: 1.4676 1550 nm: 1.4682
Fatigue Resistance Parameter (n_d)	20
Coating Strip Force	Dry: 0.6 lbs. (3 N) Wet, 14-day room temperature: 0.6 lbs. (3 N)
Rayleigh Backscatter Coefficient (for 1 ns Pulse Width)	1310 nm: -77 dB 1550 nm: -82 dB



A Furukawa Company

DryBlock® Single Jacket Cable

A Classic OSP Cabling Solution Offering Outstanding Flexibility, Durability, and Reliability



DryBlock Single Jacket Cable

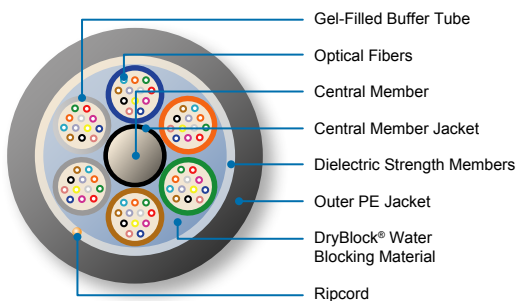
Features and Benefits

- Lightweight, flexible, and easy to install, yet highly durable and reliable
- Small cable outer diameter (OD) for ease of handling
- ROL stranding and ripcords for fast mid-span cable entry
- 600 pound (2700 N) rated pulling tension for long pulls
- DryBlock water-blocking technology for a more craft-friendly, jelly-free cable core
- Fiber counts to 288
- Hybrid (fiber/copper) and composite (mix of fiber types) cable designs available for special applications
- Available with OFS application-specific fibers including AllWave® Zero Water Peak (ZWP) and AllWave+ Single-Mode, TrueWave® RS Low Water Peak (LWP), and Multimode Fibers.

Product Description

The OFS DryBlock® Single Jacket Loose Tube Cable is a classic outside plant (OSP) cabling solution. This small diameter, lightweight cable offers the flexibility needed for duct and lashed aerial applications along with the durability critical for OSP use.

To construct the DryBlock Single Jacket Cable, one to 12 optical fibers are placed within color-coded, gel-filled buffer tubes to protect the fibers from external mechanical and environmental forces. The buffer tubes are then stranded around a dielectric central member using the reverse oscillating lay (ROL) stranding method. Unlike other methods, ROL stranding enables quick and easy mid-span entry. DryBlock water-blocking material and dielectric strength elements are applied to the cable core. Finally, a durable outer polyethylene (PE) jacket is added to complete the cable construction.



DryBlock Single Jacket Cable Cross-Section

Why the DryBlock Single Jacket Cable?

The DryBlock Single Jacket Loose Tube Cable combines ready flexibility with the rugged durability and reliability needed for outdoor applications. The result is a time-proven OSP cabling solution that is easy to handle and install, yet robust enough for the rigors of the outside environment.

The small outer diameter of the DryBlock Single Jacket Cable makes handling easier, and ROL stranding of the buffer tubes allows fast mid-span entry. This cable also incorporates DryBlock water-blocking technology for a more craft-friendly, jelly-free cable core that is lighter in weight and easier to handle, saving on cable preparation and installation time.

The DryBlock Single Jacket Loose Tube Cable is an excellent choice for lashed aerial, duct, and general OSP applications.

Specifications								
Fiber Count:	2-60	61-72	73-96	97-120	121-144	145-216	217-240	241-288
Outer Diameter - in. (mm)	0.39 (9.9)	0.41 (10.5)	0.48 (12.3)	0.55 (13.9)	0.62 (15.7)	0.62 (15.7)	0.65 (16.5)	0.72 (18.3)
Weight - lb/ft (kgm/km)	52 (77)	60 (89)	80 (119)	104 (155)	130 (193)	127 (189)	144 (214)	176 (262)

Performance Standard (all cables)

Tested per Applicable Requirements of ANSI/ICEA S-87-640 and Telcordia GR-20 CORE Issue 4

Handling

Minimum Bend Radius, With Load	15 x OD*
Minimum Bend Radius, With No Load	10 x OD*
Minimum Bend Radius, Storage Coils	10 x OD*
Maximum Rated Cable Load (MRCL):	600 lbf (2700 N)
Maximum Long Term Load:	180 lbf (800 N)

Temperature:	Installation:	-22 °F to 140 °F (-30 °C to 60 °C)
	Operation:	-40 °F to 158 °F (-40 °C to 70 °C)
	(upon request):	-60 °F to 158 °F (-60 °C to 70 °C)
	Storage:	-40 °F to 167 °F (-40 °C to 75 °C)

* **NOTE:** OD = Outer Diameter of Cable, minimum of 6 in. (15 cm). See OFS Installation Procedure 042 for sheath preparation and coiling instructions.

Fiber Type²

	Fiber (S1)	Fiber (S2)	Fiber (SF)	Fiber Standards	Wavelengths (nm)	Typical * Attenuation (dB/km)	Maximum Cable on Reel Attenuation (dB/km)
Single-Mode Fiber							
AllWave® ZWP Fiber	3	B	E	G.652.D	1310/1385/1550	-	0.35/0.31/0.25
AllWave+ ZWP Fiber	3	C	E	G.652.D/G.657.A1	1310/1385/1550	-	0.35/0.31/0.25
AllWave FLEX ZWP Fiber	5	B	E	G.652.D/G.657.A1	1310/1385/1550	-	0.35/0.31/0.25
AllWave One Fiber	3	F	E	G.652.D/G.657.A1	1310/1385/1550	0.33/0.31/0.19	0.34/0.31/0.22
AllWave ULL Fiber	3	H	E	G.652.D/G.657.B	1310/1550	0.31/0.17	0.33/0.19
TrueWave® RS LWP Fiber	6	2	6	G.655.C&D	1550	0.21	0.25
TeraWave® Fiber	6	2	R	G.654.B	1550	0.19	0.25
TeraWave ULL Fiber	6	9	R	G.654.B	1550	0.18	0.22
Multimode Fiber							
62.5 µm Fiber	R	U	9	OM1 62.5 µm	850/1300	-	3.4/1.0
LaserWave® FLEX 300 Fiber	L	F	2	OM3 50 µm	850/1300	-	2.4/0.7
LaserWave FLEX 550 Fiber	L	H	2	OM4 50 µm	850/1300	-	2.4/0.7

DryBlock Single Jacket Loose Tube Cable Ordering Information

Example: AT-3BE12TT-NNN¹ Part Number: AT- S1 S2 SF S3 S4 S5 S6 - NNN

S1 = Fiber Selection

See S1 in Fiber Type table above

S3 = Sheath Construction

1 = Single Jacket All Dielectric

S5 = Core Type

T = 2.5 mm Gel-Filled Buffer Tubes

S2 = Fiber Transmission Performance

See S2 in Fiber Type table above

S4 = Tensile Load

2 = 600 lb. (2700 N)

S6 = Fibers per Tube

2 = 2 fibers 8 = 8 fibers
4 = 4 fibers N = 10 fibers
6 = 6 fibers T = 12 fibers

SF = Fiber Type²

See SF in Fiber Type table above

NNN = Fiber Count = 002 – 288

¹ Part Number shown is for a DryBlock Single Jacket Cable with standard AllWave ZWP attenuation and standard cable print. Maximum AllWave ZWP attenuation: 0.35/0.31/0.27/0.25/0.27 dB/km @ 1310/1385/1490/1550/1625 nm
Standard Print, example for DryBlock Single Jacket Cable: OFS OPTICAL CABLE AT-3BE12TT-NNN [MM-YY] (UL) US TYPE OFNR [HANDSET SYMBOL] [NNN] F [SERIAL #]

² Contact OFS Order Management for information on other cable variations, including additional fiber types, attenuation, and custom cable print.

NOTE: For more information regarding typical attenuation as well as attenuation parameters on Link Design Value (LDV) (Maximum end-to-end attenuation over a concatenated span), please see OFS Application Note AN-111 which can be downloaded at www.ofsoptics.com or contact your OFS representative.

For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.



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Doc ID: osp-152 Date: 07/20

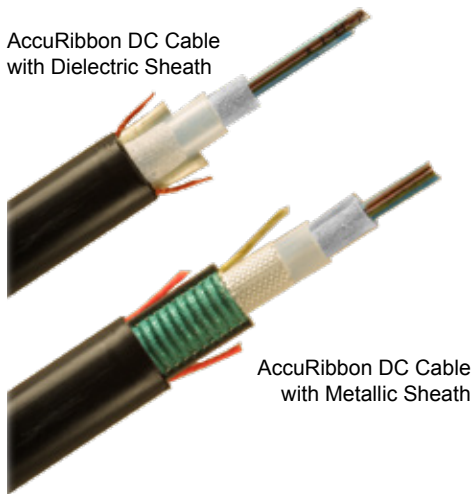
AllWave, TrueWave, DryBlock, TeraWave and LaserWave are registered trademarks of OFS FITEL, LLC.
OFS reserves the right to make changes to the prices and product(s) described in this document at any time without notice. This document is for informational purposes only and is not intended to modify or supplement any OFS warranties or specifications relating to any of its products or services.



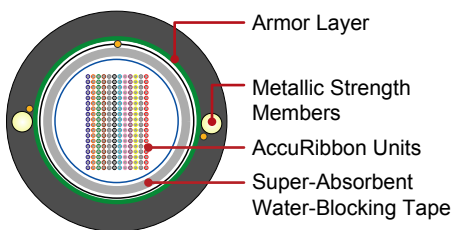
A Furukawa Company

AccuRibbon® DC Fiber Optic Cable

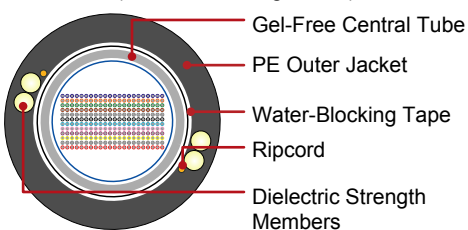
Lose the Gel With Completely Dry Cable for Faster, Cleaner Fiber Deployments



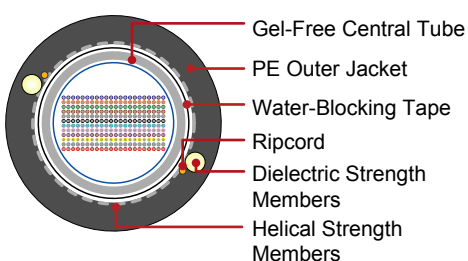
Metallic Cable Cross-Section
(features 2 strength rods)



Dielectric Cable Cross-Section
(features 4 strength rods)



Dielectric Cable (720 to 864-Fiber) Cross-Section
(features 2 strength rods and helical strength members)



Features and Benefits

- Totally gel-free cable design for cleaner, faster installations
- A significantly lighter weight cable for faster and easier cable deployment
- AccuRibbon core maximizes fibers per duct and supports mass-fusion splicing
- Metallic and dielectric sheath options support lashed aerial, direct buried, and duct installations
- Deploy up to 432 fibers in a one-inch ID duct
- Available with a wide range of OFS fibers including AllWave® Zero Water Peak (ZWP) and AllWave+ Single-Mode Fibers Single-Mode Fibers

Product Description

At first glance, you might not recognize an AccuRibbon® DC Cable. That's because it uses the same robust sheath as the gel-filled AccuRibbon LXE Cable. However, once you open the patented core of an AccuRibbon DC Cable, the difference between a gel-filled and a completely dry cable is clear. The core of the all-dry AccuRibbon DC Cable contains absolutely no gels or messy filling compounds, which eliminates the costly labor of removing gel and oil from each fiber ribbon prior to splicing and helps your tools and your workspace stay clean and safe.

The construction of the AccuRibbon DC Cable begins with its dry central core tube, which contains a gel-free, water-blocking tape and either up to eighteen 12-fiber AccuRibbon units (12 to 216 fibers) or up to thirty-six 24-fiber AccuRibbon units (240 to 864 fibers). Surrounding the central tube is an additional layer of water-blocking tape and an optional layer of armor. Completing the construction of the AccuRibbon DC Cable is a durable polyethylene (PE) jacket with integrated metallic or dielectric strength members. Ripcords are strategically located beneath the jacket for easy cable entry.

Why The AccuRibbon DC Cable?

With its innovative dry-core design, the AccuRibbon DC Cable is specifically engineered for faster, cleaner installation. Unlike traditional outside plant fiber optic cables that use gels in direct contact with optical fibers, the AccuRibbon DC Cable replaces the gel inside the central tube with a super-absorbent tape that provides water blocking "on demand". The absence of gels allows almost effortless splice preparation and a lower overall cable weight. Why not lose the gel today?

In addition to being gel free, AccuRibbon units support the use of mass-fusion splicing to speed fiber termination. The inherent high fiber density of AccuRibbon units also helps to maximize the number of fibers that can be deployed in available duct space. Deploying the most fibers possible in a limited space and terminating them quickly and cheaply are critical to cost-effective deployments – AccuRibbon DC Cables can help you do both.

Specifications	Dielectric Sheath							Metallic Sheath						
Fiber Count	12-24	36-72	84-96	108-144	156-216	288-576	720-864	12-24	36-72	84-96	108-144	156-216	288-576	720-864
Outer Diameter - in. (mm)	0.44 (11.3)	0.50 (12.6)	0.50 (12.8)	0.55 (13.9)	0.65 (16.5)	0.78 (19.8)	0.99 (25.1)	0.46 (11.7)	0.49 (12.5)	0.53 (13.4)	0.59 (15.0)	0.69 (17.5)	0.84 (21.3)	1.02 (26.0)
Weight - lb/kft (kgm/km)	82 (122)	99 (147)	99 (147)	110 (163)	136 (202)	172 (256)	260 (387)	101 (151)	109 (163)	116 (173)	141 (210)	169 (252)	222 (331)	303 (451)

Performance Standard	Temperature
Tested per Applicable Requirements of ANSI/ICEA S-87-640 and Telcordia GR-20-CORE Issue 4	Installation -22 °F to 140 °F (-30 °C to 60 °C) Operation -40 °F to 158 °F (-40 °C to 70 °C) Storage -40 °F to 167 °F (-40 °C to 75 °C)

Handling	Dielectric Sheath			Metallic Sheath		
Fiber Count	12-240	264-432	576-864	12-240	264-432	576-864
Minimum Bend Radius, With Load	20 x OD**	20 x OD	20 x OD	20 x OD	20 x OD	20 x OD
Minimum Bend Radius, With No Load	10 x OD	20 x OD	20 x OD	10 x OD	20 x OD	20 x OD
Minimum Bend Radius, Storage Coils	10 x OD	20 x OD	20 x OD	10 x OD	20 x OD	20 x OD
Maximum Rated Cable Load (MRCL)	600 lbf (2700 N) for all cables					
Maximum Long Term Load	180 lbf (800 N) for all cables					

NOTE: Low fiber count dielectric cables feature 4 strength rods, 720 and 864 dielectric cables feature 2 rods; metallic cables feature 2 rods;

** OD = Outer Diameter of Cable, minimum of 9 in. (23 cm) See OFS Installation Procedure 042 for sheath preparation and coiling instructions

Fiber Type ²							
Single-Mode Optical Fiber	Fiber (S1)	Fiber (S2)	Fiber (SF)	Fiber Standards	Wavelengths (nm)	Typical* Attenuation (dB/km)	Maximum Cable on Reel Attenuation (dB/km)
AllWave® ZWP Optical Fiber	3	B	E	G.652.D	1310/1385/1550	-	0.35/0.31/0.25
AllWave+ ZWP Optical Fiber	3	C	E	G.652.D/G.657.A1	1310/1385/1550	-	0.35/0.31/0.25
AllWave FLEX ZWP Optical Fiber	5	B	E	G.652.D/G.657.A1	1310/1385/1550	-	0.35/0.31/0.25
AllWave One Optical Fiber	3	F	E	G.652.D/G.657.A1	1310/1385/1550	0.33/0.31/0.19	0.35/0.31/0.22
TrueWave® RS LWP Optical Fiber	6	2	6	G.655.C & D	1550	0.21	0.25
TeraWave® Optical Fiber	6	2	R	G.654.B	1550	0.20	0.25
Multimode Optical Fiber							
62.5 µm Optical Fiber	R	U	9	OM1 62.5 µm	850/1300	-	3.4/1.0
LaserWave® FLEX 300 Optical Fiber	L	F	2	OM3 50 µm	850/1300	-	2.4/0.7
LaserWave FLEX 550 Optical Fiber	L	H	2	OM4 50 µm	850/1300	-	2.4/0.7

NOTE: Multimode optical fibers are qualified up to 216 fibers only (12 fiber ribbons). Contact OFS for higher fiber count cable using multimode optical fiber.

AccuRibbon DC Cable Ordering Information

Example: **AT-3BE833X-NNN¹** (Dielectric) **AT-3BE83SX-NNN¹** (Metallic/Armored)

Part Number: **AT- S1 S2 SF S3 S4 S5 S6 - N N N¹**

S1 = Fiber Selection See S1 Fiber Table above	S3 = Sheath Construction 8 = All Central Core Products	Sheath Design S5 = 3 = Totally Dry All-Dielectric Dry-Core S = Total Dry Armored Dry-Core
S2 = Fiber Transmission Performance See S2 Fiber Table above	Cable Core Design 3 = 12 Fibers per Ribbon AccuRibbon DC (≤ 216 Fibers)	S6 = Central Core - Oversheath X = No Oversheath
SF = Fiber Type² See SF Fiber Table above	S4 = 4 = 24 Fibers per Ribbon AccuRibbon DC (≥ 240 Fibers)	NNN = Fiber Count = 002-864

¹ Part Number shown is for standard AllWave ZWP attenuation and standard cable print: Maximum AllWave ZWP attenuation: 0.35/0.31/0.27/0.25/0.27 dB/km (1310/1385/1490/1550/1625 nm) Standard Print, example (AccuRibbon DC Dielectric Cable): **OFS OPTICAL CABLE AT-3BE833X -NNN [MM-YY] [HANDSET SYMBOL] [NNN] F [SERIAL #]**

² Contact OFS Order Management for information on other cable variations, including additional fiber types, attenuation, and custom cable print.

³ Contact your OFS Customer Care Representative on the positioning of ribbon requirements if TeraWave Fiber is being ordered.

NOTE: For more information regarding typical attenuation as well as attenuation parameters on Link Design Value (LDV) (Maximum end-to-end link attenuation over a concatenated span), please see OFS Application Note AN-111-A which can be downloaded at www.ofsoptics.com or contact your OFS representative.

For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.



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**CITY OF TACOMA
STANDARD TERMS AND CONDITIONS
GOVERNS BOTH GOODS AND SERVICES AS APPLICABLE**

In the event of an award by the City, these Terms and Conditions stated herein, Additional Contract Documents if issued, Solicitation if issued, Purchase Orders if issued by City, and Supplier's Submittal, if provided, shall constitute the Contract between City and Supplier for the acquisition of goods, including materials, supplies, and equipment or for the provision of services and deliverables.

Said documents represent the entire Contract between the parties and supersede any prior oral statements, discussions, or understandings between the parties, and/or subsequent Supplier invoices. No modification of the Contract shall be effective unless mutually agreed in writing.

The specific terms and conditions of any Solicitation (Specification, Request for Bids, Request for Proposals, Requests for Qualifications, Requests for Quotations, Request for Information, bid documents, request to enter into negotiations, or other form of solicitation issued by City including any general, special, or technical provisions associated with such Solicitations) are incorporated herein by reference and supersede these Terms and Conditions where there is conflict or inconsistency.

In the event Additional Contract Documents are negotiated and agreed to in writing between Supplier and City, the specific terms of such Additional Contract Documents are incorporated herein by reference and supersede all other terms and conditions where there is conflict or inconsistency.

These Terms and Conditions, Additional Contract Documents if issued, Solicitation if issued, City purchase order if issued, are controlling over Supplier's Submittal if a Submittal is provided. Submittals if provided are incorporated herein by reference.

1.01 SUPPLIER / CONTRACTOR

As used herein, "Supplier" or "Contractor" shall be the Supplier(s) entering a Contract with City, whether designated as a Supplier, Contractor, Vendor, Proposer, Bidder, Respondent, Seller, Merchant, Service Provider, or otherwise.

1.02 SUBMITTAL

Submittal means Bids, Proposals, Quotes, Qualifications or other information, content, records or documents submitted in response to a City Solicitation.

1.03 FORMS OF SUBMITTAL

Unless stated otherwise, all submittals must be in SAP Ariba and submitted exactly as specified or directed, and all required forms must be used.

1.04 COSTS TO PREPARE SUBMITTAL

The City is not liable for any costs incurred by Supplier for the preparation of materials or a Submittal provided in response to a solicitation, conducting presentations to the City, or any other activities related to responding to the City's Solicitation.

1.05 LICENSES/PERMITS

- A. Suppliers, if applicable, must have a Washington state business license at the time of Submittal and throughout the term of the Contract. Failure to include a Washington state business license may be grounds for rejection of the Submittal or cancellation of contract award. Information regarding Washington state business licenses may be obtained at <http://bls.dor.wa.gov>.
- B. Upon award, it is the responsibility of the Supplier to register with the City of Tacoma's Tax and License Division, 733 South Market Street, Room 21, Tacoma, WA 98402-3768, 253-591-5252, https://www.cityoftacoma.org/government/city_departments/finance/tax_and_license/. Supplier shall obtain a business license as is required by Tacoma Municipal Code Subtitle 6C.20.
- C. During the term of the Contract, Supplier, at its expense, shall obtain and keep in force any and all necessary licenses and permits.

1.06 PUBLIC DISCLOSURE: PROPRIETARY OR CONFIDENTIAL INFORMATION

- A. Supplier Submittals, all documents and records comprising the Contract, and all other documents and records provided to the City by Supplier are deemed public records subject to disclosure under the Washington State Public Records Act, Chapter 42.56 RCW (Public Records Act). Thus, City may be required, upon request, to disclose the Contract and documents or records related to it unless an exemption under the Public Records Act or other laws applies. In the event CITY receives a request for such disclosure, determines in its legal judgment that no applicable exemption to disclosure applies, and Supplier has complied with the requirements to mark records considered confidential or proprietary as such requirements are stated below, City agrees to provide Supplier 10 days written notice of impending release. Should legal action thereafter be initiated by Supplier to enjoin or otherwise prevent such release, all expense of any such litigation shall be borne by Supplier, including any damages, attorneys' fees or costs awarded by reason of having opposed disclosure. City shall not be liable for any release where notice was provided and Supplier took no action to oppose the release of information.
- B. If Supplier provides City with records or information that Supplier considers confidential or proprietary, Supplier must mark all applicable pages or sections of said record(s) as "Confidential" or "Proprietary." Further, in the case of records or information submitted in response to a Request for Proposals, an index must be provided indicating the affected pages or sections and locations of all such material identified Confidential or Proprietary. Information not included in the required index will not be reviewed for confidentiality or as proprietary before release. If Supplier fails to so mark or index Submittals and related records, then the City, upon request, may release said record(s) without the need to satisfy the requirements of subsection A above; and Supplier expressly waives its right to allege any kind of civil action or claim against the City pertaining to the release of said record(s).
- C. Submission of materials in response to City's Solicitation shall constitute assent by Supplier to the foregoing procedure and Supplier shall have no claim against the City on account of actions taken pursuant to such procedure.

1.07 SUSTAINABILITY

- A. The City has interest in measures used by its contractors to ensure sustainable operations with minimal adverse impact on the environment. The City seeks to do business with vendors that value community and environmental stewardship that help us meet our sustainable purchasing goals.
- B. The City encourages the use of environmentally preferable products or services that help to minimize the environmental and human health impacts of City operations. Suppliers are encouraged to incorporate environmentally preferable products or services into Submittals wherever possible. "Environmentally preferable" means products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.
- C. Environmental Standards. The City seeks to ensure that all purchases comply with current environmental standards and product specifications. Where appropriate, third party independent certifiers such as Green Seal and USEPA Standards shall be a minimum specification for products to the City, unless specified otherwise herein.
- D. The City encourages the use of sustainability practices and desires any awarded Suppliers to assist in efforts to address such factors when feasible for:
 - 1. Pollutant releases
 - 2. Toxicity of materials used
 - 3. Waste generation
 - 4. Greenhouse gas emissions, including transportation of materials and services
 - 5. Recycle content
 - 6. Energy consumption
 - 7. Depletion of natural resources
 - 8. Potential impact on human health and the environment

1.08 ALTERATIONS NOT ALLOWED

Except as otherwise specifically provided in a Solicitation, Submittals that are incomplete or conditioned in any way, contain erasures, alternatives or items not called for, or not in conformity with law, may be rejected as being non-responsive. Any attempt to condition a Submittal by inserting exceptions to the Solicitation or any conditions, qualifications or additions that vary its terms may result in rejection of the Submittal. The City may reject any submittal containing a material deviation from the Solicitation.

1.09 CORRECTION OF AMBIGUITIES AND OBVIOUS ERRORS

- A. The City reserves the right to correct obvious errors in Supplier's Submittal. In this regard, if the unit price does not compute to the extended total price, the unit price shall govern.
- B. Supplier shall notify the City of Tacoma Procurement and Payables Division in writing of any ambiguity, conflict, discrepancy, omission or other error in a Solicitation no later than five business days prior to the submittal deadline.
 - 1. For solicitations conducted in SAP Ariba, Supplier shall notify the City of Tacoma Procurement and Payables Division on the message board of the event.
 - 2. For all other solicitations, Supplier shall notify the contract person listed in the Solicitation.
- C. The City will make necessary modifications by addendum.
- D. Supplier is responsible for identifying ambiguities, conflicts, discrepancies, omissions or other errors in the Solicitation prior to providing its Submittal or the ambiguity, conflict, discrepancy, omission, or other error is waived. Any Submittal that includes assumed clarifications and/or corrections without the required authentication of the same is subject to rejection.

1.10 WARRANTIES/GUARANTEE

- A. Suppliers warrant that all items, including services, as applicable:
 - 1. Are merchantable.
 - 2. Comply with the City's latest drawings and specifications.
 - 3. Are fit for the City's intended use.
 - 4. Will be performed according to the skill and care required by customarily accepted good practices and procedures followed by service providers rendering the same or similar type of service.
 - 5. Are new and unused unless otherwise stated.
 - 6. Comply with all applicable safety and health standards established for such products by the Occupational Safety and Health Administration (OSHA), Washington Industrial Safety and Health Act (WISHA) and/or Consumer Products Safety Act (CPSA), and all other applicable state and federal laws or agency regulations.
 - 7. Are properly packaged and contain appropriate instructions or warnings, including applicable MSDS sheets.

1.11 PATENTS, TRADEMARKS AND COPYRIGHTS

Suppliers warrant that equipment and/or materials furnished, including software, do not infringe on any patent, trademark or copyright, and agree to indemnify, defend and hold harmless, the City in the event of any infringement or claim thereof.

1.12 DELIVERY OF SUBMITTALS TO THE CITY'S PROCUREMENT AND PAYABLES DIVISION

- A. Submittal packages must be received by the City's Procurement and Payables Division in SAP Ariba (unless another form of delivery is stated), prior to the scheduled time and date stated in the Solicitation.
- B. Supplier is solely responsible for timely delivery of its Submittal.
- C. Submittals received after the time stated in the solicitation will not be accepted.
- D. For purposes of determining whether a Submittal has been timely received in SAP Ariba, the City's Procurement and Payables Division will rely on the submittal clock in SAP Ariba.

1.13 SUBMITTAL IS NON-COLLUSIVE

Supplier acknowledges that by its delivery of a Submittal to the City in response to a Solicitation, it represents that the prices in such Submittal are neither directly nor indirectly the result of any formal or informal agreement with another Supplier.

1.14 PARTNERSHIPS

The City will allow firms to partner in order to respond to a Solicitation. Multiple suppliers may team under a Prime Supplier's Submittal in order to provide responses to all sections in a single submission; however, each Supplier's participation must be clearly delineated by section. The Prime Supplier will be considered the responding vendor and the responsible party at contract award. All contract negotiations will be conducted only with the Prime Supplier. All contract payments will be made only to the Prime Supplier. Any agreements between the Prime Supplier and other companies will not be a part of the Contract between the City and the Prime Supplier. The City reserves the right to select more than one Prime Supplier.

1.15 WITHDRAWAL OF SUBMITTALS

- A. Prior to Submittal Deadline. Submittals may be withdrawn (including in SAP Ariba) prior to the scheduled submittal deadline.
- B. After Submittal Deadline. No Submittal can be withdrawn after having been opened before the actual award of the contract, unless the award is delayed more than 90 calendar days beyond the date of opening. If a delay of more than 90 calendar days does occur, Supplier must submit written notice to the City purchasing manager that Supplier is withdrawing its submittal.

1.16 ACCEPTANCE OF SUBMITTALS

- A. If the solicitation announcement so states, submittals, unless previously withdrawn, will be read aloud, irrespective of any irregularities or informalities in such submittal, at the time and place specified in the solicitation announcement.
- B. All submittals must remain open for acceptance by the City for a period of at least 90 calendar days from the submittal deadline.

1.17 RIGHT TO REJECT

The City of Tacoma reserves the right to reject any and all submittals, waive minor deviations or informalities, supplement, amend, reduce or otherwise modify the scope of work or cancel the solicitation, and if necessary, call for new submittals.

1.18 RESERVED RIGHTS

- A. By providing a submittal in response to a City solicitation, Supplier acknowledges and consents to the below City rights and conditions. With regard to this procurement process, the City reserves, holds without limitation, and may exercise, at its sole discretion, the following rights and conditions:
 - 1. To terminate the procurement process or decide not to award a contract as a result thereof by written notice to the Suppliers for any reason whatsoever with or without substitution of another solicitation.
 - 2. To waive any defect, technicality, or any other minor informality or irregularity in any submittal, or any other response from Suppliers.
 - 3. To issue addenda for any purpose including:
 - a. To make minor or major changes or alterations to the evaluation, selection and/or performance schedule(s) for any events associated with a procurement.
 - b. To supplement, amend, reduce, cancel, or otherwise modify a Solicitation, including but not limited to modifications to the description of services and/or products contained in the solicitation, by omitting services/products and/or including services/products.
 - 4. To request clarifications, additional information, and/or revised Submittals from one or more Suppliers.
 - 5. To conduct investigations with respect to the qualifications and experience of Supplier(s), including inspection of facilities and to request additional evidence to support any such information.

6. To eliminate any Supplier that submits an incomplete or inadequate response, or is non-responsive to the requirements of a Solicitation, or is otherwise deemed to be unqualified during any stage of the procurement process.
7. To select and interview a single finalist or multiple finalists to further the City's evaluation of Submittals provided in response to a Solicitation. The City may, in its sole and exclusive discretion as to what is in the City's best interest, elect not to conduct interviews of any or all Suppliers in connection with a solicitation process.
8. Except in the case of Requests for Bids, to negotiate any rate/fee offered by a Supplier. The City shall have the sole right to make the final rate/fee offer during contract negotiations. If the selected Supplier does not accept the City's final offer, the City may, in its sole discretion discontinue contract negotiations and commence negotiations with another Supplier, except as otherwise provided in Chapter 39.80, RCW.
9. To select and enter into a Contract with one or more Suppliers whose Submittal best satisfies the interests of the City and is most responsive, in the sole judgment of the City, to the requirements of a Solicitation.
10. To award by line item or group of line items.
11. To not award one or more items.
12. To issue additional or subsequent solicitations.
13. To seek partnerships between one or more Suppliers.
14. Request additional related products and services from the selected Supplier(s) as necessary throughout the term of the Contract.
15. Negotiate costs or fees in the event of new legislation or regulatory changes, or issuance of related compliance guidance, technology enhancements, and innovative solutions.
16. In the event the City receives questions concerning a Solicitation from one or more Suppliers prior to the deadline for response, the City reserves the right to provide such questions, and the City's responses, if any, to all Suppliers.
17. If an award is made and, prior to entering into a contract, subsequent information indicates that such award is not in the best interest of the City, the City may rescind the award without prior notice to Supplier and either award to another Supplier or reject all submittals or cancel this solicitation.
18. To cancel award of a contract at any time before execution of the Contract by both parties if cancellation is deemed to be in the City's best interest. In providing a submittal, Suppliers agree that the City is not liable for any costs or damages for the cancellation of an award. Supplier assumes the sole risk and responsibility for all expenses connected with the preparation of its submittal.
19. To add additional City departments or divisions to the Contract or develop a separate Contract with the Supplier subject to all terms, conditions and pricing of the original Contract
20. To take any other action affecting a Solicitation or a procurement process that is determined to be in the City's best interests.

1.19 SUBMITTAL CLARIFICATION

Suppliers may be asked to clarify their Submittal. This action shall not be construed as negotiations or any indication of intentions to award. If called upon, Supplier must respond to such requests within two business days or the timeframe set forth by the City in its request for clarification. Supplier's failure to respond to such a request may result in rejection of its Submittal.

1.20 EVALUATION OF SUBMITTALS

- A. The City of Tacoma reserves the right to award to the lowest and best responsible Supplier(s) delivering a Submittal in compliance with the Solicitation, provided such Submittals are reasonable and are in the best interest of the City to accept. The City may use a number of criteria for determining award, including evaluation factors set forth in Municipal Code Section 1.06.262. Suppliers who are inexperienced or who fail to properly perform other contracts may have their submittal rejected for such cause.
1. Evaluation Factors. In addition to the factors set forth in Municipal Code Section 1.06.262, the following may be used by the City in determining the lowest and best responsible Submittal:
 - a. Compliance with a Solicitation and with applicable City requirements, including by not limited to, the City's Ethics Code and its Small Business Enterprise and Local Employment and Apprenticeship programs.
 - b. Submittal prices, listed separately if requested, as well as a lump sum total (if the unit price does not compute to the extended total price, the unit price shall govern).
 - c. The total cost to the City, including all applicable taxes, may be the basis for contract award.
 - d. Time of delivery and/or completion of performance (delivery date(s) offered).
 - e. Warranty terms.
 - f. Quality of performance of previous contracts or services, including safety requirements and past compliance with the City's Ethics Code.
 - g. Previous and existing compliance with laws and ordinances relating to contracts or services.
 - h. Sufficiency of financial resources.
 - i. Quality, availability, and adaptability of the supplies or services to the particular use required.
 - j. Ability to provide future maintenance and service on a timely basis.
 - k. Location of nearest factory authorized warranty repair facility or parts dealership.
 - l. Ability, capacity, experience, stability, reputation, integrity, character, judgment, technical qualifications, and skill to perform the contract or provide the services required.
 2. Prompt Payment Discount. Payment discount periods of 20 calendar days or more, if offered in the submittal, will be considered in determining the apparent lowest responsible submittal. Discounts will be analyzed in context of their overall cumulative effect.
 - a. ePayable/Credit Card Acceptance. Submittals offering ePayable/Credit card acceptance may be compared against submittals offering a prompt payment discount to evaluate the overall cumulative effect of the discount against the advantage to the City of the ePayable/Credit card acceptance, and may be considered in determining the apparent lowest responsible submittal.
 3. All other elements or factors, whether or not specifically provided for in a Solicitation, which would affect the final cost to, and the benefits to be derived by, the City, may be considered in determining the award of a Contract. The final award decision will be based on the best interests of the City.

1.21 CONTRACT OBLIGATION

- A. The Submittal contents of the successful Supplier will become contractual obligations if a Contract ensues.
- B. In the event the City of Tacoma determines to award a Contract, the selected Supplier(s) may be requested to execute Additional Contract Documents.
- C. Supplier shall register with the City of Tacoma on the SAP Ariba Network and be enabled for transactions upon request by the City.
- D. Suppliers may propose amendments to City's Contract documents or to these Terms and Conditions, but the City retains the right to accept or reject proposed amendments.
- E. No costs chargeable for work under the proposed Contract may be incurred before mutual acceptance and execution as directed.

1.22 AWARD

The City reserves the right to award Contracts for any or all items to one or more Suppliers in the best interests of the City.

1.23 SUPPLIER'S REFUSAL TO ENTER INTO CONTRACT

Any Supplier who refuses to enter into a Contract after it has been awarded to the Supplier will be in breach of the agreement to enter the Contract, and Supplier's certified or cashier's check or bid bond, if any, shall be forfeited.

1.24 LEGAL HOLIDAYS

A. The City of Tacoma observes the following holidays, which shall apply to performance of all contracts:

New Year's Day	January 1
Martin Luther King's Birthday	3rd Monday in January
Washington's Birthday	3rd Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4
Labor Day	1st Monday in September
Veteran's Day	November 11
Thanksgiving Day	4th Thursday of November
Day after Thanksgiving	4th Friday of November
Christmas Day	December 25

B. When any of these holidays occur on Saturday or Sunday, the preceding Friday or the following Monday, respectively, is a legal holiday for the City of Tacoma.

1.25 CONTRACT TERM

All services shall be satisfactorily completed and all deliverables provided by the termination date stated, and the Contract shall expire on said date unless mutually extended in writing by the parties.

1.26 EXTENSION OF CONTRACT

Contracts shall be subject to extension at City's sole discretion.

1.27 TERMINATION AND SUSPENSION

A. Termination for Convenience

1. Supplies. The City may terminate a Contract for supplies at any time upon prior written notice to Supplier. Upon the effective date of termination specified in such notice, and payment by the City, all conforming supplies, materials, or equipment previously furnished hereunder shall become its property.
2. Services. The City may terminate a Contract for services at any time, with or without cause, by giving 10 business days written notice to Supplier. In the event of termination, all finished and unfinished work prepared by Supplier pursuant to the Contract shall be provided to the City. In the event City terminates the Contract due to the City's own reasons and without cause due to Supplier's actions or omissions, the City shall pay Supplier the amount due for actual work and services necessarily performed under the Contract up to the effective date of termination, not to exceed the total compensation set forth in the Contract.

B. Termination for Cause. The City may terminate a Contract for either services or supplies in the event of any material breach of any of the terms and conditions of the Contract if the Supplier's breach continues in effect after written notice of breach and 30 days to cure such breach and fails to cure such breach.

C. Suspension. For either services or supplies, the City may suspend a Contract, at its sole discretion, upon three business days' written notice to Supplier. Such notice shall indicate the anticipated period of suspension. Any reimbursement for expenses incurred due to the suspension shall be limited to Supplier's actual expenses and shall be subject to verification. Supplier shall resume performance of services under the Contract without delay when the suspension period ends.

D. Termination or suspension of a Contract by City shall not constitute a waiver of any claims or remaining rights the City may have against Supplier relative to performance under a Contract.

1.28 DEFAULT/BREACH

In the event of material default or breach by Supplier on any of the conditions of a Contract, Supplier agrees that the City may, at its election, procure the goods or services from other sources, and may deduct from the unpaid balance due Supplier, or collect against the bond or security (if any), or may invoice and recover from Supplier all costs paid in excess of the price(s) set forth in the Contract.

1.29 SCOPE OF SERVICES/CONTRACT MODIFICATION

Supplier agrees to diligently and completely perform the services and provide the deliverables required by a Contract.

- A. Supplies. The City at any time by written change order or other form of written contract amendment may make reasonable changes in the place of delivery, installation, or inspection, the method of shipment or packing, identification and ancillary matters that Supplier may accommodate without substantial additional expense.
- B. Services. The City shall have the right to make changes within the general scope of services and/or deliverables upon execution in writing of a change order or other written form of contract amendment. If the changes will result in additional work effort by Supplier the City agrees to reasonably compensate Supplier for such additional effort up to the maximum amount specified in the Contract or as otherwise provided by Tacoma Municipal Code. Any new services accepted by the City may be added to the Contract and/or substituted for discontinued services. New services shall meet or exceed all requirements of original award.
- C. Expansion Clause. A Contract may be further expanded in writing to include other related services or products normally offered by Supplier, as long as the price of such additional services or products have a profit margin equal to or less than that in place at the time of original submittal. Such additions and prices will be established in writing. New items not meeting these criteria will not be added to the Contract. Supplier profit margins are not to increase as a result any such expansion.

1.30 FEDERAL, STATE, AND MUNICIPAL LAWS AND REGULATIONS

Supplier shall comply with all federal, state, municipal, and/or local laws and regulations in the performance of all terms and conditions of the Contract. Supplier shall be solely responsible for all violations of the law from any cause in connection with its performance of work under the Contract.

1.31 PREVAILING WAGES

- A. If federal, state, local, or any applicable law requires Supplier to pay prevailing wages in connection with a Contract, and Supplier is so notified by the City, then Supplier shall pay applicable prevailing wages.
- B. If applicable, a Schedule of Prevailing Wage Rates and/or the current prevailing wage determination made by the Secretary of Labor for the locality or localities where the Contract will be performed is attached and made of part of the Contract by this reference. If prevailing wages do apply to the Contract, Supplier and its subcontractors shall:
 - 1. Be bound by and perform all transactions regarding the Contract relating to prevailing wages and the usual fringe benefits in compliance with the provisions of Chapter 39.12 RCW, as amended, the Washington State Prevailing Wage Act and/or the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable, including the federal requirement to pay wages not less than once a week,
 - 2. Ensure that no worker, laborer or mechanic employed in the performance of any part of the Contract shall be paid less than the prevailing rate of wage specified on that Schedule and/or specified in a wage determination made by the Secretary of Labor (unless specifically preempted by federal law, the higher of the Washington state prevailing wage or federal Davis-Bacon rate of wage must be paid)and Additionally, in compliance with applicable federal law, contractors are required to pay wages not less than once a week.
 - 3. Immediately upon award of the Contract, contact the Department of Labor and Industries, Prevailing Wages section, Olympia, Washington and/or the federal Department of Labor, to obtain full information, forms and procedures relating to these matters. Per such procedures, a Statement of Intent to Pay Prevailing Wages and/or other or additional documentation required by applicable federal law, must be submitted by Contractor and its subcontractors to the City, in the manner requested by the City, prior to any payment by the City hereunder, and an Affidavit of Wages Paid and/or other or additional documentation required by federal law must be received or verified by the City prior to final Contract payment.

1.32 COPELAND ANTI-KICKBACK ACT

For contracts subject to Davis Bacon Act the following clauses will be incorporated into the Contract:

1. Contractor. The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
2. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
3. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

1.33 FEDERAL AID PROJECTS

The City of Tacoma, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, part 21, nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR, part 26, will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

1.34 FEDERAL FINANCIAL ASSISTANCE

If federal funds, including FEMA financial assistance to the City of Tacoma, will be used to fund, pay or reimburse all or a portion of the Contract, Contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives and the following clauses will be incorporated into the Contract:

- A. **EQUAL EMPLOYMENT OPPORTUNITY.** During the performance of this Contract, Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:
1. Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor; state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
 3. The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.
 4. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

5. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
6. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
7. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
8. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

B. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (B)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (B)(1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
3. Withholding for unpaid wages and liquidated damages. The City shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (B)(2) of this section.
4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (B)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (B)(1) through (4) of this section.

C. CLEAN AIR ACT

1. Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. Contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

D. FEDERAL WATER POLLUTION CONTROL ACT

1. Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
2. Contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

E. DEBARMENT AND SUSPENSION

1. This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
2. Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
3. This certification is a material representation of fact relied upon by the City. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (insert name of recipient/subrecipient/applicant), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
4. Contractor agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

F. BYRD ANTI-LOBBYING AMENDMENT

1. Contractors who apply or bid for an award of \$100,000 or more shall file the required certification with City. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the City.

2. If applicable, Contractor must sign and submit to the City the following certification:

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING
Certification for Contracts, Grants, Loans, and Cooperative Agreements

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

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

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap.38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official

Name and Title of Contractor's Authorized Official

Date

G. PROCUREMENT OF RECOVERED MATERIALS

1. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:
 - a. Competitively within a timeframe providing for compliance with the contract performance schedule;
 - b. Meeting contract performance requirements; or
 - c. At a reasonable price.
2. Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.
3. Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

1.35 CONTRACT PRICING

- A. Submitted prices shall include costs of submittal preparation, servicing of the account, all contractual requirements during contract period such as transportation, permits, insurance costs, bonds, labor, wages, materials, tools, components, equipment, and appurtenances necessary to complete the work, which shall conform to the best practice known to the trade in design, quality, material, and workmanship.
- B. Surcharges of any type will not be paid.
- C. If applicable, related additional products and corresponding services of benefit to the City not specifically required in a solicitation, but which Supplier offers to provide, may be included with the submittal. Supplier may request to add new products if the City approves them and Supplier can demonstrate the pricing is from the same pricing structure/profit margin.
- D. Unless specifically stated otherwise, only firm prices are accepted and all prices shall remain firm during the term of a Contract.
- E. At City's sole discretion, price increases may be passed along during a Contract period if the increase is mandated by statute, or the result of a tariff. Supplier will immediately notify the City at bids@cityoftacoma.org with contract number and accompanied by documentation demonstrating such mandate and request for price increase.
- F. At City's sole discretion, stated pricing terms may be adjusted for extraordinary conditions that could not have been known by either party at the time of bid or other circumstances beyond the control of both parties. Requests for increases or decreases, other than those previously authorized, shall be sent to City of Tacoma Procurement and Payables Division at: bids@cityoftacoma.org, addressed to specific buyer, with contract number and accompanied by documentation supporting the requested change. Requests sent elsewhere will not be considered or granted. No other individual or City Department is authorized to approve such modifications. Agreed upon price changes shall be applicable as of the Effective Date of a mutually executed written Amendment or other written modification to the Contract,
- G. Should Supplier, during the term of a Contract, enter into any other contract, agreement or arrangement that provides lower prices, more favorable terms or greater benefits to any other government unit or commercial customer, Supplier will immediately notify the City at bids@cityoftacoma.org of such fact with contract number and the Contract with the City shall thereupon be amended to provide the same price or prices, terms and benefits to the City. This provision applies to comparable products and purchase volumes by the City that are not less than the purchase volumes of the government unit or commercial customer that has received the lower prices, greater benefits, or more favorable terms.
- H. The City is entitled to any promotional pricing during the Contract period.
- I. Price decreases shall be immediately passed on to the City.
- J. The City reserves the right to increase or decrease the quantities of any item awarded pursuant to the Contract and pay according to the unit prices quoted in the submittal with no adjustments for anticipated profit.

- K. Item prices are to include freight as part of the FOB Destination terms (Section 1.37.A). If adjustments requested are due to freight costs rather than the item cost, documentation from freight carriers supporting the increase shall be submitted to the City.
- L. Delays or supply shortages caused by problems beyond the reasonable control of the Supplier, if fully documented and submitted to the City, may be excused and at City's sole discretion any applicable liquidated damages provisions may be waived. This allowance shall in no way be construed to apply to or excuse delays or shortages caused by negligence on the part of the Supplier. Events beyond Supplier's reasonable control, include acts of god, fire, strikes, epidemics, war, riot, unavoidable delay in transportation or rail car/transport shortages, or documented unavoidable material shortages, provided the City is notified in writing by the Supplier at bids@cityoftacoma.org with contract number and accompanied by documentation of such pending or actual shortage or delay and the reasons therefore. If deemed excusable, the City shall authorize an extension of time. In the event of such an excusable delay, the date of delivery shall be extended for a period equal to the time lost due to the reason for delay. Any waiver of liquidated damages or extensions of time are to be authorized by written Amendment or modification to the Contract issued by City and acknowledged in writing by Supplier. In such event, the time for performance shall be extended for a period equal to any time lost as a result thereof. In the event Supplier is unable to proceed due to a delay solely attributable to the City, Supplier shall advise City of such delay in writing as soon as is practicable
- M. An established price index such as the CPI will be used by City as a reference for substantiation of the Supplier documentation in support of a requested price adjustment.
 - i. For Hourly Rates or Service Pricing - the direct result of increases to wage rates and not exceed the U.S. Dept. of Labor Consumer Price Index (CPI) for All Urban Consumers Seattle-Tacoma-Bellevue or other appropriate service rate index agreed upon between the Buyer and the Contractor
 - ii. For Supplies - the United States published indices such as the U.S. Dept. Of Labor Consumer Price Index (CPI), Producer Price Index (PPI) or other data may be referenced to help substantiate the Contractor's documentation.

1.36 APPROVED EQUALS WHEN ALTERNATES ARE ALLOWED

- A. Unless an item is indicated as "no substitute," special brands, when named, are intended to describe the standard of quality, performance, or use desired. Equal items will be considered by the City, provided that Supplier specifies the brand and model, and provides all descriptive literature, independent test results, specification sheets, schematic drawings, photographs, product samples, local servicing, parts availability, etc., to enable the City to evaluate the proposed equal. Performance testing in the field may be required.
- B. The decision of the City as to what items are equal shall be final and conclusive. If the City elects to purchase a brand represented by Supplier to be an "equal," the City's acceptance of the item is conditioned on the City's inspection and testing after receipt. If, in the sole judgment of the City, the item is determined not to be an equal, the item shall be returned at Supplier's expense.
- C. When a brand name or level of quality is not stated in Supplier's submittal, it is understood Supplier's submittal shall exactly confirm with those required in the Contract. If more than one brand name is stated in a Solicitation, Supplier(s) must indicate the brand and model/part number to be supplied.

1.37 RISK OF LOSS, SHIPPING AND DELIVERY

- A. Shipping. Prices must be quoted FOB destination (the place of destination as defined in RCW 62A.2-319, as that statute may hereafter be amended), with freight prepaid and allowed (shipping costs included in unit prices), and risk of loss remaining with Supplier until delivery is tendered.
- B. Delivery. Delivery will be to the designated addresses set forth in a Solicitation or as otherwise stated in the Contract. Deliveries shall be between 9:00 a.m. and 3:30 p.m., Monday through Friday only, except Legal Holidays. Failure to make timely delivery shall be cause for termination of the contract or order and return of all or part of the items at Supplier's expense except in the case of force majeure.

1.38 DELIVERY OF PRODUCTS AND PROVISION OF SERVICES – IDLING PROHIBITED

- A. The City of Tacoma has a commitment to reduction of unnecessary fuel emissions and improving air quality by reducing unnecessary air pollution from idling vehicles. Limiting car and truck idling supports cleaner air, healthier work environments, the efficient use of city resources, the public's enjoyment of City properties and programs, conservation of natural resources, and good stewardship practices.
- B. Vehicles and/or diesel fuel trucks shall not idle at the time and location of the delivery to the City of Tacoma for more than three minutes. The City requires contractors to utilize practices that reduce fuel consumption and emission discharge, including turning off trucks and vehicles during delivery of products to the City. Exceptions to this requirement include when associated power is necessary to make a delivery or provide the service, when the engine is used to provide power to another device, and when a running engine is required for proper warm-up and cool-down of the engine.

1.39 PACKING SLIPS AND INVOICES

- A. Each invoice shall show City of Tacoma purchase order number, release number if applicable, quantity, unit of measure, item description, unit price and extended price for each line if applicable, services and deliverables provided if applicable. Line totals shall be summed to give a grand total to which sales tax shall be added, if applicable.
 - 1. For transactions conducted in SAP Ariba, invoices shall be submitted through Ariba.
 - 2. For invoices paid by ACH or by check, unless stated otherwise, invoices shall be electronically submitted by email with corresponding PO number listed in the subject line to accountspayable@cityoftacoma.org.
 - 3. For invoices paid by credit card, invoices shall also display the last name of the cardholder and last four digits (only) of the card number (e.g., Jones/6311). Unless stated otherwise, invoices shall be electronically submitted by email with corresponding PO number listed in the subject line to (do not combine different POs into one invoice or charge) to pcardadmin@cityoftacoma.org.

Any terms, provisions or language in Supplier's invoice(s) that conflict with the terms of the Contract are superseded and shall not apply to the Contract unless expressly accepted in writing by the City.

- B. Packing slips and shipping notices shall be sent to the specific City Division or Department receiving the item(s) at the address stated in City's Solicitation or as otherwise stated in the Contract and include complete description of items, contents of items if crated or cased, quantity, shipping point, carrier, bill of lading number and City of Tacoma purchase order.
- C. Supplier shall package orders, preferably in environmental friendly packaging such as reduced packaging and recyclable packing materials.

1.40 COOPERATIVE PURCHASING

The Washington State Interlocal Cooperation Act RCW 39.34 provides that other governmental agencies may purchase goods and services based on the Contract with the City in accordance with the terms and prices of the Contract if all parties are agreeable. Each public agency shall formulate a separate contract with Supplier, incorporating the terms and conditions of the Contract with the City of Tacoma. The City shall incur no liability in connection with such contracts or purchases by other public agencies thereunder. It will be Supplier's responsibility to inform such public agencies of the Contract with the City. Supplier shall invoice such public agencies as separate entities.

1.41 TAXES

- A. Unless otherwise stated, applicable federal, state, City, and local taxes shall be included in the submittal and in contract as indicated below. As used herein, the term "taxes" shall include any and all taxes, assessments, fees, charges, interest, penalties, and/or fines imposed by applicable laws and regulations in connection with the procurement of goods and/or services hereunder.
 - 1. Federal Excise Tax. The City of Tacoma is exempt from federal excise tax. The City will furnish a Federal Excise Tax Exemption certificate, if required. If Supplier fails to include any applicable tax in its submittal, then Supplier shall be solely responsible for the payment of said tax.
 - 2. State and Local Sales Tax. The City of Tacoma is subject to Washington state sales tax. It is Supplier's obligation to state the correct sales tax percentage and include the applicable Washington state, city and local sales tax as a separate line item(s) in the submittal.
 - 3. City of Tacoma Business and Occupation Tax. It is Supplier's obligation to include City of Tacoma Business and Occupation tax in the unit and/or lump sum prices submitted; it shall not be shown

separately on the submittal. Per Sub-Title 6A of the City of Tacoma Municipal Code, transactions with the City of Tacoma may be subject to the City's Business and Occupation Tax.

- B. Any or All Other Taxes. Any or all other taxes are the responsibility of Supplier unless otherwise required by law. Except for state sales tax, Supplier acknowledges that it is responsible for the payment of all taxes applicable to the Contract and Supplier agrees to comply with all applicable laws regarding the reporting of income, maintenance of records, and all other requirements and obligations imposed pursuant to applicable law.
- C. If the City is assessed, made liable, or responsible in any manner for taxes contrary to the provisions of the Contract, Supplier agrees to hold the City harmless from such costs, including attorney's fees. In the event Supplier fails to pay any taxes, assessments, penalties, or fees imposed by any governmental body, including a court of law, other than those taxes the City is required to pay, then Supplier authorizes the City to deduct and withhold or pay over to the appropriate governmental body those unpaid amounts upon demand by the governmental body. It is agreed that this provision shall apply to taxes and fees imposed by City ordinance. Any such payments shall be deducted from Supplier's total compensation.

1.42 COMPENSATION

- A. The City shall compensate Supplier in accordance with the Contract. Said compensation shall be the total compensation for Supplier's performance hereunder including, but not limited to, all work, services, deliverables, materials, supplies, equipment, subcontractor's fees and all reimbursable travel and miscellaneous or incidental expenses to be incurred by Supplier. Unless stated otherwise the total stated compensation may not be changed without a written change order or other form of contract amendment.
- B. Payment(s) made in accordance with the Contract shall fully compensate Supplier for all risk, loss, damages or expense of whatever nature, and acceptance of payment shall constitute a waiver of all claims submitted by Supplier.

1.43 PAYMENT TERMS

- A. Payment shall be made through the City's ordinary payment process, and shall be considered timely if made within 30 days of receipt of a properly completed invoice. All payments shall be subject to adjustment for any amounts, upon audit or otherwise, determined to have been improperly invoiced. The City may withhold payment to Supplier for any services or deliverables not performed as required hereunder until such time as Supplier modifies such services or deliverables to the satisfaction of the City.
- B. Invoices will not be processed for payment, nor will the period of cash discount commence, until all invoiced items are received and satisfactory performance of the Contract has been attained. Upon CITY'S request, Supplier shall submit necessary and appropriate documentation, as determined by the CITY, for all invoiced services and deliverables. If an adjustment in payment is necessary due to damage or dispute, the cash discount period shall commence on the date final approval for payment is authorized.

1.44 PAYMENT METHOD – EPAYABLES – CREDIT CARD ACCEPTANCE – EFT/ACH ACCEPTANCE

- A. Payment methods include:
 - 1. EPayables (Payment Plus). This is payment made via a virtual, single use VISA card number provided by the City's commercial card provider. Suppliers accepting this option will receive "due immediately" payment terms. Two options for acceptance are available to suppliers. Both are accompanied by an emailed advice containing complete payment details:
 - a. Straight-through processing (buyer initiated). Immediate, exact payments directly deposited to supplier accounts by the City's provider bank; the supplier does not need to know card account details.
 - b. Supplier retrieves card account through the secure, on-line portal provided via email notifications sent by the City's commercial card provider.
 - 2. Credit card. Tacoma's VISA procurement card program is supported by standard bank credit suppliers and requires that merchants abide by the VISA merchant operating rules. It provides "due immediately" payment terms.
 - a. Suppliers must be PCI-DSS compliant (secure credit card data management) and federal FACTA (sensitive card data display) compliant.

- b. Suppliers must be set up by their card processing equipment provider (merchant acquirer) as a minimum of a Level II merchant with the ability to pass along tax, shipping and merchant references information.
- 3. Electronic Funds Transfer (EFT) by Automated Clearing House (ACH). Standard terms are net 30 for this payment method.
- 4. Check or other cash equivalent. Standard terms are net 30 for this payment method.
- B. The City's preferred method of payment is by ePayables (Payment Plus) followed by credit card (aka procurement card). Suppliers may be required to have the capability of accepting the City's ePayables or credit card methods of payment. **The City of Tacoma will not accept price changes or pay additional fees when ePayables (Payment Plus) or credit card is used.**
- C. The City, in its sole discretion, will determine the method of payment for goods and/or services as part of the Contract.

1.45 NOTICES

Unless otherwise specified, except for routine operational communications, which may be delivered personally or transmitted by electronic mail, all notices required by the Contract shall be in writing and shall be deemed to have been duly given if delivered personally or mailed first-class mail, postage prepaid, to Supplier's registered agent and to the applicable City department representative.

1.46 INDEPENDENT CONTRACTOR STATUS

- A. Supplier is considered an independent contractor who shall at all times perform his/her duties and responsibilities and carry out all services as an independent contractor and shall never represent or construe his/her status to be that of an agent or employee of the City, nor shall Supplier be eligible for any employee benefits. No payroll or employment taxes or contributions of any kind shall be withheld or paid by the City with respect to payments to Supplier. Supplier shall be solely responsible for all said payroll or employment taxes and/or contributions including, but not limited to, FICA, FUTA, federal income tax, state personal income tax, state disability insurance tax and state unemployment insurance tax. If the City is assessed, made liable or responsible in any manner for such taxes or contributions, Supplier agrees to indemnify and hold the City harmless from all costs incurred, including attorney fees.
- B. Unless otherwise specified in writing, Supplier shall provide at its sole expense all materials, working space, and other necessities and instruments to perform its duties under the Contract. Supplier, at its sole expense, shall obtain and keep in force any and all applicable licenses, permits and tax certificates necessary to perform the Contract.

1.47 NONDISCRIMINATION

Supplier agrees to take all steps necessary to comply with all federal, state, and City laws and policies regarding non-discrimination and equal employment opportunities. Supplier shall not discriminate in any employment action because of race, religion, color, national origin or ancestry, sex, gender identity, sexual orientation, age, marital status, familial status, or the presence of any sensory, mental, or physical handicap. In the event of non-compliance by Supplier with any of the non-discrimination provisions of the Contract, the City shall be deemed to have cause to terminate the Contract, in whole or in part.

1.48 REPORTS, RIGHT TO AUDIT, PERSONNEL

- A. Reports. Supplier shall, at such times and in such form as the City may reasonably require, furnish the City with periodic status reports pertaining to the services undertaken or goods provided pursuant to the Contract.
- B. Right to Audit. Upon City's request, Supplier shall make available to City all accounts, records and documents related to the scope of work for City's inspection, auditing, or evaluation during normal business hours as reasonably needed by City to assess performance, compliance and/or quality assurance under the Contract or in satisfaction of City's public disclosure obligations as applicable.
- C. Personnel. If before, during, or after the execution of a Contract, Supplier has represented or represents to the City that certain personnel would or will be responsible for performing services pursuant to the Contract, then Supplier is obligated to ensure that said personnel perform said Contract services to the maximum extent permitted by law. Substantial organizational or personnel changes within Supplier's firm are expected to be communicated to City immediately. Failure to do so could result in termination of the Contract. This provision shall only be waived by written authorization by the City, and on a case-by-

case basis.

1.49 INSURANCE

- A. During the course and performance of a Contract, Supplier will provide proof and maintain the insurance coverage in the amounts and in the manner specified in the City of Tacoma Insurance Requirements as is applicable to the services, products, and deliverables provided under the Contract. The City of Tacoma Insurance Requirements document, if issued, is fully incorporated into the Contract by reference.
- B. Failure by City to identify a deficiency in the insurance documentation provided by Contractor or failure of City to demand verification of coverage or compliance by Contractor with these insurance requirements shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

1.50 INDEMNIFICATION – HOLD HARMLESS

- A. Supplier agrees to indemnify, defend, and hold harmless the City of Tacoma, its officers, agents and employees, from and against any and all liability which may accrue to or be sustained by the City of Tacoma for any claim, suit or legal action made or brought against the City for the death of or injury to persons (including Supplier's or subcontractor's employees), or damage to property involving Supplier or subcontractor(s) and their employees or agents, or for any other cause arising out of and in connection with or incident to the performance of the Contract, except for injuries or damages caused by the sole negligence of the City. In this regard, Supplier recognizes it is waiving immunity under Industrial Insurance Law, Title 51 RCW. This indemnification includes attorney's fees and the cost of establishing the right to indemnification hereunder in favor of the City of Tacoma. By Supplier's acceptance of this order, he/she agrees that this subsection has been mutually negotiated.
- B. These indemnifications shall survive the termination of a Contract.

1.51 CONFLICT OF INTEREST

No officer, employee, or agent of the City, nor any member of the immediate family of any such officer, employee or agent as defined by City ordinance, shall have any personal financial interest, direct or indirect, in a Contract, either in fact or in appearance. Supplier shall comply with all federal, state, and City conflict of interest laws, statutes, and regulations. Supplier represents that Supplier presently has no interest and shall not acquire any interest, direct or indirect, in the program to which the Contract pertains that would conflict in any manner or degree with the performance of Supplier's services and obligations hereunder. Supplier further covenants that, in performance of a Contract, no person having any such interest shall be employed. Supplier also agrees that its violation of the City's Code of Ethics contained in Chapter 1.46 of the Tacoma Municipal Code shall constitute a breach of Contract subjecting the Contract to termination.

1.52 CITY OWNERSHIP OF WORK/RIGHTS IN DATA/PUBLICATIONS

- A. To the extent that Supplier creates any work subject to the protections of the Copyright Act (Title 17 U.S.C.) in its performance of a Contract, Supplier agrees to the following: The work has been specially ordered and commissioned by the City. Supplier agrees that the work is a "work made for hire" for copyright purposes, with all copyrights in the work owned by City. To the extent that the work does not qualify as a work made for hire under applicable law, and to the extent that the work includes material subject to copyright, Supplier hereby assigns to City, its successors and assigns, all right, title and interest in and to the work, including but not limited to, all copyrights, patent, trade secret and other proprietary rights, and all rights, title and interest in and to any inventions and designs embodied in the work or developed during the course of Supplier's creation of the work.
- B. Supplier shall be solely responsible for obtaining releases and/or licenses for the reproduction, distribution, creation of derivative works, performance, display, or other use of copyrighted materials. Should Supplier fail to obtain said releases and/or licenses, Supplier shall indemnify, defend, and hold harmless the City for any claim resulting there from.

1.53 DUTY OF CONFIDENTIALITY

Supplier acknowledges that unauthorized disclosure of information or documentation concerning the Scope of Work hereunder may cause substantial economic loss or harm to the City except for disclosure of information and documents to Supplier's employees, agents, or subcontractors who have a substantial need to know such information in connection with Supplier's performance of obligations under the Contract. Supplier shall not, without prior written authorization by the City allow the release, dissemination,

distribution, sharing, or other publication or disclosure of information or documentation obtained, discovered, shared or produced pursuant to a Contract.

1.54 DISPUTE RESOLUTION

In the event of a dispute pertaining to a Contract, the parties agree to attempt to negotiate in good faith an acceptable resolution. If a resolution cannot be negotiated, then the parties agree to submit the dispute to voluntary non-binding mediation before pursuing other remedies. This provision does not limit the City's right to terminate.

1.55 GOVERNING LAW AND VENUE

- A. Washington law shall govern the interpretation of the Contract. The state or federal courts located in Pierce County Washington shall be the sole venue of any mediation, arbitration, or litigation arising out of the Contract.
- B. Respondents providing submittals from outside the legal jurisdiction of the United States of America will be subject to Tacoma's City Attorney's Office (CAO) opinion as to the viability of possible litigation pursuant to a contract resulting from this Specification. If it is the opinion of the CAO that any possible litigation would be beyond reasonable cost and/or enforcement, the submittal may be excluded from evaluation.

1.56 ASSIGNMENT

Supplier shall not assign, subcontract, delegate or transfer any obligation, interest or claim to or under the Contract without the prior written consent of the City.

1.57 WAIVER

A waiver or failure by either party to enforce any provision of the contract shall not be construed as a continuing waiver of such provisions, nor shall the same constitute a waiver of any other provision of the Contract.

1.58 SEVERABILITY AND SURVIVAL

If any term, condition or provision herein or incorporated by reference is declared void or unenforceable or limited in its application or effect, such event shall not affect any other provisions hereof and all other provisions shall remain fully enforceable. The provisions of the Contract, which by their sense and context are reasonably intended to survive the completion, expiration or cancellation of the Contract, shall survive termination of the Contract.

1.59 NO CITY LIABILITY

Neither the City, its officials, staff, agents, employees, representatives, or consultants will be liable for any claims or damages resulting from any aspect of this procurement process.

1.60 SIGNATURES

A signed copy of Submittals, Contract documents, including but not limited to contract amendments, contract exhibits, task orders, statements of work and other such Contract related documents, delivered by email or other means of electronic transmission including by using a third party service, which service is provided primarily for the electronic execution of electronic records, shall be deemed to have the same legal effect as delivery of an original signed copy.