NOTICE TO BIDDERS

PROPOSAL FORM

SPECIFICATIONS

and

STANDARD CONTRACTUAL REQUIREMENTS

Construction of

FTTP TELECOM DROP INSTALLATIONS FOR 1st QUARTER 2021

Within the City of

BEVERLY HILLS, CALIFORNIA

DAVID SCHIRMER
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Approved As To Form:

November 2018
Project No. 1338
Bid No. 18-95

City Attorney

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NOTICE TO BIDDERS
for the
FTTP TELECOM DROP INSTALLATIONS FOR 1st QUARTER 2021
within the City of
BEVERLY HILLS, CALIFORNIA
ooooo

BIDS - Sealed proposals for the **BID 18-95 FTTP TELECOM DROP INSTALLATIONS** within the City of Beverly Hills, California, will be received up to the hour of 2:00 p.m., on Thursday, **December 6, 2018** at the office of the City Clerk of the City of Beverly Hills, located in Room 290 at 455 North Rexford Drive, Beverly Hills, California. Bids will be publicly opened at 2:00 p.m. on the above-mentioned date in the office of the City Clerk at City Hall and award of the contract will be made during a subsequent meeting of the City Council.

SCOPE OF THE WORK - The work to be done shall consist of furnishing all the required labor, materials, equipment, parts, implements, supplies and permits necessary for, or appurtenant to, the construction and completion of the project indicated above in accordance with Standard Drawings and the Specifications prepared for this project.

In general terms, the contract work for this project shall consist of the following items of work:

ITEM	DESCRIPTION OF BID ITEM	QUANTITY	UNIT
	TELECOM DROP PRE-INSTALLS (RESIDENTIAL & COMMERCIAL)		
	Bond Premium Costs		
1	Bond Premiums - Reimbursement (receipts required)	1	LS
	Underground Drop Pre-Installs w/ New Microconduit		
2	Direct Bury Microconduit for Runs up to 100'	7,100	LF
3	Direct Bury Microconduit for Runs Over 100'	4,700	LF
4	Install Microconduit in Existing Occupied Conduit	1,500	LF
5	Install Tap Box	400	EA
6	Sidewalk Bore (12')	35	LF
7	Driveway Bore (38')	35	LF
8	Wall Penetration for Microconduit	135	EA
9	F&I Split Wye	84	EA
10	Install Microfiber in Microconduit	8,400	LF
11	Additional Fiber Splices or Terminations (if necessary)	17	EA
12	Pothole Repair - Intercept Microconduit	41	EA
13	Rod & Rope existing conduit (if necessary)	1,000	LF
	Aerial Drop Pre-Installs		
14	Aerial drop (Flat Fiber) from serving Pole	164	EA
15	Additional pole spans	106	EA
16	Install Microfiber in Existing Occupied Conduit	7,100	LF
17	Place Aerial to Undeground Riser	17	EA
	Beverly Hills Branding		
18	Branding Allowance	1	ALW

The above quatitites are estimates of the work to be performed during the first quarter of 2021 (January 1 to March 31, 2021).

Copies of the Specifications and Proposal Form may be inspected and downloaded from the City's webpage (http://www.beverlyhills.org/business/bidlistings/bidsandrfps/).

References in the project specifications to specific sections of the Standard Specifications refer to the book of "Standard Specifications for Public Works Construction", 2015 Edition, written by a Joint Cooperative Committee of the Southern California Chapter of the American Public Works Association and Southern California District of the Associated General Contractors of California. Contractors wishing to obtain this book may purchase copies directly from the publisher, Building News, Inc., 990 Park Center Drive, Vista, California, 92802; (800) 264-2665; www.bnibooks.com.

AMENDMENTS - The second paragraph of Section 3-2.2.1 "Contract Unit Prices", of the Standard Specifications for Public Works Construction is deleted.

The fourth paragraph of Section 3-2.2.1 "Contract Unit Prices", of the Standard Specifications for Public Works Construction is deleted and replaced by the following: "Should any Contract item be deleted in its entirety, no payment will be made to Contractor for that Bid Item."

The following is in addition to the provisions of Section 2-9.1 of the Greenbook:

The Contractor is required to locate and tie out survey monuments in the project area prior to construction involving street and highways, and to file with the County Surveyor a Corner Record of any such work. Prior to the issuance of a completion certificate, the Contractor is required to file a Corner Record for survey monumentation that is replaced. All such survey work shall be performed under the supervision of a California licensed Land Surveyor or a Civil Engineer authorized to perform such work.

The Contractor shall provide the City a copy of the office calculations and documents submitted to the County for filing in connection with the aforementioned work.

The payment for surveying, related professional services, office calculation, and furnishing all labor, materials, equipment, tools and incidentals, and for doing work involved shall be considered as included in the various items of work, and no additional compensation will be allowed therefore.

Section 3-3.2.2 shall be changed as follows:

(a) Labor. The costs of labor will be the actual cost for wages of workers performing the extra work at the time the extra work is done, plus the employer payments of payroll taxes, health and welfare, pension, vacation, apprenticeship funds, and other direct costs, resulting from Federal, State, or local laws, as well as assessments or benefits required by collective bargaining agreements.

The following will revise Section 3-3.2.3 of the Greenbook:

(a) Work by Contractor. An allowance for overhead and profit shall be added to the Contractor's cost as determined under 3-3.2.2 and shall constitute the full and complete markup for all overhead and profit on extra work performed by the Contractor. The Contractor shall be compensated for the actual increase in the Contractor's bond premium caused by the extra work. For costs determined under each subsection in 3-3.2.2, the markup shall be:

a) Labor	20%
b) Materials	15%
c) Tools & Equipment Rental	15%
d) Other Items	15%

(b) Work by Subcontractor. When any of the extra work is performed by a Subcontractor, the markup established in 3-3.2.3(a) shall be applied to the Subcontractor's costs as determined under 3-3.2.2. An allowance for the Contractor's overhead and profit shall be added to the sum of the Subcontractor's costs and markup and shall constitute the full and complete markup for all overhead and profit for the Contractor on work by the Subcontractor. For Contractor markup of Subcontractor's costs, the allowance shall be 10% on the first $2,000 or portion thereof, and 5% on costs in excess of $2,000.

GENERAL INSTRUCTIONS - Bids must be submitted on the Proposal Form prepared for this project and shall be delivered at the office of the City Clerk within a sealed envelope supplied by the City and marked on the outside as follows: **"BID NO. 18-95: FTTP TELECOM DROP INSTALLATIONS FOR 1st QUARTER 2021".**

ENGINEER'S ESTIMATE - The preliminary cost of construction of this Work has been prepared and the said estimate is **$451,000**.

CITY CONTACT – Any questions or requests for information can be directed to the project manager, Tristan D. Malabanan, P.E., at tmalabanan@beverlyhills.org or by calling 310-285-2512.

PUBLIC WORKS CONTRACTOR REGISTRATION NUMBER – The Contractor is required to register with State of California Department of Industrial Relations and meet requirements to bid on public works contracts. A Public Works Contractor Registration No. shall be submitted with the bid.

PREVAILING WAGES - In accordance with the provisions of Section 1770 et seq, of the Labor Code, the Director of Industrial Relations of the State of California has determined the general prevailing rate of wages applicable to the work to be done. The Contractor will be required to pay to all workers employed on the project sums not less than the sums set forth in the documents entitled "General Prevailing Wage Determination made by the Director of Industrial Relations pursuant to California Labor Code, Part 7, Chapter I, Article 2, Sections 1770, 1773, 1773.I."

For this telecom project, most work should be completed by classification "Transportation Systems Technician" (ELEC0011-004). Prevailing wage determinations are included the Appendix C.

Attention is directed to the provisions of Sections 1777.5 and 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under him. The Contractor

and any subcontractor under him shall comply with the requirements of said sections in the employment of apprentices.

Information relative to apprenticeship standards and administration of the apprenticeship program may be obtained from the Director of Industrial Relations, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

PAYROLL RECORDS - The Contractor's attention is directed to Section 1776 of the Labor Code, relating to accurate payroll records, which imposes responsibility upon the Contractor for the maintenance, certification, and availability for inspection of such records for all persons employed by the Contractor or by the Subcontractors in connection with the project. The Contractor shall agree through the Contract to comply with this section and the remaining provisions of the Labor Code.

INSURANCE AND BOND REQUIREMENTS - The Contractor shall provide insurance in accordance with Section 3-13 of the City of Beverly Hills, Public Works Department, Standard Contractual Requirements, included as part of these Specifications. All Subcontractors listed shall attach copies of the Certificate of Insurance naming the Contractor as the additional insured as part of their insurance policy coverage. In addition, the Contractor shall guarantee all work against defective workmanship and materials furnished by the Contractor for a period of one (1) year from the date the work was completed in accordance with Section 2-11 of the Standard Contractual Requirements

CONTRACTORS LICENSE - At the time of the Bid Deadline and at all times during performance of the Work, including full completion of all corrective work during the Correction Period, the Contractor must possess a California contractor's license or licenses, current and active, of the classification required for the Work, in accordance with the provisions of Chapter 9, Division 3, Section 7000 et seq. of the Business and Professions Code.

In compliance with Public Contract Code Section 3300, the City has determined that the Bidder must possess one or more of the following license(s): **A, C-10, or C-7**

The successful Bidder will not receive a Contract award if the successful Bidder is unlicensed, does not have all of the required licenses, or one or more of the licenses are not current and active. If the City discovers after the Contract's award that the Contractor is unlicensed, does not have all of the required licenses, or one or more of the licenses are not current and active, the City may cancel the award, reject the Bid, declare the Bid Bond as forfeited, keep the Bid Bond's proceeds, and exercise any one or more of the remedies in the Contract Documents.

SUBCONTRACTORS' LICENSES AND LISTING - At the time of the Bid Deadline and at all times during performance of the Work, each listed Subcontractor must possess a current and active California contractor's license appropriate for the portion of the Work listed for such Subcontractor and shall hold all specialty certifications required for such Work. When the Bidder submits its Bid to the City, the Bidder must list each Subcontractor whom the Bidder must disclose under Public Contract Code Section 4104 (Subcontractor Listing Law), and the Bidder must provide all of the Subcontractor information that Section 4104 requires (name, address, and portion of the Work). In addition, the City requires that the Bidder list each Subcontractor's license number and the dollar value of each Subcontractor's labor or services.

SUBSTITUTION OF SECURITIES - Pursuant to California Public Contract Code Section 22300, substitution of securities for withheld funds is permitted in accordance therewith.

THE CITY RESERVES THE RIGHT TO REJECT ANY BID OR ALL THE BIDS AND TO WAIVE ANY INFORMALITY OR IRREGULARITY IN ANY BID, BUT IF THE BIDS ARE ACCEPTED, THE CONTRACT FOR THE IMPROVEMENT WILL BE LET TO THE LOWEST RESPONSIBLE BIDDER FOR THE PROJECT AS A WHOLE.

PROPOSAL FORM
for the
FTTP TELECOM DROP INSTALLATIONS FOR 1st QUARTER 2021
within the City of
BEVERLY HILLS, CALIFORNIA

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Beverly Hills, California

Date **11-20-2018**

To the Honorable City Council
Beverly Hills, California:

In compliance with the advertised notice inviting sealed proposals for the **FTTP TELECOM DROP INSTALLATIONS FOR 1st QUARTER 2021** within the City of Beverly Hills, California, and after having carefully examined the locations of the project and studied the Plans and Specifications prepared for this work, the undersigned hereby agrees to enter into a contract to furnish all labor, materials, equipment, parts, implements, supplies and permits needed to perform the contract work to the satisfaction and under the direction of the City Engineer of the City of Beverly Hills, said contract to be drawn in accordance with the provisions of the Plans, Specifications, Notice to Bidders, and all the applicable clauses of the "Standard Contractual Requirements for Public Improvements in the City of Beverly Hills, California", as adopted by the Department of Public Works on November 1, 1976.

If awarded the contract, the undersigned agrees to furnish the necessary bonds and insurance, as set forth in the above-mentioned Standard Contractual Requirements, **within ten (10) days** after the award of the contract.

Attached hereto is cash, or cashier's check, or a certified check in favor of the City of Beverly Hills, in an amount equal to **at least ten percent (10%)** of the total bid, or a bid bond for said amount on a form furnished by the City, with the understanding that said security shall be held by the City Clerk until the contract for doing the work has been entered into, and that said security shall be forfeited to the City as liquidated damages should the undersigned fail to enter into a contract and furnish the above-mentioned bonds and insurance **within the ten (10) days** specified, if awarded the contract, as the undersigned agrees that in the event of such failure, the actual amount of the damage to the City would be impractical and extremely difficult to determine.

In the event cash, or cashier's check, or a certified check is furnished for the bid bond, then a letter is required from a bonding company stating that said company will furnish the necessary bonds, as specified in *Paragraph 2-11* of the Standard Contractual Requirements, if the undersigned is awarded the contract. The undersigned is aware of the fact that such a letter must be from a bonding company acceptable to the City of Beverly Hills, and that all bids accompanied by cash, or cashier's check, or a certified check in lieu of the bid bond must be accompanied by such a letter in order to be considered.

The undersigned agrees that the insurance and bonding requirements set forth in *Sections 3-13 and 2-11*, respectively, of the City of Beverly Hills, Public Works Department, Standard Contractual Requirements can and will be fulfilled.

The undersigned hereby agrees to perform the work as described in Beverly Hills Standards, and in the Specifications prepared for this project, at the following prices, to wit:

ITEM NO.	ESTIMATED QUANTITY AND UNIT	DESCRIPTION PRICE WRITTEN IN WORDS	UNIT PRICE IN FIGURES	TOTAL IN FIGURES

***TELECOM DROP PRE-INSTALLS (RESIDENTIAL & COMMERCIAL)* FOR 1st QUARTER 2021**

Bond Premium Costs

1	**1 LS**	Bond Premiums – Reimbursement (receipts required) _____DOLLARS and_____CENTS per **Lump Sum**	$_____	$_____

TELECOM DROP PRE-INSTALLS (RESIDENTIAL & COMMERCIAL)

Underground Drop Pre-installs w/ New Microconduit

2	**7,100 LF**	Direct bury microconduit for runs up to 100' _____DOLLARS and_____CENTS per **Lineal Foot**	$_____	$_____
3	**4,700 LF**	Direct bury microconduit for runs over 100' _____DOLLARS and_____CENTS per **Lineal Foot**	$_____	$_____

ITEM NO.	ESTIMATED QUANTITY AND UNIT	DESCRIPTION PRICE WRITTEN IN WORDS	UNIT PRICE IN FIGURES	TOTAL IN FIGURES
4	**1,500 LF**	Install microconduit in existing occupied conduit _____DOLLARS and_____CENTS per **Lineal Foot**	$_____	$_____
5	**400 EA**	Install TAP box _____DOLLARS and_____CENTS per **Each**	$_____	$_____
6	**35 LF**	Sidewalk bore _____DOLLARS and_____CENTS per **Lineal Foot**	$_____	$_____
7	**35 LF**	Driveway bore _____DOLLARS and_____CENTS per **LF**	$_____	$_____
8	**135 EA**	Wall penetration for microconduit _____DOLLARS and_____CENTS per **Each**	$_____	$_____

ITEM NO.	ESTIMATED QUANTITY AND UNIT	DESCRIPTION PRICE WRITTEN IN WORDS	UNIT PRICE IN FIGURES	TOTAL IN FIGURES
9	**84 EA**	Furnish and Install Split Wye _____DOLLARS and_____CENTS per **Each**	$_____	$_____
10	**8,400 LF**	Install microfiber into microconduit _____DOLLARS and_____CENTS per **Lineal Foot**	$_____	$_____
11	**17 EA**	Additional fiber splices or terminations (if necessary) _____DOLLARS and_____CENTS per **Each**	$_____	$_____
12	**41 EA**	Pothole repair – intercept microconduit _____DOLLARS and_____CENTS per **Each**	$_____	$_____
13	**1,000 LF**	Rod & rope existing conduit (if necessary) _____DOLLARS and_____CENTS per **Lineal Foot**	$_____	$_____

ITEM NO.	ESTIMATED QUANTITY AND UNIT	DESCRIPTION PRICE WRITTEN IN WORDS	UNIT PRICE IN FIGURES	TOTAL IN FIGURES
		Aerial Drop Pre-installs		
14	**164 EA**	Aerial drop (flat fiber) from serving pole _____DOLLARS and_____CENTS per **Each**	$_____	$_____
15	**106 EA**	Additional pole spans _____DOLLARS and_____CENTS per **Each**	$_____	$_____
16	**7,100 LF**	Install microfiber (flat fiber) in existing occupied conduit _____DOLLARS and_____CENTS per **Lineal Foot**	$_____	$_____
17	**17 EA**	Place aerial to underground risers _____DOLLARS and_____CENTS per **Each**	$_____	$_____
		Beverly Hills Fiber Branding		

18	**1 ALW**	Branding allowance	**$ 2,500.00**	**$ 2,500.00**

Two Thousand Five Hundred DOLLARS

And **Zero** CENTS

per **Allowance**

TOTAL BID PRICE FOR THE ENTIRE CONTRACT WORK for the cost of labor, materials, equipment parts, implements and supplies necessary to complete the project, as based on the City Engineer's estimate of quantities of work to be done (***Summation of preceding subtotals of Items 1 through 18***)

_____DOLLARS and
(Words)

_____CENTS $_____
(Words) (Figures)

All blank spaces appearing above must be filled in. In case of discrepancy between words and figures, the **words** shall prevail.

The undersigned hereby declares that the cost of all necessary items for completion of this project are included in the unit prices quoted, and that all incidentals have been taken into consideration even though said incidentals are not specifically listed in the specifications or shown on the plans. The undersigned is likewise aware of the fact that distances, quantities, and other estimated figures appearing on the plans or mentioned in the specifications or on this Proposal Form are only approximate and declares that the unit prices shown above for the various items of work are based on distances and quantities calculated as the result of actual measures performed at the site of the project.

LIST OF SUBCONTRACTORS - The undersigned is required to fill in the following blanks in accordance with the provisions of Section 4104 of the Public Contract Code of the State of California and Section 2-3 of the Standard Specifications.

Name Under Which Subcontractor is Licensed	License Number	Location of the Place of Business	Specific Description of Subcontract	Value ($) of Subcontract

Subcontractors listed in accordance with the provision of Section 2-3 of the Standard Specifications for Public Works Construction, must be properly licensed under the laws of the State of California for the type of work, which they are to perform. Do not list alternate subcontractors for the same work.

The undersigned agrees to furnish proof that all contractors and subcontractors performing any work related to this improvement are complying with all the requirements of Social Security Legislation, both State and Federal, and also agrees to conform with the provisions of Sections 4100 to 4113, inclusive, of the Public Contract Code, as amended, concerning subcontractors and subcontracts.

TE750015

NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

State of California
County of _____

_____, being first duly sworn, deposes and says that he or she is_____ of _____the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, **or** corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true, and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

_____
Contractor

_____

_____

(Attach appropriate notary acknowledgments)

TE750013
12-12-89

Respectfully submitted:

Dated_____

FIRM NAME _____

SIGNATURE _____

Bidder

ADDRESS _____

_____

TELEPHONE: BUSINESS _____

RESIDENCE _____

CONTRACTOR'S LICENSE NO._____ CLASS_____ EXPIRATION DATE_____

STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS PUBLIC WORKS CONTRACTOR REGISTRATION NUMBER_____

Bidder is *_____ If a partnership, names of partners
If a corporation, names of President **or** Vice President, **and** the Secretary **or** Assistant Secretary

NAME	ADDRESS
_____	_____
_____	_____
_____	_____

I (we) hereby state and declare under the penalty of perjury under the laws of California, that the representations made herein are true and correct.

Executed on _____ 20___ at _____ California

*By: _____

Title: _____

*By: _____

Title: _____

* Please state whether the bidder is an individual, a partnership, a corporation, **or** an individual doing business under a fictitious name. If the bidder is a corporation, the following is required: 1) signatures of two corporate officers; **or** 2) a certified copy of the corporation bylaws, and a resolution of the Board of Directors which gives authority to the officers signing this agreement to execute contracts on behalf of the corporation. Also, refer to Paragraph 2-01 of the Standard Contractual Requirements.

SPECIFICATIONS

for the

FTTP TELECOM DROP INSTALLATIONS FOR 1st QUARTER 2021

within the City of
BEVERLY HILLS, CALIFORNIA

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SECTION 1

GENERAL PROVISIONS

1-01 WORK TO BE DONE – The contract work to be done under these specifications shall consist of furnishing all the required labor, materials, equipment, parts, implements and supplies necessary for, or appurtenant to, ***FTTP TELECOM DROP INSTALLATIONS*** within the City of Beverly Hills, California, in accordance with Standard Drawings and the Specifications prepared for this project.

1-02 STANDARD CONTRACTUAL REQUIREMENTS - The provisions of the "Standard Contractual Requirements for Public Improvements in the City of Beverly Hills", a copy of which is attached hereto and incorporated herein by reference, shall be applicable to the work covered by these specifications.

1-03 REFERENCE SPECIFICATIONS

1-03.1 STANDARD SPECIFICATIONS - The words "Standard Specifications" when used in these specifications or in the contract, refer to the "Standard Specifications for Public Works Construction", 2015 Edition, written by a Joint Cooperative Committee of the Southern California Chapter of the American Public Works Association and Southern California District of the Associated General Contractors of California.

The Standard Specifications for Public Works Construction, 2015 Edition, including all amendments thereto issued prior to date of the bid opening, shall be a part of these specifications, the same as though contained fully herein.

1-03.2 AMENDMENTS - The "Standard Specifications for Public Works Construction", 2015 Edition is amended as follow:

1) The following is in addition to the provisions of *Section 2-9.1* of the Greenbook:

The Contractor is required to locate and tie out survey monuments in the project area prior to construction involving street and highways, and to file with the County Surveyor a Corner

Record of any such work. Prior to the issuance of a completion certificate, the Contractor is required to file a Corner Record for survey monumentation that is replaced. All such survey work shall be performed under the supervision of a California licensed Land Surveyor or a Civil Engineer authorized to perform such work.

The Contractor shall provide the City a copy of the office calculations and documents submitted to the County for filing in connection with the aforementioned work.

The payment for surveying, related professional services, permit processing, office calculations, and furnishing all labor, materials, equipment, tools and incidentals, and for doing work involved shall be considered as included in the various items of work, and no additional compensation will be allowed therefore.

2) The second paragraph of *Section 3-2.2.1* "Contract Unit Prices", of the Standard Specifications for Public Works Construction is deleted.

3) The third paragraph of Section 3-2.2.1 "Contract Unit Prices", of the Standard Specifications for Public Works Construction should be followed by: "Should any Contract item be deleted in its entirety, no payment will be made to Contractor for that Bid Item."

4) Section 3-3.2.3 Markup shall be replaced by the following:

3-3.2.3.1 Work by Contractor. An allowance for overhead and profit shall be added to the Contractor's cost as determined under 3-3.2.2 and shall constitute the full and complete markup for all overhead and profit on extra work performed by the Contractor. The Contractor shall be compensated for the actual increase in the Contractor's bond premium caused by the extra work. For costs determined under each subsection in 3-3.2.2, the markup shall be:

a) Labor	20%
b) Materials	15%
c) Tools & Equipment Rental	15%
d) Other Items	15%

3-3.2.3.2 Work by Subcontractor. When any of the extra work is performed by a Subcontractor, the markup established in *3-3.2.3.1* shall be applied to the Subcontractor's costs as determined under *3-3.2.2.* An allowance for the Contractor's overhead and profit shall be added to the sum of the Subcontractor's costs and markup and shall constitute the full and complete markup for all overhead and profit for the Contractor on work by the Subcontractor. For Contractor markup of Subcontractor's costs, the allowance shall be **10% on the first $2,000 or portion thereof, and 5% on costs in excess of $2,000.**

1-04 CLAIM DISPUTE RESOLUTION – In the event of any dispute or controversy with the City over any matter whatsoever, the Contractor shall not cause any delay or cessation in or of Work, but shall proceed with the performance of the Work in dispute. The Contractor shall retain any and all rights provided that pertain to the resolution of disputes and protests between the parties. The Disputed Work will be categorized as an "unresolved dispute" and payment, if any, shall be as later

determined by mutual agreement or a court of law. The Contractor shall keep accurate, detailed records of all Disputed Work, claims and other disputed matters.

All claims arising out of or related to the Contract Documents or this Project, and the consideration and payment of such claims, are subject to the Government Claims Act (Government Code Section 810 et seq.) with regard to filing claims. All such claims are also subject to Public Contract Code Section 9204 and Public Contract Code Section 20104 et seq. (Article 1.5), where applicable. This Contract hereby incorporates those provisions as though fully set forth herein. Thus, the Contractor or any Subcontractor must file a claim in accordance with the Government Claims Act as a prerequisite to filing a construction claim in compliance with Section 9204 and Article 1.5 (if applicable), and must then adhere to Article 1.5 and Section 9204, as applicable, pursuant to the definition of “claim” as individually defined therein.

SECTION 2

SPECIAL PROVISIONS

2-01 TIME OF COMPLETION – The work on this project shall start **within 7 calendar days** from the date of receipt of written notice to proceed from the City Engineer and the Contractor agrees to complete the entire work within **180 calendar days** from the Notice to Proceed date.

In case all the work called for is not completed in all parts and requirements within the time specified, the City shall have the right to grant or deny an extension of time for completion, as may best serve the interest of the City. The Contractor shall not be assessed with penalties during the delay in the completion of the work caused by acts of God or of the Public Enemy, acts of the State, fire not due to acts of contractors or subcontractors, floods, epidemics, quarantine, restrictions, strikes, freight embargo or unusually severe weather, or delays of subcontractors due to such causes provided that the Contractor shall, **within ten (10) calendar days** from the beginning of such delay, notify the City, in writing of the cause of the delay. The City will ascertain the facts and the extent of the delay, and the findings thereon shall be final and conclusive.

2-02 SPECIFICATIONS - The specifications showing character of the work and details of construction are on file at the office of the ***City Engineer, located in 345 Foothill Road, Beverly Hills, California.***

Estimates of quantities appearing in these specifications, Notice to Bidders, and Proposal Form are merely entered for the convenience of the contractors bidding on this project. An independent check of the estimate in the field is required by the contractor **prior to** submitting its bid. It must be understood that payment to the successful contractor will be made on the basis of the unit prices bid for the various items of work and on the actual quantities of work done as measured in the field by the City Engineer.

Copies of the Specifications and Proposal Form may be inspected and obtained at the office of the City Engineer.

2-03 SPECIAL WORK REQUIREMENTS AND WORK SCHEDULE

2-03.1 SPECIAL WORK REQUIREMENTS **-** All work shall be undertaken in conformance with the following special work requirements. Full compensation for conforming to all of the special work requirements shall be included in the bid prices for this contract, and no additional compensation will be made therefore:

a) The Contractor is **prohibited** from working on the following days in City of Beverly Hills:

HOLIDAY	2018	2019
New Year's Day	Jan 1 (Mon)	Jan 1 (Tues)
Martin Luther King Day	Jan 15 (Mon)	Jan 21 (Mon)
President's Day	Feb 19 (Mon)	Feb 18 (Mon)
Passover	Mar 30-31 (Fri & Sat)	Apr 19-20 (Fri & Sat)
Good Friday	Mar 30 (Fri)	Apr 19 (Fri)
Memorial Day	May 28 (Mon)	May 27 (Mon)
Independence Day	July 4 (Wed)	July 4 (Thur)
Labor Day	Sept 3 (Mon)	Sept 2 (Mon)
Rosh Hashanah	Sep 9-10 (Sun & Mon)	Sep 29-Oct 1 (Sun & Mon)
Yom Kippur	Sept 18 (Tue)	Sept 18 (Tue)
Veteran's Day	Nov 11-12 (Sun & Mon)	Nov 11 (Mon)
Thanksgiving Day	Nov 22-23 (Thurs & Fri)	Nov 28-29 (Thurs & Fri)
Christmas Day	Dec 25 (Tue)	Dec 25 (Wed)

b) The Contractor shall secure, protect and maintain the construction area on all of the dates referenced above.

c) All work must be coordinated with the Civil Engineering and Information Technology staff and comply with this specification and all referenced specifications or standards.

d) The Contractor shall maintain the construction site during non-working hours in a clean and safe condition. The Contractor will replace any newly laid concrete that is damaged or scarred. The Contractor shall be available for immediate mitigation measures should the City Engineer decide that appropriate action is necessary during non-working hours.

e) All excavated material shall be loaded into hauling vehicles as the material is excavated. See appendix for “COBH Approved Heavy Haul Truck Route Map”. Stockpiling of excavated material in the public right of way is not allowed.

f) All Underground Service Alert (USA) markings have to be removed by the Contractor at the end of the construction project.

g) Dirt and/or debris not removed by conventional sweeping will require wash down at the direction of the City Engineer. All runoff from wash down shall be vacuumed using a wet/dry vacuum truck. No runoff from wash down will be allowed to drain into the storm drain system.

h) All dirt on construction vehicle tires shall be removed prior to leaving the construction area.

i) At the Pre-Construction meeting; the City will require the Contractor to furnish a cellular phone number that will be furnished to residents with questions or complaints regarding the

Contractor's work. The Contractor should designate a public liaison person to handle all resident inquiries. The Contractor shall respond to residents' inquiries within one hour of the call during normal working hours (8am to 6pm). When dealing with residents, common courtesy is required.

j) The Contractor shall be prepared to modify haul routes and staging areas to respond to changing conditions as directed by the City Engineer. The Contractor shall ensure that all hauling vehicles be radio dispatched to facilitate changes in the hauling cycle. See COBH-approved heavy haul truck route map in appendix.

k) All vehicles used for construction work shall have a company emblem on the door.

2-03.2 WORK SCHEDULE -

a. **Normal Work Schedule** - The Normal Work Schedule for all contract work shall be between the hours of 8:00 a.m. and 6:00 p.m., Monday through Friday.

b. **After Hours** – After Hours shall be defined as any hours outside of the Normal Work Schedule. Work may be allowed outside the normal work schedule on a case by case basis as authorized by IT Manager and/or Project Manager. No additional compensation will be given.

2-04 TRAFFIC CONTROL

2-04.1 NOTIFICATION - The Contractor shall notify the following City Departments **24 hours prior** to the start of work at any location, and **24 hours prior** to the partial closing of a street or alley within the City of Beverly Hills.

BEVERLY HILLS PUBLIC WORKS DEPARTMENT
Notify Jeff Bartizal, Supervising Public Works Inspector (310.285.2518)

BEVERLY HILLS POLICE DEPARTMENT
Notify Traffic Division (310.285.2196)

BEVERLY HILLS FIRE DEPARTMENT
Notify Dispatcher's Office (310.550.4951)

BEVERLY HILLS SANITATION DEPARTMENT
Notify Arthur Saenz, Operations Supervisor (310.285.2465)

The City will furnish to the Contractor "TOW AWAY NO STOPPING" signs. The Contractor will be responsible for posting signs **72-hours** in advance of the work and removing these signs as required for this project. Signs must have exact work days and hours indicated on them for each location and cannot be general. Signs also need to indicate the Project's Permit Number.

2-04.2 PARKING AND ACCESS TO RESIDENTS' DRIVEWAYS - The Contractor shall comply with the requirements of *Paragraph 5-07* of the Standard Contractual Requirements with reference to the need of minimizing the inconvenience caused to residents.

2-04.3 CONSTRUCTION SIGNS - All signs used by the Contractor shall conform to the standards of the "Manual of Traffic Controls", issued by the Department of Transportation, State of California, current edition. All warning, regulatory and construction signs shall be fully reflectorized. The traffic cones to be used shall be 18 inches in height, rubber, or plastic and be reflectorized.

2-04.4 CONTRACTOR'S RESPONSIBILITY - The Contractor shall take all necessary measures to obtain a normal flow of traffic to prevent accidents and to protect the work throughout the construction stages until completion of the work. The Contractor shall make the necessary arrangements to provide and maintain barriers, cones, guards, barricades, and construction warnings and regulatory signs. The Contractor shall take measures necessary to protect all other portions of the work during construction and until completion, providing and maintaining all necessary barriers, barricade lights, guards, temporary crossovers and watchmen.

In addition to the foregoing traffic control and safety measures, the Contractor shall undertake immediately to implement any measures requested by the City Engineer, as deemed necessary to ensure the proper flow of traffic and the protection of the public and the safety of the workers. The Contractor shall maintain at all times the ability to respond to calls from the Beverly Hills Police Department during non-working hours to replace or provide additional traffic control or safety devices as shall be required by the Police Department.

2-04.5 FLASHING ARROW SIGNS - The Contractor shall furnish and maintain solar-powered flashing arrow signs (FAS) during lane closures on arterial streets. The City Engineer shall determine when FAS is required at any location. The cost of these signs shall be included in the unit prices bid for the particular items of work where such signs may be required.

2-04.6 PAYMENT - The entire cost for traffic control as detailed in this section and as required for this construction shall be included in all applicable bid items.

2-05 UTILITIES

2-05.1 CONTRACTOR'S RESPONSIBILITY - The Contractor shall verify the location of all underground utilities and services before proceeding with excavation work, requesting in advance the services of inspectors from the utility companies in order to ascertain said locations. Damage to underground utilities resulting from neglect on the part of the Contractor shall be corrected and paid for by the Contractor.

2-05.2 NOTIFICATION - The Contractor shall notify all owners of public utilities 48 hours in advance of excavating around any of their substructures, and shall also provide the same notice to Underground Service Alert of Southern California, ***Tel. No. 1-800-227-2600.***

2-05.3 INTERFERENCE (UTILITIES IN USE) - Utilities which are found, by exploratory location or by excavation, to interfere with the construction of this project will be relocated, altered,

or reconstructed by others, or the City Engineer may order changes in location, line or grade of the project structure, to be built or being built in order to avoid said utility. The cost of such changes will be paid for as described in *Section 2-08* of these Specifications.

2-05.4 INTERFERENCE (ABANDONED UTILITIES) - Abandoned utilities which interfere with the construction of any portion of this project may be cut by the Contractor, the interfering portion of the utility removed and open ends of the pipe sealed with a suitable plug or cap. The cost of this work shall be included in the unit prices bid for the particular items of work where such interference occurs unless otherwise specified.

2-06 BUSINESS LICENSE - The contractor is required to have a current City of Beverly Hills business license issued through the City of Beverly Hills Building & Safety and/or Finance Administration Departments. To obtain a business tax registration form, please call (310) 285-2424, or visit the one-stop permit center on the first floor of Beverly Hills City Hall located at 455 North Rexford Drive, Beverly Hills, 90210.

2-07 PERMITS – Prior to the commencement of work, the Contractor shall obtain a construction and after-hours permit at no cost from the City of Beverly Hills Permit Center, located on the 1st floor of City Hall at 455 North Rexford Drive. The permit shall be kept in a readily available place on the job site at all times during construction. While no fee will be charged for the permit, no permit will be issued unless the Contractor provides a code reference number from U.S.A. confirming they have received appropriate advance notification as required in Section 2-05.2 above and provides evidence of a current copy of Beverly Hills business license.

2-08 ADDITIONAL WORK AND EXTRA WORK - The City reserves the right to order additional work over and above the quantities listed in the Proposal Form. In the event that additional work is required and is so ordered by the City Engineer, payment to the Contractor will be based on the actual quantity of additional work ordered and measured in the field by the City Engineer and will be paid for at the unit price bid by the Contractor. Likewise, the City reserves the right to order extra work not shown on the plans and not listed in the Proposal Form. Whenever extra work is found to be necessary, the procedure described in *Paragraph 5-11* of the Standard Contractual Requirements shall be followed.

2-09 PAYMENT - Contractor shall be paid for work in accordance with the unit prices shown on the schedule of unit prices in the proposal form.

Upon completion of the assigned work by Contractor and acceptance of the work by the City Engineer, the Contractor shall submit an invoice for said work based on mutually agreed quantities.

The payment will be made on the basis of the amount of mutually agreed work completed less ***five (5) percent retention*** unto a maximum of $50,000.

The final payment will be made at least ***thirty-five (35) days*** after acceptance of the work by the City Council.

The Contractor's invoice format shall be subject to approval by the City Engineer. Each request for payment must show the work, by Bid Item, completed at each location. The invoice shall contain separate subtotals of cost by location and by Bid Item.

2-10 SAFETY REGULATIONS - The Contractor shall comply with the requirements set forth in *Section 7-10.4* of the Standard Specifications.

2-11 RECYCLING OF MATERIALS AND NON-STORMWATER DISCHARGES

2-11.1 RECYCLING OF MATERIALS - The Contractor is expected to recycle all materials removed from the job site. See *Section 3-01.*

2-11.2 DISCHARGES INTO STORM DRAIN SYSTEM - Storm water/urban runoff discharges to the public storm drainage system shall be prohibited for all discharges not wholly comprised of storm water, or permitted by a valid National Pollution Discharge Elimination System (NPDES) permit issued by the California Regional Water Quality Control Board. "Storm drain system" includes all roads with drainage systems, municipal streets, catch basins, curbs, gutter, ditches, man-made channels, or storm drains. The Contractor shall prevent all non-storm water discharges from the construction site (i.e. mixing and cleaning of construction materials, concrete washout, disposal of paints, adhesives, solvents, and landscape products).

2-12 ITEMS OF WORK – The work associated with and included in the price for each Bid Item is specifically described in this section. Refer to Section 3 and the appendices for additional requirements and standard drawings.

Mobilization, demobilization, traffic control, and safety shall be included in all other appropriate bid items. No separate payment will be made for these items.

For all work on private property, construction shall comply with latest applicable California Building Standards Code (Cal. Code Regs., Title 24) with Beverly Hills amendments. Refer to Title 9 Ch. 1 Article 1-16 http://sterlingcodifiers.com/codebook/index.php?book_id=466&chapter_id=21351 .

Many types of work will require cleanup and repair of adjacent property/improvements after the work is completed, including related tasks such as lawn re-sodding or reseeding, painting, etc. All costs for these related tasks shall be included in the bid prices for the associated work, and no extra payment for these related tasks will be allowed. Further, the associated work will not be considered complete until the related tasks are completed, and no payment will be made for the associated work until the related tasks have been completed.

All work under this contract is based on actual customer installation requests. Drop installs and work flow shall be coordinated and scheduled with the IT Department or its representatives.

2-12.1 ITEM 1. BOND PREMIUMS – REIMBURSEMENTS (RECEIPTS REQUIRED) – The lump sum item shall reimburse direct purchase costs of the payment bond only. Any additional

overhead and profit shall be included with other bid items. Receipts will be required for reimbursement. Payment bond shall be in the amount equal to 100% of the total bid.

2-12.2 ITEMS 2 & 3. *DIRECT BURY MICROCONDUIT* – The unit price bid per lineal foot shall include all the work involved in the following:

a. Direct bury microconduit drops into the residential or commercial building structure.

b. Installations shall be in new 12.7/10 mm or 10/8 mm micro-conduit with a depth of at least 8" deep from existing microconduit at the property line (stubbout, pull box, or NAP box) to the building face into a TAP box, into an existing conduit, or an existing pull box.

c. All restoration of landscaping, irrigation, and hardscape.

d. All microconduit connections and terminations into the TAP box.

e. Bid Item 1 shall be billed per foot for installs up to 100'. For installs over 100', bill per foot to Bid Item 2.

2-12.3 ITEM 4*. INSTALL MICROCONDUIT IN EXISTING OCCUPIED CONDUIT* – The unit price bid per lineal foot shall include all the work involved in the following:

a. Install microduit in existing occupied conduit that is either underground, on or in the building structure. This includes all pull boxes, junction boxes, etc. Protect existing wiring.

b. All microconduit connections and terminations into the telecom cabinet or room.

c. When installing into a split wye or existing conduit opening, you must seal the opening to prevent any dirt, water, bugs, rodents, etc. from entering the pipe.

2-12.4 ITEM 5*. INSTALL TAP BOX* – The unit price bid per each shall include all the work involved in the following:

a. Install TAP box on side of building.

b. Install penetration into the building through the TAP box to facilitate fiber installation.

2-12.5 ITEM 6 & 7*. SIDEWALK OR DRIVEWAY BORE* – The unit price bid per lineal foot shall include all the work involved in the following:

a. Boring underneath hardscape improvements such as concrete driveways or walkways.

b. Walkways shall be considered up to 8' wide. Any hardscape wider than 8' will be considered as a driveway.

c. Conduit sleeves underneath hardscape.

d. All restoration related to the boring work.

2-12.6 ITEM 8*. WALL PENETRATION FOR MICROCONDUIT* – The unit price bid per each shall include all the work involved in the following:

a. Core drill through concrete or masonry wall (up to 1' thick, typical is 8") and install 1" pvc conduit sleeve.

b. Secure sleeve into the wall with concrete repair and anchoring epoxy or similar product.

c. After microconduit is installed, seal annular space between microconduit and sleeve with an appropriate product.

d. Restore landscape or hardscape.

2-12.7 ITEM 9*. FURNISH AND INSTALL SPLIT WYE* – The unit price bid per each shall include all the work involved in the following:

a. Furnish and install PVC split wyes on existing conduits as needed. Protect existing wiring.

b. Sizes will vary. Provide up to 4" split wye.

c. After microconduit is installed, seal annular space between microconduit and split wye with an appropriate product.

2-12.8 ITEM 10*. INSTALL MICROFIBER IN MICROCONDUIT* – The unit price bid per lineal foot shall include all the work involved in the following:

a. Install fiber in microconduit from the NAP to the TAP box, cabinet, or telecom room.

b. Splice or terminate single strand at the NAP and at the TAP, cabinet, or telecom room.

c. If a microfiber with multiple strands is installed, additional splices and terminations will be necessary. This additional work shall be performed under bid item 10.

2-12.9 ITEM 11*. ADDITIONAL FIBER SPLICES OR TERMINATIONS (IF NECESSARY)* – The unit price bid per each shall include all the work involved in the following:

a. For multiple dwelling units or commercial buildings, microfiber with multiple strands will be installed.

b. Splice or terminate additional strands at the NAP and at the TAP, cabinet, or telecom room.

2-12.10 ITEM 12*. POTHOLE REPAIR – INTERCEPT MICROCONDUIT* – The unit price bid per each shall include all the work involved in the following:

a. For stubbouts buried in the pavement, sawcut and excavate to expose the existing microconduit.

b. After the new microconduit is connected and brought into the private property (under another bid item), restore the pothole per BH114. Make sure the microconduit is buried in the aggregate layer to protect it from the hot mix asphalt.

c. The minimum size pothole shall be 1' by 1'. The contractor may have to increase the size of the pothole to facilitate wall penetrations.

2-12.11 ITEM 13. ***ROD & ROPE EXISTING CONDUIT (IF NECESSARY)*** **–** The unit price bid per lineal foot shall include all the work involved in the following:

a. Some existing conduit will not have pull ropes. Rod existing conduit to verify it can be used to bring the microconduit or microfiber into the building structure. Protect existing wiring.

b. Install a new polyester mule tape through existing conduit, pull boxes, junction boxes, etc.

2-12.12 ITEMS 14 & 15. ***AERIAL DROP PRE-INSTALLS AND ADDITIONAL SPANS*** **–** The unit price bid per each shall include all the work involved in the following:

a. All the work involved in connecting existing aerial fiber cable (flat fiber) on the pole to the residential or commercial structure including penetrations. Use fire barrier sealant.

b. If a TAP box is required, install per other bid item.

c. All hardware such as brackets, attachment hardware, messenger wire, cable ties, etc.

d. Splice or terminate single strand at the NAP and at the TAP, cabinet, or telecom room.

e. If a microfiber with multiple strands is installed, additional splices and terminations will be necessary. This additional work shall be performed under bid item 10.

f. For additional pole spans, some drops will route from the NAP pole up or down line to another pole or mid span take off point to the dwelling.

2-12.13 ITEMS 16. ***INSTALL MICROFIBER IN EXISTING OCCUPIED CONDUIT*** **–** The unit price bid per lineal foot shall include all the work involved in the following:

a. Installation of flat fiber can proceed through existing occupied conduit in or on the building.

b. If rodding and roping is required, perform work under related bid item. Protect existing wiring.

2-12.14 ITEMS 17. *PLACE AERIAL TO UNDERGROUND RISER –* The unit price bid per each shall include all the work involved in the following:

a. Some installs will require the placement of a new riser conduit that will be used to route the drop from strand to underground. Each riser will be 2 IN rigid PVC.

b. Riser placement will include attaching the conduit to the serving pole.

c. Riser placement will also include an underground transition at the base of the pole to the subscriber's lot line.

2-12.15 ITEM 18*. BEVERLY HILLS FIBER BRANDING ALLOWANCE –* The unit price bid per allowance shall include all the work involved in the following:

a. **Uniforms, vehicle magnets, etc.** – coordinate overall design of uniforms, polo shirts, hats, logos, vehicle magnets, etc. with City staff. Procure quotes for obtaining uniform clothing, vehicle magnets, etc. Billing will be for actual purchase costs plus 10% for overhead and profit. Receipts will be required.

b. Background checks & badging:

- The contractor is responsible for conducting background checks on all technicians that will be assigned to the project. Each prescreen technician will be subject to the City's background check process. This process is not reimbursable. Any associated costs shall be built into all other bid items.

- The City will complete its own background check process (LiveScan) for each technician the contractor submits for project assignment and City ID badging. Each technician will be required to complete this process, whether a new hire for the contractor or an existing technician. The pass/fail requirements will be the standard used by the City currently and at its discretion, but will not be published. The City HR department may charge for each background check. For fees paid by the contractor, billing shall be actual fee costs plus 10% for overhead and profit. Receipts will be required.

- The contractor shall employ a drug screening program where 100% of new hires are tested and periodic random testing is being used. The City will not participate in this drug testing program. This process is not reimbursable. Any associated costs shall be built into all other bid items.

SECTION 3

CONSTRUCTION REQUIREMENTS AND MATERIALS

3-01 REMOVAL AND DISPOSAL OF MATERIALS - All materials removed must be hauled away from the project site and legally disposed of at a materials site located outside the City limits of Beverly Hills. The Contractor shall provide the City all documentation as to the weight or volume of materials removed during excavations in accordance with the requirements of Public Resources Code Section 40000-40004. This documentation shall be in the form of certified tickets from a Concrete & Debris (C&D) processing facility or in the form of a certified log (by an officer of the company) showing dates of excavation and/or removal of concrete and/or asphalt materials, amounts (in weights for volumes) and the facility where the materials were recycled. In addition, the contractor shall supply a similar self-certified log accounting for all materials that were not recycled. The Contractor shall supply the logs to the City ***prior to the approval of payment requests*** covering the associated work.

Except as otherwise specifically authorized by the City Engineer, all self-propelled equipment used by the Contractor in excavation, breaking and removal operations for improvement work shall be equipped with rubber tires.

3-02 AVOIDANCE OF DUST NUISANCE - The Contractor shall take all necessary measures in order to avoid the nuisance of excessive dust resulting from the process of breaking, reconstructing and removing any materials on the project site. Such measures shall be employed for the duration of the contract work. Refer to *Section 7-8.1* of the Standard Specifications.

3-03 STORAGE OF MATERIALS IN PUBLIC STREETS - *Section 7-10.2* of the Standard Specifications is deleted and replaced by the following: "The Contractor shall not store construction materials, equipment or excavated material in the public right-of-way at any time without prior written permission from the City Engineer."

3-04 UNTREATED BASE MATERIALS - Crushed miscellaneous base materials shall comply with the requirements in Section 200-2.4 and shall be placed in accordance with the requirements of Section 301-2 of the Standard Specifications.

3-05 PCC SPECIFICATIONS - The Contractor shall comply with the requirements set forth in Section 303-5 of the Standard Specifications for the construction of PCC improvements. The concrete material used for various types of improvements shall be as shown in the following table:

Type of Improvement	PCC Specification	Notes
Curb, gutter, sidewalk and curb ramp, driveway approaches, catch basin top slabs	Class 520 C 2500	1. Concrete shall contain 2% calcium chloride by weight.
Alley gutter, cross gutter, local depressions, alley approaches, integral curb and bus pads	Class 560 C 3250	1. Concrete shall contain 2% calcium chloride by weight, if requested by the City Engineer 2. Type III Cement (high early strength) shall be used. 3. Fiber mesh shall be added to the mix for integral curb and bus pads in accordance with the manufacturer's instructions.
High early alternative	Class 750-C-5000	Use WRDA 64 or equivalent water reducing admixture.

3-05.1 PCC Improvements – PCC improvements shall be constructed in accordance with the following requirements:

a) The City will mark the removal area at each location.

b) Score lines shall match adjacent markings.

c) The Contractor will be responsible for all markings on newly laid concrete. The City Engineer may require removal and reconstruction of marked or damaged work.

3-06 MATERIALS TO BE SUPPLIED – Refer to the table below for materials to be supplied the City or by the contractor:

Material Item	City of Beverly Hills	Contract or	City or Customer
TAP Box	x		
Drop Conduit (12.7/10mm or 10/8mm)		x	
Drop Fiber	x		
Inside Wire - Fiber	x		
Connectors, jacks, jack plates, & miscellaneous supplies		x	
Tools and Test Equipment		x	
Service Vehicles		x	

Any miscellaneous materials not listed in the table above that are needed to complete work shall be supplied by the contractor.

3-07 Basic Network Planning Assumptions – The City has completed the selection processes for all key building blocks of the proposed FTTP system. The contractor shall coordinate with the City and with the Premise Installer. Consider the following assumptions:

- Calix is the electronics vendor and Great Lakes Data Systems (GLDS) is the OSS/BSS vendor. The Installation and Maintenance Contractor technicians will be required to utilize the Great Lakes WinForce Tech platform which enables smart device/handheld access to the OSS platform in the field. The GLDS platform is used for all install scheduling, quota management, work order entry and issuance, and inventory management of the ONT's.

- The City will be deploying the Calix 716 model (4 data and 2 voice ports) and 844G model (4 data, 2 voice and 802.11ac WiFi) and GP1000X model (10G uplink and 10/1G LAN port) deployed in tandem with the model 844E (802.11ac WiFi Gateway). The City is primarily using indoor ONTs, with some external being used for certain commercial installations. Where installations include voice service, we are installing a UPS with internal battery.

- The City will be using a combination of direct CAT6 connections to connect ONTs to the Subscriber PC or wireless router in the subscriber home, as well as 80211.ac integrated ONT's that will not require inside wiring.

- PONs will be implemented using 1:16 splitters located in approximately (40) 288-count local convergence cabinets (LCCs).

- Network access points (NAPs) will be attached to distribution cables radiating from the LCC. Enough fibers will be dressed out in a splice tray in each NAP to serve every home and business in the NAP's serving area. The City will be using the edome closures for NAPs.

- The system is being built using a combination of strand and lash for aerial (armored distribution cable) and microcable in microduct for underground.

3-8 PRE-INSTALL OF FIBER DROP – The City intends to break the installation process into two distinct steps. The first step will be called the "pre-install." This work is the installation of the fiber drop from the serving network access point (NAP) to the exterior of the dwelling, the installation of the Test Access Point (TAP), and splicing and testing of the fiber. A detailed list of tasks for the pre-install phase is provided next:

- Contractor runs New Connect work order report in GLDS WinCable for new subscriber installation at least 5 days prior to the due date (premises installation). Work order will include all standard subscriber and service information as well as identification of the serving LCC and NAP;

- Contractor schedules pre installation for given work order such that all work is completed at least 24 hours prior to the premises installation date. The City will not be involved in the detailed scheduling of this phase. Subscriber will be notified that this work will take place prior to the actual premises installation, but they will not be required to be present;

- Contractor personnel goes to the serving LCC, identifies the next available port assigned at the serving LCC for the subscriber's NAP and connects it to the next available splitter port (pigtail);

- Contractor personnel goes to the serving NAP, locates fiber to be used to serve subscriber and fusion splices one fiber strand in drop cable (the City is not deploying any form of pre-connectorized NAPs or drop cables). Close NAP and complete pressure check on closure (hand pump acceptable);

- Install fiber drop to home using standard aerial and/or underground construction approaches (underground drops to be direct buried minimum depth of 8"):

    - Underground NAPs are located in standalone hand holes that are a minimum of 17x30x18. The City has used streetlight duct for the bulk of the distribution pathways in the underground FTTP network. In these areas, distribution fiber routes from NAP to NAP in streetlight conduits and transitions to NAP handholes via dedicated interconnects. Dedicated drop micro ducts route

from each NAP hand hole back through the streetlight conduit to either a marked stub out or another streetlight hand hole. Installers are required to locate the serving stub out or serving hand hole and connect the drop micro duct from that point. Stub outs will be marked with a tag in the concrete or with locate wire in the case of greenspace. The installer will be required to coordinate with the streetlight department to insure that the given streetlight circuit is off prior to accessing the street light handhole.

- Installers are required to bury the drop micro duct at least eight inches, unless given permission by the City to be shallower. Ground conditions will vary. Installer is expected to provide restoration for all underground work related to each install. Once the micro duct is in place, the installer will complete the splitter cabinet connections and run a drop microfiber from the TAP box to the NAP location (pushing, blowing or pulling), through the dedicated drop micro duct. Please note that the fiber drop cable may route from the NAP through a dedicated micro duct before passing over the private property line and into the dwelling. The TAP side of the drop will be connectorized and plug into the TAP box. The NAP side of the drop will be a pigtail and will be fusion spliced to the next available distribution fiber in the NAP. Once the drop is spliced, the installer will be required to take a light reading and record the value on the work order. Low light levels will be reported back the City for further investigation.

- Aerial Drop Pre-Installs: The City will be attaching feeder, distribution and drop cables to Southern California Edison (SCE) and AT&T poles in certain areas of the system. All facilities will be attached at least 48 inches below power. Facilities less than 72 inches from power will be protected by a guard arm placed 48 inches below power. Aerial systems will be constructed using strand and lash design. Distribution and feeder cables will be single jacket / single armor and drop cables will be self-support. Generally, aerial NAPs will be mounted on strand next to a pole (NAP pole). NAPs will be installed with enough slack to bring them down to the ground, but it is expected that most drop splicing will be completed in the air. Drops will route from the NAP pole to the dwelling in many ways. Some drops will route from the NAP to the dwelling directly from the NAP pole, while others will route via intermediate spans and into the dwelling (either pole based J hook or mid span take off) and some will route through a riser and then underground to the dwelling.

- Aerial drop from serving Pole: The serving pole is defined as the last pole before the dwelling in aerial service areas. Pricing is to reflect the cost of completing the cross connect in the splitter cabinet, splicing the fiber drop in the NAP, installing the aerial drop from the serving pole to the dwelling, mounting the TAP box on the dwelling, logging the power reading from the dwelling end of the drop and plugging the drop into the TAP box.

- Underground (riser) drop from serving Pole: The serving pole is defined as the last pole (or mid span take off point) before the dwelling in aerial service areas. Pricing is to reflect the cost of completing the cross connect in the splitter cabinet, splicing the fiber drop in the NAP, installing the drop down the serving pole to the property line, installing duct from the property line to the

dwelling, installing drop in the new conduit, mounting the TAP box on the dwelling, logging the power reading from the dwelling end of the drop and plugging the drop into the TAP box.

- Additional pole spans: Some drops will route from the NAP pole up or down line to another pole or mid span take off point to the dwelling. Pricing should be provided for each span (or mid span segment) in these scenarios. Installers should assume that strand will be present on all main distribution runs. Strand will not be installed from the distribution run to most drop or bump poles.

- Riser installation: The City will be applying for risers on poles where subscribers are likely to require a buried drop from the serving pole to the dwelling. Some risers may need to be installed by the installation contractor. Installers should provide pricing for installing a one inch riser for one or more fiber drops from the base of the pole to a height of approximately 24 feet.

- Underground transition installation: underground sweeps that would connect new drop risers to the property line for a given subscriber. Most poles will be set in asphalt, so pavement grade restoration will be required that meets the City's published standards.

- Mount TAP as close to the existing cable and phone demarcation points on the side of the dwelling as possible;

- Splice connectorized pigtail onto the end of the fiber drop cable;

- Log into GLDS WinForce Tech and record the following, taking photos if warranted:

  - Splitter Cabinet (LCP)

  - Serving Network Access Point and handhole

  - LCP Port

  - Length of interior fiber

  - Length of fiber drop

  - Length of conduit

  - Light level on the fiber

- Close pre-install work order using GLDS WinForce Tech.

3-9 QUALITY ASSURANCE – The contractor shall use specific and effective quality control procedures relative to the following areas:

- Employee screening

- Employee training

- Branding and appearance standards (clothing, badge IDs, vehicle appearance, logos, etc.)
- Work standards and procedures
- Work inspections
- Customer feedback and issue resolution

The contractor is to submit documentation regarding specific policies and programs.

3-10 Standard of Conduct – The contractor will adhere to the highest quality standards in relation to customer service and workmanship. The contractor shall be responsible for maintaining satisfactory standards of employees' competency, conduct, courtesy, appearance, honesty, and integrity, and shall be responsible for taking such disciplinary action with respect to any employee, as may be necessary.

The City may request the contractor to immediately remove from this assignment any employee found unfit to perform duties due to one or more of the following reasons:

a. Neglect of duty.
b. Disorderly conduct, use of abusive or offensive language, quarreling, intimidation by words or actions or fighting.
c. Theft, vandalism, immoral conduct or any other criminal action.
d. Selling, consuming, possessing, or being under the influence of intoxicants, including alcohol, or illegal substances while on assignment for the City.

Agents and employees of the contractor working in the City shall present a clean and neat appearance. Prior to performing any work for the City, the contractor shall require each of their employees to wear ID badges and uniforms identifying: the contractor by name, the first name of their employee and a photograph of their employee if using an ID badge. Their employee shall wear or attach the ID badge to the outer garments at all times.

3-11 CHANGES IN WORK

3-11.1 BASES FOR ESTABLISHING COSTS - Work by Contractor. An allowance for overhead and profit shall be added to the Contractor's cost as determined under 3-3.2.2 and shall constitute the full and complete markup for all overhead and profit on extra work performed by the Contractor. The Contractor shall be compensated for the actual increase in the Contractor's bond premium caused by the extra work. For costs determined under each subsection in 3-3.2.2, the markup shall be:

a) Labor	20%
b) Materials	15%
c) Tools & Equipment Rental	15%
d) Other Items	15%

Work by Subcontractor. When any of the extra work is performed by a Subcontractor, the markup established in *3-3.2.3.1* shall be applied to the Subcontractor's costs as determined under *3-3.2.2.* An allowance for the Contractor's overhead and profit shall be added to the sum of the

Subcontractor's costs and markup and shall constitute the full and complete markup for all overhead and profit for the Contractor on work by the Subcontractor. For Contractor markup of Subcontractor's costs, the allowance shall be **10% on the first $2,000 or portion thereof, and 5% on costs in excess of $2,000.**