



City of Tacoma, WA

TACOMA POWER TRANSMISSION & DISTRIBUTION

REQUEST FOR BIDS

**ON-CALL TELECOMMUNICATIONS SYSTEM OUTSIDE PLANT
CONSTRUCTION/MAINTENANCE**

SPECIFICATION NO. PT24-0296F



**City of Tacoma
Tacoma Power/Transmission & Distribution**

**REQUEST FOR BIDS PT24-0296F
On-Call Telecomm Outside Plant Maintenance & Construction**

Submittal Deadline: 11:00 a.m., Pacific Time, Tuesday, April 8, 2025

Submittals must be received by the City’s Procurement and Payables Division by 11:00 a.m. Pacific Time.

For electronic submittals, the City of Tacoma will designate the time of receipt recorded by our email server, as the official time of receipt. This clock will be used as the official time of receipt of all parts of electronic bid submittals. Include the specification number in the subject line of your email. Your submittal must be sent as an attachment, links to your electronic submittal will not be accepted.

For in person submittals, the City of Tacoma will designate the time of receipt recorded by the timestamp located at the lobby security desk, as the official time of receipt. Include the specification number on the outside of the sealed envelope. Late submittals will be returned unopened and rejected as non-responsive.

Submittal Delivery: Sealed submittals will be received as follows:

| | |
|--|--|
| <p>By Email: sendbid@cityoftacoma.org Maximum email size including attachments: 35 MB. Multiple emails may be sent for each submittal.</p> <p>Note: Email may pass through multiple servers before arriving at its destination. Please allow sufficient time for email delivery of submittals. Timely electronic delivery is at the risk of the supplier.</p> | <p>In Person: Tacoma Public Utilities Administration Building North, Main Floor, Lobby Security Desk 3628 South 35th Street Tacoma, WA 98409 Monday – Friday 8:00 am to 4:30 pm</p> |
|--|--|

Bid Opening: Submittals must be received by the City’s Procurement and Payables Division prior to 11:00 a.m. Pacific Time. Sealed submittals in response to a RFB will be opened Tuesday’s at 11:15 a.m. by a purchasing representative and read aloud during a public bid opening held at the Tacoma Public Utilities Administrative Building North, 3628 S. 35th Street, Tacoma, WA 98409, conference room M-1, located on the main floor. They will also be held virtually Tuesday’s at 11:15 a.m. Attend a Zoom meeting [via this link](#) or call 1 (253) 215 8782, using meeting ID # 884 0268 0573, passcode # 070737.

Submittals in response to an RFP, RFQ or RFI will be recorded as received, but not read at bid opening. As soon as possible, after 1:00 PM, on the day of submittal deadline, preliminary results will be posted to www.TacomaPurchasing.org.

If you believe your submittal was sent timely and was not read at bid opening, please contact sendbid@cityoftacoma.org immediately.

Solicitation Documents: An electronic copy of the complete solicitation documents may be viewed and obtained by accessing the City of Tacoma Purchasing website at www.TacomaPurchasing.org.

- [Register for the Bid Holders List](#) to receive notices of addenda, questions and answers and related updates.
- Click here to see a [list of vendors registered for this solicitation](#).

Pre-Proposal Meeting: A pre-proposal meeting will be held via TEAMS on Thursday, March 20th at 11am.

Microsoft Teams [Need help?](#)

[Join the meeting now](#)

Meeting ID: 284 389 933 933

Passcode: Hw3Xi6Qn

Dial in by phone

[+1 253-666-4424,,363661918#](tel:+12536664424363661918) United States, Tacoma

[Find a local number](#)

Phone conference ID: 363 661 918#

Project Scope: The work to be performed under these specifications and contract provides for the on-call construction and maintenance of aerial and underground outside plant to support the deployment of fiber and or a hybrid fiber-coaxial (HFC) transmission system. The contract includes the construction of both aerial and underground facilities in urban, rural, commercial and industrial areas for placement of coaxial and fiber optic cable, splicing and equipment installation of power supplies, amplifiers and other items required to provide for a complete and operable two-way HFC transmission system. The contract also provides for the activation and certification of HFC plant.

Estimate: \$2,500,000

Paid Sick Leave: The City of Tacoma requires all employers to provide paid sick leave in accordance with State of Washington law.

Americans with Disabilities Act (ADA Information): The City of Tacoma, in accordance with Section 504 of the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA), commits to nondiscrimination on the basis of disability, in all of its programs and activities. Specification materials can be made available in an alternate format by emailing the contact listed below in the *Additional Information* section.

Title VI Information:

"The City of Tacoma" in accordance with provisions of Title VI of the Civil Rights Act of 1964, (78 Stat. 252, 42 U.S.C. sections 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin in consideration of award.

Additional Information: Requests for information regarding the specifications may be obtained by contacting Aaron Bratton by email to abratton@cityoftacoma.org.

Protest Policy: City of Tacoma protest policy, located at www.tacomapurchasing.org, specifies procedures for protests submitted prior to and after submittal deadline.




Meeting sites are accessible to persons with disabilities. Reasonable accommodations for persons with disabilities can be arranged with 48 hours advance notice by calling 253-502-8468.

TABLE OF CONTENTS

| | |
|--|-----|
| REQUEST FOR BIDS..... | 2 |
| TABLE OF CONTENTS..... | 4 |
| SUBMITTAL CHECK LIST..... | 5 |
| SPECIAL NOTICE TO BIDDERS..... | 6 |
| 1. MINIMUM REQUIREMENTS..... | 10 |
| 2. STANDARD TERMS AND CONDITIONS / GENERAL PROVISIONS..... | 10 |
| 3. INSURANCE REQUIREMENTS..... | 10 |
| 4. DESCRIPTION OF WORK..... | 10 |
| 5. ANTICIPATED CONTRACT TERM..... | 10 |
| 6. CALENDAR OF EVENTS..... | 10 |
| 7. INQUIRIES..... | 10 |
| 8. PRE-BID MEETING..... | 11 |
| 9. DISCLAIMER..... | 11 |
| 10. RESPONSIVENESS..... | 12 |
| 11. AWARD..... | 12 |
| 12. PREVAILING WAGE INFORMATION..... | 13 |
| 13. BID BONDS..... | 13 |
| 14. PAYMENT AND PERFORMANCE BOND..... | 15 |
| 15. DELIVERY..... | 15 |
| 16. WARRANTY..... | 15 |
| 17. INSPECTION..... | 16 |
| 18. APPROVED ITEM EQUIVALENT..... | 16 |
| 19. COMPLIANCE WITH SPECIFICATIONS..... | 16 |
| 20. MATERIALS AND WORKMANSHIP..... | 16 |
| 21. ENVIRONMENTALLY PREFERABLE PROCUREMENT..... | 16 |
| 22. LEAP REQUIREMENTS..... | 17 |
| 23. EQUITY IN CONTRACTING..... | 17 |
| 24. WASHINGTON APEX ACCELERATOR..... | 17 |
| APPENDIX A..... | 18 |
| APPENDIX B..... | 150 |
| APPENDIX C..... | 162 |

SUBMITTAL CHECK LIST

This checklist identifies items to be included with your submittal. Any submittal received without these required items may be deemed non-responsive and not be considered for award. Submittals must be received by the City of Tacoma Purchasing Division by the date and time specified in the Request for Bids page.

| | |
|--|---|
| <p>The following items make up your complete electronic submittal package (include all the items below):</p> |  |
| <p>Signature Page (Appendix B) To be filled in and executed by a duly authorized officer or representative of the bidding entity. If the bidder is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.</p> | |
| <p>Price Proposal Form (Appendix B) The unit prices bid must be shown in the space provided. Check your computations for omissions and errors.</p> | |
| <p>Bid Bond (Appendix B)</p> | |
| <p>Certification of Compliance with Wage Payment Statutes (Appendix B) Bidder shall complete this form in its entirety to ensure compliance with state legislation (SHB 2017).</p> | |
| <p>State Responsibility and Reciprocal Bid Preference Information (Appendix B) Bidder shall complete this form in its entirety to ensure compliance with state legislation (SHB 2010).</p> | |
| <p>List of Subcontractor Categories of Work (Appendix B) Used on PWI projects with an estimate of \$1,000,000 dollars or more.</p> | |
| <p>Contractor's Record of Prior Contracts (Appendix B)</p> | |
| <p>List of Equipment (Appendix B)</p> | |
| <p>Safety Plan (Appendix B)</p> | |
| <p>After award, the following documents will be executed:</p> | |
| <p>City of Tacoma Contract (See sample in Appendix C) Must be executed by the successful bidder.</p> | |
| <p>Certificate of Insurance and related endorsements (Appendix A) Shall be submitted with all required endorsements</p> | |
| <p>Payment and Performance Bonds (See samples in Appendix C) Payment Bond and Performance Bond: Must be executed by the successful bidder and his/her surety company</p> | |

SPECIAL NOTICE TO BIDDERS

Public works and improvement projects for the City of Tacoma are subject to Washington state law and Tacoma Municipal Code, including, but not limited to the following:

I. STATE OF WASHINGTON

A. RESPONSIBILITY CRITERIA – STATE OF WASHINGTON

In order to be considered a responsible bidder the bidder must meet the following mandatory state responsibility criteria contained in RCW 39.04.350:

1. Have a current certificate of registration as a contractor in compliance with chapters 18.27 RCW, 18.106 RCW, 70.87 RCW, 19.28 RCW, which must have been in effect at the time of bid submittal;
2. Have a current Washington Unified Business Identifier (UBI) number;
3. If applicable:
 - a. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
 - b. Have a Washington Employment Security Department number, as required in Title 50 RCW;
 - c. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW and;
4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).
5. Have received training on the requirements related to public works and prevailing wage under this chapter and chapter 39.12 RCW and must designate a person or persons to be trained on these requirements. The training must be provided by the department of labor and industries or by a training provider whose curriculum is approved by the department. Bidders that have completed three or more public works projects and have had a valid business license in Washington for three or more years are exempt from this subsection.

B. RECIPROCAL PREFERENCE FOR RESIDENT CONTRACTORS:

Effective March 30, 2012, RCW 39.04.380 imposes a reciprocal preference for resident contractors. Any bid received from a non-resident contractor from a state that provides an in-state percentage bidding preference is subject application of a comparable percentage disadvantage.

A non-resident contractor from a state that provides an in-state percentage bidding preference means a contractor that:

1. Is from a state that provides a percentage bid preference to its resident contractors bidding on public works projects, and
2. Does not have a physical office located in Washington at the time of bidding on the City of Tacoma public works project.

The state of residence for a non-resident contractor is the state in which the contractor was incorporated, or if not a corporation, the state in which the contractor's business entity was formed.

The City of Tacoma will evaluate all non-resident contractors for an out of state bidder preference. If the state of the non-resident contractor provides an in state contractor preference, a comparable percentage disadvantage will be applied to the non-resident contractor's bid prior to contract award. The responsive and lowest and best responsible bidder after application of any non-resident disadvantage will be awarded the contract.

The reciprocal preference evaluation does not apply to public works procured pursuant to RCW 39.04.155, RCW 39.04.280, federally funded competitive solicitations where such agencies prohibit the application of bid preferences, or any other procurement exempt from competitive bidding.

Bidders must provide the City of Tacoma with their state of incorporation or the state in which the business entity was formed and include whether the bidder has a physical office located in Washington.

The bidder shall submit documentation demonstrating compliance with above criteria on the enclosed State Responsibility and Reciprocal Bidder Information form.

C. SUBCONTRACTOR RESPONSIBILITY

1. The Contractor shall include the language of this subcontractor responsibility section in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. The requirements of this section apply to all subcontractors regardless of tier.
2. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:
 - a. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
 - b. Have a current Washington Unified Business Identifier (UBI) number;
 - c. If applicable, have:
 - i. Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
 - ii. A Washington Employment Security Department number, as required in Title 50 RCW;
 - iii. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
 - iv. An electrical contractor license, if required by Chapter 19.28 RCW;
 - v. An elevator contractor license, if required by Chapter 70.87 RCW and;

3. Not be disqualified from bidding on any public works contract under RCW 39.06.010 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).

II. CITY OF TACOMA

A. SUPPLEMENTAL RESPONSIBILITY CRITERIA – CITY OF TACOMA:

In order to be considered a responsible bidder, the prospective bidder shall have all of the following qualifications set forth in Tacoma Municipal Code 1.06.262:

1. Adequate financial resources or the ability to secure such resources;
2. The necessary experience, stability, organization and technical qualifications to perform the proposed contract;
3. The ability to comply with the required performance schedule, taking into consideration all existing business commitments;
4. A satisfactory record of performance, integrity, judgment and skills; and
5. Be otherwise qualified and eligible to receive an award under applicable laws and regulations.
 - a. Bidder Responsibility. Bidders shall not be in violation of 39.04.350 RCW Bidder Responsibility Criteria - Supplemental Criteria.

In addition to the mandatory bidder responsibility criteria listed immediately above, the City may, in addition to price, consider any or all of the following criteria contained in Tacoma Municipal Code Chapter 1.06.262 in determining bidder responsibility:

1. The ability, capacity, experience, stability, technical qualifications and skill of the respondent to perform the contract;
2. Whether the respondent can perform the contract within the time specified, without delay or interference;
3. Integrity, reputation, character, judgment, experience, and efficiency of the respondents, including past compliance with the City's Ethics Code;
4. Quality of performance of previous contracts;
5. Previous and existing compliance with laws and ordinances relating to contracts or services;
6. Sufficiency of the respondent's financial resources;
7. Quality, availability, and adaptability of the supplies, purchased services or public works to the particular use required;
8. Ability of the respondent to provide future maintenance and service on a timely basis;
9. Payment terms and prompt pay discounts;
10. The number and scope of conditions attached to the submittal;
11. Compliance with all applicable City requirements, including but not limited to the City's Ethics Code and its Small Business Enterprise and Local Employment and Apprenticeship programs;
12. Other qualification criteria set forth in the specification or advertisement that the appropriate department or division head determines to be in the best interests of the City.

The City may require bidders to furnish information, sworn or certified to be true, to demonstrate compliance with the City responsibility criteria set forth above. If the city manager or director of utilities is not satisfied with the sufficiency of the information provided, or if the prospective respondent does not substantially meet all responsibility requirements, any submittal from such respondent must be disregarded.

B. ADDITIONAL SUPPLEMENTAL CRITERIA

See Section 1.06 of the Special Provisions in Appendix A.

C. MODIFICATIONS TO SUPPLEMENTAL CRITERIA

Potential bidders may request modifications to the City's supplemental criteria by submitting a written request to the Purchasing Division via email to bids@cityoftacoma.org no later than 5:00 p.m. Pacific Time, three days prior to the submittal deadline. Please include the Specification No. and Title when submitting such requests. Requests must include justification for why certain criteria should be modified. Requests received after this date and time will not be considered.

The City will respond to a timely submitted request prior to the bid opening date. Changes to the supplemental criteria, if warranted, will be issued by addendum to the solicitation documents and posted to the City's website for the attention of all prospective bidders.

D. DETERMINATION OF BIDDER RESPONSIBILITY

If the City determines the bidder does not meet the criteria above and is therefore not a responsible bidder, the City shall notify the bidder in writing with the reasons for its determination. If the bidder disagrees, the bidder may appeal the determination in a manner consistent with the City's Protest Policy. Appeals are coordinated by the Purchasing Division heard by the Procurement and Payables Division manager for contracts less than or equal to \$500,000 and by Contracts and Awards Board for contracts greater than \$500,000.

1. MINIMUM REQUIREMENTS

See Section 1.06 of the Special Provisions in Appendix A.

2. STANDARD TERMS AND CONDITIONS / GENERAL PROVISIONS

City of Tacoma General Provisions apply in Appendix A.

3. INSURANCE REQUIREMENTS

Successful proposer will provide proof of and maintain the insurance coverage in the amounts and in the manner specified in the City of Tacoma Insurance Requirements contained in this solicitation. (See Appendix A)

4. DESCRIPTION OF WORK

The City of Tacoma (City) / Tacoma Public Utilities (TPU) is soliciting bids to establish one or more contracts with qualified vendors to fulfill the City's needs for On-Call Telecommunications System Outside Plant Construction/Maintenance. Contract(s) will be awarded to the lowest responsive and responsible bidder(s) based on price, product quality and availability.

5. ANTICIPATED CONTRACT TERM

This is an on-call contract with an initial term of two-years (2) with three (3) optional one-year renewals.

6. CALENDAR OF EVENTS

This is a tentative schedule only and may be altered at the sole discretion of the City.

Contract will be issued after Public Utility Board and/or City Council approval.

The anticipated schedule of events concerning this RFB is as follows:

| | |
|--|------------------|
| Pre-Bid Meeting: | 3/20/2025 |
| Question Deadline: | 3/21/2025 |
| City response to Questions: | 3/28/2025 |
| Submittal Due Date: | 4/8/2025 |
| Anticipated Award Date, on or about: | 4/15/2025 |
| Public Utility Board/City Council Approval, on or about: | 5/28/2025 |

7. INQUIRIES

7.1 Questions can be submitted to *Aaron Bratton*, Senior Buyer, via email to abratt@cityoftacoma.org. Subject line to read:

PT24-0296F – Telecomm System Outside Plant Construction/Maintenance – *VENDOR NAME*

- 7.2 Questions are due by 3 pm on the date included in the Calendar of Events section.
- 7.3 Questions marked confidential will not be answered or included.
- 7.4 The City reserves the discretion to group similar questions to provide a single answer or not to respond when the requested information is confidential.
- 7.5 The answers are not typically considered an addendum.
- 7.6 The City will not be responsible for unsuccessful submittal of questions.
- 7.7 Written answers to questions will be posted alongside these specifications at www.tacomapurchasing.org.

8. PRE-BID MEETING

A pre-bid meeting will be held at the date and time specified in the calendar of events, via TEAMS at 11am.

Microsoft Teams [Need help?](#)

[Join the meeting now](#)

Meeting ID: 284 389 933 933

Passcode: Hw3Xi6Qn

Dial in by phone

[+1 253-666-4424,,363661918#](tel:+12536664424363661918) United States, Tacoma

[Find a local number](#)

Phone conference ID: 363 661 918#

9. DISCLAIMER

The City is not liable for any costs incurred by the Respondent for the preparation of materials or a proposal submitted in response to this RFB, for conducting any presentations to the City, or any other activities related to responding to this RFB, or to any subsequent requirements of the contract negotiation process.

10. RESPONSIVENESS

Bid submittals must provide ninety (90) days for acceptance by City from the due date for receipt of submittals. All submittals will be reviewed by the City to determine compliance with the requirements and instructions specified in this RFB. The Respondent is specifically notified that failure to comply with any part of this RFB may result in rejection of the submittal as non-responsive. The City reserves the right, in its sole discretion, to waive irregularities deemed immaterial. The City also reserves the right to not award a contract or to issue subsequent RFB's

11. AWARD

Awardee shall be required to comply with 2 CFR part 25, and obtain a unique entity identifier and/or be registered in the federal System for Award Management as appropriate.

Award will be made to the lowest responsive, responsible bidder. All bidders shall provide unit or lump sum pricing for each line item. Each line item will be added up for a subtotal price. The subtotal price will be compared amongst each bidder, including any payment discount terms offered twenty (20) days or more. The City may also take into consideration all other criteria for determining award, including evaluation factors set forth in Municipal Code Section 1.06.262.

All other elements or factors, whether or not specifically provided for in this specification, which would affect the final cost to and the benefits to be derived by the City will be considered in determining the award of the contract. The final award decision will be based on the best interests of the City.

The City reserves the right to let the contract to the lowest responsible bidder whose bid will be the most advantageous to the City, price and any other factors considered. In evaluating the proposals, the City may also consider any or all of the following:

1. Compliance with specification.
2. Proposal prices, listed separately if requested, as well as a lump sum total
3. Time of completion/delivery.
4. Warranty terms.
5. Bidder's responsibility based on, but not limited to:
 - a) Ability, capacity, organization, technical qualifications and skill to perform the contract or provide the services required.
 - b) References, judgment, experience, efficiency and stability.
 - c) Whether the contract can be performed within the time specified.
 - d) Quality of performance of previous contracts or services

12. PREVAILING WAGE INFORMATION

If this project requires prevailing wages under chapter 39.12 RCW, any worker, laborer, or mechanic employed in the performance of any part of the work shall be paid not less than the applicable prevailing rate of wage.

The primary project site is located in Pierce County.

The effective date for prevailing wages on this project will be the submittal deadline with these exceptions:

1. If the project is not awarded within six months of the submittal deadline, the award date is the effective date.
2. If the project is not awarded pursuant to a competitive solicitation, the date the contract is executed is the effective date.
3. Janitorial contracts follow WAC 296-127-023.

Except for janitorial contracts, these rates shall apply for the duration of the contract unless otherwise noted in the solicitation.

Look up prevailing rates of pay, benefits, and overtime codes from this link:

<https://secure.lni.wa.gov/wagelookup/>

REQUIRED FILINGS

The contractor and all subcontractors covered under [39.12 RCW](#) shall submit to the Department of Labor and Industries (L&I) for work provided under this contract:

1. A Statement of Intent to Pay Prevailing Wages must be filed with and approved by L&I upon award of contract.
2. An Affidavit of Wages Paid must be filed with and approved by L&I upon job completion.
3. For on-call contracts, retainage can be release annually. Please see the Intent-Affidavit Info for On-Call Contracts in Appendix D

Payments cannot be released by the City until verification of these filings are received by the engineer. Additional information regarding these filings can be obtained by calling the Department of Labor & Industries, Prevailing Wage at 360-902-5335, <https://secure.lni.wa.gov/> or by visiting their MY L&I account.

13. BID BONDS

The attached Bid Bond (Appendix A) must be executed by the person legally authorized to sign the bid and must be properly signed by representatives of the surety company unless the bid is accompanied by a certified check or cashier's check.

- 13.1** If a Bid Bond is used, the form furnished by the City must be followed; no variation from the language thereof will be accepted. The amount of the Bid Bond must be not less than five percent (5%) of the total amount bid; and, if shown in dollars and cents, the amount of said Bid Bond must be not less than the required five percent; or in lieu of dollars and cents, the bond may be completed by inserting therein, "five percent of the amount of the accompanying proposal". Bid Bonds will not be returned. Bid Bond should be submitted electronically with bid submittal. Hard copies should be postmarked no later than the submittal date.
- 13.2** If a certified or cashier's check is provided by the successful Respondent(s), the amount of their check will be refunded after award of the Contract, City's receipt of the signed Contract, and acceptance of the Performance Bond, if applicable. Unsuccessful Respondents providing certified checks will be refunded the amount of their check upon award of the Contract.
- 13.3** Failure to furnish a Bid deposit of a minimum of 5 percent shall make the bid nonresponsive and shall cause the bid to be rejected by the City.

A deposit of at least 5 percent of the total Bid shall accompany each Bid. This deposit may be cash, certified check, cashier's check, or a proposal bond (Surety bond). Any proposal bond shall be on the Contracting Agency's form and shall be signed by the Bidder and the Surety. A proposal bond shall not be conditioned in any way to modify the minimum 5 percent required. The Surety shall: (1) be registered with the Washington State Insurance Commissioner, and (2) appear on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner.

The failure to furnish a Bid deposit of a minimum of 5 percent shall make the Bid nonresponsive and shall cause the Bid to be rejected by the Contracting Agency.

If submitting your bid electronically, A scanned version of the original bid bond or cashier's check shall accompany your electronic bid submittal. The original bid bond or cashier's check shall be sent to the Contracting Agency and received by the Contracting Agency within 7 calendar days of the bid opening or the bidder may be deemed non-responsive.

Original bid bonds or cashier's check will be delivered to:

City of Tacoma Procurement & Payables Division
Tacoma Public Utilities
3628 South 35th Street
Tacoma, WA 98409

If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.

14. PAYMENT AND PERFORMANCE BOND

A payment and performance bond, including power of attorney, for this project is required in the amount of 25 percent of the Contract total.

14.1 The City's payment and performance bond forms must be used.

14.2 The payment and performance bonds must be executed by a surety company licensed to do business in the state of Washington.

14.3 The cost of a payment and performance bonds must be included in submittal prices. Bonds will not be paid as a separate line item.

14.4 For a supply-type contract, a certified cashier's check or cash may be substituted for the bonds; however, this cash or check must remain with the City through the guarantee period and any interest on said amount shall accrue to the City.

The same bonds can remain in place over the life of the contract and annual status inquiries can be directed to Senior Buyer via email to abratton@cityoftacoma.org. Subject line to read:

15. DELIVERY

15.1 Delivery shall be to the City of Tacoma, 3628 S. 35th St., Tacoma, WA, 98409.

Each vendor will be required to submit a delivery timeline they can commit to. Purchase order delivery dates will reflect this timeline. In the event a purchase order deliver date is not met, the City reserves the right to purchase these products elsewhere if they are in a time constraint. If constant late deliveries occur, the City may terminate the contract.

15.2 Hours of operation shall be Monday through Friday, 9:00 a.m. to 3:30 p.m., excluding legal holidays, as referred to in the Standard Terms and Conditions or as otherwise approved by the City.

16. WARRANTY

Labor: Minimum three (3) year warranty.

Parts: Manufacturer's warranty or minimum one-year warranty whichever is greater.

Contractor shall arrive on-site at the specified location within 48 hours of notification for all warranty repairs during normal work hours of 8:00 a.m. to 5:00 p.m. Monday through Friday. Repairs shall include free pick-up and delivery. Repairs must be completed and vehicle returned within 48 hours of pick-up.

Contractor agrees to allow City to make minor warranty repairs where that is most cost effective and, if requested, contractor will credit City for cost of parts, but not labor.

Vendor will warrant goods according to the manufacturer's warranty guidelines. The start of the warranty commences once the goods are delivered and accepted by the City.

17. INSPECTION

All goods are subject to final inspection and acceptance by the City. If any inspection fails, the vendor shall be required to make arrangements to exchange the goods at their own expense and replace it in a timely manner acceptable to the City.

Material failing to meet the requirements of this contract will be held at Vendor's risk and may be returned to Vendor. If so returned, the cost of transportation, unpacking, inspection, repackaging, reshipping, or other like expenses are the responsibility of the Vendor.

18. APPROVED ITEM EQUIVALENT

A specific manufacturer for almost all line items has been listed in the Technical Specifications because this is the current manufacturer accepted. For those line items, which do not list a specific manufacturer, bidders shall provide the technical specifications for the manufacturer they are offering. The City may request, after the bid due date, a sample of that product for review and approval by the City. The City reserves all rights to be the sole judge as to whether any other manufacturer can meet or exceed the current specifications they use. Unless an item is indicated "No Substitute", approved equivalents shall be submitted by the date listed in the Calendar of Events section. Equivalents will be approved by Addendum to the solicitation.

19. COMPLIANCE WITH SPECIFICATIONS

All products shall be new and unused. Any product that does not comply with any part of these technical specifications shall be rejected and the vendor shall, at its own expense, including shipping, replace the item.

20. MATERIALS AND WORKMANSHIP

The successful bidder shall be required to furnish all materials necessary to perform contractual requirements. Materials and workmanship for this contract shall conform to all codes, regulations and requirements for such specifications contained herein and the normal uses for which intended. Material shall be manufactured in accordance with the best commercial practices and standards for this type of goods. All literature and products must be packaged and labeled to sell in the United States.

21. ENVIRONMENTALLY PREFERABLE PROCUREMENT

In accordance with the [City's Sustainable Procurement Policy](#) and [Climate Action Plan](#), it is the policy of the City of Tacoma to encourage the use of products or services that help to minimize the environmental and human health impacts of City Operations. Respondents are encouraged

to incorporate environmentally preferable 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, products, manufacturing, packaging, distribution reuse, operation, maintenance or disposal of the product or service.

The City of Tacoma encourages the use of sustainability practices and desires any awarded contractor(s) to assist in efforts to address such factors when feasible for:

- Durability, reusability, or refillable
- Pollutant releases, especially persistent bioaccumulative toxins (PBTs), low volatile organic compounds (VOCs), and air quality and stormwater impacts
- Toxicity of products used
- Greenhouse gas emissions, including transportation of products and services, and embodied carbon
- Recycled content
- Energy and water resource efficiency

22. LEAP REQUIREMENTS

This project has no LEAP requirements, however, the City of Tacoma is committed to equality in employment for WA-State approved Apprentices, City of Tacoma residents, residents of local economically distressed areas, youth, veterans, minorities, and women. Please contact the [LEAP Office](#) for assistance in locating qualified employees. Visit the [LEAP website](#) for more information.

23. EQUITY IN CONTRACTING

This project has no EIC requirements, however, the City of Tacoma is committed to encouraging firms certified through the [Washington State Office of Minority and Women's Business Enterprise](#) to participate in City contracting opportunities. See **TMC 1.07 Equity in Contracting Policy** at the City's [Equity in Contracting Program website](#).

24. WASHINGTON APEX ACCELERATOR

Washington APEX Accelerator offers government contracting assistance for Washington firms. View services available on their website for locations, ability to register as a client, and view schedules for in-person classes and networking events. [Home - Washington APEX Accelerator](#)

Prime Contractors can also use Washington Apex Accelerator to connect with small business to promote equity in contracting practices. [Prime Information Resource - Washington APEX Accelerator](#)

APPENDIX A

Special Provisions

Sample Drawings and Plans

City of Tacoma Insurance Requirements

Tacoma Power Service Map

City of Tacoma General Provisions

Intent – Affidavit Info for On-Call Contracts



Table of Contents

Section 1 – SPECIAL PROVISIONS

- 1.01 – Project Description
 - 1.01.1 – Facilities Placement
 - 1.01.2 – Scope of Work
 - 1.01.3 – Project Scope Adjustment
- 1.02 – Project Location
- 1.03 – Pre-Bid Examination of Site
 - 1.03.1 – Bidder Responsibility
 - 1.03.2 – Bidder Verification and Reporting of Errors, Inconsistencies, and/or Omissions
- 1.04 – Commencement, Execution and Completion
 - 1.04.1 – Award Date of Contract
 - 1.04.2 – Term of Contract
 - 1.04.3 – Payment and Performance Bonds
 - 1.04.4 – Performance Measurement
 - 1.04.5 – Failure to Perform
 - 1.04.5A – Assessment of Liquidated Damages
 - 1.04.5B – Adjustment in Quantity of Work
 - 1.04.5C – Termination at Work
- 1.05 – Contract Work Times
 - 1.05.1 – Overtime – Contractor Initiated
 - 1.05.2 – Overtime – City Initiated
- 1.06 – Qualification of Contractors
 - 1.06.1 – Qualified Bidders
 - 1.06.2 – Evaluation of Bidders
 - 1.06.3 – Evaluation of Sub-Contractors
- 1.07 – Specifications and Drawings
 - 1.07.1 – Availability of original drawings once work is assigned
 - 1.07.2 – Coax design drawings
 - 1.07.3 – Drawings after award when work is assigned
 - 1.07.4 – Job-Site Requirement for drawings
- 1.08 – Evaluation of Bids
 - 1.08.1 – Primary Evaluation Criteria
 - 1.08.2 – Incidental Factors
 - 1.08.3 – Additional Factors
 - 1.08.4 – Cause for Rejection of Bid



Section 2 – MEASUREMENT AND PAYMENT

- 2.01 – Administration
 - 2.01.1 – Measurement Period
 - 2.01.2 – Suspension of Work
 - 2.01.3 – Unit Quantities Specified
 - 2.01.4 – Adjustments to Unit Prices
 - 2.01.5 – Unit Prices
 - 2.01.6 – Deletion of Bid Items
 - 2.01.7 – Incidental Costs
 - 2.01.8 – Non-Payment for rejected or surplus products
- 2.02 – Proposal Items

Section 3 – PROEJCT COORDINATION

- 3.01 – Project Manager
- 3.02 – Meetings
 - 3.02.1 – Pre-Construction Meeting
 - 3.02.2 – Minutes of Pre-Construction Meeting
 - 3.02.3 – Project Phase Meetings
- 3.03 – Permits
 - 3.03.1 – Electrical Permits
- 3.04 – Field Engineering
 - 3.04.1 – Survey Reference Points
 - 3.04.2 – Damage, destruction, or loss of Survey Reference Points
 - 3.04.3 – Establishment of Project Boundaries by Engineer
 - 3.04.4 – Adjust of Portion of Project
 - 3.04.5 – Contractor Responsibility
 - 3.04.6 – Audit of Progress by Project Manager
- 3.05 – Coordination with Others
 - 3.05.1 – Traffic Control
 - 3.05.2 – Electrical Transmission and Distribution Conductors
 - 3.05.3 – Coordination of Work with the City of Tacoma
- 3.06 – Division of Work
 - 3.06.1 – Material Furnished and installed by contractor
 - 3.06.2 – Coordination with T&D Warehouse for materials
- 3.07 – Make Ready Work on Poles
 - 3.07.1 – Electrical Utility & Communication Worker Safety Space
 - 3.07.2 – Communication Attachment Space
- 3.08 – Differing Site Condition/Change Orders
 - 3.08.1 – Subsurface Conditions
 - 3.08.2 – Filing of Claims for change orders
 - 3.08.3 – Short Notice Change Orders



3.09 – Construction Progress Schedules

3.09.1 – Schedule Format

3.09.2 – Content of Project Schedule

3.09.3 – Submittals of Schedules

Section 4 – QUALITY CONTROL

4.01 – Reference Standards

4.02 – Inspection, Testing, and Certification

4.02.1 – Pre-Final Inspection

4.02.2 – Final Inspection

4.03 – County/City Permit Inspections

Section 5 – CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

5.01 – Utilities

5.01.1 – Electric Service

5.01.2 – Telephone Service

5.01.3 – Water

5.01.4 – Sanitary Facilities

5.02 – Job Shack & Materials Storage Area

5.02.1 – Location & Size of Job Shack

5.02.2 – Contents of Job shack

5.02.3 – Storage Area

5.03 – Roadway and Traffic Control

5.03.1 – Traffic Coordination

5.03.2 – Coordination with City Traffic Engineering Staff

5.03.3 – Traffic Signs and Signals

5.03.4 – Traffic Control Plan

5.04 – Dust Control

5.04.1 – Protection from Dust

5.05 – Temporary Drainage Provisions

5.06 – Pollution Control

Section 6 – MATERIAL AND EQUIPMENT

6.01 – Quality of Workmanship and Materials

6.01.1 – Workmanship

6.01.2 – Materials

Section 7 – CONTRACT CLOSEOUT

7.01 – Documents Required Upon Completion of Work

7.01.1 – Closeout Procedures

7.01.2 – Final Documentation



7.01.2A – “As-Built” Drawings

Section 8 – FIBER OPTIC AND COAXIAL CABLE PLANT

8.01 – General

8.01.1 – Section Includes

8.01.2 – Regulatory Requirements

8.02 – Products

8.02.1 – General

8.02.2 – General Materials Contractor Supplied

8.02.2A – Grounding and Bonding Clamps

8.02.2B – Ground Rods

8.02.2C – Ground Wire

8.02.2D – Heat Shrink

8.02.3 – Contractor Supplied Aerial Materials

8.02.3A – Strand

8.02.3B – Pre-formed Dead-Ends

8.02.3C – Lashing Wire

8.02.3D – Guards, Insulators and Guy Markers

8.02.3E – Pole Hardware

8.02.3F – Lashing Clamps

8.02.3G – Cable Zink Straps

8.02.3H – Aerial Fiber Slack Storage

8.02.3H.1 – Cable Ties

8.02.4 – Contractor Supplied Underground Materials

8.02.4A – Detectable Polyester Pull Rope

8.02.4B – Pulling Lubricant

8.02.4C – Concrete

8.02.4D – Control Density Fill

8.02.4E – Asphalt Emulsion Coating

8.02.4F – Asphalt Concrete Pavement

8.02.4G – Landscaping

8.02.4H – Duct Plugs

8.02.4I – Structural Fill

8.02.4J – Jet Line

8.02.4K – Riser Clamps for 2” PVC

8.02.4L – Riser Clamps for 4” PVC

8.02.4M – Conduit Roll Duct 2”

8.02.4N – Bracket, 15”, Pole Riser, Galvanized

8.02.4O – Bracket, 24”, Pole Riser, Galvanized

8.03 – Execution

8.03.1 – General Requirements



- 8.03.1A – Conduct at Work Site
- 8.03.1B – Completion of Work
- 8.03.1C – Field Supervision and Communication
 - 8.03.1C.1 – Field Supervisor Duties
 - 8.03.1D – Communications for Field Personnel
 - 8.03.1E – Security of Material and Equipment
- 8.03.2 – Aerial Construction
 - 8.03.2A – Verification of Readiness
 - 8.03.3 – Anchors and Guying
 - 8.03.3A – Anchors
 - 8.03.3B – Downguys
 - 8.03.3B.1 – Guying Methods
 - 8.03.3B.2 – Splices in Guy Wire
 - 8.03.3B.3 – Auxiliary Eyes
 - 8.03.3B.4 – Existing CATV Guys
 - 8.03.3B.5 – Crossing Instate Highways, Rivers and Railroads
 - 8.03.4 – Pole Framing, Stranding, Grounding and Bonds
 - 8.03.4A – Hardware and Framing
 - 8.03.4A.1 – Boring new holes in poles
 - 8.03.4B – Strand Installation
 - 8.03.4C – Attachment to Poles
 - 8.03.4D – Adjustment of other Communications facilities
 - 8.03.4E – Safety Rules
 - 8.03.4F – Clearances from other utilities
 - 8.03.4G – Strand Breaks
 - 8.03.4H – Sagging of Strand
 - 8.03.4I – Suspension Clamps
 - 8.03.4J – Clearances to Power Risers
 - 8.03.4K – Tree Trimming
 - 8.03.4L – Reduced Tension Spans (Slack Spans)
 - 8.03.4M – Strand Pulling & Hardware
 - 8.03.5 – Grounding and Bonding
 - 8.03.5A – Frequency of Grounding
 - 8.03.5B – Grounding at Equipment
 - 8.03.5C – Installation of New Ground Rods
 - 8.03.5D – Installation of Ground Wire
 - 8.03.5E – Ground Connectors
 - 8.03.5F – Bonding to other utilities
 - 8.03.5G – Bonding on Riser Poles
 - 8.03.6 – Aerial Coaxial & Fiber Cable Construction
 - 8.03.6A – Setting of Reel Brakes on Tensioner



- 8.03.6B – Application of Cable Rollers
- 8.03.6C – Slack cable
- 8.03.6D – Communication on Long Pulls
- 8.03.6E – Maximum number of corners to be pulled
- 8.03.6F – Application of Cable Guards
- 8.03.6G – Installation of Fiber Optic Cable
 - 8.03.6G.1 – Expansion Loops at Poles
 - 8.03.6G.2 – Fiber Slack Loops
 - 8.03.6G.3 – Fiber Optic Splice
- 8.03.6H – Expansion Loops
 - 8.03.6H.1 – Depth of Loop
 - 8.03.6H.2 – Forming of Loops
 - 8.03.6H.3 – Frequency of Expansion Loops
 - 8.03.6H.4 – Cable Zink Straps
 - 8.03.6H.5 – Equipment Loops
- 8.03.6I – Lashing
 - 8.03.6I.1 – Pulling of Lashers
 - 8.03.6I.2 – Application of Lashing Wire
- 8.03.7 – Underground Construction
 - 8.03.7A – Installation and Safety Procedures
 - 8.03.7B – Traffic Control
 - 8.03.7C – Ignition Sources
 - 8.03.7D – Communication during pulling operations
 - 8.03.7E – Methods of Installation
 - 8.03.7F – Covering and Barricading of Trenches
 - 8.03.7G – Natural Gas Leaks
 - 8.03.7H – Digging on Private Property
 - 8.03.7I – Operating of Construction Equipment
- 8.03.8 – Pre-Survey of Specific Job Sites
- 8.03.9 – Trenching and Boring
 - 8.03.9A – Trench Safety Systems
 - 8.03.9B – Work not specifically addressed by this specification
 - 8.03.9C – Excavation
 - 8.03.9C.1 – Backfill Material
 - 8.03.9C.2 – Compaction of trench backfill
 - 8.03.9C.3 – Trenching across Lawns
 - 8.03.9D – Rocksaw or Wheel Trenching
 - 8.03.9E – Road Crossings
 - 8.03.9E.1 – Backfill for Street Crossings
 - 8.03.9E.2 – Application of CDG as Backfill Material
 - 8.03.9E.3 – Open Cutting Pavement



- 8.03.9E.4 – Repair of Cut Pavement
- 8.03.9F – Railroad Crossings
- 8.03.9G – Removal of Waste debris from job site
- 8.03.9H – Asphalt Placement
 - 8.03.9H.1 – Application of Asphaltic Emulsion
 - 8.03.9H.2 – Edge Sealing
 - 8.03.9H.3 – Asphalt Compaction
- 8.03.10 – Roll Duct and/or PVC Placement
 - 8.03.10A – Placement of Conduit
 - 8.03.10B – Pulling Line
 - 8.03.10C – Conduit under roadways
 - 8.03.10D – Protection of conduit
 - 8.03.10D.1 – Duct Plugs
- 8.03.11 – Underground Cable Placement
 - 8.03.11A – Handling of Cable
 - 8.03.11B – Cable Pulling
 - 8.03.11B.1 – Use of Cable Lubricant
 - 8.03.11B.2 – Pulling of multiple cables
 - 8.03.11B.3 – Maximum Cable Pulling Tensions
 - 8.03.11C – Coaxial Cable Installation at Pedestals and Vaults
- 8.03.12 – Fiber Optic Cable Installation Criteria
 - 8.03.12A – Installation of Fiber Optic Cable
 - 8.03.12B – Pulling Multiple Cables
 - 8.03.12C – Minimum Bending Radius
 - 8.03.12D – Cable Splices
 - 8.03.12E – Cable Storage
 - 8.03.12F – Identification of Fiber Optic Cable
 - 8.03.12G – Length of Cable for Splicing
- 8.03.13 – Pedestals, Vaults and Handholes
 - 8.03.13A – Installation of Amplifiers, line extenders directional couplers, splitters, taps and splices
 - 8.03.13B – Setting of Enclosures and Pedestals
 - 8.03.13C – Setting of Handholes
- 8.03.14 – Risers
 - 8.03.14A – Riser Sweeps
 - 8.03.14B – Risers in heavy traffic locations
- 8.03.15 – Grounding and Bonds
 - 8.03.15A – Frequency of Grounding
 - 8.03.15A.1 – Grounding Installation
 - 8.03.15B – Bonding Application
 - 8.03.15B.1 – Power Supplies



- 8.03.15B.2 – Metal Enclosures
- 8.03.15B.3 – HFC Equipment and Enclosures
- 8.04 – Equipment Installation
 - 8.04.1 – Fiber Optic Cable Installation
 - 8.04.1A – Fiber Splicing
 - 8.04.1B – Coaxial Splicing and Equipment Installation
 - 8.04.1B.1 – Evidence of Performance
 - 8.04.1B.2 – Close Coupling
 - 8.04.1B.3 – Supply of Fittings
 - 8.04.1B.4 – Installation of Connectors, fittings and terminators
 - 8.04.1B.5 – Application of Heat Shrink
 - 8.04.1B.6 – Jacket Stripping
 - 8.04.1B.7 – Cleaning of Conductors
 - 8.04.1C – Aerial Installation
 - 8.04.1C.1 – Installation on Poles
 - 8.04.1C.2 – Tap Brackets
 - 8.04.1C.3 – Taps for Services
 - 8.04.1D – Underground Installation
 - 8.04.1D.1 – Grounding of Equipment
 - 8.04.1D.2 – Stripping of Cables
 - 8.04.1E – Power Supply Installation
 - 8.04.1E.1 – Location of Power Supplies
 - 8.04.1E.2 – Pole-Mounted of Power Supplies
 - 8.04.1E.2A – Electrical Service Connection – Pole-Mounted Installations
 - 8.04.1E.2B – Grounding and Bonding
 - 8.04.1E.3 – Pad-Mounted Power Supplies
 - 8.04.1E.3A – Pedestal
 - 8.04.1E.3B – Grounding and Bonding
 - 8.04.1E.4 – Installation of Batteries
 - 8.04.1E.5 – Electrical Conductor
 - 8.04.2 – Fiber Optic System Testing and Reporting
 - 8.04.2A – Fiber Test Plan
 - 8.04.2B – Fiber Testing
 - 8.04.2C – Frequency of Testing
 - 8.04.2D – Fiber Component Testing & Reporting
 - 8.04.2E – Components failing test
 - 8.04.3 – Coaxial Testing and Reporting
 - 8.04.3A – Cable Inspection
 - 8.04.3B – Component Testing and Reporting
 - 8.04.3C – Components Failing Test

SECTION 1 – SPECIAL PROVISIONS

1.01 – PROJECT DESCRIPTION

The work to be performed under these specifications and contract provides for the construction and maintenance of aerial and underground outside plant to support the deployment of fiber and or a hybrid fiber-coaxial (HFC) transmission system. The contract includes the construction of both aerial and underground facilities in urban, rural, commercial and industrial areas for placement of coaxial and fiber optic cable, splicing and equipment installation of power supplies, amplifiers and other items required to provide for a complete and operable two-way HFC transmission system. The contract also provides for the activation and certification of HFC plant.

1.01.1 – Facilities Placement

The City maintains its existing facilities and networks largely in public Right of Way, but also on private property, and in utility and City easement areas. Any installation, construction or other activities within the Right of Way shall follow the requirements stated in the City's standards, with modifications according to franchise, city, county, state or other utility or Right of Way operating agencies (e.g., railroads), or as directed by City representatives. Installation and construction on private property and/or within easements shall follow the City's construction standards as well as any specific requirements of the easements. Contractors working on this project must comply with all Regional Road Maintenance Endangered Species Act Program Guidelines, please see the State of Washington website for more information: [Regional Road Maintenance ESA Program | CRAB](#)

1.01.2 – Scope of Work

The contractor shall be issued either an Aerial or Underground work packet containing all pertinent information including work order, prints and permits.

Each work packet shall meet the equivalent of the contractor's daily crew rate described in bid items 30 and 31:

Item 30 Aerial crew is defined as 1-Lineman, 1-Driver / Ground man and Line truck / Cable Trailer, including all necessary tools.

Item 31 Underground crew is defined as 1-Equipment operator, 1-Driver / ground man, 1 Backhoe and 1- Truck with Equipment

In the event the work packet does not meet the equivalent of the contractors' daily crew rate the packet shall be subject to a one time set up fee as described in bid item 32. It is the City's intent to issue work packets containing units equal to or greater than the contractor's daily crew rate and group the work by area whenever possible.



1.01.3 – Project Scope Adjustment

Per section 1.16 of the General Provisions, the City of Tacoma reserves the right to increase or decrease the quantities of any items under this Contract and pay according to the unit prices quoted in the Proposal (with no adjustments for anticipated profit).

1.02 – PROJECT LOCATION

The work to be performed under this contract is located within the Tacoma Power's Electrical Service Area (Appendix A).

1.03 – PRE-BID EXAMINATION OF SITE

72 hours after assignment of project, complete with drawings and work packet, the bidder agrees to be responsible for examining the site(s). Bidder is responsible to have compared them with these specifications and contract drawings, and to be satisfied as to the facilities and difficulties attending the execution of the proposed contract (such as uncertainty of weather, floods, nature and condition of materials to be handled and all other conditions, special work conditions including work schedules, obstacles and contingencies) before the delivery of his/her bid submittal. No allowance will be subsequently made by the City on behalf of the bidder by reason of any error or neglect on the bidder's part, for such uncertainties as aforesaid.

1.03.1 – Bidder Responsibility

By entering into the contract, the contractor represents that he/she has inspected in detail the drawings included with the specification documents and has become familiar with all the physical and local conditions affecting the potential project and/or the project site. Any information provided by the City to the contractor, relating to existing conditions on, under, or to the project and/or site including, but not limited to information pertaining to hazardous material abatement and other conditions affecting the project site, represents only the opinion of the City as to the location, character, or quantity of such conditions and is provided only for the convenience of the contractor. The contractor shall draw his own conclusions from such information and make such tests, reviewed and analyses as he deems necessary to understand such conditions and to prepare his proposal.

1.03.2 – Bidder Verification and Reporting of Errors, Inconsistencies, and/or Omissions

72 hours after assignment of project, complete with drawings and work packet, the contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the contractor with the contract documents before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to the City at once.

The contractor shall carefully study and compare any assigned work documents with each other and shall at once report to the City errors, inconsistencies or omissions discovered. If the contractor performs any construction activity knowing it involves a recognized error, inconsistency or omission in the contract documents without such



notice to the City, the contractor shall assume the risk and responsibility for such performance and shall bear an appropriate amount of the attributable costs for correction.

1.04 – COMMENCEMENT, EXECUTION AND COMPLETION

The contractor will be required to execute the contract, provide a payment bond, performance bond and certificate of insurance within ten (10) calendar days after the award of the contract. The contractor shall begin the work to be performed in the contract within seven (7) calendar days after the date of notification to commence work. Notification to commence work may either be by letter or, if no letter is issued, by agreement at the pre-construction conference that will be confirmed by letter.

1.04.1 – Award Date of Contract

The Award Date of Contract is the date of the contract award letter issued by the City of Tacoma Purchasing Division after approval of the Public Utility Board.

1.04.2 – Term of Contract

The term of this contract is from the date of award per Section 1.04.1 through the subsequent 24-month period. Three one-year contract extensions may be considered if Tacoma Power finds that it is in its best interest to extend the contract under the same terms and conditions of the original contract. Any contract extension will follow the procedures listed by the City of Tacoma Purchasing Division (refer to Section 1.17 of the General Provisions).

1.04.3 – Payment and Performance Bonds

The Contractor shall provide a payment bond and performance bond, including power of attorney, for 100 percent (100%) of the contract award Revised bonding totals may be reviewed at time of contract renewal. The City's bond forms must be used.

1.04.4 – Performance Measurement

Following issuance of a work packet the contractor must be on site and prepared to begin construction work within five (5) calendar days. This work is inclusive of all bid items listed in the proposal sheets that will be required to provide for a complete and operable 2-way hybrid fiber coaxial network.

1.04.5 – Failure to Perform

If the contractor fails to maintain this minimum rate of construction per section 1.04.3, he shall be placed on formal notice in writing by the project manager and be given fourteen (14) calendar days to provide evidence satisfactory to the project manager that the minimum construction rate can and will be maintained. If the contractor fails to provide evidence satisfactory to the project manager, then the City may impose any or all of the following:

1.04.5A – Assessment of Liquidated Damages

The project manager may assess liquidated damages in the amount of \$1,000 per calendar day for each day the contractor is not on site and working as described in section 1.04.4, Performance Measurement. The City will assess liquidated damages in accordance with Section 3.14 of the General Provisions.

1.04.5B – Adjustment in Quantity of Work

The project manager may decrease the quantities of work or areas of work set forth on the proposal and specification and award portions of that work to other contractors.

1.04.5C – Termination of Work

The project manager may terminate the contract and make payment for work completed to date, with no allowance for anticipated profit or demobilization.

1.05 – CONTRACT WORK TIMES

Contract work times shall be 7:00 AM - 3:30 PM, Monday through Friday excluding holidays, described in Section 2.14 of the General Provisions or as otherwise approved by the City.

1.05.1 – Overtime – Contractor Initiated

If the contractor elects to work on a Saturday, Sunday, holiday or longer than the designated contract work times, for the purposes of City personnel, such work shall be considered overtime work. On all such overtime work, a City supervisor or inspector must be present. The contractor shall reimburse the City for the full amount of the costs for City employees who must work any such overtime hours. It shall be the City's decision as to when a supervisor or inspector is required.

1.05.2 – Overtime – City Initiated

However, if the City orders work to be performed on overtime, all City employees' overtime costs will be at no expense to the contractor.

1.06 – QUALIFICATION OF CONTRACTORS

1.06.1 – Qualified Bidders

Only contractors experienced in the construction of aerial and underground hybrid fiber coaxial (HFC) Networks, and with a record of successful completion of jobs of similar scope will be considered. The bidder must complete the Contractor's Record of Prior Contracts Form attached to this specification at the time of submitting his bid. The City will be the sole judge of the bidder's ability to meet the requirements of this paragraph.



1.06.2 – Evaluation of Bidders

In addition to the bid evaluation factors set forth in City Code Section 1.06.262 the following criteria will be used to evaluate and determine the successful bidder:

Past successful performance as a General Contractor for contracts with a minimum value of \$2,500,000 for the type of work and within the time frame as specified herein.

Verifiable experience and past successful performance of projects of similar scope and size as listed on the “Contractor’s Record of Prior Contracts Form” to include projects where activation and certification of two-way CATV and Fiber Plant were performed.

List and quantity of equipment owned by Contractor and any Subcontractor to be used on this project including year, model and general condition of each piece of equipment specific to the type of work to be performed,

Prices stated on the bid Proposal Forms. Prices stated by the contractor will be evaluated and compared to local industry prices established by similar work functions performed in Western Washington.

1.06.3 – Evaluation of Sub-Contractors

Contractor shall include in the submittal package, a list of all subcontractors to be used on this project including the type(s) of work to be performed. Include address, telephone number, and references for relevant experience throughout the past five (5) years. This requirement is in addition to the requirement to provide the list of subcontractors with the bid proposal pursuant to General Provisions Section 3.16.

1.07 – SPECIFICATIONS AND DRAWINGS

The following examples and specifications are made part of the contract.

Drawings can be found in Appendix A immediately following Special Provisions section.

Drawings for Construction

| <u>Drawing No.</u> | <u>Title - Standard Drawings</u> |
|--------------------|---|
| No. 1 | Tacoma Power Electrical Service Area Map |
| No. 2 | Work Area Vicinity Map – City of Lakewood |
| No. 3 | Work Area Vicinity Map – City of Fife |
| No. 4 | Work Area Vicinity Map – North East County |
| No. 5 | Work Area Vicinity Map – Pierce County |
| No. 6 | Sample - Telecommunications Project Design Map SWL-38 |
| No. 7 | Sample – Telecommunications Project Design Map NEF-18 |
| No. 8 | Sample - Telecommunications Project Design Map NEC-1 |
| No. 9 | Sample – Telecommunications Project Design Map SEC-45 |
| No. 10-15 | Sweep Graph (6 pgs.) |
| No. 16-18 | Concrete Driveway Entrances Types 1, 2, 3 |
| No. 19-20 | Concrete Curb and Gutters |
| No. 21 | Concrete Sidewalks |

1.07.1 – Availability of original drawings once work is assigned

Sample drawings are included in this specification packet for reference. When work is assigned, reduced-sized print copies will be included in the work packet as drawing attachment. Original drawings may be inspected by prospective bidders upon request in the office of the HFC Field Operations Manager – Tacoma Power, at 3628 South 35th Street, Tacoma, Washington 98409 between the hours of 9:00 a.m. and 11:00 a.m.

1.07.2 – Coax design drawings

Included with this specification are coax design drawings for aerial and underground work to be constructed in the identified Hub areas. These drawings generally reflect node layouts in their respective area. Design drawings to be issued by the work packet.

1.07.3 – Drawings after award when work is assigned

The contractor shall be issued reproducible work packets containing all pertinent information including work order, prints and permits once work is assigned. It shall be



the contractor's responsibility to provide sufficient sets of drawings for building and as-built purposes.

1.07.4 – Job-Site Requirement for drawings

The contractor shall keep on the job site copies of all as-built drawings, and shall, at all times, give the project manager access thereto.

1.08 – EVALUATION OF BIDS

The award of this contract will not be based on cost alone as other factors and criteria are equally important. See Special Notice to Bidders for more information.

1.08.1 – Primary Evaluation Criteria

The contract will be awarded to the lowest and best responsible bidder satisfying these Specifications, provided such bid is reasonable and in the best interest of the City to accept. The City, however, reserves the right to reject any and all bids and to waive any informality in bids received. The City reserves the right to let the contract to the lowest and best responsible bidder whose bid will be most advantageous to the City, price and any other factors considered.

1.08.2 – Incidental Factors

Other incidental elements or factors, whether or not specifically provided for in this specification, which would affect the final cost to and the benefits to be derived by the City, may be considered in determining the award of the contract. In addition, the City may consider the bid evaluation factors set forth in City of Tacoma Municipal Code Section 1.06.262. The final award decision will be based on the best interests of the City. The City has the sole and exclusive discretion to decide which contractor best meets the City's needs.

1.08.3 – Additional Factors

In addition to General Provisions Section 1.08, the following factors will be used in bid evaluation:

- Minimum requirements as stated in section 1.06 of the Special Provisions.

1.08.4 – Cause for Rejection of Bid

Material misstatements concerning completed actions by the bidder in any sworn statement or failure to complete and submit any form may render this bid non-responsive and shall be cause for rejection of the bid.

END OF SECTION



SECTION 2 - MEASUREMENT AND PAYMENT

2.01 – ADMINISTRATION

The City inspector or project manager in coordination with the contractor shall make all measurements and determine all quantities and amounts of work done for progress payments under the contract.

2.01.1 – Measurement Period

Upon completion of each work packet, the project manager shall make an estimate of the work completed or done by the contractor, and such estimates will be made by measurement or approximation at the option of the project manager.

2.01.2 – Suspension of Work

In case work is suspended, nearly suspended, or in case only unimportant progress is being made, the project manager may, at his discretion, make progress estimates at longer intervals than once a month.

2.01.3 – Unit Quantities Specified

Quantities indicated in the proposal are for bidding and contract purposes only. Quantities and measurements supplied or placed in the work and verified by the project manager and contractor determine payment.

2.01.4 – Adjustments to Unit Prices

Requests for escalation of unit prices for Items 30a,b,c,d and 31a,b,c,d of Proposal Pages are limited to the percent change in the Washington State Prevailing Wage Rates posted by the Department of Labor and Industries.

For the first 12 months of the project, prevailing wage rates will be based on the prevailing wage in effect at the time of the submittal deadline and will serve as a base for any requested price adjustment.

Price escalation may be allowed on unit pricing on the anniversary date of the contract award.

Contractor will be required to submit all proposed price escalation/de-escalation in writing to the Tacoma Power contract manager, 30 days prior to each contract period anniversary.

Any proposed adjustment in price must be beyond the control of the Contractor and supported by written documentation due to changes in the prevailing wage rates for King, Lewis, Mason, Pierce, Grays Harbor or Thurston Counties for the appropriate positions. Unit prices may receive a maximum increase equal to the percent change in the prevailing wage rates for that position and only when requested in writing by the Contractor.



In the event that the City and the Contractor cannot agree on an adjustment request, the City may terminate the contract.

Pricing for all other items to remain fixed for the duration of the contract.

2.01.5 – Unit Prices

The unit bid prices shall be full and complete compensation for the contract work stated together with all appurtenances incidental thereto, including materials, equipment, tools, labor, and all the costs to the contractor for completing the contract in accordance with the plans, specifications, and instructions of the project manager.

2.01.6 – Deletion of Bid Items

The City reserves the right to delete any bid item from the contract by notifying the contractor in writing of its intent. The only monies due the contractor for deleted work would be for materials already purchased.

2.01.7 – Incidental costs

All work not specifically called out in these specifications but required to construct a complete and operable 2-way HFC system, structures or amenities shall be considered incidental to the contract.

2.01.8 – Non-payment for rejected or surplus products

Payment will not be made for any of the following:

- Products wasted or disposed of in a manner that is not acceptable
- Products determined as unacceptable before or after placement
- Products not completely unloaded from the transporting vehicle
- Products placed beyond the lines and levels of the required work
- Products remaining on hand after completion of the work
- Loading, hauling and disposing of rejected products
- Inoperable products deemed to underperform by the project manager
- Products not meeting technical performance criteria



2.02 – PROPOSAL ITEMS

Item No. 1 FURNISH AND INSTALL 1/4" EHS STRAND AND HARDWARE FOR COAXIAL/FIBER OPTIC CABLE

Measurement Shall be measured by the strand foot, pole to pole, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment required for the installation, grounding, bonding, and framing of strand. Work includes placement of all clamps, bolts, miscellaneous hardware, and all safety measures, including traffic control and reel tender with two-way communications, traveling grounds, and any pole line construction functions to meet NESC, NEC and, state, and local requirements.

All safety measures, including traffic control, will be the responsibility of the contractor.

Item No. 2 MAKE READY CONSTRUCTION – STRAIGHT LINE POLES

Measurement Shall be measured by the pole, complete and ready for strand installations.

Payment The unit price shall be full compensation for all costs associated with the labor and materials for moving, raising, lowering, adjusting, and transferring to new pole, tree trimming, or removing communications lines to make legal and appropriate space, within the communications space, on the pole to locate strand or other equipment. Work considered incidental to this item include traffic control, rearrangement of communication system drop cables, risers, multiple cables, grounds, bonds, guys, arms, and any other attachment or rearrangements to the pole.

Note: Tacoma Power will perform Major Make-Ready and tree trimming work before contractor work begins. In some instances, a competent line person may be required to work in the Supply Zone which will necessitate the contractor to provide a “qualified employee” as outlined in WAC 296-45-065 and the NESC Part 4, Section 42, Rule 420B. Documentation will be required.

All safety measures, including traffic control, will be the responsibility of the contractor.



Item No. 3 MAKE READY CONSTRUCTION – CORNER, “T” LEAD, AND DEAD END POLES

- Measurement Shall be measured by the pole, complete and ready for strand installations.
- Payment The unit price shall be full compensation for all costs associated with the labor and materials for moving, raising, lowering, adjusting, and transferring to new pole, tree trimming, and removing communications lines to make legal and appropriate space, within the communications space, on the pole to locate strand or other equipment. Work considered incidental to this item include traffic control, rearrangement of communication system drop cables, risers, multiple cables, grounds, bonds, guys, arms, and any other attachments or rearrangements to the pole.

Note: Tacoma Power will perform Major Make-Ready and tree trimming work before contractor work begins. In some instances, a line person may be required to work in the Supply Zone which will necessitate the contractor to provide a “qualified employee” as outlined in WAC 296-45-065 and the NESC Part 4, Section 42, Rule 420B. Documentation will be required.

All safety measures, including traffic control, will be the responsibility of the contractor.

Item No. 4 FURNISH AND INSTALL 1/4" EHS or 3/8" STRAND AND HARDWARE FOR GUYING

- Measurement Shall be measured per each guy, complete and in place.
- Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment required for the installation of a 1/4" or 3/8" guy. Work includes grounding, bonding, clamps, bolts, miscellaneous hardware, connecting to existing or new anchors, placing guy guards, insulators, brush trimming, hand digging to expose anchor eyes, traffic control, all safety measures, and any pole line construction necessary to meet NESC, NEC and, state, and local requirements.

Pole to pole and head guys will be paid at strand footage price.

Removal and disposal of existing guy materials that are replaced is considered incidental to this work.

All safety measures, including traffic control, will be the responsibility of the contractor.



Item No. 5 LASH CITY-FURNISHED COAXIAL CABLE (SINGLE CABLE)

Measurement Shall be measured by the Active Cable Bearing Strand (A.C.B.S.) foot, pole-to-pole, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment including lashing wire, lashing clamps, zinc straps, markers, ty-raps, etc. to lash a single City-furnished coaxial cable to the strand. Expansion loops will be placed on all output cables, and on "T" lead cables. Only Lemco model G-120 or approved equal mechanical loop bender tools will be used to hold loops in place until lashing is complete to the next pole. All cable lashing will be double lashed.

All safety measures, including traffic control, will be the responsibility of the contractor.

Item No. 6 LASH MULTIPLE CITY-FURNISHED COAX CABLES

Measurement Shall be measured by the Active Cable Bearing Strand (A.C.B.S.) foot, pole-to-pole, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment including lashing wire, lashing clamps, zinc straps, markers, ty-raps, etc. to lash multiple City-furnished coaxial cables to the strand. Tails must be pulled at all devices where multiple cables are present. At all locations where multiple coaxial cables are installed, the cables shall be doublelashed, regardless of location.

Expansion loops will be placed on all uncut output cables, and on "T" lead cables. Only Lemco model G-120 or approved equal mechanical loop bender tools will be used to hold loops in place until lashing is complete to the next pole.

This item shall be bid as additional and separate strand footage from lashed single cable.

All safety measures, including traffic control, will be the responsibility of the contractor.



Item No. 7 DE-LASH AND RE-LASH CITY-FURNISHED CABLES

Measurement Shall be measured by the Active Cable Bearing Strand (A.C.B.S.) foot, pole-to-pole, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment including lashing wire, lashing clamps, zinc straps, markers, ty-raps, etc. to de-lash existing cables, delete cables and re-lash remaining coax and fiber cables separately. All cables shall be double-lashed, regardless of location. Expansion loops will be placed on all uncut output cables, and on "T" lead cables. Only Lemco model G-120 or approved equal mechanical loop bender tools will be used to hold loops in place until lashing is complete to the next pole.

Placement of additional new cables will be paid for under Items 5 and 6 single or multiple cables as described in those items.

All safety measures, including traffic control, will be the responsibility of the contractor.

Item No. 8 LASH CITY-FURNISHED FIBER (SINGLE SHEATH)

Measurement Shall be measured by the Active Fiber Bearing Strand (A.F.B.S.) foot, pole-to-pole, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment including lashing wire, lashing clamps, zinc straps, markers, ty-raps, snowshoes, brackets, etc. to lash a single City-furnished fiber optic sheath only to strand or coax cabled strand. All safety measures, including traffic control and reel tender with two-way communications will be the responsibility of the contractor. All fiber optic cables shall be double-lashed. This work includes back lashing for the storage of 10% excess slack cable at 1000' intervals and pulling of splicing tails. Protection of the fiber against damage and vandalism is the responsibility of the contractor from point of issue. All runs are to be installed in continuous lengths. Under no circumstances is any optical fiber to be severed at any point other than those specified on the plans without prior written permission. Contractor will be responsible for any physical damage or performance issues as a result of mishandling or improper installation techniques.

It is the contractor's responsibility to notify the Tacoma Power inspection division when a fiber reel has been pulled to the designated splice location before cutting the fiber to ensure adequate storage has been provided. Fiber placement must conform to Section 8.03.6.

All safety measures, including traffic control, will be the responsibility of the contractor.



Item No. 9 COAXIAL ELECTRONIC ACTIVE AND PASSIVE SPLICING AND ACTIVATION

Measurement Shall be measured by the Active Cable Bearing Strand (A.C.B.S.) or Cable Bearing Trench Foot of delivered two-way operating plant.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment to perform the following work under this bid item in all aerial and underground areas.

Bid item includes grounding, bonding, forming of cables, strapping and splicing of all cables and fittings and placement of amplifiers and accessories, 2-port, 4-port, and 8-port taps, directional couplers, two-way splitters, three-way splitters and power inserters whether self-terminating or not. Install heat shrink on all fittings. Install terminators and filters as required, install tap brackets on all taps, passives and amplifiers, and include security termination fittings over all customer ports. Provide brackets and hardware as needed for all devices. Install grounds and bonds on all active electronic devices as specified. Also included is installation of all forward and reverse pads and equalizers as posted on design maps, fuses, thermals, and other associated equipment. Select AC voltage range to 90 volts in all amplifiers. Torque all housings to manufacturer specifications using Tacoma Power approved torque wrenches, and all other splicing tools must be approved and of the type recommended by the equipment manufacturers.

As a part of the splicing function, contractors are required to activate the forward plant to 870Mhz +/- 2db.

Signal ingress testing must be performed on active reverse plant, verifying no ingress signals meeting a 72db Carrier to Ingress standard. Ingress testing will be reviewed, inspected and verified by Tacoma Power Inspection staff. This test consists of connecting an H/P spectrum analyzer to the reverse optical receiver, at the Hub location, and placing the analyzer on "Max Hold" for a period of 24 hours. Ingress interference cannot exceed 72db Carrier to Ingress over a 24-hour period.

Detail:

STEP 1: Verification of amplifier housing:

Pre-Installation

A: Check that all pad and Eq locations are installed per call out blocks B: Verify AC Voltage is set to 90V!

Post-Installation

A: Set DC Power Pack Voltage to 24V!
B: Set RF Output Levels per system specs

STEP 2: All Amplifier Locations, Store the following files:

A: Input Tilt File
B: Output Forward Sweep
C: Output Return Sweep



(Note- return sweep is used as a tool to view the return spectrum and to set levels)

STEP 3: Line End Recording:

- A: Store a Tilt File
- B: Store a Forward sweep file
- C: Store a Return sweep file
- D: Reinstall port terminators on line end tap

STEP 4: Providing Fire off Documentation (see drawings no. 8-13 in Appendix A)

- A: Provide hard and soft copies all files for backup
- B: Print all Tilt, Forward, and Return Sweep Files
- C: Report any and all low-level issues to Tacoma Power Personnel.

STEP 5: System Ingress Testing:

- A: Ingress testing will be conducted.
- B: A 24 HR MAX HOLD TEST will be performed.
- C: After a passing 24HR Test and final ingress drive-out with the Technical staff present to verify (noise floor of the return spectrum is clean from any impulse noise, CPD's, and any other interferences), Tacoma Power staff will except the node.

All aerial, multiple devices locations will require installing each piece of equipment on opposite sides of a pole using .715 jumper cables to connect the equipment. Any locations having a cable direction change will require additional cable slack to create a loop-back. The use of housing-to housing and/or 90 connectors will only be permitted in underground locations. Any exceptions must be pre-approved by Tacoma Power's project inspectors.

All safety measures, including traffic control, will be the responsibility of the contractor.



Item No. 10 INSTALL CITY-FURNISHED STANDBY AERIAL POWER SUPPLY WITH UNDERGROUND BATTERIES AND VAULT

Measurement Shall be measured by per each, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, equipment, grounding, weather-head, conductors, pole risers, wiring connections and termination's, disconnect and over-current protection, to aerial power supply. Additional work includes splicing the power inserter and alt box in the cabinet and providing and installing up to 50 feet of power conductors installed to the power transformer. The contractor will be issued a NO FEE electrical permit from Tacoma Power. Tacoma Power work crews will coordinate for inspection and service hook-up.

All safety measures, including traffic control, will be the responsibility of the contractor.

Item No. 11 INSTALL CITY-FURNISHED STANDBY UNDERGROUND POWER SUPPLY CABINET AND BATTERIES & VAULT

Measurement Shall be measured by per each CABINET, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, equipment, grounding, weather-head, risers, and any necessary hardware to install underground power supply, batteries and SSB. Additional work includes splicing the power inserter and alt box in the cabinet and providing and installing up to 75 feet of power conductors installed to the power transformer.

The contractor will be issued a NO FEE electrical permit from Tacoma Power.

Tacoma Power work crews will coordinate for inspection and service hook-up. All safety measures, including traffic control, will be the responsibility of the contractor.



Item No. 12 ROCKSAW TRENCH, MINIMUM 6" WIDE WITH 18" COVER USING CONTROL DENSITY BACKFILL

Measurement Shall be measured by the trench foot, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment required to open a trench and to place City-furnished 2" PVC pipe or 4" PVC. (See System Design) Work considered incidental to this bid item includes hand digging and trenching to expose existing utility substructure and to extend trench to a pedestal or pole, including boring under curb and gutter, and under sidewalk, concrete and asphalt replacement, and all other digging required for placement of the facilities.

This work is defined as that excavation which takes place within the City Rights of Way or in the Utility easements of private roads. Additional work to be performed under this bid item includes notification of Utilities Locator, backfilling with control density fill, replacement of asphalt wearing surface including 18" grind as required, potholing for utilities in roadway including asphalt replacement, placement of vaults, boxes and drop pedestals, small pedestals, medium pedestals, large pedestals, and optical node pedestals and cleanup and restoring properties to their original condition. Also, all conduits must be proofed with detectable poly tape or cabled, trimmed to published specifications, and fitted with City approved conduit caps before asphalt is replaced.

All rocksaw and grinding equipment must have a trench evacuation conveyer system to load trench materials directly into a dump truck. All asphalt replacement must meet or exceed a 92% compaction test, as required and specified in the Washington State Standards for Road, Bridge, and Municipal Construction and by local jurisdiction. The testing will be managed and paid for by Tacoma Power.

All vacant conduits must have a locatable pull tape installed.

All safety measures, including traffic control, are the responsibility of the contractor.



Item No. 13 BACKHOE TRENCH, MINIMUM 12" WIDE WITH 18" COVER USING CONTROL DENSITY BACKFILL

Measurement Shall be measured by the trench foot, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment required to open a trench and to place City-furnished 2" PVC pipe or 4" PVC. (See System Design) Work considered incidental to this bid item includes hand digging and trenching to expose existing utility substructure and to extend trench to a pedestal or pole, including boring under curb, gutter and sidewalk. Concrete and asphalt replacement, and all other digging required for placement of the facilities is also considered incidental to this bid item. This work is defined as that excavation which takes place within the City Rights of Way or in the Utility easements of private roads. Additional work to be performed under this bid item includes notification of Utilities Locator, backfilling with control density fill, replacement of asphalt wearing surface including 18" grind as required, potholing for utilities in roadway including asphalt replacement, placement of vaults, boxes and drop pedestals, small pedestals, medium pedestals, large pedestals, and optical node pedestals and cleanup and restoring properties to their original condition. Also, all conduits must be proofed with detectable poly tape or cabled, trimmed to published specifications, and fitted with City approved conduit caps before asphalt is replaced.

All trench spoils must be loaded directly into a dump truck. Grinding equipment must have a trench evacuation conveyer system to load trench materials directly into a dump truck.

All asphalt replacement must meet or exceed a 92% compaction test, as required and specified in the Washington State Standards for Road, Bridge, and Municipal Construction and by local jurisdiction. The testing will be managed and paid for by Tacoma Power.

All safety measures, including traffic control, are the responsibility of the contractor.



Item No. 14 TRENCH 12" WIDE WITH 24" COVER USING NATIVE MATERIAL BACKFILL

Measurement Shall be measured by the trench foot, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment required to open a trench and to place City-furnished 2" PVC pipe or 4" PVC pipe.

Work considered incidental to this bid item includes hand digging/trenching to expose existing utility substructure, boring under driveways, across roadways, under sidewalks, curbs and gutters and to extend trench to a pedestal or pole.

This work is defined as that excavation which takes place within the City Rights of Way or in the Utility easements of private roads. Additional work to be included under this bid item includes notification of Utilities Locator, potholing for utilities in roadway, including asphalt and concrete replacement, open cut of roadway, if required, including asphalt replacement, placement of vaults, boxes and drop pedestals, small pedestals, medium pedestals, large pedestals, and optical node pedestals and cleanup and restoring properties to their original condition.

Also, all conduits must be proofed with detectable poly tape or cabled, trimmed to published specifications, and fitted with City approved conduit caps before asphalt is replaced.

All asphalt replacement must meet or exceed a 92% compaction test, as required and specified in the Washington State Standards for Road, Bridge, and Municipal Construction and by local jurisdiction. The testing will be managed and paid for by Tacoma Power.

All backfill material must meet or exceed a 95% compaction test, as required and specified in the Washington State Standards for Road, Bridge, and Municipal Construction and by local jurisdiction.

All vacant conduits must have a locatable pull tape installed.

All safety measures, including traffic control, are the responsibility of the contractor.



Item No. 15 TRENCH 12” WIDE WITH 36” COVER USING NATIVE MATERIAL BACKFILL

Measurement Shall be measured by the trench foot, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment required to open a trench and to place City-furnished 2” PVC pipe or 4” PVC pipe. Work considered incidental to this bid item includes hand digging/trenching to expose existing utility substructure, boring under driveways, across roadways, under sidewalks, curbs and gutters and to extend trench to a pedestal or pole and any other digging required for placement of the facilities.

This work is defined as that excavation which takes place within the City Rights of Way or in the Utility easements of private roads. Additional work to be included under this bid item includes notification of Utilities Locator, providing and placement of warning ribbon, potholing for utilities in roadway, including asphalt and concrete replacement, open cut of roadway, if required, including asphalt replacement, placement of vaults, boxes and drop pedestals, small pedestals, medium pedestals, large pedestals, and optical node pedestals and cleanup and restoring properties to their original condition.

Also, all conduits must be proofed with detectable poly tape or cabled, trimmed to published specifications, and fitted with City approved conduit caps before asphalt is replaced.

All backfill material must meet or exceed a 95% compaction test, as required and specified in the Washington State Standards for Road, Bridge, and Municipal Construction and by local jurisdiction.

All vacant conduits must have a locatable pull tape installed.

All safety measures, including traffic control, are the responsibility of the contractor.



Item No. 16 TRENCH 12" WIDE WITH 36" COVER WITH 2" CONCRETE CAP USING NATIVE MATERIAL BACKFILL

Measurement Shall be measured by the trench foot, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment required to open a trench and to place City-furnished 2" PVC pipe or 4" PVC pipe and cover with 2 inches of concrete prior to backfill. This work is defined as that excavation which takes place within the County Rights of Way or in the Utility easements of private roads.

Work considered incidental to this bid item includes hand digging/trenching to expose existing utility substructure, and to extend trench to a pedestal or pole and any other digging required for placement of the facilities, includes notification of Utilities Locator, providing and placement of approved warning ribbon, potholing for utilities in roadway, open cut of roadway, if required, including asphalt and concrete replacement, placement of vaults, boxes and drop pedestals, small pedestals, medium pedestals, large pedestals, and optical node pedestals and cleanup and restoring properties to their original condition. Also, all conduits must be proofed with detectable poly tape or cabled, trimmed to published specifications, and fitted with City approved conduit caps before asphalt is replaced.

All backfill material must meet or exceed a 95% compaction test, as required and specified in the Washington State Standards for Road, Bridge, and Municipal Construction and by local jurisdiction.

All vacant conduits must have a locatable pull tape installed.

All safety measures, including traffic control, are the responsibility of the contractor.



Item No. 17 TRENCH 12" WIDE WITH 36" COVER UNDER WEDGE CURB USING 5/8" MINUS GRAVEL BACKFILL MATERIAL

Measurement Shall be measured by the trench foot, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment required to open a trench and to place City-furnished 2" PVC pipe or 4" PVC pipe in the roadway under the wedge curb.

This work is defined as that excavation which takes place within the County Rights of Way. Work considered incidental to this bid item includes hand digging/trenching to expose existing utility substructure, and to extend trench to a pedestal or pole and any other digging required for placement of the facilities, all costs associated with the labor, materials and equipment for the placement of structural fill material including transportation and disposal of unsuitable material, notification of Utilities Locator, providing and placement of warning ribbon, potholing for utilities in roadway, replacement of asphalt wedge curb up to 18" in width with Class "B" asphalt concrete to Pierce County standards, open cut of roadway, saw-cutting, placement of vaults, boxes and drop pedestals, small pedestals, medium pedestals, large pedestals, and optical node pedestals and cleanup and restoring properties to their original condition.

Also, all conduits must be proofed with detectable poly tape or cabled, trimmed to published specifications, and fitted with City approved conduit caps before asphalt is replaced.

All backfill material must meet or exceed a 95% compaction test, as required and specified in the Washington State Standards for Road, Bridge, and Municipal Construction and by local jurisdiction.

All vacant conduits must have a locatable pull tape installed.

All safety measures, including traffic control, are the responsibility of the contractor.



Item No. 18 INSTALL UNDERGROUND SERVICE CONDUIT

Measurement Shall be measured by the per each unit, complete and in place.

Payment The per each unit price shall be full compensation for all costs associated with the labor, materials, and equipment required to open a trench, plow or bore to place City-furnished 1" roll pipe from the City Rights of Way to a customer's power meter with 12" of cover minimum.

Work considered incidental to this bid item includes hand digging/trenching to expose existing utility substructure, boring or plowing to extend trench to a pedestal or pole. Additional work to be included under this bid item includes notification of Utilities Locator, potholing for utilities, placement of drop vaults and cleanup and restoring properties to their original condition. Also, all conduits must be proofed, trimmed to specifications, and fitted with City approved conduit caps.

All safety measures, including traffic control, are the responsibility of the contractor.

Item No. 19 UNDERGROUND PUSHING

Measurement Shall be measured per Lineal Foot, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment necessary to horizontally push across existing roadways, driveways, beneath sidewalks, curbs and gutters or other areas as directed by the City.

Pushes must accommodate 2" or 4" conduit as directed by the City. Work incidental to this bid item shall include the placement of all City Furnished PVC pipe, excavation and restoration of bore pits including asphalt/concrete removal and replacement, and for the complete restoration of landscape materials.

Additional work to be included under this bid item includes notification of Utilities Locator, potholing for utilities in roadway, including asphalt and concrete replacement, open cut of roadway, if required, including asphalt replacement, placement of vaults, boxes and drop pedestals, small pedestals, medium pedestals, large pedestals, and optical node pedestals and cleanup and restoring properties to their original condition. Also, all conduits must be proofed with detectable poly tape or cabled, trimmed to published specifications, and fitted with City approved conduit caps before asphalt is replaced.

All safety measures, including traffic control, are the responsibility of the contractor.



Item No. 20 DIRECTIONAL BORING

Measurement Shall be measured per Lineal Foot, complete and in place for the following:

- 1 run of 2" conduit
- 2 runs of 2" conduit
- 3 runs of 2" conduit

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment necessary to directionally bore across existing roadways, driveways, beneath sidewalks, curbs and gutters or other areas as directed by the City.

Bores must accommodate 2" roll conduit as directed by the City. Bid item shall include incremental pricing for multiple ducts. Work incidental to this bid item shall include the placement of all Contractor-Furnished roll duct, excavation and restoration of bore pits including asphalt/concrete removal and replacement, and for the complete restoration of landscape materials.

Also, all conduits must be proofed with detectable poly tape or cabled, trimmed to published specifications, and fitted with City approved conduit caps before asphalt is replaced. Additional work to be included under this bid item includes notification of Utilities Locator, potholing for utilities in roadway, including asphalt and concrete replacement, open cut of roadway, if required, including asphalt replacement, placement of vaults, boxes and drop pedestals, small pedestals, medium pedestals, large pedestals, and optical node pedestals and cleanup and restoring properties to their original condition. Containment of boring compounds is the responsibility of the contractor. All vacant conduits must have a locatable pull tape installed.

All safety measures, including traffic control, are the responsibility of the contractor.



Item No. 21 PLACE ENCLOSURES

Measurement Shall be measured by each enclosure in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials and equipment necessary to place City-furnished vaults, small pedestals and large pedestals over previously installed conduits. Additional work to be included under this bid item includes conduit trimming, conduit cap placement supplied by contractor, placement of ground rods and # 6 ground wire, cleanup and restoring properties to their original condition.

All safety measures, including traffic control, are the responsibility of the contractor.

This bid item does not include work to be performed under bid items 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20. This bid item shall be used only with the approval of Tacoma Power's inspection staff.

Item No. 22 PROOF EXISTING CONDUITS

Measurement Shall be measured by the linear duct foot, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials and equipment for proofing previously installed conduits with contractor supplied locatable pull tape; through manholes, vaults, pedestals and risers. Conduit trimming and conduit cap placements are considered incidental to this work.

All safety measures, including traffic control, are the responsibility of the contractor.

This bid item does not include work to be performed under bid items 12, 13, 14, 15, 16, 17, 18, 19, 20, 25, 26 and 27. This bid item shall be used only with the approval of Tacoma Power's inspection staff.



Item No. 23 CUT, REMOVE AND RESTORE CONCRETE

Measurement Shall be measured by the square foot, complete and in place

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment required for saw cutting and removing concrete, hauling and disposal to a legal dump site obtained and paid for by the contractor. Additional work considered incidental to this bid item shall include restoring the affected areas to the standards required by the local jurisdictions where the work is being performed. Concrete will be replaced to its original depth and finish. It is the contractor's responsibility to provide adequate site protection against vandalism while the concrete is curing.

This bid item does not include concrete work to be performed under bid items, 12, 13, 14, 15, 16, 17, 19 and 20. This bid item shall be used only with the approval of Tacoma Power's inspection staff for miscellaneous work not included in other bid items and not caused by contractor negligence.

All safety measures, including traffic control, are the responsibility of the contractor.

Item No. 24 CUT, REMOVE AND RESTORE UP TO 3" THICK ASPHALT, BEYOND AND NOT INCLUDING 18" GRIND

Measurement Shall be measured by the square foot, complete and in place

Payment The unit price shall be full compensation for all costs associated with the labor, materials, and equipment required for saw cutting, grinding and removing asphalt, hauling and disposal to a legal dump site obtained and paid for by the contractor. Additional work considered incidental to this bid item includes restoring the affected areas to the standards required by the local jurisdictions where the work is being performed.

This bid item does not include asphalt work to be performed under bid items 12, 13, 14, 15, 16, 17, 19 and 20. This bid item shall be used only with the approval of Tacoma Power's inspection staff for miscellaneous work not included in other bid items and not caused by contractor negligence.

All safety measures, including traffic control, will be the responsibility of the contractor.



Item No. 25 FURNISH AND INSTALL RISER ASSEMBLIES

Measurement Shall be measured by per each, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, hardware, materials and equipment necessary for framing and digging for the placement of a riser up to 30 feet in length on wood poles. All safety measures, including traffic control, are the responsibility of the contractor.

Item No. 26 INSTALL CITY FURNISHED QR .715 COAXIAL CABLE IN CONDUIT

Measurement Shall be measured by the linear trench foot per duct, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials and equipment for the installation of City-furnished QR 715 coaxial cable through previously installed conduit, manholes, vaults, pedestals and risers. Slack loops and tails, conduit trimming, and conduit cap placements are considered incidental to this work. A City approved pulling lubricant must be used at all locations.

All safety measures, including traffic control, are the responsibility of the contractor.

Item No. 27 INSTALL CITY FURNISHED RG6 OR RG11 COAXIAL CABLE IN CONDUIT

Measurement Shall be measured by the linear trench foot per duct, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials and equipment for the installation of City-furnished RG6 or RG11 coaxial cable through previously installed conduit, manholes, vaults, pedestals and risers. Slack loops and tails, conduit trimming, and conduit cap placements are considered incidental to this work.

All safety measures, including traffic control, are the responsibility of the contractor.



Item No. 28 INNERDUCT PLACEMENT

Measurement Shall be measured by innerduct foot, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor and equipment for the installation of City-furnished 1-1/4" inner-duct through previously installed conduit, manholes, vaults, pedestals and risers. Conduit proofing, trimming and capping with City approved inner-duct plugs is considered incidental to this work.

All safety measures, including traffic control, are the responsibility of the contractor.

Item No. 29 INSTALL CITY FURNISHED FIBER OPTIC CABLE IN CONDUIT

Measurement Shall be measured by the linear duct foot, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials and equipment for the placement of City-furnished fiber optic cable and locate wire through previously installed conduit, manholes, vaults, pedestals and risers and includes all handling of the cable to avoid any cutting or damage of the cable. Contractor will be responsible for performance testing of fiber after installation and will be required to provide the City with OTDR test results confirming fiber is useable for intended purpose. Slack loops and tails, conduit trimming, and conduit cap placements are considered incidental to this work. This work includes back pulling for the storage of 10% excess slack cable at approximately 1000 ft. intervals and pulling of splicing tails.

Protection of the fiber against damage and vandalism is the responsibility of the contractor from point of issue until all testing and documentation has been released and verified to owner. All runs are to be installed in continuous lengths. Under no circumstances is any optical fiber to be severed at any point other than those specified on the plans without prior written permission. Placement of all fibers will include reel test before and full OTDR documentation after placement.

It is the contractor's responsibility to notify the Tacoma Power inspection division when a fiber reel has been pulled to the designated splice location before cutting the fiber to ensure adequate storage has been provided.

Fiber placement and splicing must conform to the attached Fiber Proofing and Certification Specification.

All safety measures, including traffic control, are the responsibility of the contractor.



Item No. 30 AERIAL CREW RATE

Measurement Shall be measured by the hour.

Payment The unit price shall be full compensation for all costs associated with the labor, supervision, and equipment required to perform aerial telecommunications type work not covered in any other bid items.

These labor rates shall meet current prevailing wage standards and conform to the guidelines in General Provisions section 3.08 of this contract.

Itemized price for each of the following:

- 1- Lineman
- 1- Driver / Ground man
- 1- Laborer
- 1- Splicer
- 1- Line truck / Cable Trailer, including all necessary tools
- 1- Splicing vehicle

All safety measures, including traffic control, are the responsibility of the contractor.

Item No. 31 UNDERGROUND CREW RATE

Measurement Shall be measured by the hour.

Payment The unit price shall be full compensation for all costs associated with the labor, supervision, and equipment required to perform underground telecommunications type work not covered in any other bid items.

These labor rates shall meet current prevailing wage standards and conform to the guidelines in General Provisions section 3.08 of this contract.

Itemized price for each of the following:

- 1- Equipment operator
- 1- Driver / Ground man
- 1- Laborer
- 1- Splicer
- 1- Splicing vehicle
- 1- Backhoe
- 1- Trucks with Equipment

All safety measures, including traffic control, are the responsibility of the contractor.



Item No. 32 SET UP FEE

Measurement Shall be measured per each work packet.

Payment The unit price shall be added to an Aerial or Underground work packet that does not meet the contractor's daily crew rate as described under 1.01.2 Scope of Work.

All safety measures, including traffic control, will be the responsibility of the contractor.

Item No. 33 STRUCTURAL FILL – 5/8” MINUS GRAVEL

Measurement Shall be measured by the ton, complete and in place.

Payment The unit price shall be full compensation for all costs associated with the labor, materials and equipment for the placement of structural fill 5/8” minus gravel material including transportation and compaction and disposal of unsuitable material.

Placement of structural fill material will be in lieu of native material deemed not suitable for backfill and shall be approved by the project manager. The inspector will collect truck tickets.

Item No. 34 FORCE ACCOUNT

Measurement & Payment If the contract calls for work or materials to be paid for by force account, payment amounts will be determined as outlined in Section 1-09.6 - FORCE ACCOUNT of the latest edition of the Standard Specifications for Road, Bridge, and Municipal Construction as published by the Washington State Department of Transportation. [2025 Standard Specifications for Road, Bridge, and Municipal Construction](#)

All force account items must be agreed to in writing before work begins.

END OF SECTION

SECTION 3 - PROJECT COORDINATION

3.01 – PROJECT MANAGER

The project manager for this project with whom the contractors shall coordinate all activities will be provided upon contract execution.

3.02 – MEETINGS

3.02.1 – Pre-Construction Meeting

Following assignment of work, the project manager will notify the selected bidder of the time and date of the pre-construction meeting to be held at the project location or at a location to be determined in the Tacoma Public Utilities Administration Complex, 3628 South 35th Street, Tacoma, Washington.

3.02.2 – Minutes of Pre-Construction Meeting

Minutes of the pre-construction meeting will be sent to the contractor and all meeting attendees. Recipients of the pre-construction meeting minutes will be required to direct any comments or changes to these minutes to the project manager within seven (7) days from the date of receipt. If no changes or comments are received within the seven (7) days, the meeting minutes will become part of the project file.

3.02.3 – Project Phase Meetings

The project manager will schedule meetings at the project site prior to each major phase or section of work; prior to installing major pieces of equipment as identified by the project manager; and on an as-needed basis. Attendance is required of the contractor, site superintendent and major subcontractors at all such meetings. The project manager will notify the contractor of all required site meetings during the pre-construction meeting. Agenda will follow the same format as the pre-construction conference for applicable items. Minutes of each meeting will be kept by the project manager and become part of the project file.

3.03 – PERMITS

The City will be responsible for procurement of all work permits to authorize the contractor to trench and install the telecommunication facilities within any City Rights of Way.

3.03.1 – Electrical Permits

The Power Division will issue to the contractor a NO FEE electrical permit. The City of Tacoma shall perform electrical inspection.

3.04 – FIELD ENGINEERING

3.04.1 – Survey Reference Points

The contractor shall protect survey control points, monuments and other survey control within the City Rights of Way during construction.

3.04.2 – Damage, destruction, or loss of Survey Reference Points

Promptly report to the project manager the loss or destruction of any survey control point. Survey control damaged by the contractor shall be replaced by City forces and paid for by the contractor.

3.04.3 – Establishment of Project Boundaries by Engineer

The project manager shall establish the lines for location of the work items listed in the proposal. Contractor's work shall conform to the horizontal and vertical controls unless deviations are obtained from the project manager.

3.04.4 – Adjustment of Portion of Project

The project manager may adjust or relocate any portion of the project to meet site requirements or to improve the project without additional compensation to the contractor, provided such adjustments do not represent appreciable costs for additional labor and materials as determined by the project manager.

3.04.5 – Contractor Responsibility

Based upon the information provided by the project manager, all other lines and detail surveys necessary for the execution and completion of the work shall be established and maintained by the contractor.

After the project manager has given lines and grades for any part of the work, the contractor shall be held responsible for the proper execution of the work to such lines and grades.

3.04.6 – Audit of Progress by Project Manager

The project manager reserves the right to check all work, have free access to all work, and shall have the full cooperation of the contractor in so doing.

3.05 – COORDINATION WITH OTHERS

3.05.1 – Traffic Control

Contractor shall provide temporary facilities, barricades and make other temporary modifications as necessary to keep the existing roads and fire lanes in operation during the construction period.

3.05.2 – Electrical Transmission and Distribution Conductors

Existing transmission lines, distribution lines, and utility lines will be encountered during the course of this project. These service systems will remain electrically energized and functional during construction except as otherwise provided for in these specifications.

3.05.3 – Coordination of Work with the City

The contractor shall be responsible for coordinating and scheduling the work to be performed by the City so that it coincides with the work.

3.06 – DIVISION OF WORK

3.06.1 – Material Furnished and installed by contractor

The contractor shall furnish and pay for all necessary materials (except City-furnished) and shall provide all labor, tools, equipment and superintendent, and perform all work incidental to the completion of the project as contemplated by this contract in accordance with the plans, specifications, and instructions of the project manager.

3.06.2 – Coordination with T&D Warehouse for materials

It shall be the responsibility of the contractor to provide two business days' notice prior to obtaining the City-furnished material from the Tacoma Power Warehouse, 3628 South 35th Street (rear), Tacoma, Washington, between the hours of 10:00 AM and 3:00 PM on regular City working days with his own forces and equipment. All materials received by the contractor shall become his responsibility and he shall be liable for any material lost or damaged after receipt.

3.07 – MAKE READY WORK ON POLES

3.07.1 – Electrical Utility & Communication Worker Safety Space

Tacoma Power will perform Major Make-Ready work before contractor work begins to provide as much pole contact space as possible for the HFC system to be installed. The most current edition of ANSI Standard C2 – National Electric Safety Code, regulates this space.

3.07.2 – Communication Attachment Space

The contractor shall be responsible for rearrangement of communications facilities to create the 40" safety space. In some instances a lineperson may be required to work in the Supply Zone which will necessitate the contractor to provide a "qualified employee" as outlined in [WAC 29645-065](#) and the NESC Part 4, Section 42, Rule 420B. Written documentation will be required.

3.08 – DIFFERING SITE CONDITION/CHANGE ORDERS

Differing site conditions shall be administered in accordance with the subsections below. All deviations from agreed upon work process shall be agreed upon by the project manager in writing.

3.08.1 – Subsurface Conditions

The contractor shall promptly, and before conditions are disturbed, notify the project manager or the field representative of problems with subsurface conditions at the site, problems or conflicts in the plans or specifications or problems on construct ability.

3.08.2 – Filing of Claims for change orders

No claim by the contractor under this differing site condition shall be allowed except as agreed upon in writing with the project manager.



Whenever possible, the contractor shall submit in advance and in writing, a proposal for changes in the scope of work and/or contract amount. This proposal shall be either accepted or rejected in writing by the project manager prior to work commencing.

3.08.3 – Short Notice Change Orders

When time is short, the contractor shall notify the City extra work is required or the City shall notify the contractor that extra work is needed and at a minimum, the project manager shall issue a handwritten notice to proceed. In such cases, said handwritten notice will not be considered as agreement that such work is extra. Within seven (7) days, the contractor shall submit a written proposal for changes in the scope of work and/or contract amount.

3.09 – CONSTRUCTION PROGRESS SCHEDULES

3.09.1 – Schedule Format

Prepare schedules as a horizontal bar chart with separate bar for each major portion of work or operation, identifying the first workday of each week as directed by the project manager.

3.09.2 – Content of Project Schedule

This schedule shall be activity-oriented showing as nearly as can be determined the starting and completion dates of each event. The schedule shall show the materials delivery, structure erection, and installation. It will include the start and completion of each major civil, mechanical and electrical item of work critical to the general contractor's operation.

Show complete sequence of construction, by activity, with dates for beginning and completion of each element of construction.

Identify each task by the appropriate proposal bid item number.

3.09.3 – Submittals of Schedules

Submit initial schedules within five (5) working days after assignment of a project. After review, if the project manager requires changes, resubmit required revised data within 5 (5) working days. This may be adjusted per job at TPU's convenience.

END OF SECTION

SECTION 4 - QUALITY CONTROL

4.01 – REFERENCE STANDARDS

Reference to standards, specifications, manuals or codes of any technical society, organization, or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest Standard Specification manual, code, or laws or regulations in effect at the time of opening of bids (or on the effective date of the agreement if there were no bids), except as may be otherwise specifically stated. However, no provision of any referenced standard, specification, manual, or code (whether or not specifically incorporated by reference in the contract documents) shall be effective to change the duties and responsibilities of City, contractor, or project manager, or employees from those set forth in the contract documents.

Any part of the work not specifically covered by these specifications shall be performed in accordance with the applicable section of the latest Edition of the "Standard Specifications for Road, Bridge and Municipal Construction" as prepared by the Washington State Department of Transportation and the Washington State Department of Public Works Association (APWA) as amended by the latest APWA Amendment No. 1 and the latest City of Tacoma Amendment No.1. These specifications will herein be referred to as the Standard Specifications.

4.02 – INSPECTION, TESTING AND CERTIFICATION

Construction inspection for the City shall be coordinated through the project manager or others as the City may designate and as the construction situation may dictate. The City inspector will be responsible for insuring that the contractor is complying with the contract plans and specifications.

4.02.1 – Pre-final Inspection

Contractor shall notify the project manager in writing when all work or portions of work are complete and ready for inspection. The project manager will make a "punch list" and forward the results of same to the contractor who shall promptly correct any deficiencies noted.

4.02.2 – Final Inspection

Contractor shall notify the project manager in writing when all punch list deficiencies have been completed. The project manager will promptly set a time for final inspection at which time the project manager and contractor shall jointly inspect the work. The contractor will promptly correct any further deficiencies noted.

4.03 – COUNTY/CITY PERMIT INSPECTIONS

As part of the construction permits provided by the applicable City department, an inspector from the city will inspect the various phases of construction. The contractor shall follow the requirements of the permits from the city.

END OF SECTION



SECTION 5 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

5.01 – UTILITIES

5.01.1 – Electric Service

Power will not be provided for this project.

5.01.2 – Telephone Service

The City will not provide telephone service for the contractor.

5.01.3 – Water

The City will not provide water to the contractor for this project.

5.01.4 – Sanitary Facilities

Contractor(s) shall provide for the sanitary necessities of all persons employed on the project, beginning with the first person employed and shall be of the chemical type. Such conveniences shall be erected and maintained by the contractor, in the number, manner, and place approved by the project manager immediately upon commencing work. The Sanitation Laws of the State of Washington and any applicable county sanitary laws shall be complied with.

5.02 – JOB SHACK & MATERIALS STORAGE AREA

5.02.1 – Location & Size of Job shack

The contractor shall supply a job shack where construction plans shall be kept. The shack shall be large enough to keep "AS-BUILT" plans and provide access to City inspectors and project managers as required.

5.02.2 – Contents of Job shack

The contractor shall keep on the job site a full-size copy of the drawings and specifications and shall at all times give the project manager access thereto.

5.02.3 – Storage area

The contractor will acquire a storage area for staging materials for construction. These storage areas shall be capable of protecting both contractor and City-furnished materials from damage, effects of weather and theft. It shall be the contractor's sole responsibility to provide security for all City-furnished materials and equipment once received from Tacoma Power's warehouse. The storage area shall be large enough to adequately store one week's worth of work.

5.03 – ROADWAY AND TRAFFIC CONTROL

5.03.1 – Traffic Coordination

All traffic controls on this project shall adhere to the latest edition of the "Manual on Uniform Traffic Control Devices" and Washington Administrative Code 296-155-305. Adequate access shall be provided for local and emergency vehicular traffic through the project area at all times.

5.03.2 – Coordination with City Traffic Engineering staff

Portions of the work contemplated under this contract will require the blockage of certain streets and sidewalks. Tacoma Power will not be responsible for any traffic control matters. The contractor is fully responsible for coordinating with the City traffic engineer on all matters pertaining to the movement of vehicular and pedestrian traffic past the project area, and all costs shall be incidental to the project.

It is the contractor's responsibility to provide all traffic control and signing for the project to the satisfaction of the area traffic engineer within the City or county in which work is being performed, all costs shall be incidental to the project.

5.03.3 – Traffic Signs and Signals

The contractor shall be responsible for all temporary signing or barricades placed at the job site to control traffic and protect the public from construction areas.

The supply, placement, and maintenance of all traffic controls shall be the responsibility of the contractor and shall be in accordance with the "Manual on Uniform Traffic Control Devices." and Washington Administrative Code 296-155-305.

5.03.4 – Traffic Control Plan

The lead person of the job site crew will familiarize the flaggers with the job site, proposed activities, and their expectations for performance. When flaggers are used on a job that will last more than one day, the employer, responsible contractor and/or project owner must keep on-site, a current site-specific traffic control plan per MUTCD standards.

5.04 – DUST CONTROL

The contractor shall take reasonable measures to prevent unnecessary dust. Earth surfaces subject to dusting shall be kept moist with water or by application of a chemical dust suppressant. Dusty materials in piles or in transit shall be covered when practicable to prevent blowing.

5.04.1 – Protection from Dust

Buildings or operating facilities, which may be affected adversely by dust, shall be adequately protected from dust. Existing or new machinery motors, instrument panels, or similar equipment shall be protected by suitable dust screens. Proper ventilation shall be included with dust screens.



5.05 – TEMPORARY DRAINAGE PROVISIONS

Contractor shall provide for the drainage of storm water and such water as may be applied or discharged on the site in performance of the work. Drainage facilities shall be adequate to prevent damage to the work, the site, and adjacent property. Contractors working on this project must comply with all Regional Road Maintenance Endangered Species Act Program Guidelines.

5.06 – POLLUTION CONTROL

Contractor shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances resulting from construction activities. No sanitary wastes will be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris, or other substances will be permitted to enter sanitary sewers and reasonable measures will be taken to prevent such materials from entering any drain or watercourse. Contractors working on this project must comply with all Regional Road Maintenance Endangered Species Act Program Guidelines.

END OF SECTION



SECTION 6 - MATERIAL AND EQUIPMENT

6.01 – QUALITY OF WORKMANSHIP AND MATERIALS

6.01.1 – Workmanship

The contractor shall employ only competent, skillful, and orderly persons to do the work, and whenever the project manager administering the contract shall notify the contractor in writing that any person on the work is, in his opinion, incompetent, disorderly or otherwise unsatisfactory, the contractor shall forthwith discharge such persons from the work and shall not again employ them on this contract. Work shall conform to the highest industry standards.

6.01.2 – Materials

Materials shall be delivered to the project site in the manufacturer's original containers, bundles or packages unopened with the seals unbroken and the labels intact. Each type of material shall be of the same make and quality throughout. Manufactured articles, materials and equipment shall be installed in accordance with each manufacturer's written directions, unless otherwise specified.

SECTION 7 - CONTRACT CLOSEOUT

7.01 – DOCUMENTS REQUIRED UPON COMPLETION OF WORK

7.01.1 – Close out procedures

The contractor shall notify the project manager in writing when identified tasks are complete and ready for inspection. The project manager will make the inspection, forward the results of it to the contractor, who shall promptly correct any deficiencies noted.

The contractor shall notify the project manager in writing when all punch list deficiencies have been completed. The project manager will promptly set a time for final inspection, at which time the project manager and the contractor shall jointly inspect the work. The contractor will promptly correct any deficiencies noted.

7.01.2 – Final Documentation

Upon completion of the work and before final payment is made, the contractor shall deliver to the project manager, in addition to such other items specified in these specifications, the following documents:

7.01.2A – "AS-BUILT" Drawings

"As Built" maps MUST accompany invoices or claims for work completed. All mapping revisions must be submitted with daily production reports and will not be accepted until "As Built" information is documented and signed off by designated City Inspector.

Underground Rock Saw or Trenching As-built Procedure:

- Inspector white lines with the contractor, all changes will be marked on our prints and the contractor's prints.
- Rock-saw work begins and pipe is placed, all pipes must be proofed before paving.
- Conduit is cabled by competent person able to read design prints.
- Pave Rock-saw patch and complete all restoration.
- Contractor turns in as-built weekly or as work on a street is completed.
- Inspector walks out production with contractor and verifies walk out footages on contractor as-built.
- Tacoma Power Inspection staff transfers as-built information onto master as-built.
- Plant is spliced and activated.
- Construction notifies Technical of all field changes before activation begins.
- Technical certifies node.
- Technical notifies Construction of any changes or punch list items.
- As-built is turned into Engineering.

Aerial Changes:

- All aerial changes will be identified and approved by aerial Inspector.
- Contractor will provide an as-built with changes marked.
- Inspector will transfer as-built information to master as-built.
- Plant is spliced and activated.
- Construction notifies Technical of all field changes before activation begins.
- Technical certifies node.
- Technical notifies Construction of any changes or punch list items.
- As-built is turned into Engineering.



Joint Trench As-built Procedure if cabled by Contract Staff:

- Contractor proofs pipe to verify design.
- Inspector verifies design and any changes will be marked on Click! and contractor prints at that time.
- Cable is pulled.
- Contractor turns in as-built weekly or as project is completed.
- Inspector verifies footage.
- Tacoma Power Inspector will transfer as-built info to master as-built.
- Plant is spliced and activated.
- Construction notifies Technical of all field changes before activation begins.
- Technical certifies node.
- Technical notifies Construction of any changes or punch list items.
- As-built is turned into Engineering

"AS-BUILT" drawings and specifications of new or revised existing work, shown in red ink, shall be provided by the general contractor and all other subcontractors, including all addendum's, change orders, deviations, changes, elevations, and dimensions of their work from the construction documents. This documentation shall include any deviation or Tacoma Power approved changes made during the course of construction.

END OF SECTION

SECTION 8 – FIBER OPTIC AND COAXIAL CABLE PLANT

8.01 – GENERAL

8.01.1 – Section Includes

This section will provide for the construction of aerial and underground fiber optic and coaxial cable plant to support the deployment and maintenance of a hybrid fiber-coaxial (HFC) transmission network. The work consists of both overhead and underground facilities including coaxial and fiber optic cable, splicing of coaxial and fiber optic cable and equipment, installation of power supplies, amplifiers and other items required to provide for a complete and operable two-way HFC network including activation and certification of CATV plant, and as further described in these specifications.

8.01.2 – Regulatory Requirements

- Comply with all necessary ordinances and public works requirements.
- Maintain street Rights of Way egress, fire and life safety lanes.
- WISHA requirements for all work shall be strictly adhered to.

8.02 – PRODUCTS

8.02.1 – General

The City will provide certain items to the contractor for installation as specified. The contractor is responsible for the proper care, handling and storage of all material provided to the contractor by the City, including protection from weather, freezing, water damage, impact and static discharge.

The contractor shall supply all passive and support hardware required for construction. This shall include, but not be limited to, strand, pre-formed ends, guys, anchors, hardware, cross-arms, extension arms, ground rods and ground wire, clamps, cable brackets, lashing wire, bonding material, warning tape, conduit caps and other items as further required for a complete and operable HFC transmission network and as identified in Part 2.02 of this section.

8.02.2 – General Materials Contractor Supplied

8.02.2A – Grounding and Bonding Clamps

Bolt-on grounding and bonding clamps shall be as manufactured by Thomas & Betts, Type K-UJL for all copper to copper, strand to copper and strand-to-strand applications.

8.02.2B – Ground Rods

Ground rods shall be Blackburn model BBN 002949, 8-foot long, 3/4" diameter, or engineer approved equal.

8.02.2C – Ground Wire

#6 AWG soft-drawn, bare copper ground wire.

8.02.2D – Heat Shrink

Provide CANUSA-EMI CFTV-1500 City MID: 808070TC heat-shrink tubing with pre-applied adhesive or engineer-approved equal. At minimum, shrink ratio of unheated to heated tubing shall be 3 to 1. Heat shrink shall form a watertight seal around the cable and fittings and overlap aluminum jacket by 2", and shall have a heat indicator stripe that changes from blue to black after the tubing has been properly heated.

8.02.3 – Contractor Supplied Aerial Materials

8.02.3A – Strand

1/4" and 3/8" galvanized extra high strength steel strand, rated to a minimum 6600/9100/10,000 must be used as applicable for guys.

8.02.3B – Pre-formed Dead-ends

Provide pre-formed dead-ends as manufactured by Preformed Line Products, model #'s GDE - 1104, 1106, 2121 and 2123, composed of seven individual wires, appropriate for interface to strand, with seven-wire manufacture and appropriate weave for strand.

8.02.3C – Lashing Wire

Provide stainless steel lashing wire, 0.038" in diameter, with a tensile strength of 95 psi. All hardware must be pre-approved by Tacoma Power inspection staff.

8.02.3D – Guards, Insulators and Guy Markers

Provide tree guards / cable guards to protect coaxial cable and fiber optic cables from abrasion at each suspension clamp and from damage by trees and limbs. Guards shall be sized as required for the cable diameter and area to be protected.

Provide 8-foot yellow, full round guy markers as sold by Tele-Wire Stock #HDW 002867, to enhance the visibility of down guys at each guy location.

8.02.3E – Pole Hardware

Pole hardware shall include all machine bolts, nuts and washers, corner attachments, sidewalk guy fittings, suspension c lamps (three bolt, flat and curved), tap brackets, cross-over clamps, guy hooks, guy clamps and screws, gains, thimble eyes, extension brackets, and grounding equipment. All material must be 5/8-inch construction for 1/4-inch strand and be hot dipped galvanized. All hardware must be pre-approved by Tacoma Power inspection staff; no used hardware will be accepted.

8.02.3F – Lashing Clamps

Provide lashing clamps sized for ¼-inch strand as manufactured by Diamond, Type D model #2609010, or engineer approved equal. Clamps shall use double-ended stud bolts, washers and free running nuts. Clamps shall be hot-dipped galvanized steel. Plates shall be two-piece “D” type construction.

8.02.3G – Cable Zink Straps

Provide Diamond 10”, 16”, 22” Zinc straps or engineer approved equal.

8.02.3H – Aerial Fiber Slack Storage

Provide fiber-loop storage units as manufactured by Antec Model FOSS-2, 3, and 5 or engineer approved equal, for attachment to strand to support slack fiber in aerial plant. Units shall be provided with tap brackets for connection to strand.

8.02.3H.1 – Cable Ties

Heavy cable ties shall be used for fiber storage units& all mid entry slack loops ty-rap every 12”.

Approved: Thomas & Betts CAT NO TY527MX.

8.02.4 – Contractor Supplied Underground Materials

8.02.4A – Detectable Polyester Pull Rope

Provide any necessary rope for install coax or fiber cables. All spare conduits must have a locatable footage tape installed prior to final inspection. Approved Part # CONDUX 08099203

8.02.4B – Pulling Lubricant

Provide polymer-based lubricant appropriate for the cable jackets. Lubricants shall be approved for use by the coaxial and fiber optic cable manufacturers. Lubricant shall have a freezing point of -7 degrees Celsius or colder, with stability to 90 degrees Celsius. Material shall be non-toxic, non-staining and shall have a coefficient of friction of 0.15 minimum.

Approved part: POLYWATER #J-128, PT Technologies #61101, AQUA-GEL II # 31-371



8.02.4C – Concrete

Concrete shall be WSDOT Class 3000, no hand/sack mix is accepted as specified in Section 6.02.3(2) of the WSDOT Standard Specifications. [2025 Standard Specifications for Road, Bridge, and Municipal Construction](#)

| Ingredient | Lbs. | S.G. | Volume |
|------------------------|------------------|------|--------------|
| Cement | 517 | 3.15 | 2.63 |
| Silica Fume | 0 | 2.20 | 0.00 |
| Fly Ash | 0 | 2.20 | 0.00 |
| Steel Fiber | 0 | 3.50 | 0.00 |
| #467 | 0 | 2.70 | 0.00 |
| #67 | 0 | 2.70 | 0.00 |
| 1/2" X 3/8" | 0 | 2.70 | 0.00 |
| #8 | 1635 | 2.69 | 9.74 |
| Bldg-sand | 1610 | 2.65 | 9.74 |
| Pavg-sand | 0 | 2.65 | 0.00 |
| Water | 251 | 1.00 | 4.02 |
| Polyheed 997 | 0.0 oz. | | |
| Glenium 3000 NS | 0.0 oz. | | |
| Pozzolith NC534 | 0.0 oz. | | |
| Pozzolith 100XR | 0.0 oz. | | |
| MBAE90 | 2.5 oz. | | 1.08 |
| Pozzolith 200N | | | |
| Total | 4013 lbs. | | 27.21 |
| Calc. Unit Wt. | 147.47 | | |
| W/C Ratio | 0.49 | | |
| Slump | 4"-5" Max | | |
| Coarse Aggregate | 209 | | |
| Intermediate Aggregate | 1731 | | |
| Fine Aggregate | 1305 | | |
| Total Aggregate Wt. | 3245 | | |
| Sand / Paste Ratio | 1.186 | | |
| Sand / Aggregate Ratio | 0.402 | | |
| Combined Coarse Agg. | 0.126 | | |
| Mortar Volume | 57% | | |
| Design Air Content | 4.00% | | |

Holroyd Company Mix Design Holroyd Mix # 5535A or approved equal 1 Cu. Yd. S.S.D.



8.02.4D – Control Density Fill

Control density fill (CDF) material for street crossings as required by the City Inspector. CDF shall conform to the following specifications:

Holroyd Company Mix Design Holroyd Mix # CDF50PD or approved equal 1 Cu. Yd. S.S.D.

| Ingredient | Lbs. | S.G. | Volume |
|------------------------|------------------|------|--------------|
| Cement | 50 | 3.15 | 0.25 |
| Silica Fume | 0 | 2.20 | 0.00 |
| Fly Ash | 300 | 2.20 | 2.19 |
| Steel Fiber | 0 | 3.50 | 0.00 |
| #467 | 0 | 2.70 | 0.00 |
| #67 | 0 | 2.70 | 0.00 |
| #4 x #16 | | 2.70 | 0.00 |
| #8 | 0 | 2.68 | 0.00 |
| Bldg-sand | 2545 | 2.65 | 15.40 |
| Pavg-sand | 0 | 2.65 | 0.00 |
| Water | 300 | 1.00 | 4.81 |
| Polyheed 997 | 0.0 oz. | | |
| Glenium 3000 NS | 0.0 oz. | | |
| Pozzolith NC534 | 0.0 oz. | | |
| Rheocell 30 | 0.0 oz. | | 0 |
| MBAE90 | 10.0 oz. | | 4.46 |
| Pozzolith 200N | 0.0 oz. | | |
| Total | 3195 lbs. | | 27.11 |
| Calc. Unit Wt. | 117.85 | | |
| W/C Ratio | 0.86 | | |
| Slump | 10" | | |
| Coarse Aggregate | 0 | | |
| Intermediate Aggregate | 199 | | |
| Fine Aggregate | 2346 | | |
| Total Aggregate Wt. | 2545 | | |
| Sand / Paste Ratio | 1.958 | | |
| Sand / Aggregate Ratio | 0.922 | | |
| Combined Coarse Agg. | 0.000 | | |
| Mortar Volume | 96% | | |
| Design Air Content | 17.00% | | |

8.02.4E – Asphalt Emulsion Coating

Emulsion coating (AEC) is an asphalt-based sealer used to fill minor cracks and depressions to develop a smoother, more attractive, longer-lasting surface. AEC shall conform to the following specifications:

- A-100 Type – CSS1-H AASHTO M208
- Uniformity – ASTM D – 977-91 & AASHTO M140-88
- Cone Penetration @ 77 degrees F
- AEC shall be used in the following proportions.
- No less than 30 sq ft per gallon of undiluted sealer per square yard applied in two coats.
- A-100 can be mixed with up to three pounds of silica sand per gallon.
- A-100 may be mixed with water from 10 to 25 percent depending on surface conditions dictated by the City.

8.02.4F – Asphalt Concrete Pavement

Unless otherwise referenced or modified, quality control and quality standards for the furnishing and placement of asphalt concrete pavement shall be as specified in the State of Washington Standard Specifications for Road, Bridge, and Municipal Construction - latest edition.

All asphalt shall be Class B. Aggregates for asphalt Class B shall conform to the requirements of the WSDOT Standard Specifications paragraph 9-03.8 for Class “B” asphalt concrete.

Bituminous materials shall meet the requirements of the WSDOT Standard Specification paragraph 9-02.1(4) for viscosity grade AR-4000W. Seal edge of patch with Click! Network approved washed sand immediately after placing AR-4000.

Asphalt emulsion tack coat shall be CSS-1 conforming to the requirements of the WSDOT Standard Specifications paragraph 9-02.2 and shall be diluted 50/50 with water.

8.02.4G – Landscaping

All landscaping material to include, but not be limited to beauty bark, landscaping gravel, shrubs, retaining walls, concrete edging strip, brickwork, and fences necessary for site restoration, unless otherwise noted.

8.02.4H – Duct Plugs

All duct plugs shall be sized for the duct and inner-duct that they are installed and be water and dust tight.

Provide blank duct plugs for unused and empty duct and inner-duct such as Jack-moon 12D148U or approved equal. Blank duct plugs shall be equipped with a tie-off point for pull ropes. Conduit plugs such as Multi-cap SS CA-200 or an approved equal shall be sized for the conduit in which they are to be installed and placed after cabling.

Provide duct plugs to seal around cables exiting duct and inner-duct such as Simplex 125090SB or an approved equal. Duct plugs of this type shall have at least two- (2) minimum and up to four- (4) cable penetrations and openings shall be sized for the cables installed. Penetrations in this type of plug shall be equipped with a blank duct plug with pull rope tie off.

8.02.4I – Structural Fill

Structural fill shall be 1-1/4" minus or 5/8" minus.

8.02.4J – Jet Line

Pull-line, synthetic, untwisted parallel strands, bound together with spiral jacket binder 335 tensile, approximately 240 LB. knot breaking point, package weight approximately 10 LBS, shrink wrapped tubes with center dispensing feature.

APPROVED:

- RACEWAYS TECHNOLOGY
- CONTINENTAL WESTERN # 350M #027-001
- CONTINENTAL WESTERN # 3500M

8.02.4K – Riser Clamps for 2" PVC

Conduit riser clamps shall be hot dipped galvanized steel, 2-piece with hex-head bolt and nut to fit 1-5/8" "Uni-strut" type channel. Strap must be hot dipped galvanized per ASTM Standard A386/A1-53 after fabrication.

ELECTRO-GALVANIZING WILL NOT BE ACCEPTED.

APPROVED:

- B-LINE B2013HDG
- UNISTRUT P1117HG
- MORFAB 200-HDG
- SUPERSTRUT 702-2 HDG

8.02.4L – Riser Clamps for 4” PVC

Conduit riser clamps shall be hot dipped galvanized steel, 2-piece with hex-head bolt and nut to fit 1-5/8” “Uni-strut” type channel. Strap must be hot dipped galvanized per ASTM Standard A-386/A1-53 after fabrication.

ELECTRO-GALVANIZING WILL NOT BE ACCEPTED.

APPROVED:

- B-LINE B2017HDG
- UNISTRUT P1121HG
- MORFAB 400-HDG
- SUPERSTRUT 702-4 HDG
- POWERSTRUT PS1100 4HDG

8.02.4M – Conduit Roll Duct 2”

Conduit, roll duct, 2”, inside diameter 2.010”, outside diameter 2.375”, minimum wall thickness 0.176”, weight 52lb./100ft, manufactured in compliance with ASTM D-3035. The inside diameter shall be minimum 2”. The wall thickness shall be outside diameter controlled to SDR 13.5 rating. The outside surface shall be smooth wall, and the inside surface shall be either smooth wall or longitudinally ribbed. Approved: Vikamatic #2SDR13.5

8.02.4N – Bracket, 15”, Pole Riser, Galvanized

15” long standoff bracket, hot dipped galvanized. Reference material standards drawing “standoff bracket”.

8.02.4O – Bracket, 24”, Pole Riser, Galvanized

24” long standoff bracket, hot dipped galvanized. Reference material standards drawing “standoff bracket”.

8.03 – EXECUTION

8.03.1 – General Requirements

All construction shall be in accordance with the requirements stated herein, as well as the codes, regulations, ordinances, permits, easements, and other documentation for the project.

8.03.1A – Conduct at Work site

The contractor shall conduct all work in a way that reduces any inconveniences to the property owners and general public. Disturbance and impedance of traffic shall be kept to a minimum, and at no time shall a property owner be barred from

entering or exiting their property, nor shall commercial, industrial and retail properties be impacted in such a way as to impede the access of customers, deliveries or services to and from the properties.

8.03.1B – Completion of Work

When work is complete in an area, the Rights of Way and private property shall be restored as close as possible, to the original condition. The contractor shall use care to avoid damage to fences, trees, shrubs, flowers, etc. Keep disturbance of the ground surface by equipment to a minimum. Streets, driveways, sidewalks and all other landscape areas will be swept or washed clean, using appropriate means. The contractor shall be careful not to let pets out of fenced yards.

8.03.1C – Field Supervision and Communication

All contractors will provide a non-working project manager. In addition, the City specifies the contractor will provide one (1) non-working supervisor for up to each ten (10) workers.

8.03.1C.1 – Field Supervisor Duties

Field supervisor's duties will include providing all required documentation, safety, quality control, and daily completion time. Field supervisors will not splice or be involved in physical construction. Their job will be to oversee their crews.

8.03.1D – Communications for Field Personnel

All contractors will provide communications for their field personnel. Pagers and telephones are required for each field supervisor. If the supervisor leaves the construction site, a telephone and pager must be left with the supervisor's appointed replacement for the period of their absence. Contractor will coordinate communications using equipment compatible with City's system as required by the project manager, cost of adaptation to be paid by contractor.

8.03.1E – Security of Material and Equipment

The contractor shall be responsible for twenty-four-hour security for any material or equipment left on the job site for any period of time, throughout the life of this project.

8.03.2 – Aerial Construction

The contractor shall perform the construction of aerial facilities, including the installation of:

- Strand
- Cabling (both fiber optic cable and coaxial cable)
- Hardware
- Framing
- Lashing
- Bonding
- Splicing, Electronics and Activation
- Grounding

This shall include the installation of the following equipment:

- Amplifier
- Optical Nodes
- Couplers
- Splitters
- Power Inserters
- Taps
- Power Supplies
- All other passive and active equipment required for a complete and operable 2-way HFC system and as shown on the plans.

8.03.2A – Verification of readiness

The contractor IS required to show evidence of verification of no leakage or ingress interference as a condition of “complete and operable two-way HFC system.”

8.03.3 – Anchors and Guying

The contractor shall install strand, and guying as required to support the HFC systems. Guying will be installed to prevent damage to utility poles, whether owned by the City or others, due to the weights and tensions added to the poles by the installation of new strand and cable.

The contractor is responsible for any damage his crews may cause to utility poles or peripheral equipment.

8.03.3A – Anchors

TACOMA POWER CREWS WILL SET ALL ANCHORS

8.03.3B – Downguys

Guying of poles shall be done to counter-balance the pull of the cable and keep the poles plumb and upright.

All guy wires must maintain proper clearances. Install guy guards at all new locations.

All guys shall be bonded to the strand, using #6 BC wire and bonding clamps.

8.03.3B.1 – Guying Methods

Use of different guying methods is allowed as follows:

| Method | Description |
|---------------|---|
| Overhead Guys | Overhead guys are strand running from the attachment point of one pole to the attachment point of an adjacent pole. Overhead guys shall be used at all crossings where there is not adequate room for a down guy to take the strain off the strand. |
| Head Guys | Head guys shall be used at the end of a strand run or at a corner where the strand changes direction. |
| Line Guys | Line guys are placed in the middle of a straight pole line to reinforce the line. Use the line guy in long straight runs where the extra support is needed, or as directed by the City. |
| Side Guys | Side guys shall be placed crosswise to the line of the strand. Side guys shall be used to reinforce a pole line against an unbalanced side pull by the strand of 20 degrees or less, such as those encountered where the pole line rounds a curve or changes angle. |
| Sidewalk Guys | Sidewalk guys shall be used with a horizontal strut at least eight feet above a sidewalk to clear the sidewalk, where the guying crosses a sidewalk or walkway. Use sidewalk type guy installation where the correct down guy lead-length-ratio cannot be obtained and a pole-to-pole guy is not used. |
| Joint Guys | Often, existing CATV guys can be removed and replaced with a guy sufficient in capacity to support both current CATV operator tensions and the added tension of HFC Network. Typically this will be a 3/8-inch guy placed on new frame installed on behalf of HFC Network. Consult with Tacoma Power inspectors for guidance when in doubt. |

8.03.3B.2 – Splices in Guy Wire

No splices will be allowed in overhead guys or down guys. Strand splices placed at pole are to be placed so that they do not interfere with any equipment installations. In any case, strand splices are to be a maximum of 5 feet and a minimum of 1 foot from pole with no mid span splices being allowed. Use only pre-form type strand splices.

8.03.3B.3 – Auxiliary Eyes

Contractor shall use auxiliary eyes only where they already exist, unless prior authorization has been received from the City. The contractor shall attach to existing power, telephone or CATV anchors whenever possible.

8.03.3B.4 – Existing CATV Guys

Existing CATV guys may be replaced by a new down guy engineered with capacity of handling combined strain of the existing CATV system plus the new Click! Network attachment.

8.03.3B.5 – Crossing Instate Highways, Rivers & Railroads

All strands must be double dead-ended when crossing Interstate Highways, rivers and railroads and anchored using expanding anchors.

8.03.4 – Pole Framing, Stranding, Grounding and Bonds

8.03.4A – Hardware and Framing

Install hardware, framing and supporting hardware as required herein and in accordance with the manufacturer's requirements, and in compliance with the minimum clearances for communications construction as listed in the latest edition of the National Electric Safety Code (NESC).

8.03.4A.1 – Boring new holes in poles

Contractor shall not attempt to place a new hole within 6" of an existing bore location. Bolts shall not extend more than 2" beyond nut.

8.03.4B – Strand Installation

All cable shall be supported by 1/4" EXTRA HIGH STRENGTH, MINIMUM STRENGTH 6,660 LBS. strand as specified herein; however, 5/16" strand shall be used at all Interstate Highway and River crossings that exceed 300 feet. All strands must be double dead-ended when crossing Interstate Highways, rivers and railroads and anchored using expansion type anchors.

8.03.4C – Attachment to poles

On all poles, attach the strand to the street side, unless other communications carriers are located on the field side of the pole unless otherwise approved by the project manager. The installation of strand shall be completed in such a manner as to maintain all clearances particularly climbing space, and across streets, alleys, driveways, must maintain 18” of clearance at all active location, etc. Strand shall be placed with care to avoid damaging adjacent utility and other telecommunications companies’ equipment and public property.

8.03.4D – Adjustment of other Communications facilities

Contractor shall rearrange existing communications facilities (e.g., fire alarm, CATV, traffic control systems, etc.) as directed and approved by the project manager or his designees, to allow for the proper installation of the City HFC system strand. At no time will existing facilities be disconnected, cut, damaged or otherwise disrupted unless proper notifications and instructions are granted. When unmanageable situations arise, the contractor will notify the project manager who will make arrangements with the existing communications systems to arrange for corrections and rearrangements.

8.03.4E – Safety Rules

Contractor shall strictly adhere to all local, state and federal safety laws governing the installation of strand. When installing strand, an approved traveling ground shall be used at all times.

Prior to installation, the contractor shall familiarize himself with the field conditions and any requirements of permits, easements and other documentation. Prior to pulling strand, ground the strand at the first pole with a traveling ground roller connected to an effective electrical ground. A strand reel tender with two-way communications, need to be stationed as appropriate, with visibility to the reel.

8.03.4F – Clearances from other utilities

Care shall be exercised during the installation and pulling of strand to avoid contact with power lines. Strand shall be placed with proper minimum clearances between telephone, cable, power and other communication systems.

Final sag of strand and cable will be a minimum of 30” from power at mid-span and 40 inches at the pole contact. Final sag of strand and cable shall be 12” minimum at mid-span from other communications, and at the pole contact. When sagging strand keep in mind that cable(s), when lashed, will increase sag and adjust accordingly when pulling strand tension.

8.03.4G – Strand Breaks

Strand brakes must be placed at the poles on both sides of all street, railroad, and power crossings.

8.03.4H – Sagging of strand

Strand should be tensioned to 35% and sagged at 6" in a 200-foot span. Since this project is built on Joint Use Poles, care must be taken to sag strands and cables consistent with other users. Maximum span lengths between poles shall not exceed 400 feet without the prior approval of the project manager.

8.03.4I – Suspension Clamps

All suspension clamps shall be tightened after the installation of strand and/or cable.

At strand cross-overs, a minimum of 12" of separation shall be maintained between suspension clamps. Both strands at a cross-over shall be bonded together. Cross-over clamps shall be used at mid-span locations to secure HFC Network strand only.

Curved suspension clamps shall be used when the strand makes a slight turn from a straight line.

This type of clamp may be used for a turn up to 20°, and poles greater than 3 feet out of lead. The pole must be down guyed at this point to oppose any side pull.

8.03.4J – Clearances to Power Risers

Whenever the strand is attached to a pole that has power or cable risers, maintain a minimum 2" clearance from all parts. This can be accomplished by locking the suspension clamp a maximum 3" from the pole on the support bolt. If this is not sufficient, other means of attachment will be necessary, such as fiberglass or metal arm.

8.03.4K – Tree Trimming

Contractor shall be responsible for determining and complying with local requirements for tree trimmings, including securing permits if necessary. When trees cannot be trimmed, strand shall be pulled through the trees using a rope passed through at the appropriate height. Cable guards shall be installed at all locations where tree limbs may come in contact with the cable and strand. Any major tree trimming or trees contacting Power will be referred to Tacoma Power or your inspector.

8.03.4L – Reduced Tension Spans (Slack Spans)

All slack spans will not be greater than 100 feet and shall use false dead-end construction techniques.

8.03.4M – Strand Pulling & hardware

Strand is not to be pulled over hardware or through a suspension clamp on the setup pole. A wire rope block or butt chain will be used.

8.03.5 – Grounding and Bonding

When installing grounds and bonds, care shall be taken to ensure that all connections are secure and tight. At every amp location ground to pole vertical, contractor must ground line ends not coax line ends.

8.03.5A – Frequency of Grounding

The HFC system plant shall be grounded to reduce the electrical shock hazard caused by overhead power lines. The grounding standard is to ground the first, last and every tenth pole in any given continuous line. For pole leads or sections of more than two (2), but less than 13, the contractor shall ground at the first and last poles.

8.03.5B – Grounding at Equipment

In addition, grounds will be placed at all active locations to include all node, amplifier stations and line extender locations. Use existing power or telephone grounds. If no other ground exists within 1 pole either direction, install a ground rod and wire. Each power supply shall have its own ground rod and wire.

8.03.5C – Installation of New Ground Rods

New ground rods installed shall be copper-clad steel, 3/4" in diameter and eight (8) feet in length. Ground rods on aerial shall be located 12" from the pole base, with the top of the rod 6" below the surface. Ground rods shall be driven. All locating for rod installations is the responsibility of the contractor.

8.03.5D – Installation of Ground Wire

Ground wires shall be #6 AWG bare soft-drawn copper wire stapled to the pole at ground level. It shall be routed below the surface of the soil and connected to the ground rod with a 5/8" ground clamp.

8.03.5E – Ground Connectors

The ground wire shall be connected to the strand with a bolt-on clamp, sized for the size of the strand and ground wire. Crimp-on connectors shall not be used. Connectors shall never be used on pre-formed strand splices or dead-ends. The copper wire shall be installed in the brass side of the clamp, and the strand shall

be installed in the galvanized side of the clamp. Ground wires shall not extend beyond the end of the clamp.

8.03.5F – Bonding to other utilities

Where two (2) or more support strands, whether cable, telephone, power, or a combination of these, run in the same vertical or horizontal plane, they shall be bonded together. The contractor shall use #6 AWG BC and bonding clamps. All double dead-ends, guys, pole crossovers shall be bonded.

8.03.5G – Bonding on Riser Poles

Bond the strand at all grounding and riser locations whether the ground is power, telephone CATV or HFC. Ground wires shall not extend beyond the end of the clamp.

8.03.6 – Aerial Coaxial & Fiber Cable Construction

Cable shall be installed after the strand installation is complete and approved. Cables shall be pulled using a pulling grip on each cable, with appropriate tensioning on the cable.

8.03.6A – Setting of Reel Brakes on Tensioner

Tension on reel brakes shall be set such that the reel does not run on when pulling is stopped.

8.03.6B – Application of Cable Rollers

Cable rollers shall be installed on the strand every 30 to 50 feet, depending on span length, with multiple cable rollers used where more than one (1) cable is to be installed. Install all 45° and 90° rollers as required by curves and corners. On driveway and street crossings, install several rollers to maintain clearance. Roller axis shall be perpendicular to the ground.

8.03.6C – Slack cable

At the end of each pull, slack cable shall be pulled back onto the reel.

8.03.6D – Communication on Long Pulls

On long pulls, personnel with two-way radios in contact with all other members of the work crew shall be stationed to observe and advise on the pull and at the reel, identifying problems and hazardous situations.

8.03.6E – Maximum number of Corners to be pulled

In aerial applications, cable shall not be pulled around more than two (2) 90° corners.

8.03.6F – Application of Cable Guards

At each pole and where appropriate, the contractor shall install appropriately sized cable guards to protect the coaxial cable and fiber from abrasion at the pole or the support hardware.

8.03.6G – Installation of Fiber Optic Cable

Fiber optic cable shall be installed over the coaxial cable using its own doublelash. Fiber optic cable shall be installed in accordance with the manufacturer's recommendations and requirements. Fiber shall be protected from damage and abrasion during and after construction, from contact with equipment, tools, hardware and other sources of damage.

8.03.6G.1 – Expansion Loops at Poles

Expansion loops are not required for fiber optic cable; at poles, a moderate amount of slack will be left as the fiber passes under the suspension clamp only.

8.03.6G.2 – Fiber Slack Loops

Fiber slack loops of approximately 200' at approximately 1000' intervals will be installed at locations approved by the project manager. Fiber splicing tails of 50' to 400' (or as directed by the engineer) will be pulled and secured to the strand at designated splice locations.

8.03.6G.3 – Fiber optic Splice

Fiber optic splice cases and storage racks shall be supported from the strand using tap brackets.

8.03.6H – Expansion Loops

Expansion loops shall be formed in the cable with a Lemco Model # G120 Mechanical Bender, during the cabling function, to keep consistent loops while lashing. Splicers may use Mullen Board M-200 (Hand Board) to form loops, as tension is relieved while splicing. Loops are necessary for the movement of the coaxial cable due to thermal effects.

8.03.6H.1 – Depth of Loop

The depth of the loop will be not more than 6" and not less than 5", regardless of the number of cables at any given location, as measured from the bottom of the cable before the loop to the bottom of the loop in the flat area of the loop.

8.03.6H.2 – Forming of Loops

Expansion loops and loop back cables shall be formed with a City approved bending board or mechanical loop forming tool. Cables shall always be formed with a mechanical loop-forming tool. Loops shall never be formed by hand.

The loop forming tool or forming board must remain in position until the lasher has been transferred and the next span of cable is lashed to the next pole. If a forming board is used, the lineman must hold the cable up into the board until the next span has been lashed the proper distance.

Leave adequate spare cable for the forming of loops and splicing of equipment, particularly the loop back location.

8.03.6H.3 – Frequency of Expansion Loops

Loops shall be formed at every pole and must be formed using a loop forming board. When both distribution and feeder are located on the same strand, the expansion loop will contain both cables and the feeder cable dictates loop location. Include all through cables in all loops, with the exception of fiber optic cables.

Where an obstruction exists at a pole, the loop may need to be further out from the pole. If the obstruction is a splice box or other object that will need access, leave adequate working space for linemen and repair crews to work in the future.

8.03.6H.4 – Cable Zink Straps

Cable zinc straps shall be used at all loops and at all poles. All zinc straps must be put on loosely by hand only and properly spaced a minimum from the end of any bend in the cable, at least 4 inches back from any bend in the cable.

8.03.6H.5 – Equipment Loops

All locations where the cables are spliced during construction must have input and output expansion loops.

8.03.6I – Lashing

Lashers shall be sized for the cable bundle being placed. All distribution and feeder runs will be double lashed, unless on a fiber run.

8.03.6I.1 – Pulling of Lashers

A lasher and cable pusher shall be used. Lashers shall be pulled by hand with a pull rope, and under no circumstances will they be pulled with a vehicle. Slack cable shall be rolled back onto the reel.

8.03.6I.2 – Application of Lashing Wire

Lashing wire shall be wrapped off around the strand at least 4 to 6 times and terminated between the washers on the lashing clamp. Excess lashing wire shall be tucked trimmed off at the clamp. Lashing clamps will be placed approximately 4 to 6 inches inside the expansion loops. Install an additional clamp when fiber is added to the strand.

8.03.7 – Underground Construction

Underground construction shall consist of the installation of coaxial cable and fiber optic cable, either in conduit or innerduct.

8.03.7A – Installation and Safety Procedures

Before starting any underground cable placement operation, all personnel must be thoroughly familiar with the installation and safety procedures and precautions. The items listed herein do not comprise a complete list of safety requirements or procedures.

8.03.7B – Traffic Control

Traffic control, flagging and signage will comply with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD).

8.03.7C – Ignition Sources

No smoking or open flame or sparking device shall be used around open manholes, handholes, or during the pulling of cable, or when any solvents or other flammable materials are present.

8.03.7D – Communication during pulling operations

Two-way radio communication shall be maintained between work crews involved in construction, particularly crews involved in feeding and pulling cables at locations that are separated, or where visual and verbal communication is hampered by obstructions, equipment, structures or other conditions.

8.03.7E – Methods of installation

The placing of underground cable shall be accomplished by a combination of wheel trenching, backhoe or boring. Local conditions will dictate the methods and materials used, as well as the utility locates and requirements of permits and easements.

Limit all trenching and boring to the amount of cable, fiber or conduit that can be placed, restored to full completion by the end of each week. No holes, demolished concrete or asphalt or any other incomplete restoration shall be left over night. Any exceptions must be pre-approved in writing by the project manager.

8.03.7F – Covering and Barricading of Trenches

Properly cover and barricade all trenches and boring pits as needed and as required by permits, local construction codes, and all governing bodies, with a minimum of cones and flags during daylight and flashers after dusk. Limit all openings in the ground to what can be closed up the same day. All safety precautions must be taken to protect personnel and the public during construction.

8.03.7G – Natural Gas Leaks

Use extreme care when trenching. If the smell of gas is detected, all equipment shall be shut off and the Gas Company shall be notified immediately. Under no circumstances will any equipment be started or moved. All work crews and the public shall be kept from the area until the gas is shut off.

8.03.7H – Digging on Private Property

Before digging on any private property, consult with the property owner regarding the presence and location of sprinkler pipes and heads. In the presence of a sprinkler system, the contractor shall hand dig around the sprinkler system before trenching or plowing begins. The contractor shall be responsible for notifying property owners of their intent to use privately maintained Right of Way areas for any purpose during the scope of the project.

8.03.7I – Operating of construction Equipment

Only qualified personnel shall operate construction equipment. The work crews shall follow the recommendations, requirements and operating procedures for all construction equipment.

8.03.8 – Pre-Survey of Specific Job Sites

Prior to the start of construction, the contractor shall visit the project area and identify and address the following issues:

- Traffic control to (ensure fire lanes remain open)
- Existence of other utilities
- Safety precautions for work crews and the public
- Easement and permit requirements and conditions
- Special rigging and equipment requirements

8.03.9 – Trenching and Boring

The contractor shall install all City furnished roll duct, PVC, couplings, and sweeps as required along the alignment indicated on the contract drawings. Installation includes excavation, backfilling, and restoration in accordance with these specifications.

8.03.9A – Trench Safety Systems

The contractor shall furnish a trench safety system at all locations where required by Washington State Law. This section applies to trench excavation, excavated in excess of four (4) foot depth.

8.03.9B – Work not specifically addressed by this specification

Any part of the work not specifically covered by these specifications shall be performed in accordance with applicable sections of the latest edition of the Standard Specifications for Road, Bridge, and Municipal Construction.

8.03.9C – Excavation

The contractor shall excavate for the conduits to the minimum depth as specified in the bid item or as required by field conditions encountered to provide clearance for various utilities as directed by the City Inspector.

The bottom of all trenches shall be smooth, uniform, free of all loose rocks, stone, other sharp objects, and foreign material. Hand dig where large rocks are encountered and as directed by the City Inspector.

8.03.9C.1 – Backfill Material

If, in the opinion of the City inspector, the material being removed from a trench is deemed not acceptable for use as backfill, the contractor shall dispose of non-suitable material to a legal dumpsite and replace with structural fill.

8.03.9C.2 – Compaction of trench backfill

Backfill shall be tamped as directed by the City inspector. Compaction shall be 95-percent of maximum density as determined by the Washington Densometer Method outlined in the Washington State Highway Department's Construction Manual or as designated by the project manager. Backfill for mechanical compaction shall be placed in successive horizontal layers of loose material not more than 8" in depth prior to compaction. The contractor shall allow the City to test the density of the backfill at any point during the operation. If the density of the compacted backfill does not meet the specified requirements, the contractor shall continue compacting until the specified density is attained.

8.03.9C.3 – Trenching across Lawns

When trenching crosses lawns, the contractor shall remove a strip of grass 12" wide. Sod shall be rolled up and stored until trenching and backfilling is complete. Sod shall be kept damp until 72 hours after it has been replaced. Dirt removed from trenches across lawns shall be stored on tarps to prevent damage to the lawn. The contractor may, at the discretion of the City inspector and with the prior approval, hydro seed grass areas disturbed by trenching.

8.03.9D – Rock saw or Wheel Trenching

Where the Rock saw or Wheel trench method is used, the contractor shall raise the saw at existing utility crossings to just cut the asphalt 2 feet before and after the marked locations. The contractor shall hand dig the area between these limits to expose the existing utility.

8.03.9E – Road Crossings

Wherever required by City inspector, hard surfaces such as streets, driveways, sidewalks, and parking lots with concrete or asphalt construction, shall be crossed using boring techniques. Contractor shall flag, or visually locate all existing utilities, which are in direct line of the bore direction regardless of depth. Open cutting of hard-surfaces is not allowed except as preapproved by the City and the permitting authority having jurisdiction.

8.03.9E.1 – Backfill for Street Crossings

Control density fill (CDF) shall be used at street crossings and other areas, if required by the City inspector.

8.03.9E.2 – Application of CDF as Backfill Material

CDF, when used, shall be discharged from the mixer by any reasonable means into the area to be filled. The CDF shall be brought up uniformly to the elevation shown on the drawings. CDF shall not be placed on frozen ground. CDF patching, mixing and placing may be started if weather conditions are favorable, when the temperature is at 34 degrees F and rising. At the time of placement, CDF must have a temperature of at least 40 degrees F. Mixing and placing shall stop when temperature is 38 degrees F or less and falling. Each filling stage shall be as continuous an operation as is practicable. Excavated section to be filled with CDF shall be contained at either end of the section by bulkhead or earth fill. The contractor shall provide steel plates for all road crossings and when deemed necessary by the City inspector.

8.03.9E.3 – Open Cutting Pavement

Open-cutting of streets or other hard surfaces (driveways, parking lots, etc.), either for the full length of the surface, a portion of the length, or for windows for guide holes, are permitted only as approved in advance by the municipal government inspector and the City. Contractor shall provide 1” plywood or better for all driveway crossings for homeowner ingress and egress.

8.03.9E.4 – Repair of Cut Pavement

Streets or hard surface cuts shall be repaired and restored as required by the municipal inspector and the permit. Resurfacing and patching of cuts shall be flush and level with the surrounding pavement, with proper compaction and backfill. Include concrete, asphalt, sealing, tack coating, and other items as required. Where special tints or additives have been added to concrete, the contractor shall restore the concrete to match the existing as closely as possible, allowing for variations in coloring due to weathering and other effects. Contractor shall provide 1” plywood or better for all driveway crossings for homeowner ingress and egress.

8.03.9F – Railroad Crossings

Bores shall also be used under rail beds and across Washington State Department of Transportation Right of Way as required, within the requirements of these entities.

8.03.9G – Removal of Waste debris from Job Site

All materials and debris that are removed shall be hauled to a legal waste site that has been secured by the Contractor and shall be disposed of in such a manner as to meet all requirements of State, County, and Municipal regulations regarding health, safety, and public welfare. Dumping of excavated material along the City's waterfront is expressly prohibited. The cost of all debris and material removal shall be incidental to the contract.

8.03.9H – ASPHALT PLACEMENT

Asphaltic concrete shall be mixed and delivered at temperatures specified in Section 5-04.3 of the WSDOT Standard Specifications. Mix, handle, batch, haul, roll, and compact asphalt concrete in accordance with the applicable portions of Section 5-04.3 of the WSDOT Standard Specifications except that the maximum thickness for a single course shall be 2-1/2 inches.

8.03.9H.1 – Application of Asphaltic Emulsion

Apply asphaltic emulsion tack coat in accordance with Section 5-04.3 of the WSDOT Standard Specifications. Unless otherwise directed, apply at a rate of 0.12 - 0.15 gallons per square yard of dilution at all junctions of new pavement with existing pavement and at all junctions of new pavement with existing concrete structures.

8.03.9H.2 – Edge Sealing

For sealing the edges after placing the asphaltic concrete patch, use AR4000, and then sand immediately with City approved washed sand to prevent tracking. THIS REQUIREMENT WILL BE STRICTLY ENFORCED.

8.03.9H.3 – Asphalt Compaction

All asphalt shall attain a minimum of 92% compaction as determined by WSDOT Test Method 705. THIS REQUIREMENT WILL BE STRICTLY ENFORCED.

8.03.10 – Roll Duct and/or PVC Placement

The contractor shall excavate for the conduits to the minimum depth as specified in the bid item or as required by field conditions encountered to provide clearance for various utilities as directed by the City Inspector.

8.03.10A – Placement of Conduit

Conduit shall be placed in the center of the trench, lying flat to the bottom of the trench. Conduits running parallel in the trench shall not cross. The bottom of the trenches shall be graded smooth. Where rock, soft spots, and/or sharp-edged materials are encountered, the bottom shall be excavated for an additional 3", filled and tamped level with the original bottom with sand or earth free from particles that would be retained on a ¼-inch sieve.

8.03.10B – Pulling Line

Contractor is required to install a locatable pull rope in all ducts not receiving cable.

8.03.10C – Conduit under Roadways

Unless otherwise stated, conduit shall be placed with CDF encasement at all locations within existing paved roadways.

8.03.10D – Protection of conduit

During construction, partially completed duct lines shall be protected from the entrance of debris such as mud, sand and dirt, by means of suitable conduit plugs.

8.03.10D.1 – Duct Plugs

Provide duct plugs on all duct and inner-duct, whether empty or occupied, to prevent the entry of water, gas, dirt or rodents. Duct plugs sized for the duct or inner-duct shall be used. Where no cable is installed, a blind plug with a tie off for a pull rope shall be installed. Where one or more cables are installed, the contractor shall provide and install a duct plug that provides support and protection for the duct and cables installed.

8.03.11 – Underground Cable Placement

This section covers the general installation of both coaxial and fiber optic cable.

8.03.11A – Handling of Cable

Cable shall be handled with the proper care and in accordance with the recommendations of the manufacturer. No cable shall be bent into a smaller radius than allowed by the manufacturer, nor shall pulling tensions exceed those allowed by the manufacturer, nor shall any installation tool or method be used which is not in accordance with the manufacturer's requirements. Specific care shall be given to pulling fiber optic cable to avoid exceeding the allowed bending radius and the installation and in-place tensions.

8.03.11B – Cable Pulling

Cables shall be pulled down with the feed-in point at the highest elevation. Use flexible cable feeds to convey cables through the opening and into the duct runs. Cable slack shall be accumulated at each junction box where space permits by training the cable around the interior to form one complete loop. Minimum allowable bending radii or greater shall be maintained in forming such loops.

8.03.11B.1 – Use of Cable Lubricant

Lubricant shall be used when pulling cable into conduit. Lubricants shall be those specifically recommended by the cable manufacturer. Lubricant shall not be deleterious to the cable sheath, jacket, or outer coverings, nor will it adversely affect inner-duct or conduit. Under no circumstances will soap be used for pulling lubrication. All lubricants must be City approved as specified in Section 8.02.4B (Contractor supplied materials).

8.03.11B.2 – Pulling Multiple Cables

Install cables simultaneously where more than one cable is being installed in same duct or innerduct. Use pulling lubricant where necessary to install inner-duct. Use a pulling means, including fish tape, rope, and basket weave grips, which will not damage the cables, duct or inner-duct. Breakaway swivels shall be used to prevent damage to the cable due to snags or over tensioning.

8.03.11B.3 – Maximum Cable Pulling Tensions

Maximum cable pulling tensions shall be calculated per manufacturer's recommendations. Fiber, elastic rope, steel or wire rope may be used for cable pulling. A dynamometer graduated to indicate the tension on the cable being pulled can be used, or the contractor shall adapt a rope harness properly sized to limit pull tension to the value indicated. Any combination of a group of cables to be pulled into a duct shall not exceed the sum of individual tension of each cable plus 15%.

8.03.11C – Coaxial Cable Installation at Pedestals and Vaults

Where coaxial cable is brought up for splicing in locations where pedestals are to be set, slack cable shall be extended to a height above grade equal to the top of the pedestal to be installed and tied off to a stake. At hand-holes and vaults, at least 36" of all coaxial cables shall be coiled in the vault for splicing. At hand-holes, at least 96" of all cables shall be left coiled in the handhole, racked in the saddles provided. No extra payment shall be made for slack cable pulled and stored in this fashion.

8.03.12 – Fiber Optic Cable Installation Criteria

Install fiber optic cables and associated equipment and devices in accordance with industry standards and manufacturer's written instructions. Cables shall be installed in conduit or innerduct as noted in the drawings.

8.03.12A – Installation of Fiber Optic Cable

Install fiber optic cable without damage to fibers, cladding, or jacket. Ensure that manufacturer's recommended pulling tensions are not exceeded. The cable tension shall be monitored at all times with a dynamometer and recorder, and the records of all pulls shall be submitted to City for approval. Cable subjected to tensions and/or stresses greater than those allowed by the manufacturer shall be removed and replaced at no cost to the City, including the replacement cost of any and all cables supplied by the City to the contractor.

8.03.12B – Pulling Multiple Cables

Install fiber optic cables simultaneously where more than one (1) cable is being installed in same duct or inner-duct. Use pulling lubricant where necessary; lubricant compound used must not deteriorate cable materials and shall be approved for use by the cable manufacturer. Under no circumstances will soap be used for pulling lubrication. Use a pulling means, including fish tape, rope, and basket weave grips, which will not damage the fiber media, duct or inner-duct. All lubricants must be City approved as specified in Section 8.02.4B (Contractor supplied materials).

8.03.12C – Minimum Bending Radius

Use wheels, pulling sheaves and cable guides to maintain fiber optic cable bending radius. Do not at any time bend cables to smaller radii than minimums recommended by manufacturer. For long underground pulls, the contractor shall use center-pulling techniques, including laying the cable in a figure eight to avoid kinking or tangling.

8.03.12D – Cable Splices

No splices are allowed, except at indicated splice points. All splicing shall be fusion, using the fusion splicing equipment approved by the City, and using the splice kits and housings provided by the City.

8.03.12E – Cable Storage

Where slack or excess cable or inner-duct is exposed, such as in hand-holes, the cable or innerduct shall be neatly bundled and racked.

8.03.12F – Identification OF Fiber Optic Cable

At all locations where the fiber optic cable or its enclosing inner-duct is exposed, it shall be identified with a warning sign attached to the cable or inner-duct with cable ties.

8.03.12G – Length of Cable for Splicing

In locations with fiber optic cable, 50 to 150 feet (or as directed by the engineer) of slack shall be left on each cable end for splicing, except at optical nodes, where a minimum of 100 feet of slack fiber shall be racked and mounted in the pedestal. The contractor in the locations noted shall install additional slack. No extra payment shall be made for slack cable pulled and stored in this fashion.

8.03.13 – Pedestals, Vaults and Handholes

Pedestals shall be placed at the time the conduit is installed. The cable ends should extend to the top of the pedestal with the input and output marked. If the pedestal cannot be placed at the same time, the cable ends should extend 4 feet above finished grade and be attached to a stake.

If in an area of tall grass and brush, place a taller stake that can be seen over any undergrowth. Paint the top of the stake orange.

8.03.13A – Installation of Amplifiers, Line extenders directional couplers, splitters, taps and splices

All amplifiers, line extenders, directional couplers, splitters, taps and splices shall be installed in above ground pedestals unless specifically required by local code. Vaults and hand-holes shall be installed only in the locations shown on the construction plans and as approved by the City. Minimum cable storage at all amp locations will be 8'.

All equipment should be attached to the mounting brackets in the pedestal or enclosure or to a non-corrosive metal stake or rod.

8.03.13B – Setting of Enclosures and Pedestals

Enclosures shall be installed level and at the proper depth in the ground at final grade that they are designed to. Pedestals should be set back in the easement from the curb. Normal placement for enclosures is at the property line. If a driveway extends close to the property line, the pedestal should be set several feet away from the driveway. In a joint trench a bypass trench should be dug around power transformer locations.

8.03.13C – Setting of Handholes

Hand-holes shall be installed in accordance with manufacturer's recommendations and as indicated on the drawings. Raceways entering hand-holes shall be terminated flush at the wall, with end bells. Provide leveling rings and concrete collars to match slope of hand-hole top with slope of adjacent grade as needed. For slope above 15-percent from grade; provide 8-inch-thick retaining wall, anchored to hand-hole.

8.03.14 – Risers

8.03.14A – Riser Sweeps

Risers shall have a minimum 24" PVC or metal sweep (except for 6" conduit, which will have a 48" sweep) from the trench level to the pole or building, connected to the PVC duct using a GRS to PVC adapter. The sweep shall be terminated above grade and sealed to prevent water, dirt, or rodents from plugging the conduit until such time as the riser is installed.

8.03.14B – Risers in heavy traffic locations

Risers in heavy traffic locations or areas subject to possible impact from trucks or other vehicles shall have added protection. A steel bumper or steel bumper with concrete pillar shall be used, as approved by the City.

8.03.15 – Grounding and Bonds

8.03.15A – Frequency of Grounding

Coaxial cable shall be grounded at every amplifier, line end, and power transformer locations. Distribution lines shall be grounded at least every 1000 feet plus at each amplifier and at the last tap in each run. Every power supply shall be grounded.

8.03.15A.1 – Grounding Installation

Grounding shall be accomplished by bonding to an existing power or telephone ground with #6 copper wire, or placing a new eight-foot, 3/4" diameter, copper-clad steel ground rod in undisturbed soil at the pole base or adjacent to the pedestal, connected with #6 copper wire between the rod and the equipment or items(s) requiring bonding at every device except as approved by inspector.

8.03.15B – Bonding application

All equipment, whether passive or active, shall be bonded to prevent injury or death to workers and the public, as well as damage to equipment and systems.

8.03.15B.1 – Power Supplies

All power supplies should be bonded to the power company ground.

8.03.15B.2 – Metal Enclosures

All metal enclosures must be bonded to the equipment they enclose. This can be accomplished by attaching the bare metal surface of the line equipment to the bare metal surface of the enclosure-mounting bracket. Attaching a #6 copper wire from the line equipment or cable to the enclosure bonding/grounding lug.

8.03.15B.3 – HFC Equipment and Enclosures

All HFC equipment and enclosures with exposed metallic parts must be bonded to power and telephone equipment and enclosures that are within 8 feet of each other.

8.04 – Equipment Installation

8.04.1 – Fiber Optic Cable Installation

8.04.1A – Fiber Splicing

Where fiber optic cables are to be spliced together, the contractor shall use a fusion splicer. Fusion splices shall be in accordance with all recommendations and requirements of the cable manufacturer and shall have a loss of no greater than 0.1 dB per splice. All splices shall be contained in and/or supported by a splice rack or break out kit, provided by the City for this purpose.

8.04.1B – Coaxial Splicing and Equipment Installation

The contractor shall perform the construction of aerial and underground coaxial facilities, including the installation of strand, hardware, framing, bonding, grounding, cabling (both fiber optic cable and coaxial cable), lashing, splicing and level balancing to within +/- 2 dB. This shall include the installation of amplifiers and optical nodes, couplers, splitters, power inserters, taps and power supplies and all other passive and active equipment required for a complete and operable two-way HFC system and as shown on the plans.

8.04.1B.1 – Evidence of Performance

Contractors are required to show evidence of passing ingress and signal leakage testing on all submitted systems. All pads and equalizers both forward and reverse must be installed as posted on the plans as specified in Item 9 of the Special Provisions.

8.04.1B.2 – Close Coupling

Close coupling of equipment will not be allowed, except in underground applications and where necessary as dictated by design.

8.04.1B.3 – Supply of Fittings

The City shall supply fittings for coaxial components, including housing-to-housing, terminators, and fittings for cable entry into equipment to the contractor.

8.04.1B.4 – Installation of Connectors, fittings and terminators

Connectors, fittings and terminators shall be installed in accordance with the manufacturer's requirements and recommendations, using the appropriate fittings for the cable and equipment installed.

8.04.1B.5 – Application of Heat Shrink

Connectors and fittings shall be covered with heat shrink after splicing is complete. Heat shrink shall be installed in accordance with the manufacturer's requirements.

8.04.1B.6 – Jacket Stripping

Care shall be exercised when splicing to avoid damage to the aluminum sheath of the cable. No nicks, dents or cuts are allowed. A Cablematic JST 715QR jacket-strip tool must be used to remove the outer jacket of all cables. Knives and straight blades are not allowed. A manufacturer-approved Cablematic CST 715QR combination cable prep tool must be used to remove the sheath and dielectric.

8.04.1B.7 – Cleaning of Conductors

Center conductors of cables must be cleaned with a Lemco Y-190 cleaning tool or approved equal. Knives and torches shall not be used to clean the center conductor under any circumstances.

8.04.1C – Aerial Installation

Pole-mounted equipment shall be attached to the strand wire with the hardware provided by the manufacturer and in accordance with the manufacturer's requirements.

8.04.1C.1 – Installation on Poles

Aerial equipment shall be installed on the input side of the pole, within 18 inches of the pole, allowing for the presence of expansion loops. The input side of the pole is the side closest to the source of the forward path (i.e., 54 to 750 MHz bandwidth). Amplifiers, couplers and splitters shall be installed to allow the output cables to be routed along strand routing with a minimum number of bends, and avoiding doubling back wherever possible.

8.04.1C.2 – Tap Brackets

Tap brackets shall be used to support all equipment and place them in proper alignment with the expansion loops or the ports of other equipment to which they connect.

8.04.1C.3 – Taps for services

Taps for feeding customers shall be installed on the input side of the pole, and shall be placed closest to the pole when installed with other equipment to allow ease of access for installers. Taps shall always be installed with stand-off brackets.

8.04.1D – Underground Installation

Equipment shall be supported by the pedestal and stake with bolts as provided for this purpose by the manufacturer.

8.04.1D.1 – Grounding of Equipment

All pedestals containing active components (mini-bridgers, line extenders and optical nodes) shall have grounding systems installed at the pedestal with complete bonding of the pedestal to the ground rod prior to installation of the active equipment.

8.04.1D.2 – Stripping of Cables

Remove armor wrap (if present) and flooding compounds with the tools and materials approved by the cable manufacturer. No flammable compounds shall be used to clean the cable.

8.04.1E – Power Supply Installation

Power supply installation, whether underground or overhead, shall conform to local electric codes and requirements. Pole-mounted installations shall meet with the approval of the local power utility.

8.04.1E.1 – Location of Power Supplies

Power supplies shall only be mounted on poles identified and approved by the project manager.

8.04.1E.2 – Pole-Mounted of Power Supplies

Power supplies shall be mounted on the opposite side of traffic of pole, 10 feet above grade or higher, but shall not interfere with climbing space, or other utilities.

8.04.1E.2A – Electrical Service Connection – Pole-Mounted Installations

Power supplies shall be connected to the power secondary with a conduit riser with weather head, a magnetic disconnect with over current protection sized according to the NEC. The disconnect shall be connected to the power supply with liquid-tight flexible metal conduit and shall be mounted on or below the power supply. Power conductors from the secondary to the power supply shall be #6 AWG minimum, sized per the NEC.

8.04.1E.2B – Grounding and Bonding

All power supplies shall be bonded and grounded as stated elsewhere in this document, including the installation of a ground rod as required.

8.04.1E.3 – Pad-Mounted Power Supplies

Where ground mounted power supplies are to be installed, ground rods and grounding wires shall be installed in undisturbed soil prior to installation of the power supply.

8.04.1E.3A – Pedestal

Install the underground supply in the pedestal, supporting it properly, and install the disconnect and over current protection as described generally above.

8.04.1E.3B – Grounding and Bonding

The pedestal location for the power supply shall be bonded to the grounding system prior to installation of the supply.

8.04.1E.4 – Installation of Batteries

For all standby power supplies, install the batteries prior to activation.

8.04.1E.5 – Electrical Conductor

All cable between the power supply and the power inserter or amplifier shall be .715" CommScope QR Cable provided by the City.

8.04.2 – Fiber optic System Testing and reporting

8.04.2A – Fiber Test Plan

Prior to installation, submit a test plan to the resident project manager for approval. At minimum, the test plan shall include the requirements defined below. Test plans shall include sample forms for documenting cable losses, splice losses and connector losses.

8.04.2B – Fiber Testing

Prior to usage, test all equipment and components in accordance with manufacturers published test procedures. In addition, test the cable installation with an optical time domain reflectometer (OTDR) with strip chart and magnetic media recording capability and anomaly resolution to within one foot in runs up to 1,000 feet in length.

8.04.2C – Frequency of Testing

Cable tests using an OTDR shall be performed during the following phases of construction:

- Cable on reel.
- Cable segments after installation.
- Cable system after any splices.
- Cable system after termination with connectors.
- End to end testing of entire completed system.

8.04.2D – Fiber Component Testing & reporting

Test all cable segments for faulty connectors, splices, and termination's and for the integrity of the cable and its component parts. Replace malfunctioning or damaged items with new materials, then retest until satisfactory performance is achieved. Provide complete detailed reports of the results of all cable segment and system tests.

Test all splices and connectors and document losses in each, demonstrating compliance with stated requirements. (See Attached "Proofing Fiber Cables.")

8.04.2E – Components failing test

Any sections of cable, splices and connectors that fail to meet specified requirements shall be removed and replaced by the contractor at no cost to the City.

8.04.3 – Coaxial Testing and Reporting

8.04.3A – Cable inspection

All cable shall be physically inspected upon receiving reels. Items to look for include damage to the reel, scrapes in the outer jacket, flattened or misshapen cable, and indentations in the cable. If any of the preceding is evident, inspect the reel to see the extent of damage and notify vendor or refuse delivery.

8.04.3B – Component Testing & reporting

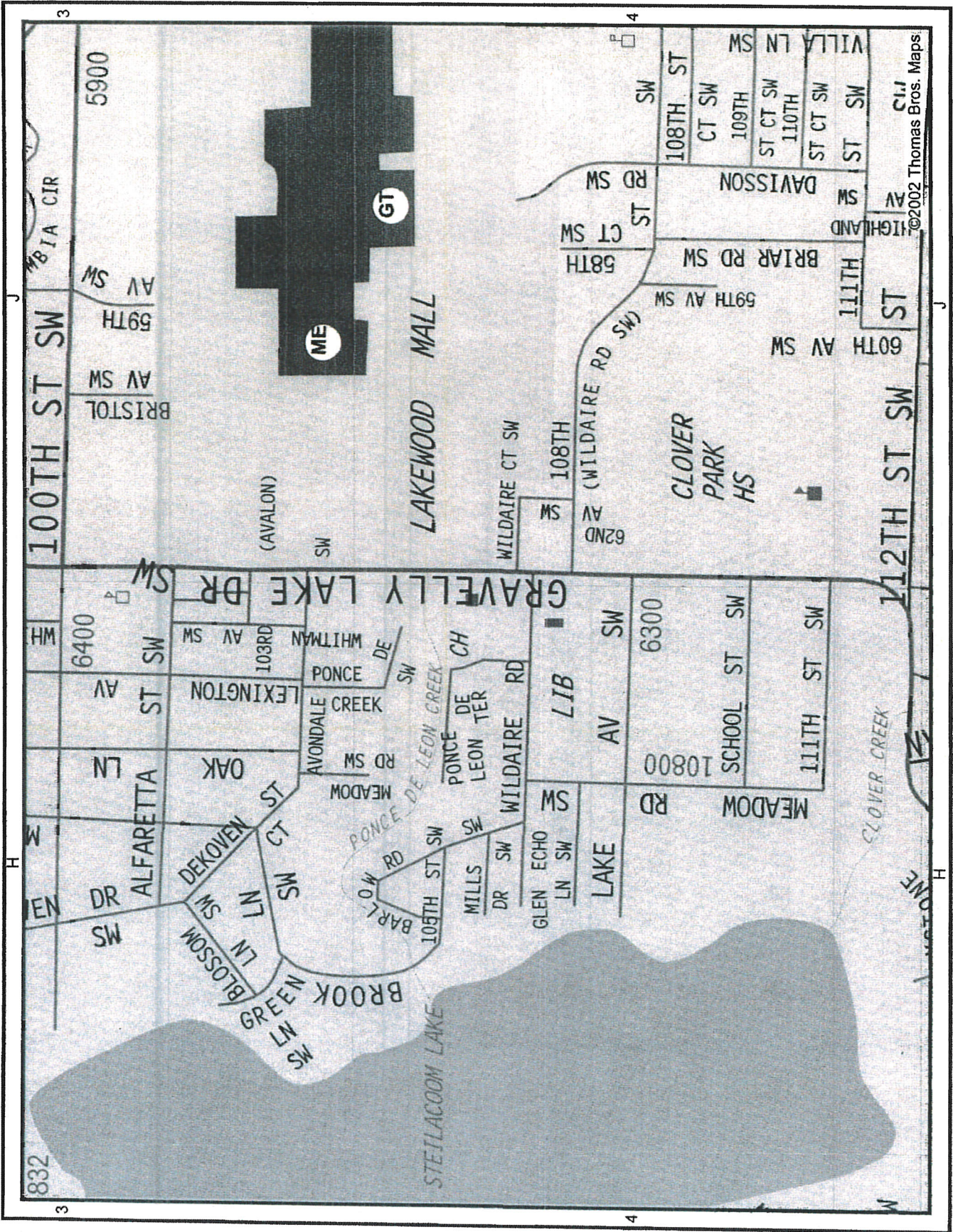
Contractors are required to submit systems that pass all signal leakage and ingress testing as well as levels within +/- 2 dB across the band for both forward and reverse systems. All pads and equalizers for forward and reverse must be installed in amplifiers and operating levels set per operational specifications and verified at ALL end of line locations. City technical staff will sweep and certify both forward and reverse systems, which will authorize systems for payment to contractors.



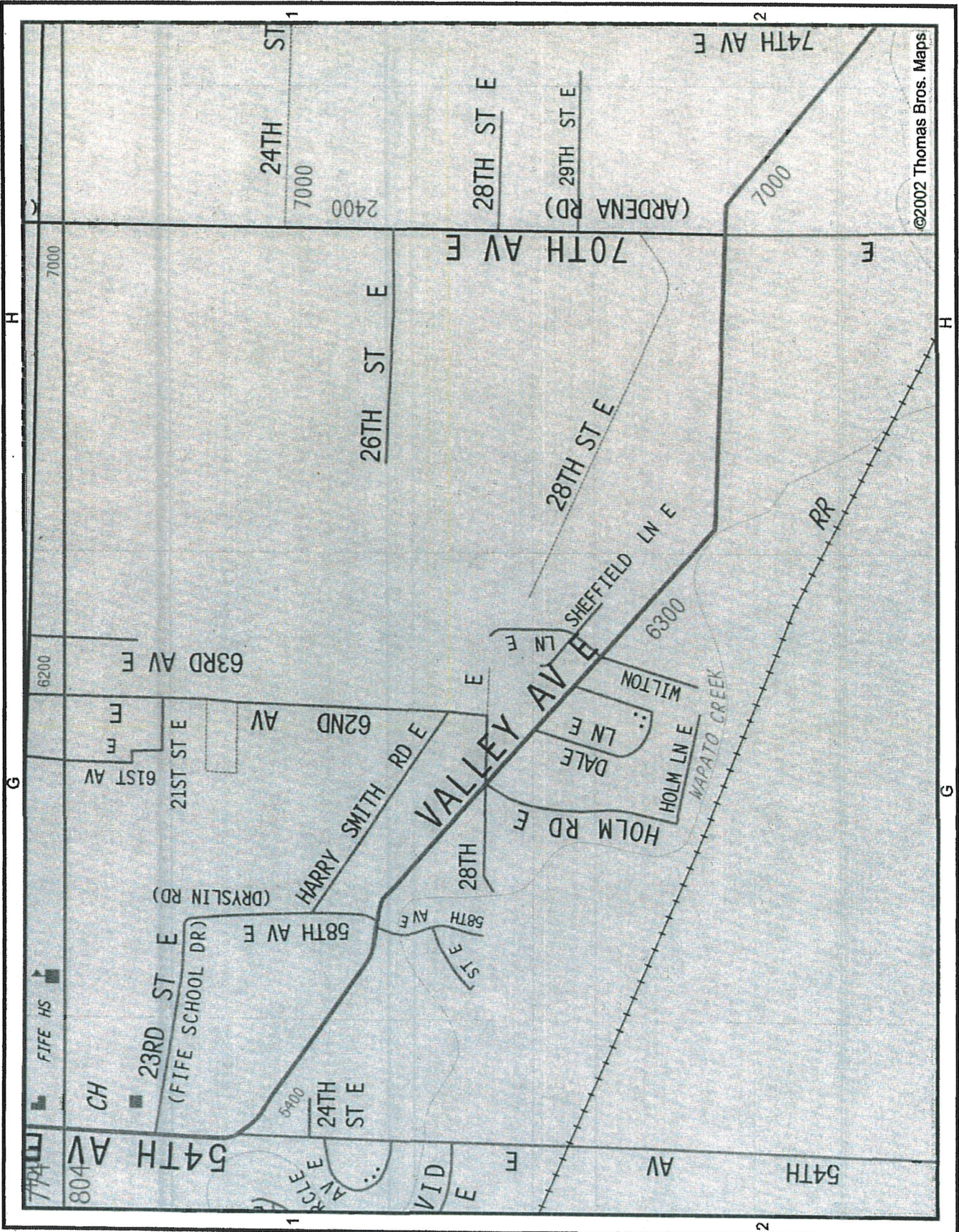
8.04.3C – Components failing test

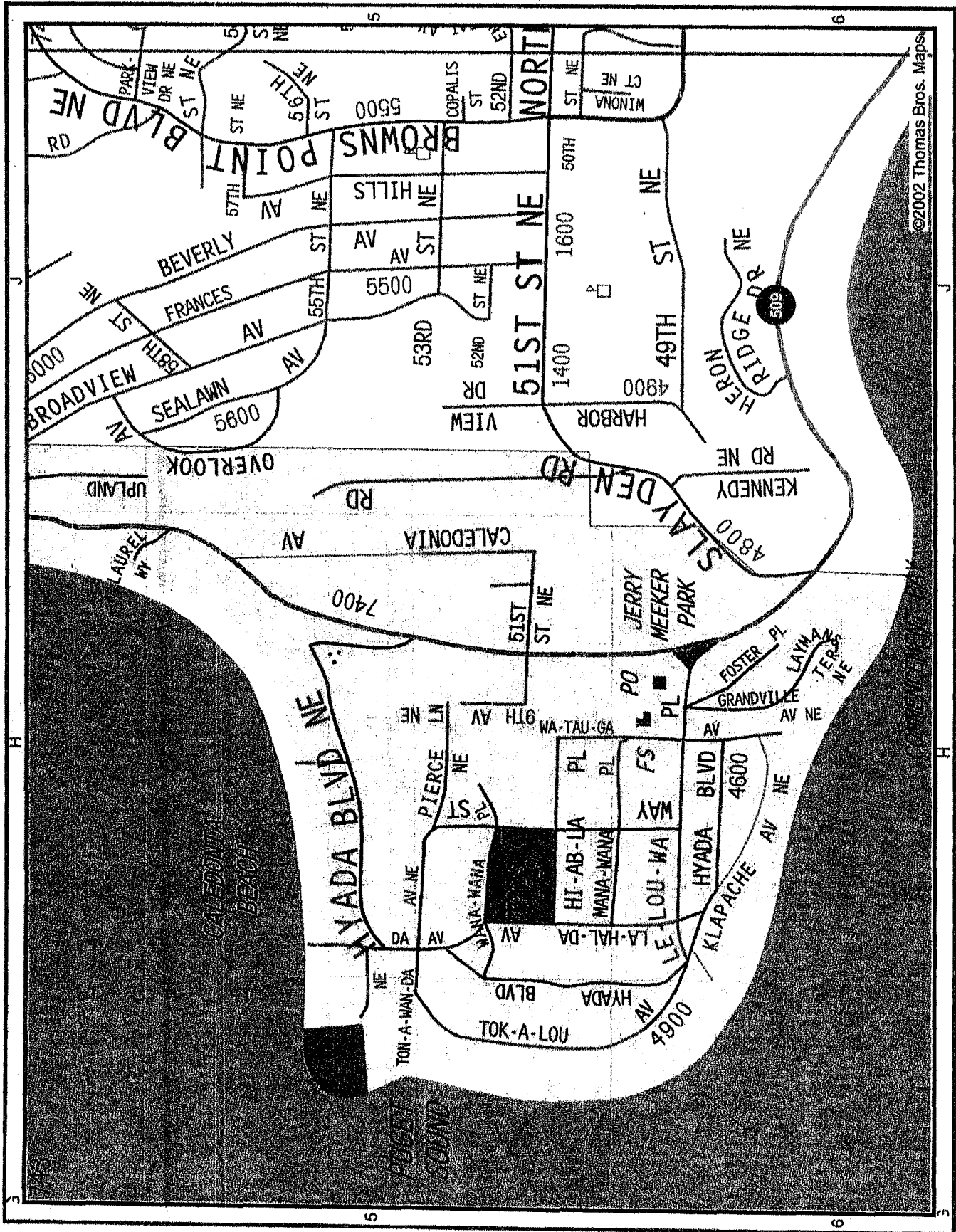
All cable and equipment will be proofed after installation to identify any damages or improper splicing that might have occurred during installation. Poor signal levels, signal leakage and ingress interference, or sudden “roll-off” of frequency or inconsistent sweep trace quality across a span will result in non-acceptance and require repair and or replacement by the contractor. (See attached Sample Documentation Information).

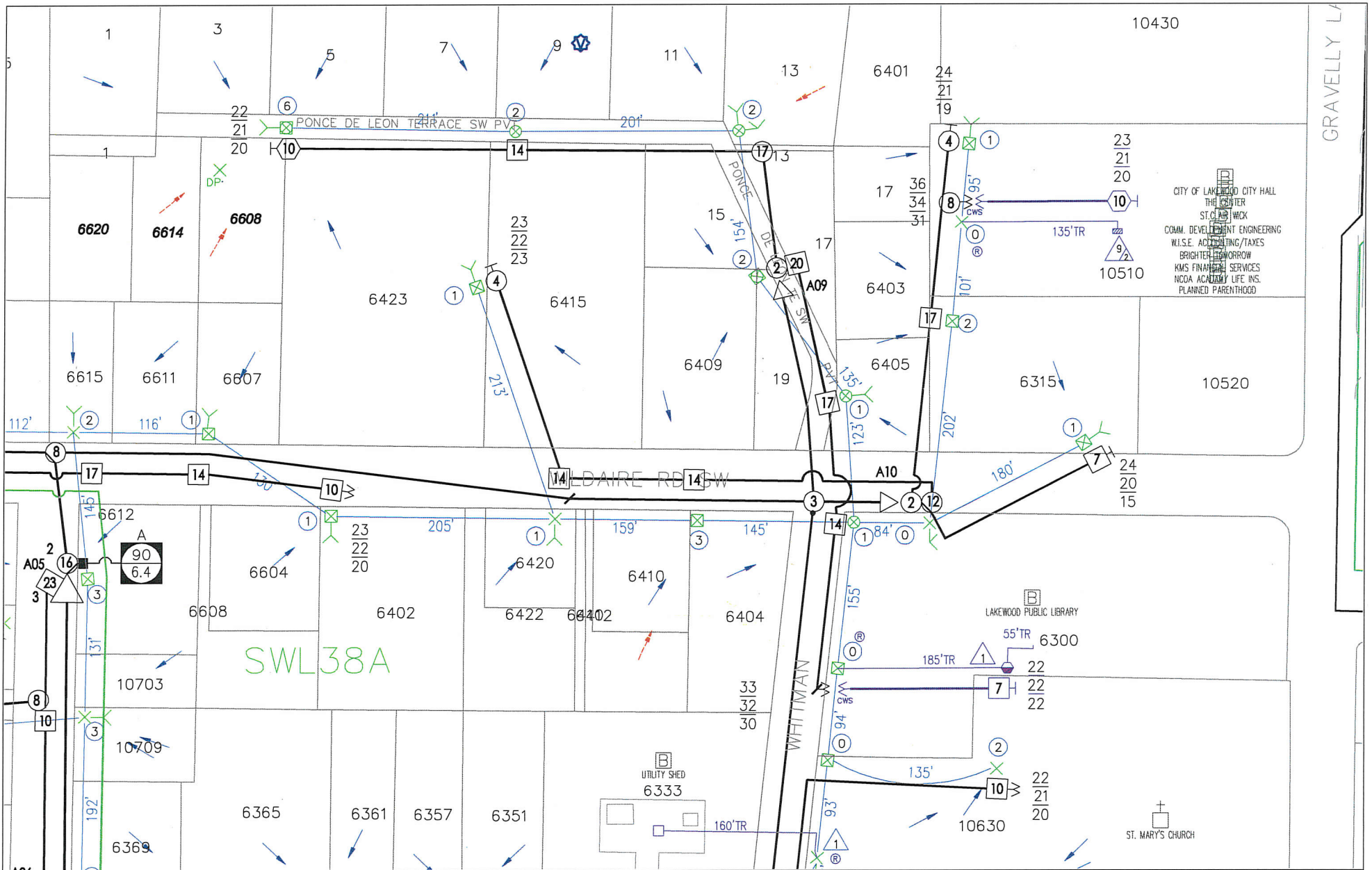
END OF SECTION



©2002 Thomas Bros. Maps



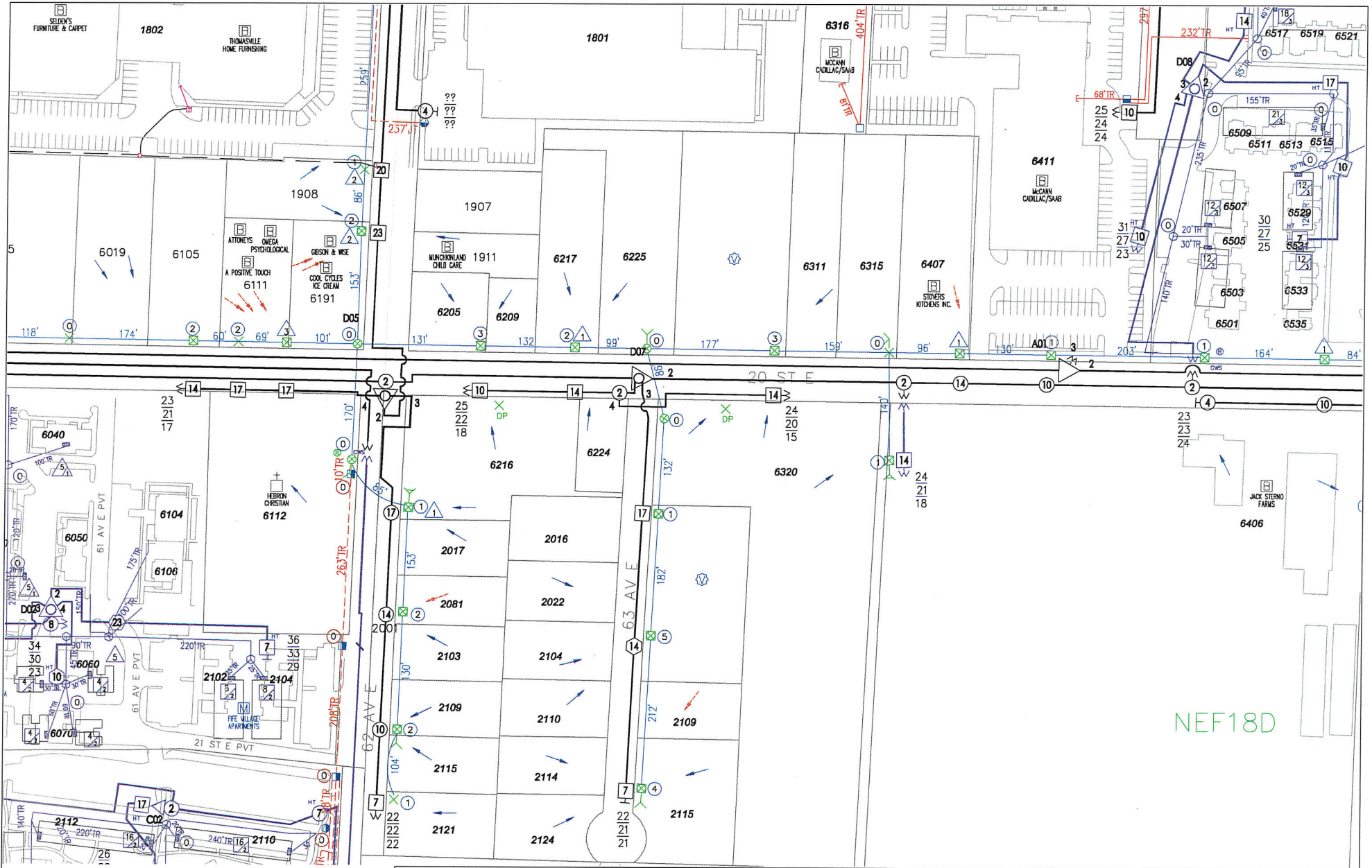




SWL38A

SWL38

| | | | | | |
|---------------------------------------|----------|-------|-----|------|-----------------|
| CLICK! NETWORK Tacoma Power | DATE | DRAWN | MAP | NODE | POWER REF DWG # |
| | 06/04/09 | CJM | | | Drawing No. 6 |

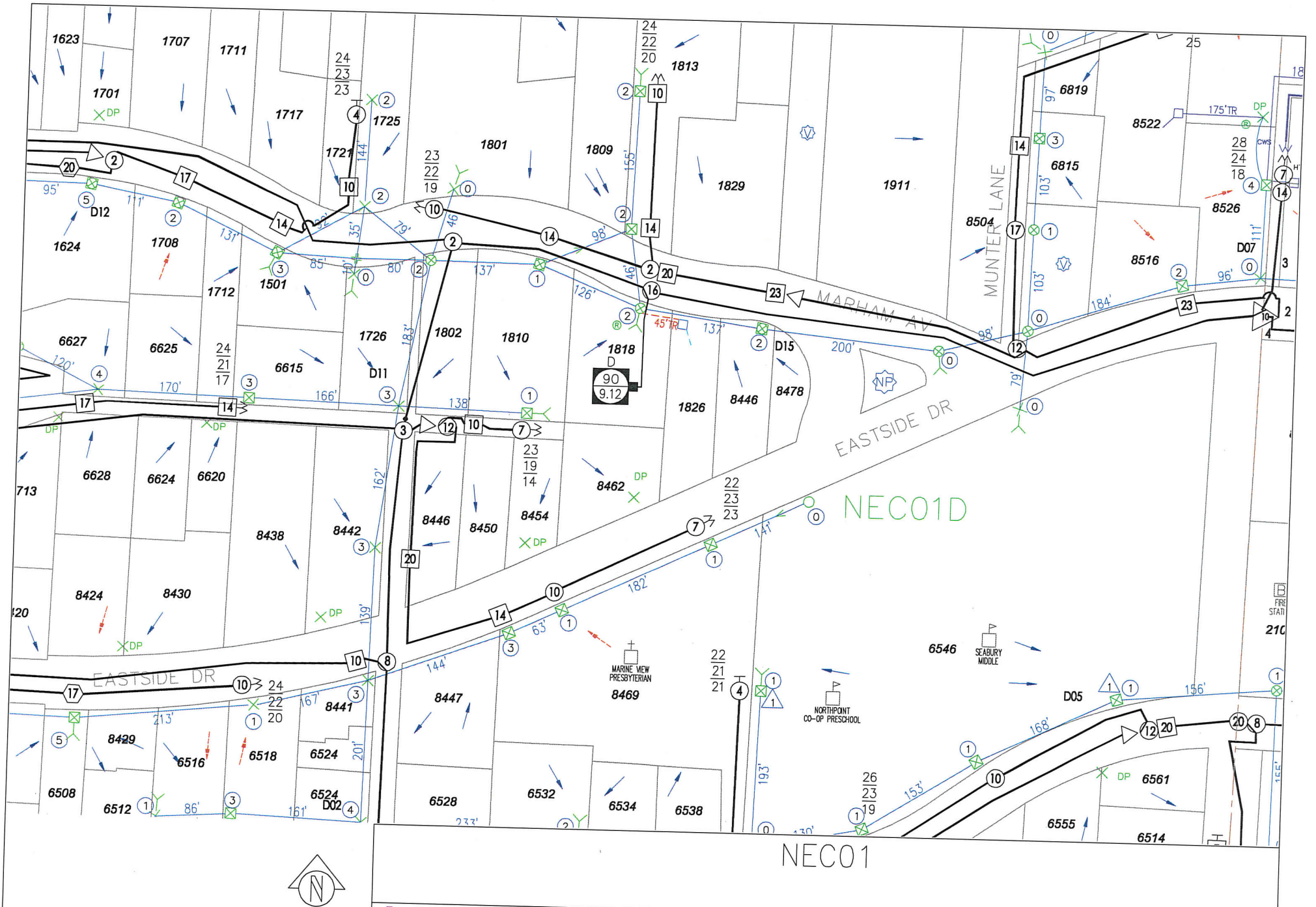


NEF18D

NEF18



| | | | | | |
|---|----------|-------|-----|------|-----------------|
| CLICK! NETWORK Tacoma Power | DATE | DRAWN | MAP | NODE | POWER REF DWG # |
| | 06/04/09 | CJM | | | Drawing No. 7 |



CLICK! NETWORK
Tacoma Power

DATE
 06/04/09

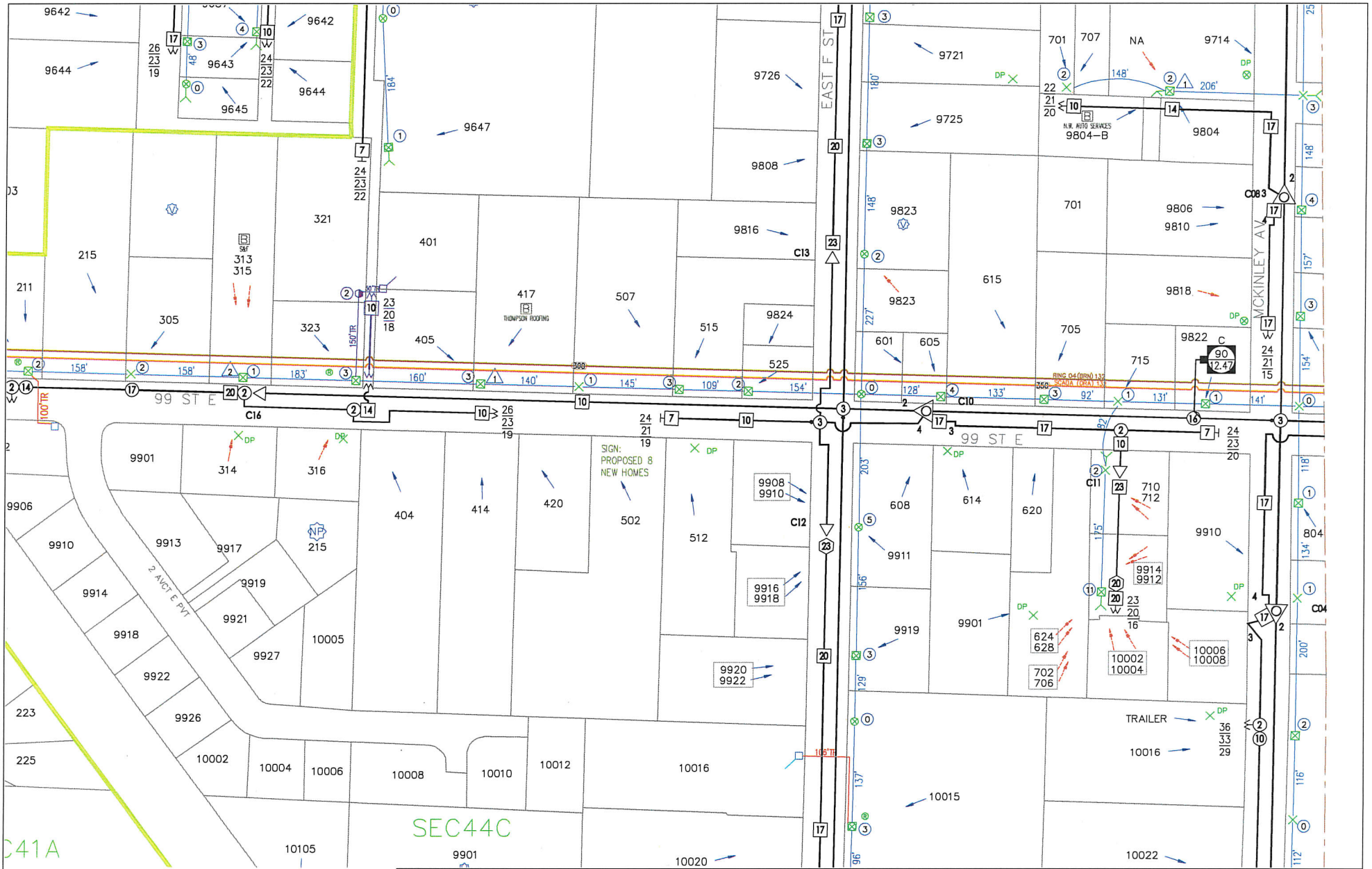
DRAWN
 CJM

MAP

NODE

POWER REF DWG #

Drawing No. 8



CLICK! NETWORK
Tacoma Power

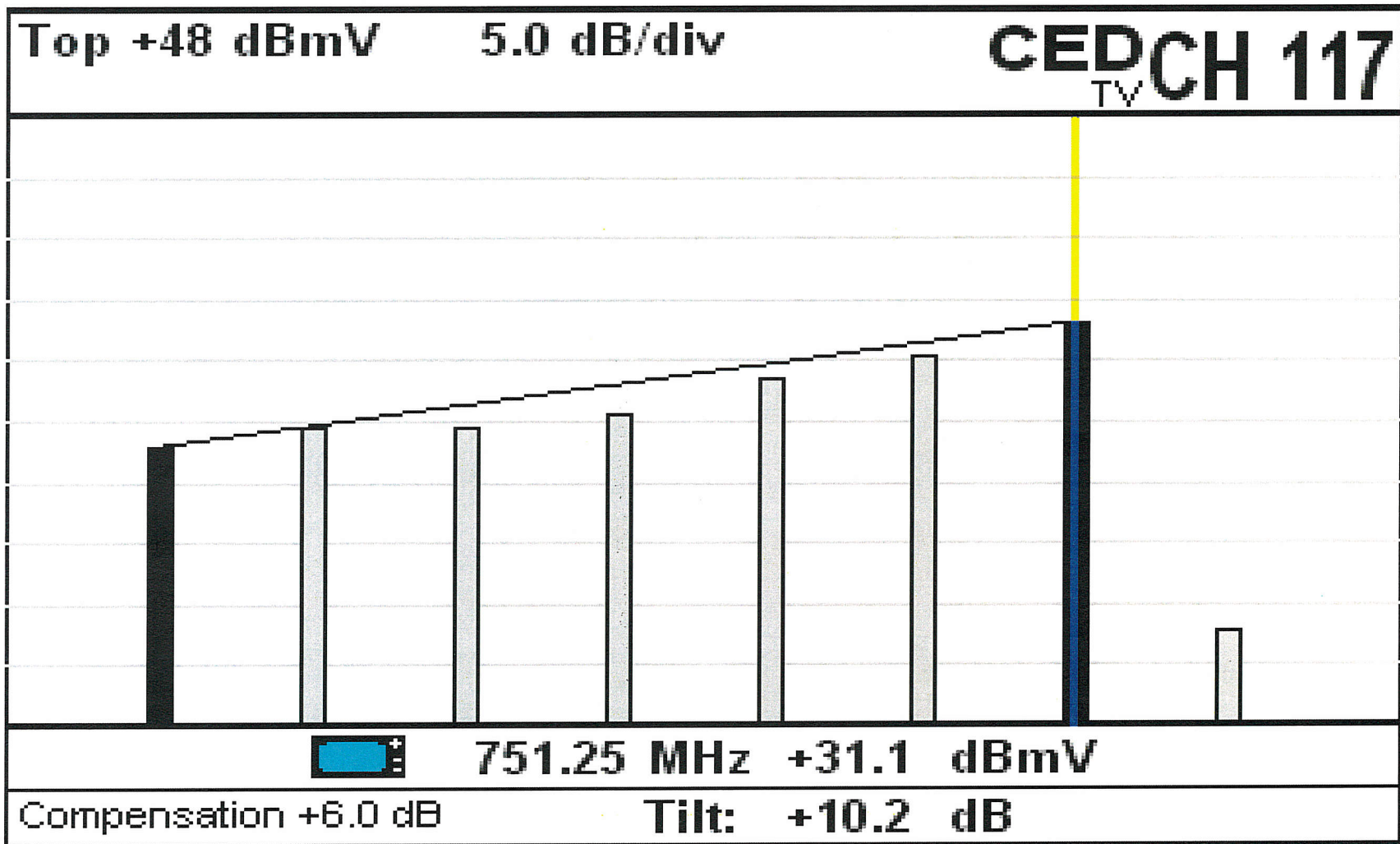
DATE
 06/04/09

DRAWN
 CJM

MAP
 319041

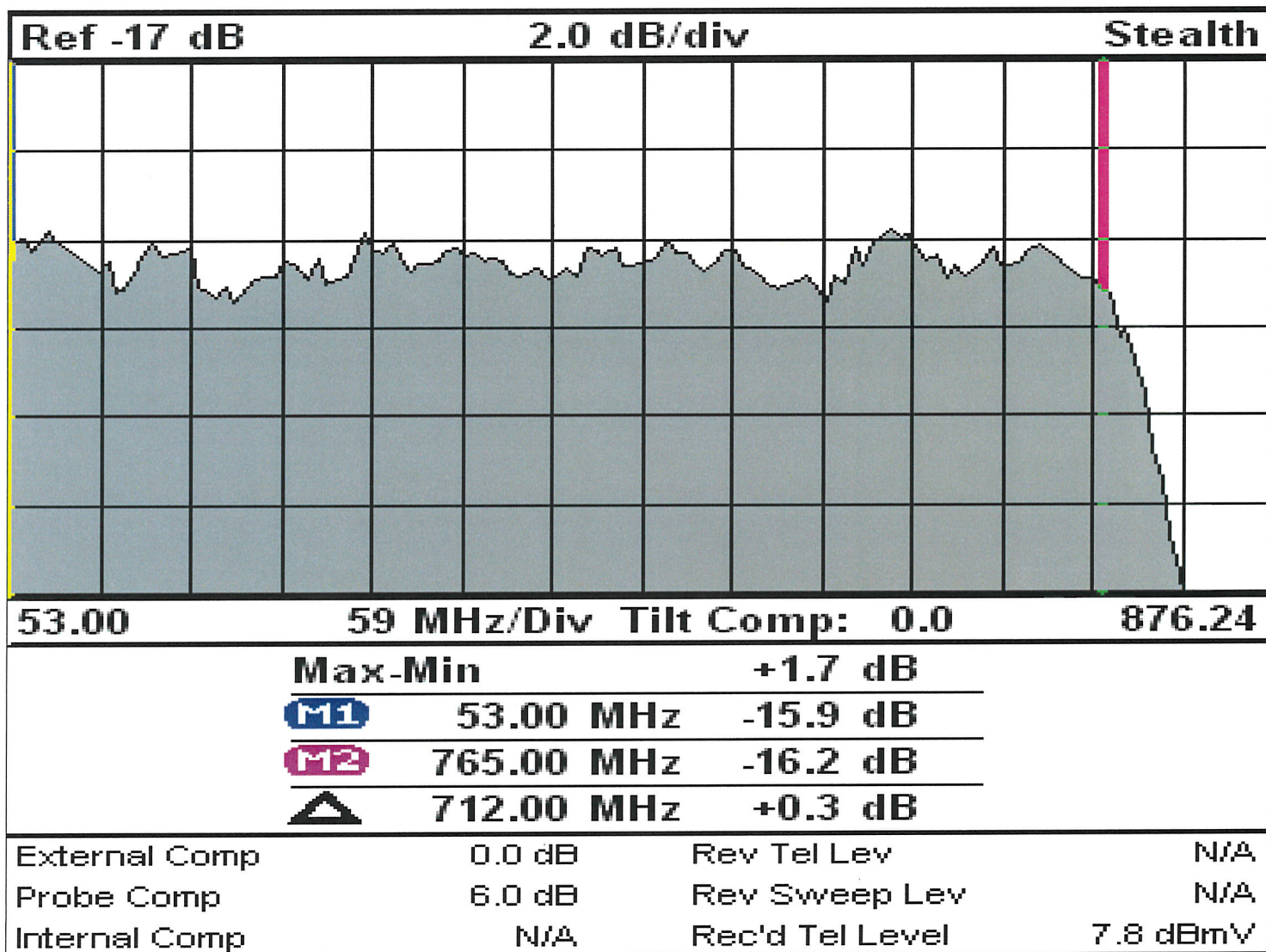
NODE

POWER REF DWG #
 Drawing No. 9



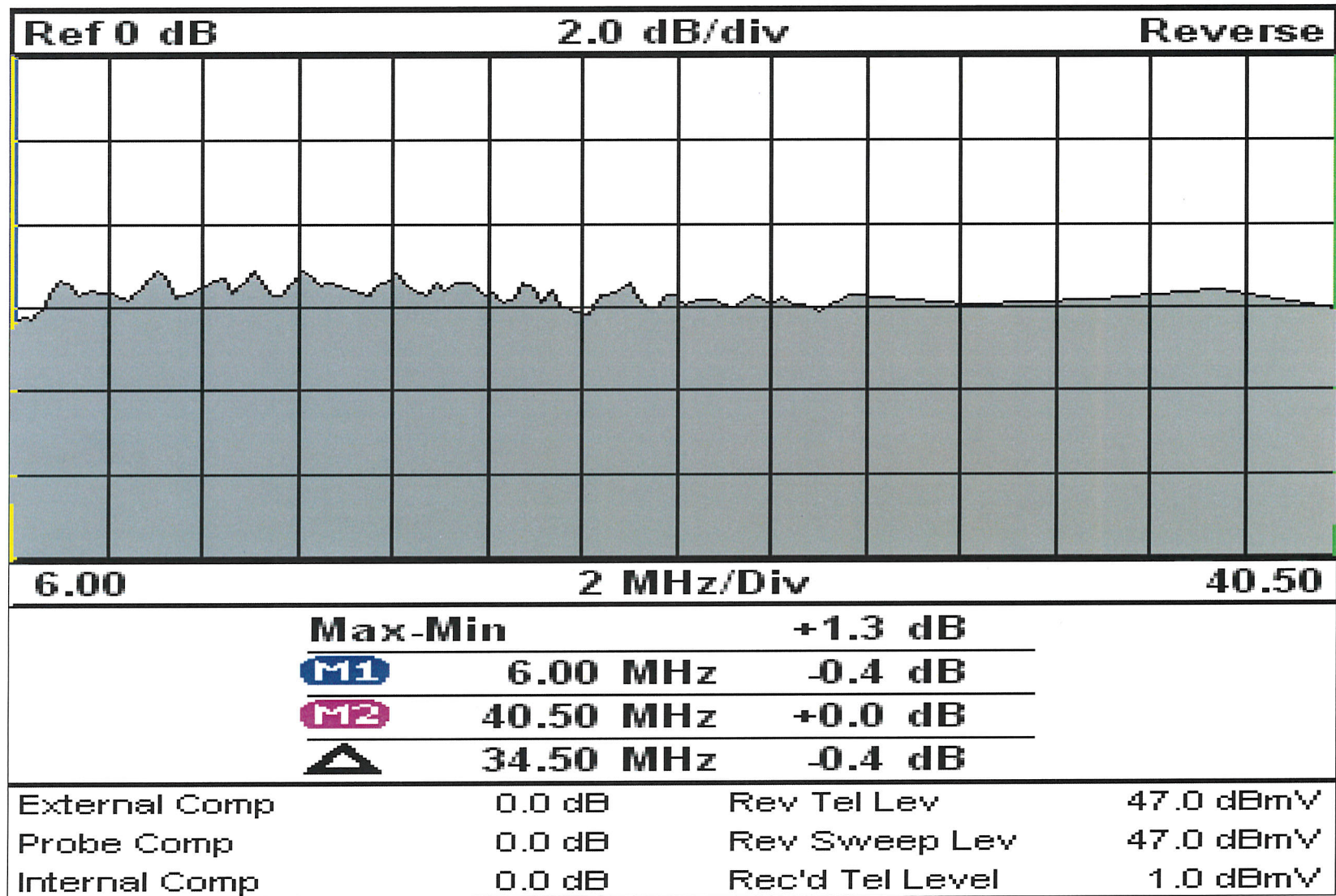
Example of Tilt screen of line end at 750 MHz

DRAWING NO. 10



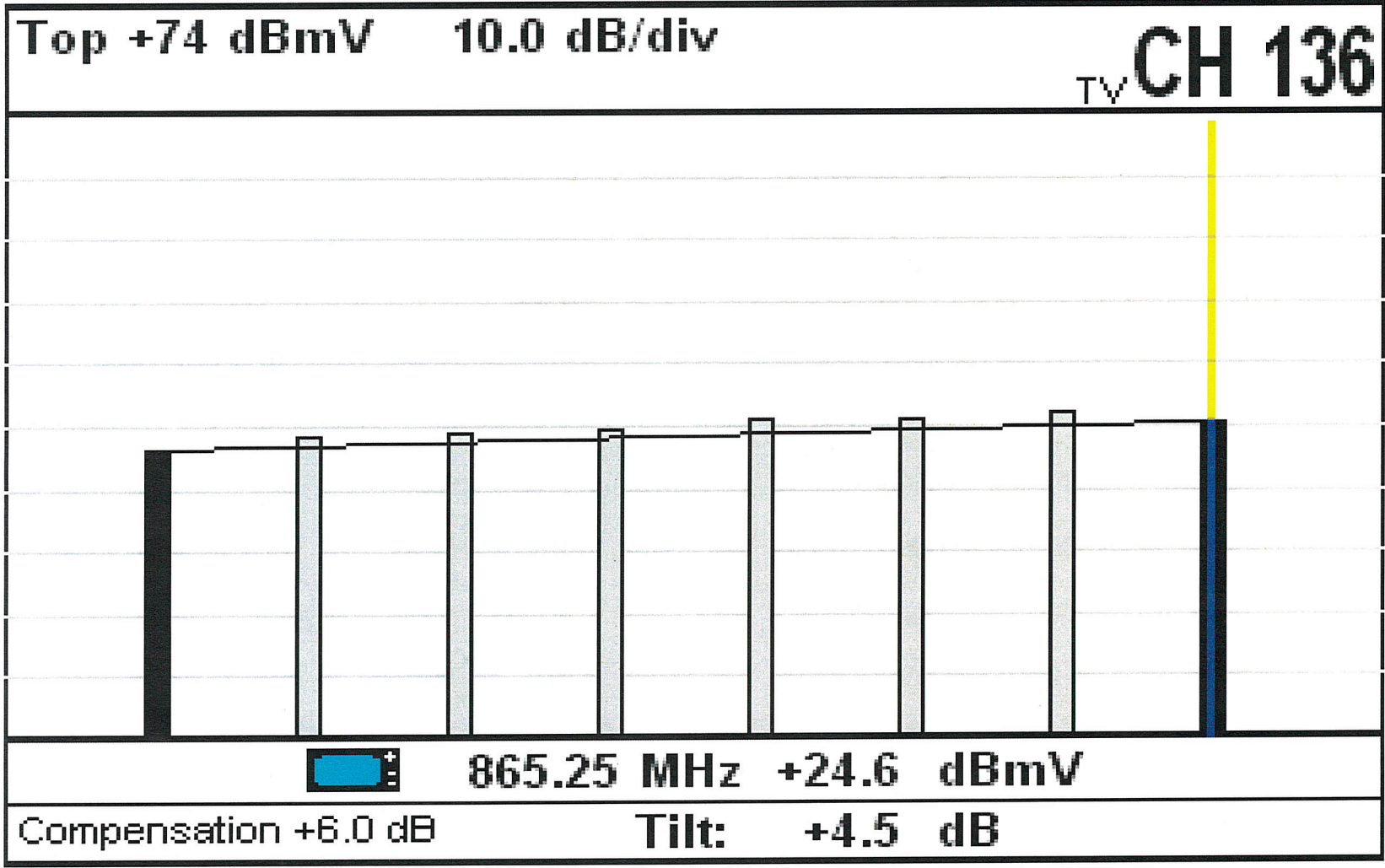
Example of forward sweep of a line end at 750MHz

DRAWING NO. 11



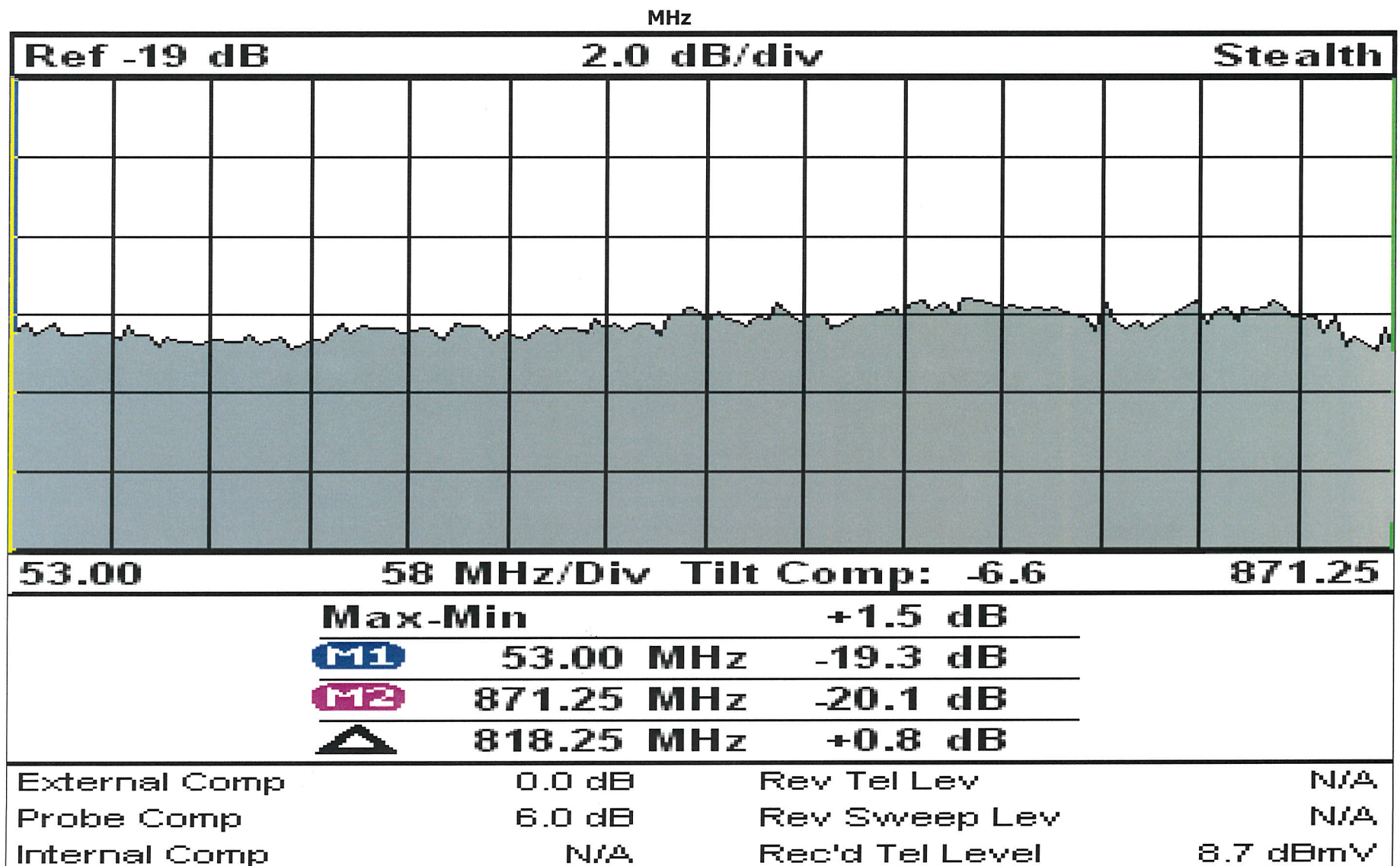
Example of return sweep

DRAWING NO. 12



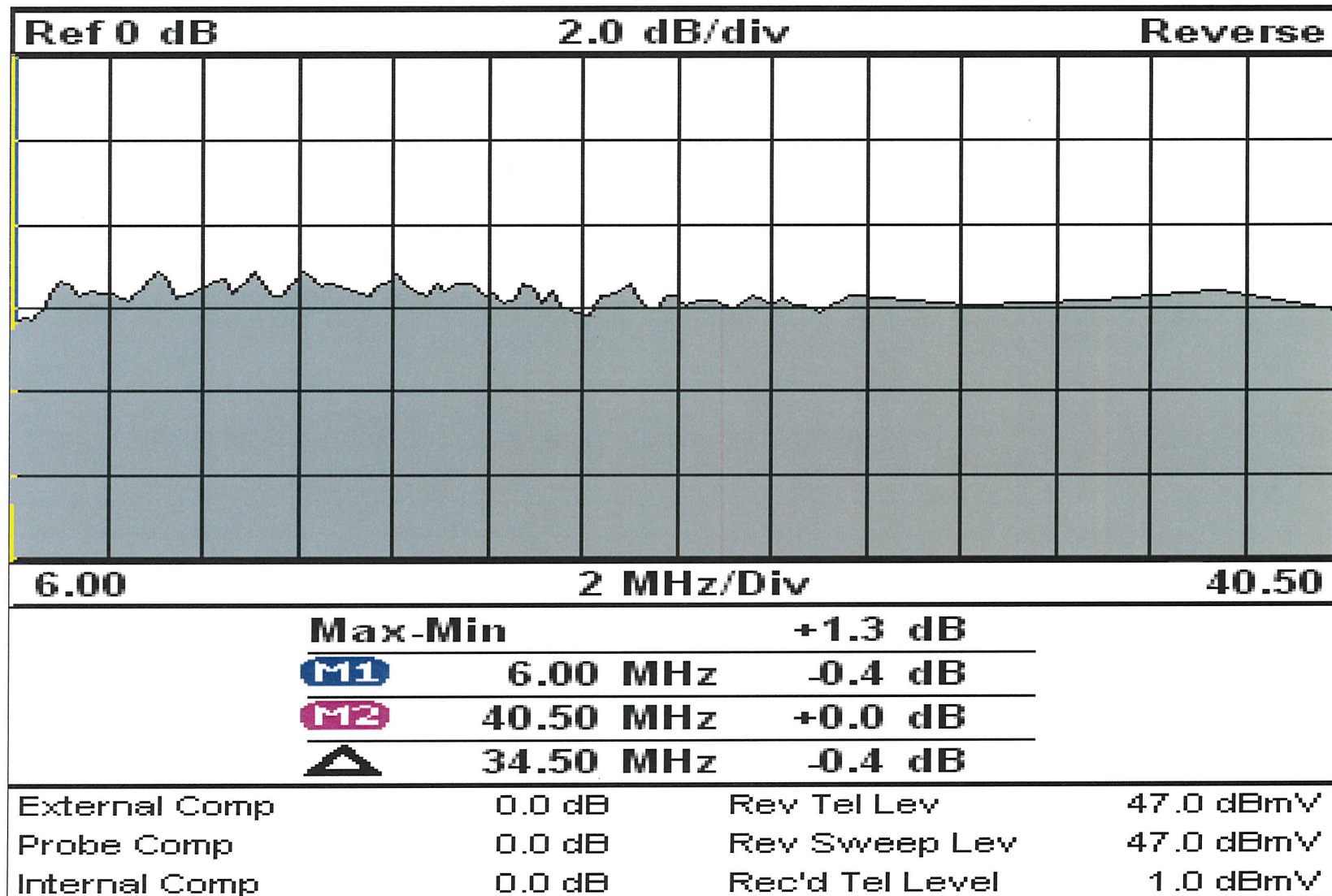
Example of Tilt screen of line end at 870

DRAWING NO. 13



Example of Forward sweep of a line end at 870 MHz

DRAWING NO. 14



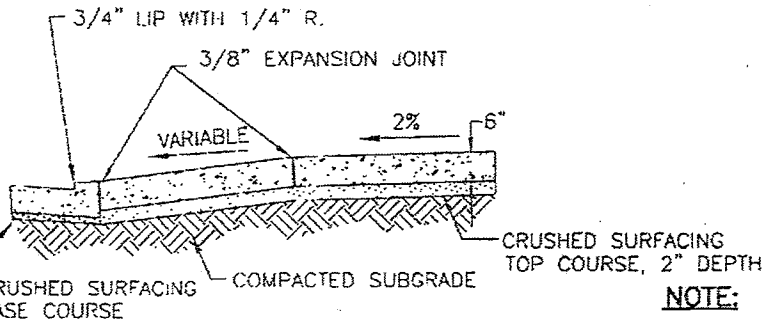
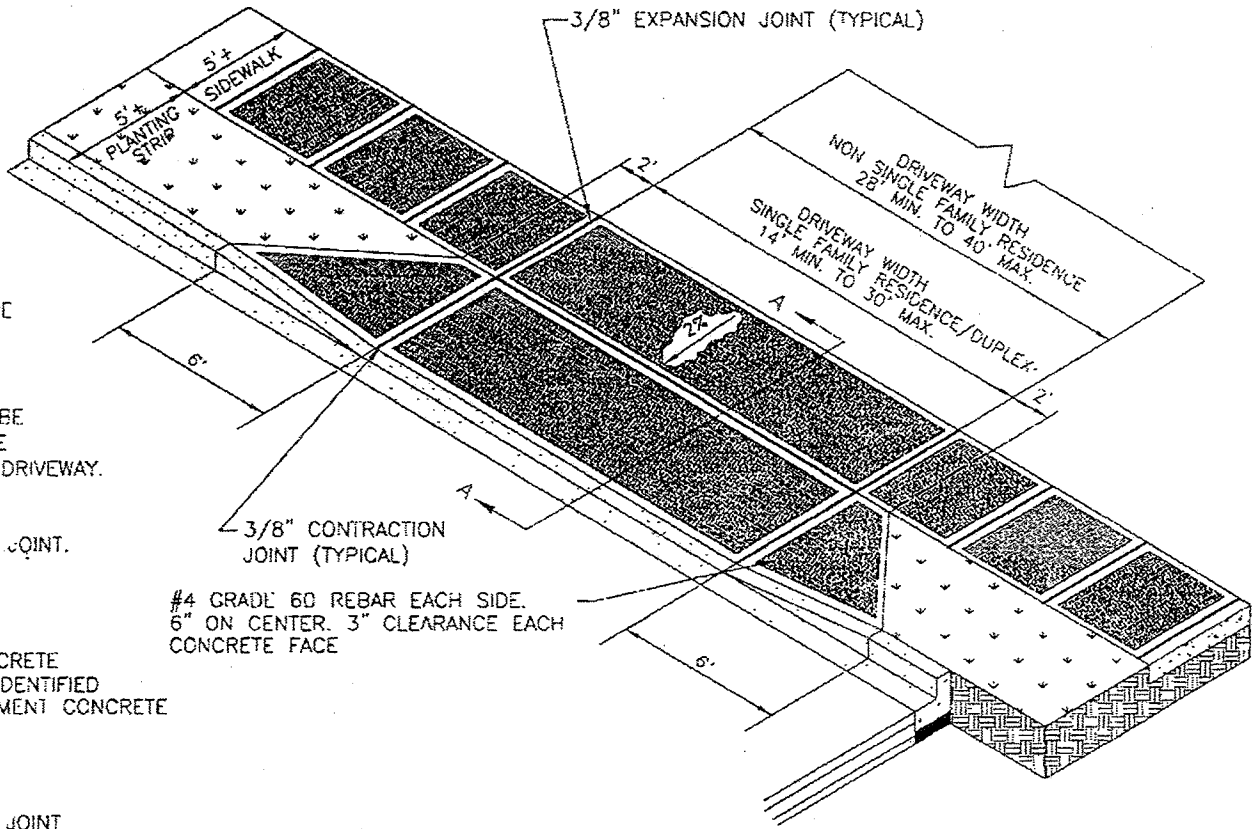
Example of return sweep

DRAWING NO. 15

NOTES:

1. CONCRETE SHALL BE A MINIMUM OF CLASS 3000.
2. ALL JOINTS SHALL BE CLEANED & EDGED. EXTERNAL JOINTS TO THE DRIVEWAY SHALL BE 1/2" RADIUS. INTERNAL JOINTS TO THE DRIVEWAY SHALL BE 1/4" RADIUS
3. DRIVEWAYS WIDER OR NARROWER THAN SHOWN ON THIS PLAN REQUIRE APPROVAL OF THE DIRECTOR OF PUBLIC WORKS
4. 6" THICK DRIVEWAY SECTION SHALL BE A BRUSHED FINISH IN A TRANSVERSE DIRECTION TO THE CENTER LINE OF DRIVEWAY.
5. DRIVEWAYS WIDER THAN 20' REQUIRE A CENTER LINE EXPANSION JOINT.
6. ALL EXPANSION JOINTS SHALL BE FULL DEPTH.

NOTE: MEASUREMENT FOR CEMENT CONCRETE DRIVEWAY SHALL BE ALL AREAS IDENTIFIED AS 6" THICKNESS EXCLUDING CEMENT CONCRETE CURB & GUTTER SEE NOTE #4



SECTION DETAIL A-A

NTS

NOTE:

TYPE 1 DRIVEWAY SHALL BE USED WHERE THE PLANTING STRIP WIDTH IS 5' OR GREATER

APPROVED FOR PUBLICATION

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

CITY ENGINEER

DATE

3/11/04

CEMENT CONCRETE
DRIVEWAY ENTRANCE
TYPE 1

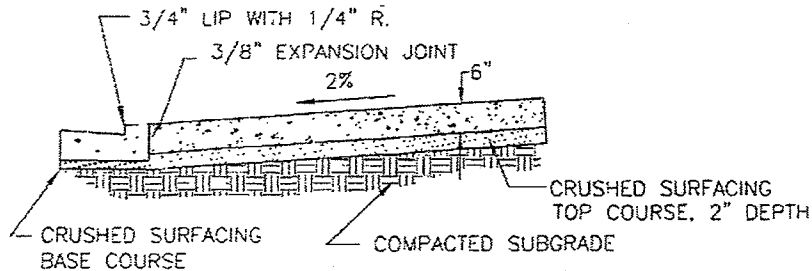
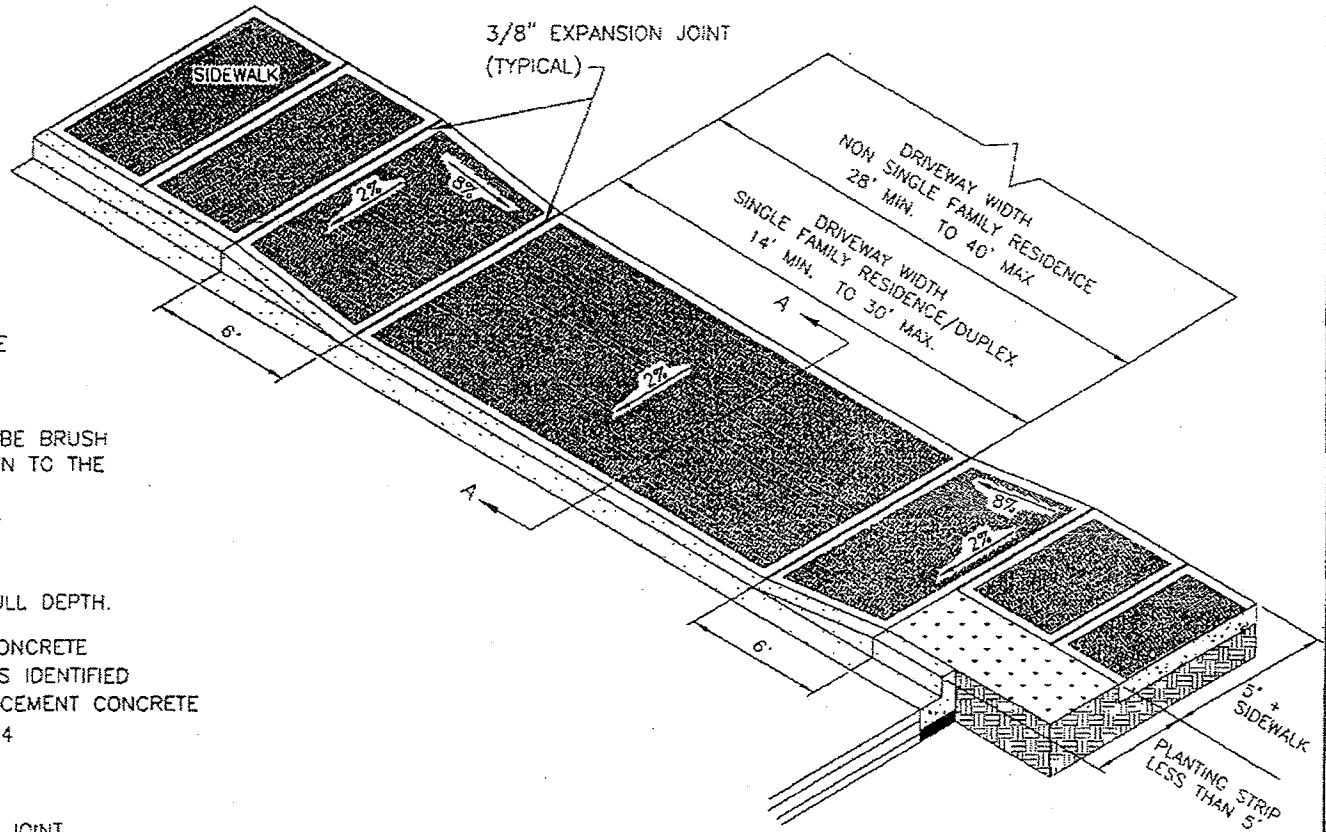
STANDARD PLAN NO. SU-07

DRAWING NO. 16

NOTES:

- 1 CONCRETE SHALL BE A MINIMUM OF CLASS 3000
- 2 ALL JOINTS SHALL BE CLEANED & EDGED EXTERNAL JOINTS TO THE DRIVEWAY SHALL BE 1/2" RADIUS. INTERNAL JOINTS TO THE DRIVEWAY SHALL BE 1/4" RADIUS.
3. DRIVEWAYS WIDER OR NARROWER THAN SHOWN ON THIS PLAN REQUIRE APPROVAL OF THE DIRECTOR OF PUBLIC WORKS
- 4 6" THICK DRIVEWAY SECTION SHALL BE BRUSH FINISHED IN A TRANSVERSE DIRECTION TO THE CENTER LINE OF DRIVEWAY
5. DRIVEWAYS WIDER THAN 20' REQUIRE A CENTER LINE EXPANSION JOINT.
6. ALL EXPANSION JOINTS SHALL BE FULL DEPTH.

NOTE: MEASUREMENT FOR CEMENT CONCRETE DRIVEWAY SHALL BE ALL AREAS IDENTIFIED AS 6" THICKNESS EXCLUDING CEMENT CONCRETE CURB & GUTTER SEE NOTE #4



SECTION DETAIL A-A
NTS

NOTE:

TYPE 2 DRIVEWAY SHALL BE USED AT DRIVEWAYS/ALLEYS WHERE THE PLANTING STRIP IS LESS THAN 5' WIDE

APPROVED FOR PUBLICATION

DRAWING NO. 17

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

CITY ENGINEER

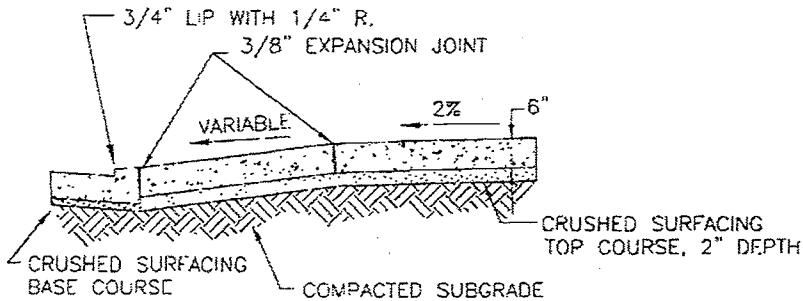
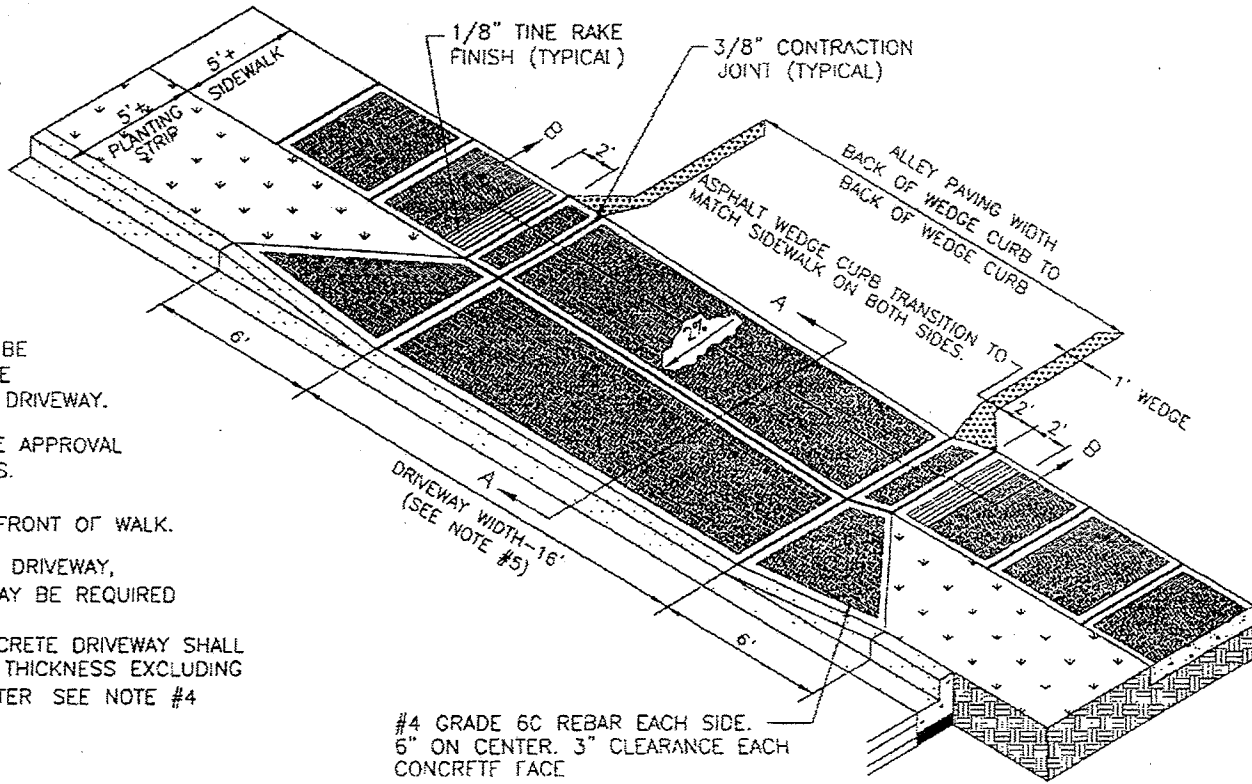
3/11/04
DATE

CEMENT CONCRETE
DRIVEWAY ENTRANCE
TYPE 2
STANDARD PLAN NO. SU-08

NOTES:

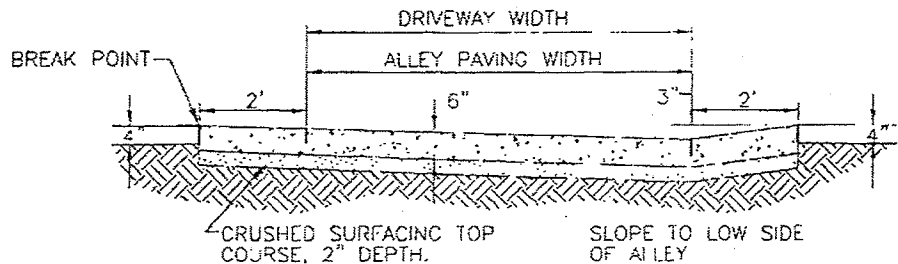
1. CONCRETE SHALL BE A MINIMUM OF CLASS 3000
2. ALL JOINTS SHALL BE CLEANED & EDGED. EXTERNAL JOINTS TO THE DRIVEWAY SHALL BE 1/2" RADIUS. INTERNAL JOINTS TO THE DRIVEWAY SHALL BE 1/4" RADIUS.
3. ALL EXPANSION JOINTS SHALL BE FULL DEPTH.
4. 6" THICK DRIVEWAY SECTION SHALL BE A BRUSHED FINISH IN A TRANSVERSE DIRECTION TO THE CENTER LINE OF DRIVEWAY.
5. DRIVEWAYS WIDER THAN 16' REQUIRE APPROVAL OF THE DIRECTOR OF PUBLIC WORKS.
6. CONCRETE WING SHALL EXTEND TO FRONT OF WALK.
7. DEPENDENT UPON CROSS SLOPE OF DRIVEWAY, ADDITIONAL DRAINAGE PROVISIONS MAY BE REQUIRED

NOTE: MEASUREMENT FOR CEMENT CONCRETE DRIVEWAY SHALL BE ALL AREAS IDENTIFIED AS 6" THICKNESS EXCLUDING CEMENT CONCRETE CURB & GUTTER SEE NOTE #4



SECTION DETAIL A-A

NTS



SECTION DETAIL B-B

NTS

NOTE:

TYPE 3 DRIVEWAY SHALL BE USED AT ALLEYS WHERE THE PLANTING STRIP IS 5' WIDE OR GREATER

APPROVED FOR PUBLICATION

CITY OF TACOMA
 DEPARTMENT OF PUBLIC WORKS

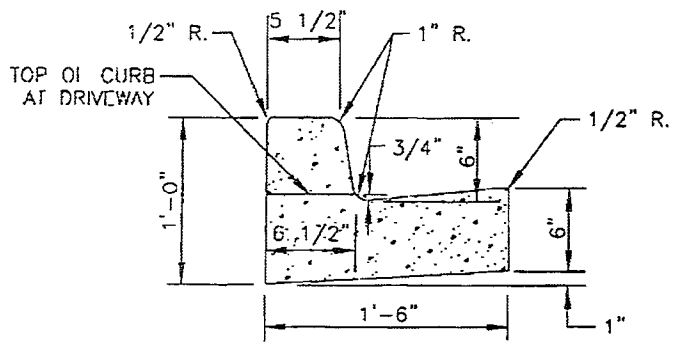
CITY ENGINEER

[Signature]

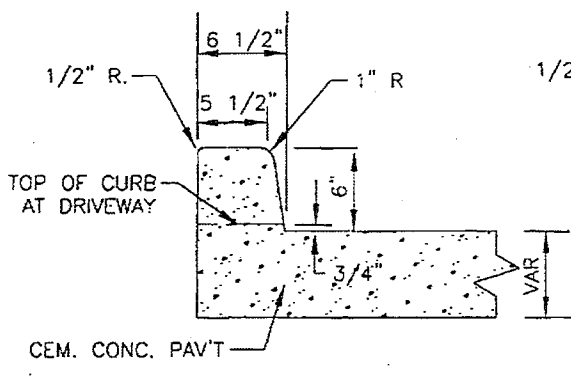
3/11/04
 DATE

CEMENT CONCRETE
 DRIVEWAY ENTRANCE
 TYPE 3
 STANDARD PLAN NO. SU-09

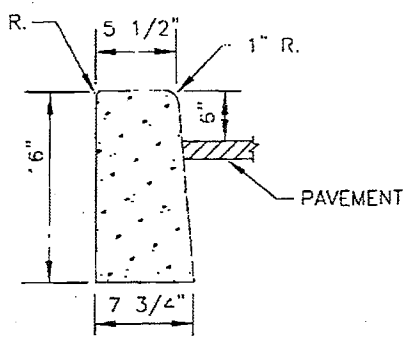
DRAWING NO. 18



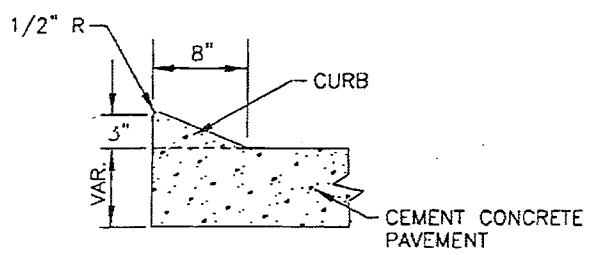
CEMENT CONCRETE TRAFFIC CURB & GUTTER



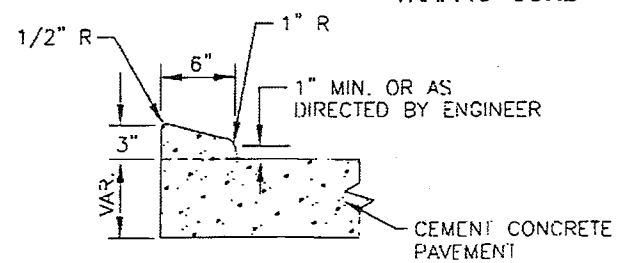
INTEGRAL CEMENT CONCRETE TRAFFIC CURB



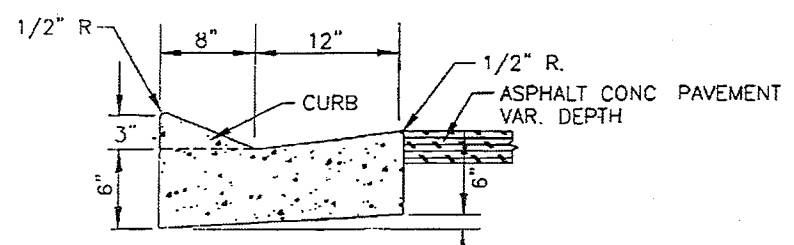
CEMENT CONCRETE TRAFFIC CURB



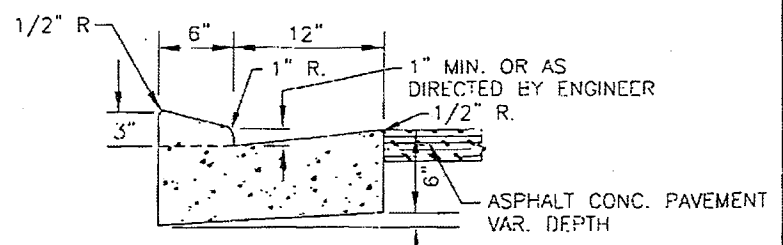
TYPE "C" MOUNTABLE INTEGRAL CEMENT CONCRETE CURB



TYPE "D" MOUNTABLE INTEGRAL CEMENT CONCRETE CURB



TYPE "C" MOUNTABLE CEMENT CONCRETE CURB & GUTTER



TYPE "D" MOUNTABLE CEMENT CONCRETE CURB & GUTTER

APPROVED FOR PUBLICATION

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

CITY ENGINEER

DATE

3/11/14

CEMENT CONCRETE CURB AND GUTTER

STANDARD PLAN NO. SU-03

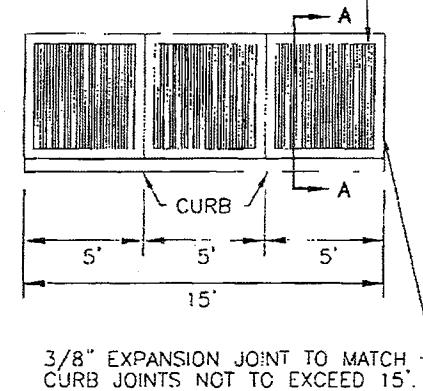
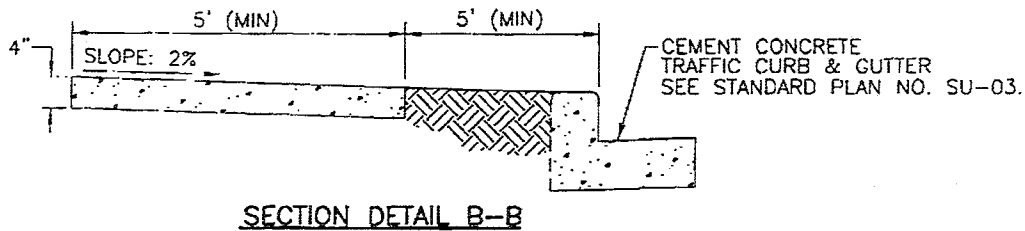
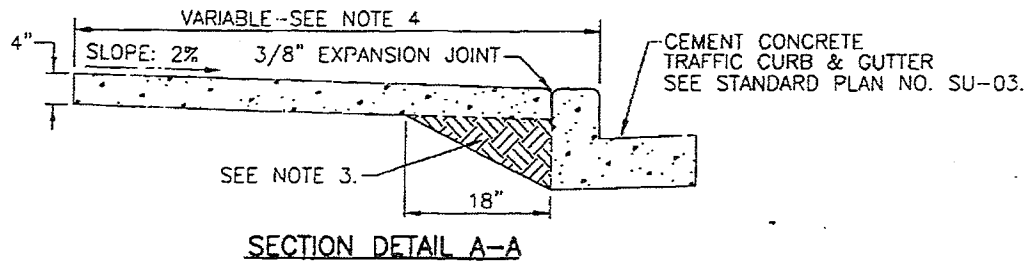
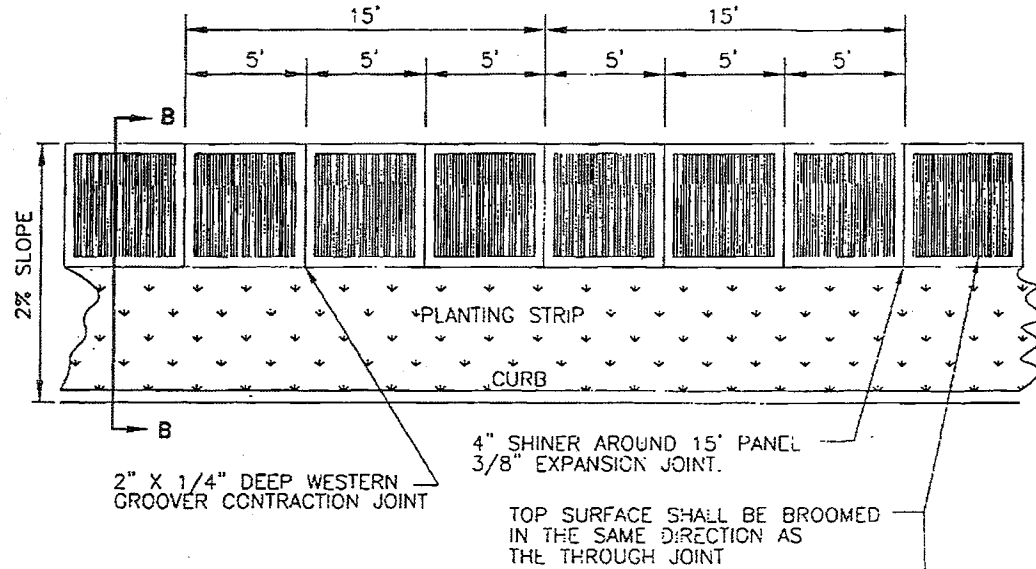
DRAWING NO. 19

Cement Concrete Curb and Gutters

1. Where curb ramps are to be constructed the contractor shall contact the construction inspector for layout.
2. Joints shall be flush with the finished surface.
3. Between November 1st and April 1st an asphalt membraned paper (Sisnal Kraft SK-30) shall be placed over the entire sidewalk to aid the curing process. The paper must be secured so that wind will not disrupt it.
4. Between April 2nd and October 31st a transparent curing compound shall be applied uniformly on the cement concrete sidewalk area.
5. A 3/4" thick thru joint is to be placed at the end of each radius and at the center of each catch basin.
6. A 2" x 3/8" dummy joint shall be placed every 10 feet.
7. Contact construction inspector for inspection of forms prior to placement of concrete.
8. Concrete shall be class 3000; no hand/sack mix is accepted.
9. Forms shall be either wood or steel and free of warps or bends.
10. Curb and Gutter shall be placed prior to any asphalt concrete paving.
11. The top and face of curb shall receive a light brush finish, and the top of gutter will receive a broom finish. Both broom and brush finished shall be uniform.
12. Contractor is to slug catch basins to prevent possible shifting.

NOTES:

1. WHEN PLACING WALK ADJACENT TO EXISTING CURB AND GUTTER CURB AND GUTTER WILL BE REPAIRED AS NECESSARY BEFORE PLACING CONCRETE FORMS FOR WALK.
2. STAKING REQUIRED WHERE NO CURB IS PRESENT.
3. THICKENED EDGE SHALL BE CONSTRUCTED USING CEMENT CONCRETE ON ALL RADII, ALL OTHER LOCATIONS SHALL BE COMPACTED BACKFILL TO 90% COMPACTION
4. COMBINATION WALK SHALL BE 7' ON ALL COMMERCIAL SITES AND ARTERIAL STREETS. COMBINATION WALK MINIMUM OF 5'-6" ON NON ARTERIAL STREETS. DIMENSIONS ARE FROM FACE OF CURB TO BACK OF WALK.
5. ALL EXPANSION JOINTS SHALL BE FULL DEPTH.
6. ALL JOINTS SHALL BE CLEANED AND EDGED. EXTERNAL EDGES SHALL BE 1/2" RADIUS. INTERNAL JOINTS SHALL BE 1/4" RADIUS.



DRAWING NO. 21

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

APPROVED FOR PUBLICATION

CITY ENGINEER

DATE

CEMENT CONCRETE
SIDEWALK

STANDARD PLAN NO. SU-04



CITY OF TACOMA INSURANCE REQUIREMENTS FOR CONTRACTS

This Insurance Requirements shall serve as an attachment and/or exhibit form to the Contract. The Agency entering a Contract with City of Tacoma, whether designated as a Supplier, Contractor, Vendor, Proposer, Bidder, Respondent, Seller, Merchant, Service Provider, or otherwise referred to as "Contractor".

1. GENERAL REQUIREMENTS

The following General Requirements apply to Contractor and to Subcontractor(s) performing services and/or activities pursuant to the terms of this Contract. Contractor acknowledges and agrees to the following insurance requirements:

- 1.1. Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the City of Tacoma.
- 1.2. Contractor shall keep in force during the entire term of the Contract, at no expense to the City of Tacoma, the insurance coverage and limits of liability listed below and for Thirty (30) calendar days after completion of all work required by the Contract, unless otherwise provided herein.
- 1.3. Liability insurance policies, except for Professional Liability and Workers' Compensation, shall:
 - 1.3.1. Name the City of Tacoma and its officers, elected officials, employees, and agents as **additional insured**
 - 1.3.2. Be considered primary and non-contributory for all claims with any insurance or self-insurance or limits of liability maintained by the City of Tacoma
 - 1.3.3. Contain a "Waiver of Subrogation" clause in favor of City of Tacoma
 - 1.3.4. Include a "Separation of Insureds" clause that applies coverage separately to each insured and additional insured
 - 1.3.5. Name the "City of Tacoma" on certificates of insurance and endorsements and not a specific person or department
 - 1.3.6. Be for both ongoing and completed operations using Insurance Services Office (ISO) form CG 20 10 04 13 and CG 20 37 04 13 or the equivalent
 - 1.3.7. Be satisfied by a single primary limit or by a combination of a primary policy and a separate excess umbrella
- 1.4. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these requirements below. Verification of coverage shall include:
 - 1.4.1. An ACORD certificate or equivalent
 - 1.4.2. Copies of requested endorsements
- 1.5. Contractor shall provide to City of Tacoma Procurement & Payable Division, prior to the execution of the Contract, Certificate(s) of Insurance and endorsements from the insurer certifying the coverage of all insurance required herein. Contract or Permit number and the City of Tacoma Department must be shown on the Certificate of Insurance.
- 1.6. A renewal Certificate of Insurance shall be provided electronically prior to coverage



CITY OF TACOMA INSURANCE REQUIREMENTS FOR CONTRACTS

expiration via email sent annually to coi@cityoftacoma.org.

- 1.7. Contractor shall send a notice of cancellation or non-renewal of this required insurance within Thirty (30) calendar days to coi@cityoftacoma.org.
- 1.8. "Claims-Made" coverages, except for pollution coverage, shall be maintained for a minimum of three years following the expiration or earlier termination of the Contract. Pollution coverage shall be maintained for six years following the expiration of the Contract. The retroactive date shall be prior to or coincident with the effective date of the Contract.
- 1.9. Each insurance policy must be written by companies licensed or authorized (or issued as surplus line by Washington surplus line broker) in the State of Washington pursuant to RCW 48 with an (A-) VII or higher in the A.M. Best key rating guide.
- 1.10. Contractor shall not allow any insurance to be cancelled, voided, suspended, or reduced in coverage/limits, or lapse during any term of this Contract. Otherwise, it shall constitute a material breach of the Contract.
- 1.11. Contractor shall be responsible for the payment of all premiums, deductibles and self-insured retentions, and shall indemnify and hold the City of Tacoma harmless to the extent such a deductible or self-insured retained limit may apply to the City of Tacoma as an additional insured. Any deductible or self-insured retained limits in excess of Twenty Five Thousand Dollars (\$25,000) must be disclosed and approved by City of Tacoma Risk Manager and shown on the Certificate of Insurance.
- 1.12. City of Tacoma reserves the right to review insurance requirements during any term of the Contract and to require that Contractor make reasonable adjustments when the scope of services changes.
- 1.13. All costs for insurance are included in the initial Contract and no additional payment will be made by City of Tacoma to Contractor.
- 1.14. Insurance coverages specified in this Contract are not intended and will not be interpreted to limit the responsibility or liability of Contractor or Subcontractor(s).
- 1.15. Failure by City of Tacoma to identify a deficiency in the insurance documentation or to verify coverage or compliance by Contractor with these insurance requirements shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- 1.16. If Contractor is a government agency or self-insured for any of the above insurance requirements, Contractor shall be liable for any self-insured retention or deductible portion of any claim for which insurance is required. A certification of self-insurance shall be attached and incorporated by reference and shall constitute compliance with this Section.



CITY OF TACOMA

INSURANCE REQUIREMENTS FOR CONTRACTS

2. SUBCONTRACTORS

It is Contractor's responsibility to ensure that each subcontractor obtain and maintain adequate liability insurance coverage that applies to the service provided. Contractor shall provide evidence of such insurance upon City of Tacoma's request. Failure of any subcontractor to comply with insurance requirements does not limit Contractor's liability or responsibility.

3. REQUIRED INSURANCE AND LIMITS

The insurance policies shall provide the minimum coverages and limits set forth below. Providing coverage in these stated minimum limits shall not be construed to relieve Contractor from liability in excess of such limits.

3.1 Commercial General Liability Insurance

Contractor shall maintain Commercial General Liability Insurance policy with limits not less than One Million Dollars (\$1,000,000) each occurrence and Two Million Dollars (\$2,000,000) annual aggregate. This policy shall be written on ISO form CG 00 01 04 13 or its equivalent and shall include product liability especially when a Contract is solely for purchasing supplies. It includes Products and Completed Operations for three years following the completion of work related to performing construction services. It shall be endorsed to include: A per project aggregate policy limit (using ISO form CG 25 03 05 09 or equivalent endorsement)

3.2 Commercial (Business) Automobile Liability Insurance

Contractor shall maintain Commercial Automobile Liability policy with limits not less than One Million Dollars (\$1,000,000) each accident for bodily injury and property damage and bodily injury and property damage coverage for owned (if any), non-owned, hired, or leased vehicles. Commercial Automobile Liability Insurance shall be written using ISO form CA 00 01 or equivalent. Contractor must also maintain MCS 90 and CA 99 48 endorsements or equivalent if "Pollutants" are to be transported unless in-transit Pollution coverage is covered under required Contractor's Pollution Liability Insurance.

3.3 Workers' Compensation

Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington, as well as any other similar coverage required for this work by applicable federal laws of other states. Contractor must comply with their domicile State Industrial Insurance laws if it is outside the State of Washington.

3.4 Employers' Liability Insurance

Contractor shall maintain Employers' Liability coverage with limits not less than One Million Dollars (\$1,000,000) each employee, One Million Dollars (\$1,000,000) each accident, and One Million Dollars (\$1,000,000) policy limit.

3.5 Excess or Umbrella Liability Insurance

Contractor shall provide Excess or Umbrella Liability Insurance with limits not less than Three Million Dollars (\$3,000,000) per occurrence and in the aggregate. This coverage shall apply, at a minimum, in excess of primary underlying Commercial General Liability, Employer's Liability, Pollution Liability, Marine General Liability, Protection and Indemnity, and Automobile Liability if required herein.

3.6 Pollution Liability Insurance

Contractor shall maintain Pollution Liability or Environmental Liability Insurance with limits not



CITY OF TACOMA

INSURANCE REQUIREMENTS FOR CONTRACTS

less than One Million Dollars (\$1,000,000) each occurrence and Two Million Dollars (\$2,000,000) in the aggregate. Coverage shall include investigation and defense costs for bodily injury and property damage, loss of use of damaged or destroyed property, Natural Resource Damage, and Hazardous Substance Removal. Such coverage shall provide both on-site and off-site cleanup costs, cover gradual and sudden pollution, and include in its scope of coverage the City of Tacoma damage claims for loss arising out of Contractor's work.

3.7 Installation Floater Insurance

Contractor shall maintain during the term of the Contract, at its own expense, Installation Floater Insurance covering Contractor's labor, materials, and equipment to be used for completion of the work performed under this Contract against all risks of direct physical loss, excluding earthquake and flood, for an amount equal to the full amount of the Contract improvements.

3.8 Builder's Risk Insurance

Contractor shall maintain during the term of the Contract and until final acceptance of the work by the City of Tacoma, a policy of Builder's Risk Insurance providing coverage for all-risk of physical injury to all structures to be constructed according to the Contract. City of Tacoma shall be included as a named insured (not named as additional insured) on the policy. Builder's Risk Insurance policy shall:

- 3.8.1 Have a deductible of no more than Five Thousand Dollars (\$5,000) for each occurrence, the payment of which will be the responsibility of Contractor. Any increased deductibles accepted by City of Tacoma will remain the responsibility of Contractor
- 3.8.2 Be on an ISO Special Form Causes of Loss or the equivalent and also include coverage for Collapse, Earthquake and Flood. The deductible for Earthquake and Flood may be higher than the \$5,000 deductible required in 3.18.1
- 3.8.3 Include coverage for temporary buildings, debris removal, and damage to materials in transit or stored off-site
- 3.8.4 Be written in the amount of the completed value of the structures, with no coinsurance provisions exposure on the part of Contractor or City of Tacoma
- 3.8.5 Contain a Waiver of Subrogation provision whereby each insured waives their subrogation rights to the extent the loss is covered by this insurance
- 3.8.6 Grant permission to occupy, allowing the building or structure to be partially occupied prior to completion, without detrimental effect to the coverage provided
- 3.8.7 Include coverage for the testing and startup of the building's operating systems
- 3.8.8 Include coverage for City of Tacoma's loss of use or business interruption arising out of a covered loss which delays completion
- 3.8.9 Include resultant damage coverage for loss due to faulty workmanship and defective material
- 3.8.10 Include coverage for startup and testing
- 3.8.11 Include coverage for resultant damage coverage for loss due to faulty workmanship and defective material

Contractor and City of Tacoma waive all rights against each other, their respective subcontractors, agents, and representatives for damages caused by fire or other perils to the extent covered by Builder's Risk Insurance or other property insurance applicable to the work. The policies shall provide such waivers by endorsement or otherwise.



CITY OF TACOMA INSURANCE REQUIREMENTS FOR CONTRACTS

3.9 Other Insurance

Other insurance may be deemed appropriate to cover risks and exposures related to the scope of work or changes to the scope of work required by City of Tacoma. The costs of such necessary and appropriate Insurance coverage shall be borne by Contractor.

3.10 Other Conditions

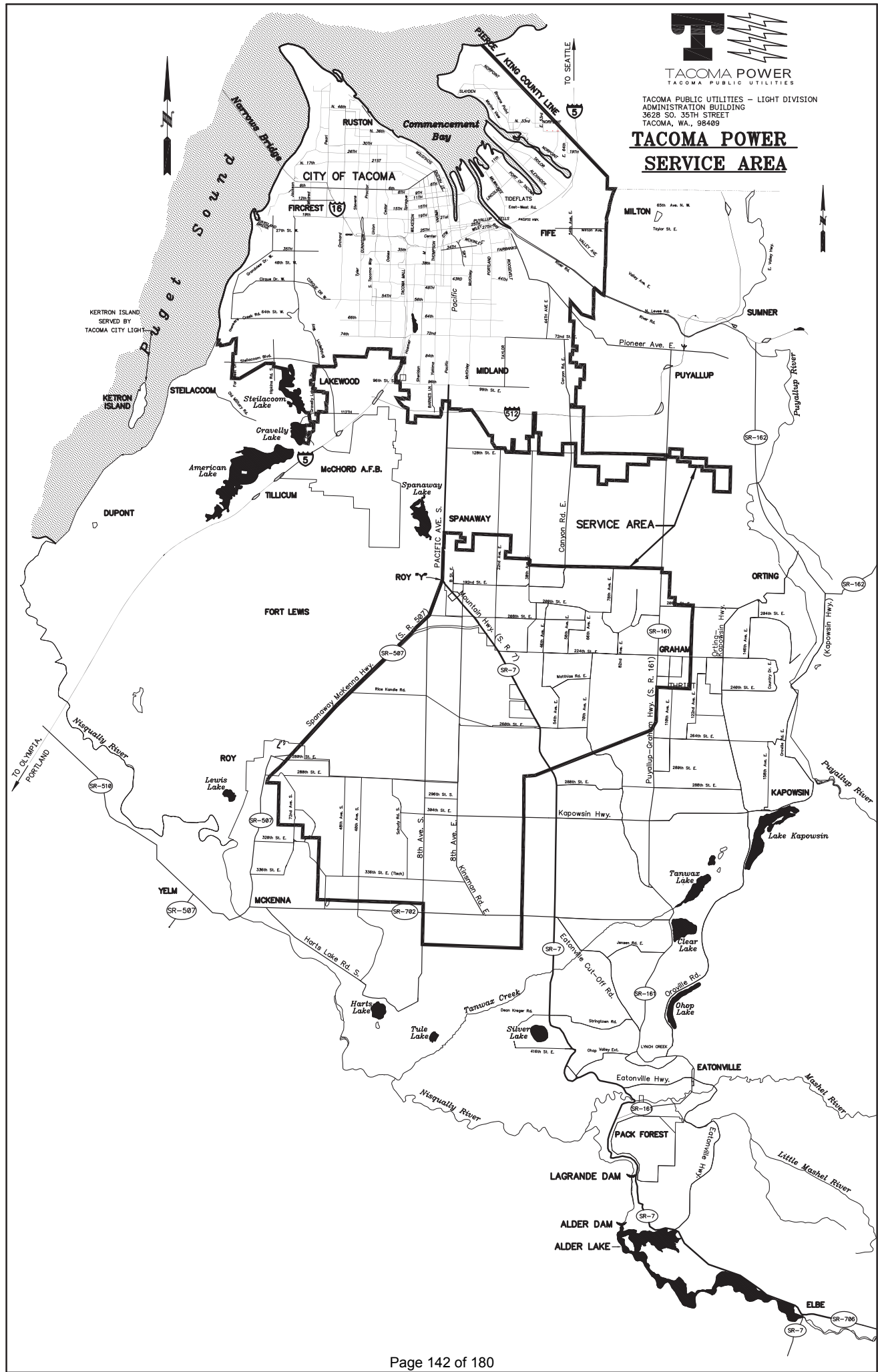
Contractor will be responsible to comply with all specific insurance requirements associated with any highway or rail crossings, e.g., Washington State Department of Transportation (WSDOT), Burlington Northern Santa Fe Railway (BNSF), and Union Pacific Railroad (UPRR).



TACOMA POWER
TACOMA PUBLIC UTILITIES

TACOMA PUBLIC UTILITIES - LIGHT DIVISION
ADMINISTRATION BUILDING
3628 SO. 35TH STREET
TACOMA, WA., 98409

TACOMA POWER SERVICE AREA



GENERAL PROVISIONS

(Revised October 8, 2024)

SECTION I - BIDDING REQUIREMENTS

SECTION I REQUIREMENTS ARE BINDING ON ALL RESPONDENTS.

1.01 USE AND COMPLETION OF CITY PROPOSAL SHEETS

A. Respondent's Proposal

Each Respondent must bid exactly as specified on the Proposal sheets. All proposals must remain open for acceptance by the City for a period of at least 60 calendar days from the date of opening of the bids.

B. Alterations of Proposals Not Allowed

Proposals that are incomplete or conditioned in any way contain alternatives or items not called for in the General Provisions and Specifications, or not in conformity with law may be rejected as being nonresponsive. The City cannot legally accept any proposal containing a substantial deviation from these Specifications.

C. Filling Out City Proposal Sheets

All proposals must be completed using the proposal sheets and forms included with this specification, and the prices must be stated in figures either written in ink or typewritten. No proposal having erasures or interlineations will be accepted unless initialed by the Respondent in ink.

1.02 CLARIFICATION OF PROPOSAL FOR RESPONDENT

If a prospective Respondent has any questions concerning any part of the Proposal, he/she may submit a written request for answer of his/her questions. Any interpretation of the Proposal will be made by an Addendum duly issued and mailed or delivered to each prospective Respondent. Such addendum must be acknowledged in the proposal. The City of Tacoma will not be responsible for any other explanation or interpretation of the bid documents.

1.03 RESPONDENT'S BOND OR CERTIFIED CHECK

Each bid for construction must be accompanied either by a certified or cashier's check for 5 percent of the total amount bid, including tax, payable to the City Treasurer, or an approved bid bond, by a surety company authorized to do business in the State of Washington, for 5 percent of the total amount bid. The person legally authorized to sign the bid must sign all bid bonds. The approved bid bond form attached to these Specifications should be used: no substantial variations from the language thereof will be accepted.

If a bid bond is used, the 5 percent may be shown either in dollars and cents, or the bid bond may be filled in as follows, "5 percent of the total amount of the accompanying proposal."

The check of the successful Respondent will be returned after award of the Contract, acceptance of the Payment and Performance Bond and City's receipt of the signed Contract. The checks of all other Respondents will be returned immediately upon the award of the Contract. Bid bonds will not be returned.

1.04 DELIVERY OF PROPOSALS TO THE CITY'S PURCHASING OFFICE

- A. Proposal 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.

1.05 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 CONTRACTOR'S STATE REGISTRATION NUMBER

Contractors for construction or public works construction are required to be licensed by the state. If the provisions of Chapter 18.27 of the Revised Code of Washington apply to the Respondent, then the Respondent's Washington State Contractor's Registration No. must accompany the bid.

1.07 BID IS NONCOLLUSIVE

The Respondent represents by the submission of the Proposal that the prices in this Bid are neither directly nor indirectly the result of any formal or informal agreement with another Respondent.

1.08 EVALUATION OF BID

A. Price, Experience, Delivery Time and Responsibility

In the evaluation of bids, the Respondent's experience, delivery time, quality of performance or product, conformance to the specifications and responsibility in performing other contracts (including satisfying all safety requirements) may be considered in addition to price. In addition, the bid evaluation factors set forth in City Code Section 1.06.262 may be considered by the City. Respondents who are inexperienced or who fail to properly perform other contracts may have their bids rejected for such cause.

B. Prequalified Electrical Contractor

Certain types of electrical construction require special expertise, experience, and prequalification of the Contractor (or subcontractor) by the City. In such cases, the Respondent must be prequalified or the Respondent must subcontract with a City prequalified electrical contractor for the specialty work.

C. Insertions of Material Conflicting with Specifications

Only material inserted by the Respondent to meet requirements of the Specifications will be considered. Any other material inserted by the Respondent will be disregarded as being nonresponsive and may be grounds for rejection of the Respondent's Proposal.

D. Correction of Ambiguities and Obvious Errors

The City reserves the right to correct obvious errors in the Respondent's proposal. In this regard, if the unit price does not compute to the extended total price, the unit price shall govern.

1.09 WITHDRAWAL OF BID

A. Prior to Bid Opening

Any Respondent may withdraw his/her Proposal prior to the scheduled bid opening time by delivering a written notice to the City's Procurement and Payables Office. The notice may be submitted in person or by mail; however, it must be received by the City's Procurement and Payables Office prior to the time of bid opening.

B. After Bid Opening

No Respondent will be permitted to withdraw his/her Proposal after the time of bid opening, as set forth in the Call for Bids, and before the actual award of the Contract, unless the award of Contract is delayed more than sixty (60) calendar days after the date set for bid opening. If a delay of more than 60 calendar days does occur, then the Respondent must submit written notice withdrawing his/her Proposal to the Purchasing Manager.

1.10 OPENING OF BIDS

At the time and place set for the opening of bids, all Proposals, unless previously withdrawn, will be publicly opened and read aloud, irrespective of any irregularities or informalities in such Proposal.

1.11 CITY COUNCIL/PUBLIC UTILITY BOARD FINAL DETERMINATION

The City Council or Public Utility Board of the City of Tacoma shall be the final judge as to which is the lowest and best bid in the interest of the City of Tacoma. The City reserves the right to reject any and all bids, waive minor deviations or informalities, and if necessary, call for new bids.

1.12 RESPONDENT'S REFUSAL TO ENTER INTO CONTRACT

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

1.13 TAXES

A. Include In Proposal All Taxes

Respondent shall include in his/her Proposal all applicable local, city, state, and federal taxes. It is the Respondent's obligation to state on his/her Proposal sheet the correct percentage and total applicable Washington State and local sales tax. The total cost to the City including all applicable taxes may be the basis for determining the low Respondent.

B. Federal Excise Tax

The City of Tacoma is exempt from federal excise tax. Where applicable, the City shall furnish a Federal Excise Tax Exemption certificate.

C. City of Tacoma Business and Occupation Tax

Sub-Title 6A of the City of Tacoma Municipal Code (TMC) provides that transactions with the City of Tacoma, may be subject to the City of Tacoma's Business and Occupation Tax. It is the responsibility of the Respondent awarded the Contract to register with the City of Tacoma's Department of Tax and License, 733 South Market Street, Room 21, Tacoma, WA 98402-3768, telephone 253-591-5252. The City's Business and Occupation Tax amount shall not be shown separately but shall be included in the unit and/or lump sum prices bid.

1.14 FIRM PRICES/ESCALATION

Except as specifically allowed by the Special Provisions, only firm prices will be accepted.

1.15 AWARD

A. Construction and/or Labor Contracts

Unless specifically noted in the Special Provisions or Proposal sheets, all construction and/or labor contracts will be awarded to only one Respondent.

B. Supply/Equipment Contracts

The City reserves the right to award an equipment or supply contract for any or all items to one or more Respondents as the interests of the City will be best satisfied.

1.16 INCREASE OR DECREASE IN QUANTITIES

The City of Tacoma reserves the right to increase or decrease the quantities of any items under this Contract and pay according to the unit prices quoted in the Proposal (with no adjustments for anticipated profit).

1.17 EXTENSION OF CONTRACT

Contracts resulting from this specification shall be subject to extension by mutual agreement per the same prices, terms and conditions.

1.18 PAYMENT TERMS

- A. Prices will be considered as net 30 calendar days if no cash discount is shown. Payment discount periods of twenty (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. Invoices will not be processed for payment nor will the period of cash discount commence until receipt of a properly completed invoice and until all invoiced items are received and satisfactory performance of the Contractor has been attained. 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.
- B. 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.

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

- A. Payment methods include:
 - 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:
 - 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.
 - Supplier retrieves card account through the secure, on-line portal provided via email notifications sent by the City's commercial card provider.
 - 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.
 - Suppliers must be PCI-DSS compliant (secure credit card data management) and federal FACTA (sensitive card data display) compliant.
 - 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.
 - Electronic Funds Transfer (EFT) by Automated Clearing House (ACH). Standard terms are net 30 for this payment method.
 - 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.

1.20 COOPERATIVE PURCHASING

The Washington State Interlocal Cooperative Act RCW 39.34 provides that other governmental agencies may purchase goods and services on this solicitation or contract in accordance with the terms and prices indicated therein if all parties are agreeable.

1.21 PUBLIC DISCLOSURE: PROPRIETARY OR CONFIDENTIAL INFORMATION

- A. Respondent's Submittals, all documents and records comprising any Contract awarded to Respondent, and all other documents and records provided to the City by Respondent 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 Respondent has complied with the requirements to Respondent has complied with the requirements to mark records considered confidential or proprietary

as such requirements are stated below, City agrees to provide Respondent 10 days written notice of impending release. Should legal action thereafter be initiated by Respondent to enjoin or otherwise prevent such release, all expense of any such litigation shall be borne by Respondent, 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 Respondent took no action to oppose the release of information.

B. If Respondent provides City with records or information that Respondent considers confidential or proprietary, Respondent 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 Respondent expressly waives its right to allege any kind of civil action or claim against the City pertaining to the release of said record(s). Submission of materials in response to City's Solicitation shall constitute assent by Respondent to the foregoing procedure and Respondent shall have no claim against the City on account of actions taken pursuant to such procedure.

1.22 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.

SECTION II - CONTRACT REQUIREMENTS

2.01 CONTRACTOR'S RESPONSIBILITY

A. Contract Documents

The Respondent to whom the Contract is awarded, hereinafter called the Contractor, shall enter into a Contract with the City of Tacoma, , within 10 days after receipt from the City of Tacoma of a properly prepared Contract. In addition, the Contractor will do all things required to promptly perform this Contract pursuant to the terms of this Contract. Certain contracts for supplies, goods or equipment may use the City Purchase Order in place of a formal contract document.

B. Surety Bonds

Except as modified by the Special Provisions, the Respondent to whom the Contract is awarded shall provide a payment and performance bond, including power of attorney, for 100 percent of the amount of his/her bid (including sales taxes), to insure complete performance of the Contract including the guarantee. The bonds must be executed by a surety company licensed to do business in the State of Washington. For a supply-type contract, a cashier's check or cash may be substituted for the bonds; however, this cash or cashier's check must remain with the City through the guarantee period and any interest on said amount shall accrue to the City.

C. Independent Contractor

Contractor is an independent contractor; no personnel furnished by the Contractor shall be deemed under any circumstances to be the agent or servant of the City. Contractor shall be fully responsible for all acts or omissions of Subcontractors and its and their suppliers and of persons employed by them, and shall be specifically responsible for sufficient and competent supervision and inspection to assure compliance in every respect with the Contract. There shall be no contractual relationship between any Subcontractors or supplier and the City arising out of or by virtue of this agreement. No provision of the Contract is intended or is to be construed to be for the benefit of any third party.

2.02 CONFLICTS IN SPECIFICATIONS

Anything mentioned in the Specifications and not shown on the Drawings and anything on the Drawings and not mentioned in the Specifications shall be of like effect and shall be understood to be shown and/or mentioned in both. In case of differences between Drawings and Specifications, the Specifications shall govern. In addition, in the event of any conflict between these General Provisions, the Special Provisions, the Technical Provisions and/or the Proposal pages, the following order of precedence shall control:

1. Proposal pages prevail if they conflict with the General, Special or Technical Provisions.
2. Special Provisions prevail if they conflict with the General Provisions and/or Technical Provisions.
3. Technical Provisions prevail if they are in conflict with the General Provisions.

In case of discrepancy of figures between Drawings, Specifications or both, the matter shall immediately be submitted to the Engineer for determination. Failure to submit the discrepancy issue to the Engineer shall result in the Contractor's actions being at his/her own risk and expense. The Engineer shall furnish from time to time such detailed drawings and other information as he/she may consider necessary.

2.03 INSPECTION

A. Of the Work

All materials furnished and work done shall be subject to inspection.

The Inspector administering the Contract shall at all times have access to the work wherever it is in progress or being performed, and the Contractor shall provide proper facilities for such access and inspection. Such inspection shall not relieve the Contractor of the responsibility of performing the work correctly, utilizing the best labor and materials in strict accordance with the Specifications of this Contract. All material or work approved and later found to be defective shall be replaced without cost to the City of Tacoma.

B. Inspector's Authority

The inspector shall have power to reject materials or workmanship which do not fulfill the requirements of these Specifications, but in case of dispute the Contractor may appeal to the Director or Superintendent, whose decision shall be final. The word "Director" means the Director of the City of Tacoma General Government department that is administering the contract. The word "Superintendent" means the Superintendent of the City of Tacoma, Department of Public Utilities Division that is administering the contract.

The Contract shall be carried out under the general control of the representative of the particular City Department or Division administering the Contract, who may exercise such control over the conduct of the work as may be necessary, in his or her opinion, to safeguard the interest of the City of Tacoma. The Contractor shall comply with all orders and instructions given by the representative of the particular Department or Division administering the Contract in accordance with the terms of the Contract.

Provided, that for the purposes of construction contracts, such control shall only apply (a) to the extent necessary to ensure compliance with the provisions of this contract, and (b) to the extent necessary to fulfill any nondelegable duty of the City for the benefit of third parties not engaged in promoting the activity of this contract.

Nothing herein contained, however, shall be taken to relieve the Contractor of his/her obligations or responsibilities under the Contract.

2.04 FEDERAL, STATE AND MUNICIPAL REGULATIONS

All federal, state, municipal and/or local regulations shall be satisfied in the performance of all portions of this Contract. The Contractor shall be solely responsible for all violations of the law from any cause in connection with work performed under this Contract.

2.05 INDEMNIFICATION

A. Indemnification

Contractor acknowledges that pursuant to the terms of this agreement, Contractor is solely and totally responsible for the safety of all persons and property in the performance of this Contract. To the greatest extent allowed by law, Contractor assumes the risk of all damages, loss, cost, penalties and expense and agrees to indemnify, defend and hold harmless the City of Tacoma, from and against any and all liability which may accrue to or be sustained by the City of Tacoma on account of any claim, suit or legal action made or brought against the City of Tacoma for the death of or injury to persons (including Contractor's or subcontractor's employees) or damage to property involving Contractor, or subcontractor(s) and their employees or agents, arising out of and in connection with or incident to the performance of the Contract including if the City is found to have a nondelegable duty to see that work is performed with requisite care, except for injuries or damages caused by the sole negligence of the City. In this regard, Contractor recognizes that Contractor is waiving immunity under industrial Insurance Law, Title 51 RCW. This indemnification extends to the officials, officers and employees of the City and also includes attorney's fees and the cost of establishing the right to indemnification hereunder in favor of the City of Tacoma. In addition, within the context of competitive bidding laws, it is agreed that this indemnification has been mutually negotiated. Provided however, this provision is intended to be applicable to the parties to this agreement and it shall not be interpreted to allow a Contractor's employee to have a claim or cause of action against Contractor.

B. Limitation of Liability for Primarily Supply-Type Contracts

In all contracts where the total cost of the supply of materials and/or equipment constitute at least 70 percent of the total contract price (as determined by the City), the City agrees that it will not hold the contractor, supplier or manufacturer liable for consequential damages for that part of the contract related to the manufacture and/or design of the equipment, materials or supplies.

2.06 CONTRACTOR'S INSURANCE

A. During the course and performance of a Contract, Contractor 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.

2.07 ASSIGNMENT AND SUBLETTING OF CONTRACT

C. Assignment

The Contract shall not be assigned except with the consent of the Superintendent or his/her designee.

Requests for assignment of this contract must be in writing with the written consent of the surety, and the request must show the proposed person or organization to which the contract is assigned is capable, experienced and equipped to perform such work. The proposed substitute person or organization may be required to submit to the City information as to his/her experience, financial ability and give statements covering tools, equipment, organization, plans and methods to fulfill any portion of the Contract prior to approval of assignment.

D. Subletting

The Contract shall not be sublet except with the written consent of the Superintendent or his/her designee. In the event that a prequalified electrical contractor is necessary to perform certain portions of the work, such work may be subcontracted with a City prequalified electrical contractor for the type of work involved.

Requests for subletting of this Contract must be in writing with the written consent of the Surety, and the request must show the proposed person or organization to which the Contract is sublet is capable, experienced and equipped to perform such work. The proposed substitute person or organization may be required to submit to the City information as to his experience, financial ability and give statements covering tools, equipment, organization, plans and methods to fulfill any portion of the Contract prior to approval of subletting.

The written consent approving the subletting of the Contract shall not be construed to relieve the Contractor of his/her responsibility for the fulfillment of the Contract. The Subcontractor shall be considered to be the agent of the Contractor and the Contractor agrees to be responsible for all the materials, work and indebtedness incurred by the agent.

A subcontractor shall not sublet any portion of a subcontract for work with the City without the written consent of the City.

2.08 DELAY

E. Extension of Time

With the written approval of the Superintendent or his/her designee, the Contractor may be granted additional time for completion of the work required under this Contract, if, in the Superintendent's opinion the additional time requested arises from unavoidable delay.

F. Unavoidable Delay

Unavoidable delays in the prosecution of the work shall include only delays from causes beyond the control of the Contractor and which he/she could not have avoided by the exercise of due care, prudence, foresight and diligence. Delay caused by persons other than the Contractor, Subcontractors or their employees will be considered unavoidable delays insofar as they necessarily interfere with the Contractor's completion of the work, and such delays are not part of this Contract.

Unavoidable delay will not include delays caused by weather conditions, surveys, measurements, inspections and submitting plans to the Engineer of the particular Division involved in administering this Contract.

2.09 GUARANTEE

A. Guarantee for Construction, Labor or Services Contract

Neither the final certificate of payment or any provision in the Contract Documents, nor partial or entire occupancy of the premises by the City, shall constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final acceptance of the work unless a longer period is specified. The City will give notice of observed defects with reasonable promptness.

If it has been discovered, before payment is required under the terms of the Contract, that there is a failure to comply with any of the terms and provisions of this Contract, the City has the right and may withhold payment.

In case of a failure of any part of the work, materials, labor and equipment furnished by the Contractor or to fully meet all of the requirements of the Contract, the Contractor shall make such changes as may be necessary to fully meet all of the specifications and requirements of this Contract. Such changes shall be made at the Contractor's sole cost and expense without delay and with the least practicable inconvenience to the City of Tacoma. Rejected material and equipment shall be removed from the City's property by and at the expense of the Contractor.

B. Guarantee for Supply Contracts

Unless a longer period is specified, the supplier and/or manufacturer of the supplies, materials and/or equipment furnished pursuant to this Contract agrees to correct any defect or failure of the supplies, materials and/or equipment which occurs within one year from the date of: (1) test energization if electrical or mechanical equipment; (2) commencement of use if supplies or materials, provided, however, said guarantee period shall not extend beyond eighteen months after date of receipt by the City. All of the costs (including shipping, dismantling and reinstallation) of repairs and/or corrections of defective or failed equipment, supplies and/or material is the responsibility of the supplier and/or manufacturer.

When the supplier is not the manufacturer of the item of equipment, supplier agrees to be responsible for this guarantee and supplier is not relieved by a manufacturer's guarantee.

C. Guarantee Period Extension

The Contract guarantee period shall be suspended from the time a significant defect is first documented by the City until the work or equipment is repaired or replaced by Contractor and accepted by the City. In addition, in the event less than ninety (90) days remain on the guarantee period (after recalculating), the guarantee period shall be extended to allow for at least ninety (90) days from the date the work or equipment is repaired or replaced and accepted by the City.

2.10 DEDUCTIONS FOR UNCORRECTED WORK

If the City of Tacoma deems it expedient to correct work not done in accordance with the terms of this Contract, an equitable deduction from the Contract price shall be made.

2.11 CITY OF TACOMA'S RIGHT TO TERMINATE CONTRACT

A. Termination for Convenience

1. **Supplies.** The City may terminate a Contract for supplies at any time upon prior written notice to Contractor. 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 day's 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

1. 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 Contractor's breach continues in effect after written notice of breach and 30 days to cure such breach and fails to cure such breach
2. **Bankruptcy.** If the Contractor should be adjudged as bankrupt, or makes a general assignment for the benefit of creditors, or a receiver should be appointed on account of his/her insolvency, or if he/she or any of his/her subcontractors should violate any of the provisions of the Contract, or if the work is not being properly and diligently performed, the City of Tacoma may serve written notice upon the Contractor and Surety, executing the Payment and Performance Bond, of its intention to terminate the Contract; such notice will contain the reasons for termination of the Contract, and unless within 10 days after the serving of such notice, such violation shall cease and an arrangement satisfactory to the City of Tacoma for correction thereof shall be made, the Contract shall, upon the expiration of said 10 days, cease and terminate and all rights of the Contractor hereunder shall be forfeited. In the event the Contract is terminated for cause, Contractor shall not be entitled to any lost profits resulting therefrom.
3. **Notice.** In the event of any such termination for cause, the City of Tacoma shall immediately send (by regular mail or other method) written notice thereof to the Surety and the Contractor. Upon such termination the Surety shall have the right to take over and perform the Contract, provided however, the Surety must provide written notice to the City of its intent to complete the work within 15 calendar days of its receipt of the original written notice (from the City) of the intent to terminate. Upon termination and if the Surety does not perform the work, the City of Tacoma may take over the work and prosecute the same to completion by any method it may deem advisable, for the account of and at the expense of the Contractor, and the Contractor and the Surety shall be liable to the City of Tacoma for all cost occasioned to the City of Tacoma thereby. The City of Tacoma may without liability for doing so, take possession of and utilize in completing the work, such materials, equipment, plant and other property belonging to the Contractor as may be on the site of the work and necessary therefore.

2.12 LIENS

In the event that there are any liens on file against the City of Tacoma, the City of Tacoma shall be entitled to withhold final or progress payments to the extent deemed necessary by the City of Tacoma to properly protect the outstanding lien claimants until proper releases have been filed with the City Clerk.

2.13 LEGAL DISPUTES

A. General

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.

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.

B. Attorney Fees

For contracts up to \$250,000, which become the subject of litigation or arbitration, the substantially prevailing party may be entitled to reasonable attorney fees, as provided in RCW 39.04.240. Provided, however, the attorney fee hourly rate for the City of Tacoma’s assistant city attorneys is agreed to be \$150 per hour or the same as the hourly rate for Contractor’s legal counsel, whichever is greater.

2.14 DELIVERY

Prices must be quoted F.O.B. destination, freight prepaid and allowed with risk of loss during transit remaining with Contractor/Supplier (unless otherwise stated in these Specifications) to the designated address set forth in these Specifications.

Deliveries shall be between 9:00 a.m. and 3:30 p.m.; Monday through Friday only (except legal holidays of the City of Tacoma).

Legal holidays of the City of Tacoma are:

| | |
|-------------------------------|--------------------------|
| 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 |
| Juneteenth | June 19 |
| 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 |

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.

2.15 PACKING SLIPS AND INVOICES

A. 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.

B. 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.

2.16 APPROVED EQUALS

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 the respondent specifies the brand and model, and provides all descriptive literature, independent test results, product samples, local servicing and parts availability to enable the City to evaluate the proposed "equal".

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 the respondent 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 the respondent's expense.

C. When a brand name or level of quality is not stated by the respondent, it is understood the offer is exactly as specified. If more than one brand name is specified, respondents must clearly indicate the brand and model/part number being bid.

2.17 ENTIRE AGREEMENT

This written contract represents the entire Agreement between the parties and supersedes any prior oral statements, discussions or understandings between the parties.

2.18 CODE OF ETHICS

The City's Code of Ethics, Chapter 1.46, Tacoma Municipal Code, provides ethical standards for City personnel and prohibits certain unethical conduct by others including respondents and contractors. Violation of the City's Code of Ethics will be grounds for termination of this contract.

2.19 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, 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.

[Section III is for contracts that involve construction and/or labor, and are not applicable to contracts solely for material/supply purchases.]

GENERAL PROVISIONS

SECTION III - CONSTRUCTION AND/OR LABOR CONTRACTS

SECTION III REQUIREMENTS APPLY ONLY TO CONSTRUCTION AND/OR LABOR CONTRACTS AND ARE IN ADDITION TO APPLICABLE REQUIREMENTS CONTAINED IN SECTION II CONTRACT REQUIREMENTS.

3.01 RESPONDENT'S DUTY TO EXAMINE

The Respondent agrees to be responsible for examining the site(s) and to have compared them with the Specifications and Contract Drawings, and to be satisfied as to the facilities and difficulties attending the execution of the proposed Contract (such as uncertainty of weather, floods, nature and condition of materials to be handled and all other conditions, obstacles and contingencies) before the delivery of his/her Proposal. No allowance will be subsequently made by the City on behalf of the Respondent by reason of any error or neglect on Respondent's part, for such uncertainties as aforesaid.

3.02 PERMITS

Except when modified by the Special Provisions, the Contractor shall procure and pay for all permits and licenses necessary for the completion of this Contract including those permits required by the City of Tacoma. The City will obtain county or state road crossing permits if required. In the event a necessary permit is not obtained, the Contractor will not be permitted to work on items subject to said permit and any delays caused thereby will not be subject to extra compensation or extensions.

3.03 NOTIFICATION OF OTHER GOVERNMENTAL AGENCIES AND UTILITIES WHEN UNDERGROUND WORK IS INVOLVED

The Contractor shall notify all other affected governmental agencies and utilities whenever underground work is done under the terms of this Contract. The Contractor is required to obtain permission of the appropriate public and private utilities and governmental agencies before performing underground work pursuant to the terms of this Contract. The Contractor is required to call "one call" at 1-800-424-5555 for all work involving excavation or digging more than 12 inches beneath ground or road surface.

The City may have indicated on the plans and specifications the existence of certain underground facilities that are known to the City department responsible for this Contract. It is the Contractor's responsibility to fully comply with the Underground Utility Locate Law, Chapter 19.122 RCW. If the site conditions are "changed or differing" as defined by RCW 19.122.040(l), the Contractor may pursue the party responsible for not properly marking or identifying the underground facility. The Contractor agrees not to file any claim or legal action against the City (department responsible for this Contract) for said "changed or differing" conditions unless said City department is solely responsible for the delay or damages that the Contractor may have incurred.

3.04 TRENCH EXCAVATION BID ITEM

In the event that "trench excavation" in excess of four feet requires a safety system pursuant to Washington State law and safety shoring, sloping, sheeting, or bracing is used, a separate bid item should be set forth in the Proposal for this work. If a separate bid item is not set forth in the Proposal pages, said installed safety system shall be paid at \$3.00 per lineal foot of trench, which unit price includes both sides of the trench.

3.05 SAFETY

A. General

The Contractor shall, at all times, exercise adequate precautions for the safety of all persons, including its employees and the employees of a Subcontractor, in the performance of this Contract and shall comply with all applicable provisions of federal, state, county and municipal safety laws and regulations. It is the Contractor's responsibility to furnish safety equipment or to contractually require Subcontractors to furnish adequate safety equipment relevant to their responsibilities.

The Contractor shall obtain the necessary line clearance from the inspector before performing any work in, above, below or across energized Light Division circuits.

The Inspector and/or Engineer may advise the Contractor and the Safety Officer of any safety violations. It is the Contractor's responsibility to make the necessary corrections. Failure to correct safety violations is a breach of this Contract and, as such, shall be grounds for an order from the Safety Officer, Inspector or Engineer to cease further work and remove from the job site until the condition is corrected. Time and wages lost due to such safety shutdowns shall not relieve the Contractor of any provisions of Section 3.14 of this Specification and shall be at the sole cost of the Contractor. The purpose of this authority to stop work is to enforce the contract and not to assume control except to the extent necessary to ensure compliance with the provisions of this contract.

Any of the above actions by employees of the City of Tacoma shall in no way relieve the Contractor of his/her responsibility to provide for the safety of all persons, including his/her employees.

B. Work Hazard Analysis Report

The Contractor will be required to complete a work hazard analysis report. This report shall outline how the Contractor proposes to satisfy all safety laws and regulations involved in performing the work. This report shall be completed and submitted to the City Safety Officer before the pre-construction conference. A copy of the report shall be maintained at the work site (accessible to the supervisor).

3.06 PROTECTION OF WORKERS AND PROPERTY

The Contractor shall erect and maintain good and sufficient guards, barricades and signals at all unsafe places at or near the work and shall, in all cases, maintain safe passageways at all road crossings, and crosswalks, and shall do all other things necessary to prevent accident or loss of any kind.

The Contractor shall protect from damage all utilities, improvements, and all other property that is likely to become displaced or damaged by the execution of the work under this Contract.

The Contractor is responsible for all roads and property damaged by his/her operations as shall be determined by the Engineer administering this Contract. The Contractor shall be responsible for repairing all damage to roads caused by his/her operations to the satisfaction of the particular governmental body having jurisdiction over the road.

3.07 CONTRACTOR - SUPERVISION AND CHARACTER OF EMPLOYEES

A. Superintendent to Supervise Contractor's Employees

The Contractor shall keep on his/her work, during its progress, a competent superintendent and any necessary assistants, all of whom must be satisfactory to the City of Tacoma. The Contractor's superintendent shall not be changed except with the consent of the City of Tacoma, unless the Contractor's superintendent proves to be unsatisfactory to the Contractor and ceases to be in his/her employ. The Contractor's superintendent shall represent the Contractor in his/her absence and all directions given to him/her shall be binding as if given to the Contractor directly. The Contractor shall give efficient supervision to the work, using his/her best skill and attention.

B. Character of Contractor's Employees

The Contractor shall employ only competent, skillful, faithful and orderly persons to do the work, and whenever the Engineer administering the Contract shall notify the Contractor in writing that any person on the work is, in his or her opinion, incompetent, unfaithful, disorderly or otherwise unsatisfactory, the Contractor shall forthwith discharge such persons from the work and shall not again employ him or her on this Contract.

3.08 CONTRACTOR'S COMPLIANCE WITH THE LAW

A. Hours of Labor

The Contractor and Subcontractors shall be bound by the provisions of RCW Chapter 49.28 (as amended) relating to hours of labor. Except as set forth in the Special Provisions, eight (8) hours in any calendar day shall constitute a day's work on a job performed under this Contract.

In the event that the work is not performed in accordance with this provision and in accordance with the laws of the State of Washington, then this Contract may be terminated by the City of Tacoma for the reason that the same is not performed in accordance with the public policy of the State of Washington as defined in said statutes.

B. Prevailing Wages

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.

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. In the event any dispute arises as to what are the prevailing rates of wages for work of a similar nature and such dispute cannot be adjusted by the parties in interest, including labor and management representatives, the matter shall be referred for arbitration to the Director of the State of Washington, Department of Labor and industries whose decision shall be final, conclusive and binding on all parties involved in the dispute.

3.09 COPELAND ANTI-KICKBACK ACT

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

A. 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.

B. 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.

C. 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.

3.10 CHANGES

A. In Plans or Quantities

The City of Tacoma, without invalidating this Contract, or any part of this Contract, may order extra work or make reasonable changes by altering, adding to or deducting from the materials, work and labor and the Contract sum will be adjusted accordingly. All such work and labor shall be executed under the conditions of the original Contract except that any claim for extension of time caused thereby shall be adjusted at the time of ordering such change. When work or bid items are deducted, reduced or eliminated, it is agreed that no payment will be made to Contractor for anticipated profit.

B. Extra Work

Any claim or order for extra materials, work and labor made necessary by alterations or additions to the plans or by other reasons for which no price is provided in this Contract, shall not be valid unless the Contractor and Engineer administering the Contract have agreed upon a price prior to commencing extra work, and the agreement has been signed by the Contractor and approved by the Superintendent or his/her designee, and approved by the payment and performance bond surety.

C. Extra Work - No Agreed Price

If it is impracticable to fix an increase in price definitely in advance, the order may fix a maximum price which shall not under any circumstances, be exceeded, and subject to such limitation, such alteration, modification, or extra shall be paid for at the actual necessary cost as determined by the City of Tacoma, which cost (including an allowance for profit) shall be determined as the sum of the following items (1) to (7) inclusive:

- (1) Labor, computed at regular wage scale, including premium on compensation insurance and charge for social security taxes, and other taxes, pertaining to labor; no charge for premium pay shall be allowed unless authorized by the Engineer administering the Contract;
- (2) The proportionate cost of premiums on comprehensive general liability and other insurance applicable to the extra work involved and required under this Contract;
- (3) Material, including sales taxes pertaining to materials;
- (4) Plant and equipment rental, to be agreed upon in writing before the work is begun; no charge for the cost of repairs to plant or equipment will be allowed;
- (5) Superintendence, general expense and profit computed at 20 percent of the total of paragraphs (1) to (4) inclusive;
- (6) The proportionate cost of premiums on bonds required by this Contract, computed by 1 1/2 percent of the total of paragraphs (1) to (5) inclusive.
- (7) The City of Tacoma reserves the right to furnish such materials as it may deem expedient, and no allowance will be made for profit thereon.

Whenever any extra work is in progress, for which the definite price has not been agreed on in advance, the Contractor shall each day, report to the Engineer the amount and cost of the labor and material used, and any other expense incurred in such extra work on the preceding day, and no claim for compensation for such extra work will be allowed unless such report shall have been made.

The above-described methods of determining the payment for work and materials shall not apply to the performance of any work or the furnishing of any material, which, in the judgment of the Engineer administering the Contract, may properly be classified under items for which prices are established in the Contract.

D. Claims for Extra Work

If the Contractor claims that any instructions by drawings or otherwise, involve extra cost under this Contract, he/she shall give the City of Tacoma written notice thereof within 30 days after receipt of such instruction, and in any event before proceeding to execute the work, except in an emergency endangering life or property, and the procedures governing the same shall be as provided for immediately above in this paragraph. The method in these paragraphs is the only method available to the Contractor for payment of claims for extra work performed under the terms of this Contract.

3.11 CLEANING UP

The Contractor shall at all times, at his/her own expense, keep the premises free from accumulation of waste materials or debris caused by any workers or the work, at the completion of the work the Contractor shall remove all his waste materials from and about the site and all his/her equipment, sanitary facilities and surplus materials. In the case of dispute, the City of Tacoma may remove the debris and charge the cost to the Contractor as the City of Tacoma shall determine to be just. All material that is deposited or placed elsewhere than in places designated or approved by the Engineer administering the Contract will not be paid for and the Contractor may be required to remove such material and deposit or place it where directed.

3.12 PROGRESS PAYMENT

Progress payments will be made up to the amount of ninety-five percent (95%) of the actual work completed as shall be determined by the Engineer administering the Contract.

The Contractor may request that an escrow account be established as permitted by law, in which event the Contractor will earn interest on the retained funds.

When the time for construction, services and/or installation will exceed thirty (30) days, the Contractor may request, by invoice, to be paid a progress payment based on percentage of work completed. The Engineer will review and approve the progress payment request on a monthly basis.

3.13 FINAL PAYMENT

The final payment of five percent (5%) of the Contract price shall be approved on final acceptance of the work under this Contract by the Superintendent or his/her designee. In addition, before final payment is made, the Contractor shall be required to:

- A. Provide a certificate from the Washington State Department of Revenue that all taxes due from the Contractor have been paid or are collectible in accordance with the provisions of Chapter 60.28 and Title 82 of the Revised Code of Washington;
- B. Provide the General Release to the City of Tacoma on the form set forth in these Contract documents;
- C. Provide a release of any outstanding liens that have been otherwise filed against any monies held or retained by the City of Tacoma;
- D. File with the City Director of Finance, and with the Director of the Washington State Department of Labor and Industries, on the state form to be provided, an affidavit of wages paid;
- E. File with the City Director of Finance, on the state form to be provided, a statement from the State of Washington, Department of Labor and Industries, certifying that the prevailing wage requirements have been satisfied.
- F. File with the City Director of Finance, on the state form to be provided, a statement of release from the Public Works Contracts Division of the State of Washington, Department of Labor and Industries, verifying that all industrial insurance and medical aid premiums have been paid.

If there is a fee assessed to the City for any certificate, release or other form required by law, the contractor agrees that the fee amount may be passed on to the Contractor and deducted from the monies paid to the Contractor.

3.14 FAILURE TO COMPLETE THE WORK ON TIME

Should the completion of the work required under the Contract be delayed beyond the expiration of the period herein set for the completion of said work, or such extension of said period as may be allowed by reason of unavoidable delays, there shall be deducted from the total Contract price of work, for each calendar day by which such completion shall be delayed beyond said period of such extension thereof the sum of \$300 or a sum of money as set forth hereinafter in these Specifications, as the amount of such deduction per calendar day.

Said sum shall be considered not as a penalty, but as liquidated damages, which the City will suffer by reason of the failure of the Contractor to perform and complete the work within the period, herein fixed or such extensions of said period as may be allowed by reason of unavoidable delays.

Any money due or to become due the Contractor may be retained by the City to cover said liquidated damages, and should such money not be sufficient to cover such damages, the City shall have the right to recover the balance from the Contractor or his/her Sureties.

The filing of any bid for the work herein contemplated shall constitute acknowledgment by the Respondent that he/she understands, agrees and has ascertained that the City will actually suffer damages to the amount hereinabove fixed for each and every calendar day during which the completion of the work herein required shall be delayed beyond the expiration of the period herein fixed for such completion or such extension of said period as may be allowed by reason of unavoidable delays.

3.15 CITY RESERVES RIGHT TO USE FACILITIES PRIOR TO ACCEPTANCE

The City of Tacoma hereby reserves the right to use the facilities herein contracted prior to final acceptance under this Contract. The use of said facilities, as mentioned herein, shall not be construed as a waiver or relinquishment of any rights that the City of Tacoma has under this Contract.

3.16 LIST OF SUBCONTRACTORS

Bid proposals for construction, alteration or repair of any building or other public works that may exceed \$1,000,000 including tax shall satisfy the following requirement: Respondent shall submit as part of the bid, the names of the subcontractors, with whom the respondent, if awarded the contract, will subcontract performance of the work of heating, ventilation and air conditioning, plumbing as described in chapter 18.106 RCW, and electrical as described in chapter 19.28 RCW, or to name itself for the work. The respondent shall not list more than one subcontractor for each category of work identified, unless subcontractors vary with bid alternates, in which case the respondent must indicate which subcontractor will be used for which alternate. Failure to comply with this provision or the naming of two or more subcontractors to perform the same work shall require the City (pursuant to state law RCW 39.30.060) to determine that respondent's bid is nonresponsive; therefore, the bid will be rejected.

INTENT & AFFIDAVIT INFORMATION FOR ON CALL CONTRACTS

- A. One Intent to Pay Prevailing Wages and a corresponding approved Affidavit of Wages Paid (Affidavits) are to be filed for each 12 month (one year) period of the contract performance for the Contractor and all subcontractors of any tier. Intents for the Contractor and all subcontractors shall be filed prior to any payment for work performed following contract execution. Following the first 12 month period, Affidavits must be received prior to final payment for work performed during the first 12 month period. New Intents shall be filed prior to any payment for work performed during the second 12 month period for the Contractor and all subcontractors. Affidavits from the Contractor and all subcontractors must be received from Washington State's Department of labor and Industries (L&I) per Article 6 of the General Conditions.
- B. Immediately following the end of all work completed under this Contract, the Contractor, and each Subcontractor of any tier, shall file an approved Affidavit of Wages Paid with the L&I.
- C. The Contractor shall post in a location readily visible to works at the Project site (1) a copy of the Statement of Intent to Pay Prevailing Wages approved by the Industrial Statistician of the Department of Labor and Industries and (2) the address and telephone number of the Industrial Statistician of the Department of labor and Industries to whom a complaint or inquiry concerning prevailing wages may be directed.
- D. If a State of Washington prevailing wage rate conflicts with another applicable wage rate (such as Davis-Bacon Ace wage rate) for the same labor classification, the higher of the two shall govern.
- E. Pursuant to RCW 39.12.060, if any dispute arises concerning the appropriate prevailing wage rate for work of a similar nature, and the dispute cannot be adjusted by the parties in interest, including labor and management representatives, the matter shall be referred for arbitration to the Director of the Department of Labor and Industries, and his or her decision shall be final and conclusive and binding on all parties involved in the dispute.
- F. The Contractor shall defend (at the Contractor's sole costs, with legal counsel approved by the City of Tacoma), indemnify and hold the City harmless from all liabilities, obligations, claims, demands, damages, disbursements, lawsuits, losses, fines, penalties, costs and expenses, whether direct, indirect, including but not limited to attorneys' fees and consultants' fees and other costs and expenses, from any violation or alleged violation by the Contractor or any Subcontractor of any tier of RCW 39.12 ("Prevailing Wages on Public Works") or Chapter 51 RCW ("Industrial Insurance"), including but not limited to RCW 51.12.050.

APPENDIX B

Signature Page

Price Proposal Forms

Bid Bond

Certification of Compliance With Wage Payment Statutes

State Responsibility and Reciprocal Bid Preference Information

Record of Prior Contracts

List of Subcontractors Category of Work

List of Equipment

Safety Plan

SIGNATURE PAGE

**CITY OF TACOMA
TACOMA POWER/TRANSMISSION & DISTRIBUTION**

All submittals must be in ink or typewritten, executed by a duly authorized officer or representative of the bidding/proposing entity, and received and time stamped as directed in the **Request for Bids page near the beginning of the specification**. If the bidder/proposer is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.

**REQUEST FOR BIDS SPECIFICATION NO. PT24-0296F
On-Call Telecomm System Outside Plant Construction/Maintenance**

The undersigned bidder/proposer hereby agrees to execute the proposed contract and furnish all materials, labor, tools, equipment and all other facilities and services in accordance with these specifications.

The bidder/proposer agrees, by submitting a bid/proposal under these specifications, that in the event any litigation should arise concerning the submission of bids/proposals or the award of contract under this specification, Request for Bids, Request for Proposals or Request for Qualifications, the venue of such action or litigation shall be in the Superior Court of the State of Washington, in and for the County of Pierce.

Non-Collusion Declaration

The undersigned bidder/proposer hereby certifies under penalty of perjury that this bid/proposal is genuine and not a sham or collusive bid/proposal, or made in the interests or on behalf of any person or entity not herein named; and that said bidder/proposer has not directly or indirectly induced or solicited any contractor or supplier on the above work to put in a sham bid/proposal or any person or entity to refrain from submitting a bid/proposal; and that said bidder/proposer has not, in any manner, sought by collusion to secure to itself an advantage over any other contractor(s) or person(s).

Bidder/Proposer's Registered Name

Signature of Person Authorized to Enter Date
into Contracts for Bidder/Proposer

Address

Printed Name and Title

City, State, Zip

(Area Code) Telephone Number / Fax Number

Authorized Signatory E-Mail Address

State Business License Number
in WA, also known as UBI (Unified Business Identifier) Number

E.I.No. / Federal Social Security Number Used on Quarterly
Federal Tax Return, U.S. Treasury Dept. Form 941

State Contractor's License Number
(See Ch. 18.27, R.C.W.)

E-Mail Address for Communications

Addendum acknowledgement #1 _____ #2 _____ #3 _____ #4 _____ #5 _____

THIS PAGE MUST BE SIGNED AND RETURNED WITH SUBMITTAL.



PROPOSAL PAGES

| ITEM # | ITEM TITLE | SHALL BE MEASURED BY... | ESTIMATED QUANTITY | PRICE PER UNIT | EXTENDED PRICE |
|--------|---|--|--------------------|----------------|----------------|
| 1 | FURNISH AND INSTALL 1/4" EHS STRAND AND HARDWARE FOR COAXIAL/FIBER OPTIC CABLE | The strand foot, pole to pole, complete and in place | 200,000 | \$ | \$ |
| 2 | MAKE READY CONSTRUCTION—STRAIGHT LINE POLES | The pole, complete and ready for strand installations | 1200 | \$ | \$ |
| 3 | MAKE READY CONSTRUCTION—CORNER, 'T' LEAD, AND DEAD END POLES | The pole, complete and ready for strand installations | 800 | \$ | \$ |
| 4 | FURNISH AND INSTALL 1/4" OR 3/8" STRAND AND HARDWARE FOR GUYING | Per each guy, complete and in place | 50 | \$ | \$ |
| 5 | LASH CITY-FURNISHED COAXIAL CABLE (SINGLE CABLE) | The Active Cable Bearing Strand (A.C.B.S.) foot, pole to pole, complete and in place | 25,000 | \$ | \$ |
| 6 | LASH MULTIPLE CITY-FURNISHED COAXIAL CABLES | The Active Cable Bearing Strand (A.C.B.S.) foot, pole to pole, complete and in place | 10,000 | \$ | \$ |
| 7 | DE-LASH AND RE-LASH CITY FURNISHED CABLES | The Active Cable Bearing Strand (A.C.B.S.) foot, pole to pole, complete and in place | 50,000 | \$ | \$ |
| 8 | LASH CITY-FURNISHED FIBER (SINGLE SHEATH) | The Active Fiber Bearing Strand (A.F.B.S.) foot, pole to pole, complete and in place | 200,000 | \$ | \$ |
| 9 | COAXIAL ELECTRONIC ACTIVE AND PASSIVE SPLICING AND ACTIVATION | The Active Cable Bearing Strand (A.C.B.S.) or Cable Bearing Trench Foot of delivered 2 way operating plant | 1,000 | \$ | \$ |
| 10 | INSTALL CITY-FURNISHED STANDBY AERIAL POWER SUPPLY WITH UNDERGROUND BATTERIES AND VAULT | Per each, complete and in place | 1 | \$ | \$ |
| 11 | INSTALL CITY-FURNISHED STANDBY UNDERGROUND POWER SUPPLY CABINET AND BATTERIES AND VAULT | Per each cabinet, complete and in place | 1 | \$ | \$ |



| | | | | | | |
|-----------|---|--|--------------------|-------|----|----|
| 12 | ROCKSAW TRENCH, MINIMUM 6" WIDE WITH 18" COVER USING CONTROL DENSITY | The trench foot, complete and in place | 1,000 | \$ | \$ | |
| 13 | BACKHOE TRENCH, MINIMUM 12" WIDE WITH 18" COVER USING CONTROL DENSITY BACKFILL | The trench foot, complete and in place | 100 | \$ | \$ | |
| 14 | TRENCH 12" WIDE WITH 24" COVER USING NATIVE MATERIAL BACKFILL | The trench foot, complete and in place | 6,000 | | | |
| 15 | TRENCH 12" WIDE WITH 36" COVER USING NATIVE MATERIAL BACKFILL | The trench foot, complete and in place | 500 | \$ | \$ | |
| 16 | TRENCH 12" WIDE WITH 36" COVER WITH 2" CONCRETE CAP USING NATIVE MATERIAL BACKFILL | The trench foot, complete and in place | 100 | \$ | \$ | |
| 17 | TRENCH 12" WIDE WITH 36" COVER UNDER WEDGE CURB USING 5/8" MINUS GRAVEL BACKFILL MATERIAL | The trench foot, complete and in place | 100 | \$ | \$ | |
| 18 | INSTALL UNDERGROUND SERVICE CONDUIT | The each, complete and in place | 100 | \$ | \$ | |
| 19 | UNDERGROUND PUSHING | Lineal foot, complete and in place | 100 | \$ | \$ | |
| 20 | DIRECTIONAL BORING | Lineal foot, complete and in place | 1-2" | 1,000 | \$ | \$ |
| | | | 2-2" | 1,000 | \$ | \$ |
| | | | 3-2" | 1,000 | \$ | \$ |
| 21 | PLACE ENCLOSURES | Shall be measured by each enclosure in place | a. Vaults | 50 | \$ | \$ |
| | | | b. small pedestals | 100 | \$ | \$ |
| | | | c. large pedestals | 50 | \$ | \$ |
| 22 | PROOF EXISTING CONDUITS | Shall be measured by the linear duct foot, complete and in place | 30,000 | \$ | \$ | |
| 23 | CUT, REMOVE AND RESTORE CONCRETE | Square foot, complete and in place | 100 | \$ | \$ | |
| 24 | CUT, REMOVE AND RESTORE UP TO 3" THICK ASPHALT, BEYOND AND NOT INCLUDING 18" GRIND | Square foot, complete and in place | 1,000 | \$ | \$ | |
| 25 | FURNISH AND INSTALL RISER ASSEMBLIES | Per each, complete and in place | 40 | \$ | \$ | |
| 26 | INSTALL CITY-FURNISHED QR .715 COAXIAL CABLE IN CONDUIT | Linear trench foot per duct, complete and in place | 50,000 | \$ | \$ | |



| ITEM # | ITEM TITLE | SHALL BE MEASURED BY... | ESTIMATED QUANTITY | PRICE PER UNIT | EXTENDED PRICE |
|-----------------------|--|--|--------------------|----------------|----------------|
| 27 | INSTALL CITY-FURNISHED RG6 OR RG11 COAXIAL CABLE IN CONDUIT | Linear trench foot per duct, complete and in place | 1,000 | \$ | \$ |
| 28 | INNERDUCT PLACEMENT | The innerduct foot, complete and in place | 3,000 | \$ | \$ |
| 29 | INSTALL CITY-FURNISHED FIBER OPTIC CABLE IN CONDUIT | Linear trench foot per duct, complete and in place | 50,000 | \$ | \$ |
| 30 | AERIAL CREW RATE | Per hour | | | |
| | | a. Lineman | 400 | \$ | \$ |
| | | b. Driver/Ground man | 400 | \$ | \$ |
| | | c. Laborer | 400 | \$ | \$ |
| | | d. Splicer | 10 | \$ | \$ |
| | | Splicing Vehicle | 10 | | |
| 31 | UNDERGROUND CREW RATE | Per hour | | | |
| | | a. Equipment Operator | 400 | \$ | \$ |
| | | b. Driver/Ground Man | 400 | \$ | \$ |
| | | c. Laborer | 1000 | \$ | \$ |
| | | d. Splicer | 2000 | \$ | \$ |
| | | Splicing Vehicle | 2000 | \$ | \$ |
| | | Backhoe | 400 | \$ | \$ |
| Trucks with Equipment | 1000 | \$ | \$ | | |
| 32 | SET UP FEE | Per each work packet. | 1 | \$ | \$ |
| 33 | STRUCTURAL FILL – 5/8"MINUS GRAVEL | The ton, complete and in place | 500 | \$ | \$ |
| 34 | FORCE ACCOUNT | | 1 | Lump Sum | \$150,000 |
| | PRE-TAX SUBTOTAL (including Force Account) | | | | \$ |
| | **Retail Sales Tax @ 10.3% (Note Section 1.13 of General Provisions) | | | | \$ |
| | TOTAL | | | | \$ |

**Sales tax is determined by the location where services are conducted ("destination based")

Herewith find deposit in the form of a cashier's check in the amount of \$ _____ which amount is not less than 5-percent of the total bid.

SIGN HERE _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and _____, as Surety, are held and firmly bound unto the City of Tacoma, as Obligee, in the penal sum of _____ dollars, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of this obligation is such that if the Obligee shall make any award to the Principal for

according to the terms of the proposal or bid made by the Principal therefor, and the Principal shall duly make and enter into a contract with the Obligee in accordance with the terms of said proposal or bid and award and shall give bond for faithful performance thereof, with Surety or Sureties approved by the Obligee; or if the Principal shall, in case of failure to do so, pay and forfeit to the Obligee the penal amount of the deposit specified in the call for bids, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect and the Surety shall forthwith pay and forfeit to the Obligee, as penalty and liquidated damages, the amount of this bond.

SIGNED, SEALED AND DATED THIS _____ DAY OF _____, 20_____.

PRINCIPAL:

SURETY:

_____, 20_____

Received return of deposit in the sum of \$ _____



City of Tacoma

Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (**April 8, 2025**), that the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the state of Washington that the foregoing is true and correct.

Bidder

Signature of Authorized Official*

Printed Name

Title

Date

City

State

Check One:

Individual

Partnership

Joint Venture

Corporation

State of Incorporation, or if not a corporation, the state where business entity was formed:

If a co-partnership, give firm name under which business is transacted:

** If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

Specification No. _____

Name of Bidder: _____

State Responsibility and Reciprocal Bid Preference Information

Certificate of registration as a contractor
(Must be in effect at the time of bid submittal):

Number: _____

Effective Date: _____

Expiration Date: _____

Current Washington Unified Business Identifier
(UBI) Number:

Number: _____

Do you have industrial insurance (workers' compensation)
Coverage nor your employees working in Washington?

- Yes No
 Not Applicable

Washington Employment Security Department Number

Number: _____

Not Applicable

Washington Department of Revenue state excise tax
Registration number:

Number: _____

Not Applicable

Have you been disqualified from bidding any public
works contracts under RCW 39.06.010 or 39.12.065(3)?

- Yes No

If yes, provide an explanation of your
disqualification on a separate page.

Do you have a physical office located in the state of
Washington?

- Yes No

If incorporated, in what state were you incorporated?

State: _____ Not Incorporated

If not incorporated, in what state was your business
entity formed?

State: _____

Have you completed the training required by RCW
39.04.350, or are you on the list of exempt businesses
maintained by the Department of Labor and Industries?

- Yes No



SAFETY PLAN

In the space below or on a separate sheet the Respondent must provide a **comprehensive safety plan** addressing the following requirements.

1. List of names and contact information for supervisory and management staff concerning **safety related issues**.

| Name | Title | Contact Number |
|------|-------|----------------|
| | | |
| | | |
| | | |
| | | |
| | | |

2. The contractor(s) shall have available to the City a 24 hour on-call number for service notifications. Provide below the on-call phone number for contact outside of normal business hours:

3. A process for addressing safety issues brought to the attention of the contractor by Tacoma Power.

List of Subcontractor Categories of Work

Project Name _____

Subcontractor(s) that are proposed to perform the work of heating, ventilation and air conditioning, and/or plumbing, as described in Chapter 18.106 RCW, and electrical as described in Chapter 19.28 RCW must be listed below. **This information must be submitted with the bid proposal or within one hour of the published bid submittal time via email to bids@cityoftacoma.org.**

Subcontractor(s) that are proposed to perform the work of structural steel installation and/or rebar installation must be listed below. **This information must be submitted with the bid proposal or within forty-eight hours of the published bid submittal time via email to bids@cityoftacoma.org.**

Failure to list subcontractors or naming more than one subcontractor to perform the same work will result in your bid being non-responsive. Contractors self-performing must list themselves below. The work to be performed is to be listed below the subcontractor(s) name. If no subcontractor is listed below, the bidder acknowledges that it does not intend to use any subcontractor to perform those items of work.

Subcontractor Name _____
Work to be Performed _____

Subcontractor Name _____
Work to be Performed _____

Subcontractor Name _____
Work to be Performed _____

Subcontractor Name _____
Work to be Performed _____

Subcontractor Name _____
Work to be Performed _____

APPENDIX C

Sample City of Tacoma Contract

Sample Performance Bond

Sample Payment Bond

CONTRACT

Resolution No.
Contract No.

This Contract is made and entered into effective as of [Month], [Day], [Year] (“Effective Date”) by and between the City of Tacoma, a Municipal Corporation of the State of Washington (“City”), and [supplier name as it appears in Ariba, including dbas or trade names] (“Contractor”).

That in consideration of the mutual promises and obligations hereinafter set forth the Parties hereto agree as follows:

- I. Contractor shall fully execute and diligently and completely perform all work and provide all services and deliverables described herein and in the items listed below each of which are fully incorporated herein and which collectively are referred to as “Contract Documents”:

 1. Specification No. [Spec Number] [Spec Title] together with all authorized addenda.
 2. Contractor’s submittal [or specifically described portions thereof] dated [Enter Submittal Date] submitted in response to Specification No. [Spec Number] [Spec Title].
 3. Describe with specific detail and list separately any other documents that will make up the contract (fee schedule, work schedule, authorized personnel, etc.) or any other additional items mutually intended to be binding upon the parties.

- II. If federal funds will be used to fund, pay or reimburse all or a portion of the services provided under the Contract, the terms and conditions set forth at this Appendix A are incorporated into and made part of this Contract and CONTRACTOR will comply with all applicable provisions of Appendix A and with all applicable federal laws, regulations, executive orders, policies, procedures, and directives in the performance of this Contract.

If CONTRACTOR’s receipt of federal funds under this Contract is as a sub-recipient, a fully completed Appendix B, “Sub-recipient Information and Requirements” is incorporated into and made part of this Contract.
- III. In the event of a conflict or inconsistency between the terms and conditions contained in this document entitled Contract and any terms and conditions contained the above referenced Contract Documents the following order of precedence applies with the first listed item being the most controlling and the last listed item the least controlling:
 1. Contract, inclusive of Appendices A and B.
 2. List remaining Contract Documents in applicable controlling order.
- IV. The Contract terminates on xxxxx, and may be renewed for xxxxxxxx
- V. The total price to be paid by City for Contractor’s full and complete performance hereunder, including during any authorized renewal terms, may not exceed:
\$[Dollar Amount], plus any applicable taxes.
- VI. Contractor agrees to accept as full payment hereunder the amounts specified herein and in Contract Documents, and the City agrees to make payments at the times and in the manner and upon the terms and conditions specified. Except as may be otherwise provided herein or in Contract Documents Contractor shall provide and bear the expense of all equipment, work and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work and providing the services and deliverables required by this Contract.
- VII. The City’s preferred method of payment is by ePayables (Payment Plus), followed by credit card (aka procurement card), then Electronic Funds Transfer (EFT) by Automated Clearing House (ACH), then check or other cash equivalent. CONTRACTOR 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. The City, in its sole discretion, will determine the method of payment for this Contract.

VIII. 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 the insurance requirements contained in the Contract Documents shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

IX. Contractor and for its heirs, executors, administrators, successors, and assigns, does hereby agree to the full performance of all the requirements contained herein and in Contract Documents.

It is further provided that no liability shall attach to City by reason of entering into this Contract, except as expressly provided herein.

IN WITNESS WHEREOF, the Parties hereto have accepted and executed this Contract, as of the Effective Date stated above, which shall be Effective Date for bonding purposes as applicable.

CITY OF TACOMA:
Signature:

CONTRACTOR:
Signature:

Name:

Name:

Title:

Title:

(City of Tacoma use only - blank lines are intentional)

Director of Finance: _____

Deputy/City Attorney (approved as to form): _____

Approved By: _____

Approved By: _____

Approved By: _____

Approved By: _____

Approved By: _____

Approved By: _____

**APPENDIX A
FEDERAL FUNDING**

1. Termination for Breach

CITY may terminate this Contract in the event of any material breach of any of the terms and conditions of this Contract if CONTRACTOR's breach continues in effect after written notice of breach and 30 days to cure such breach and fails to cure such breach.

2. Prevailing Wages

1. If federal, state, local, or any applicable law requires CONTRACTOR to pay prevailing wages in connection with this Contract, and CONTRACTOR is so notified by the CITY, then CONTRACTOR shall pay applicable prevailing wages and otherwise comply with the Washington State Prevailing Wage Act (RCW 39.12) in the performance of this Contract.
2. 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 made of part of the Contract by this reference. If prevailing wages apply to the Contract, CONTRACTOR and its subcontractors shall:
 - i. 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.
 - ii. 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.
 - iii. 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.

3. COPELAND ANTI-KICKBACK ACT

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

- A. 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.
- B. CONTRACTOR or subcontractor shall insert in any subcontracts the clause above and such other clauses federal agencies 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.

- C. 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.

4. 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. If the CONTRACTOR does over \$10,000 in business a year that is funded, paid or reimbursed with federal funds, CONTRACTOR will take specific and 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:

- A. 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. CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- B. 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.
- C. 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.
- D. 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.
- E. 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.
- F. In the event of 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 federally funded 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.

- G. CONTRACTOR will include the portion of the sentence immediately preceding paragraph (A) and the provisions of paragraphs (A) through (G) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. 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 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.

5. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

- A. Overtime requirements. Neither 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.
- B. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (3)(A) 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 (3)(A) 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 (3)(A) of this section.
- C. 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 sub-contractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (3)(B) of this section.

- D. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (3)(A) through (D) 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 (3)(A) through (D) of this section.

6. CLEAN AIR ACT

- A. 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.
- B. 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.

CONTRACTOR agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with federal funds.

7. FEDERAL WATER POLLUTION CONTROL ACT

- A. 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.
- B. 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 appropriate federal agency.
- C. CONTRACTOR agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with federal funding.

8. DEBARMENT AND SUSPENSION

- A. 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).
- B. 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.

- C. 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 CITY, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- D. 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 throughout the period of this Contract and to include a provision requiring such compliance in its lower tier covered transactions.

9. BYRD ANTI-LOBBYING AMENDMENT

- A. 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.
- B. If applicable, CONTRACTOR must sign and submit to the CITY the certification required by Appendix A to 44 CFR Part 18 contained at Appendix A-1 to this Contract.

10. PROCUREMENT OF RECOVERED MATERIALS

- A. In the performance of this Contract, CONTRACTOR shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:
 - i. Competitively within a timeframe providing for compliance with the contract performance schedule;
 - ii. Meeting contract performance requirements; or
 - iii. At a reasonable price.
- B. 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>.
- C. CONTRACTOR also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

APPENDIX A-1

**APPENDIX A to 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

APPENDIX B—Sub-recipient information and requirements

Pursuant to 2 CFR 200.332(a)(1) Federal Award Identification

| | | | |
|--|---|---|---|
| (i) Agency Name (must match the name associated with its unique entity identifier) | | (ii) Unique Entity Identifier <i>(i.e., DUNS)</i> | City of Tacoma Number for This Agreement |
| (iii) Federal Award Identification Number (FAIN) | (iv) Federal Award Date | (v) Federal Period of Performance Start and End Date | (vi) Federal Budget Period Start and End Date |
| (vii) Amount of Federal Funds <i>Obligated</i> to the agency <i>by this action</i> : \$ | (viii) Total Amount of Federal Funds <i>Obligated</i> to the agency | (ix) Total Amount of the Federal Award <i>Committed</i> to the agency \$ | |
| (x) Federal Award Project Description: CORONAVIRUS STATE AND LOCAL FISCAL RECOVERY FUNDS– City of Tacoma | | | |
| (xi) Federal Awarding Agency: DEPARTMENT OF THE TREASURY | Pass-Through Entity: City of Tacoma | Awarding Official Name and Contact Information: | |
| (xii) Assistance Listing Number and Name (the pass-through entity must identify the dollar amount made available under each Federal award and the Assistance Listing number at time of disbursement) | | | (xiii) Identification of Whether the Award is R&D |
| (xiv) Indirect Cost Rate for the Federal Award | Award Payment Method (lump sum payment or reimbursement) REIMBURSEMENT | | |



PAYMENT BOND TO THE CITY OF TACOMA

Resolution No. [Enter Reso # Here]
Bond No.

That we, the undersigned, [Supplier name] _____
as principal, and _____
as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of,
[\$dollar value], plus any applicable taxes _____, for the payment whereof Contractor and Surety bind themselves,
their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

Specification No. [Enter Spec # Here]

Specification Title: [Enter Spec Title Here]

Contract No. [Enter Contract # Here]

(which contract is referenced to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory payment bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall pay all persons in accordance with RCW 39.08, 39.12, and 60.28, including all workers, laborers, mechanics, subcontractors, and materialmen, and all person who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and all taxes incurred on said Contract under Titles 50 and 51 RCW and all taxes imposed on the Principal under Title 82 RCW; and if such payment obligations have not been fulfilled, this bond shall remain in full force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract shall in any way affect its obligation on this bond, and waivers notice of any changes, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

No suit or action shall be commenced hereunder by any claimant unless claimant shall have given the written notices to the City, and where required, the Contractor, in accordance with RCW 39.08.030.

The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of claims which may be properly filed in accordance with RCW 39.08 whether or not suit is commenced under and against this bond.

If any claimant shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgment and attorney fees as provided by RCW 39.08.030, shall also pay such costs and attorney fees as may be incurred by the City as a result of such suit. Venue for any action arising out of or in connection with this bond shall be in Pierce County, WA.

Surety companies executing bonds must be authorized to transact business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Department of the Treasury.

Resolution No. [Enter Reso # Here]
Specification No. [Enter Spec # Here]
Contract No. [Enter Contract # Here]

One original bond shall be executed, and be signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed power of attorney for the office executing on behalf of the surety.

Principal: [Supplier name]

By: _____

Surety:

By: _____

Agent's Name: _____

Agent's Address: _____



PERFORMANCE BOND TO THE CITY OF TACOMA

Resolution No. [Enter Reso # Here]
Bond No.

That we, the undersigned, [Supplier Name] _____
as principal, and _____
as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of
\$[dollar value], plus any applicable tax, for the payment whereof Contractor and Surety bind themselves,
their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

Specification No. [Enter Spec # Here] _____
Specification Title: [Enter Spec Title Here] _____
Contract No. [Enter Contract # Here] _____

(which contract is referenced to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory performance bond shall become null and void, if and when the principal, its heirs, executors, administrators, successors, or assigns shall well and faithfully perform all of the Principal's obligations under the Contract and fulfill all terms and conditions of all duly authorized modifications, additions and changes to said Contract that may hereafter be made, at the time and in the manner therein specified; and if such performance obligations have not been fulfilled, this bond shall remain in force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract, the specifications accompanying the Contract, or to the work to be performed under the Contract shall in any way affect its obligation on this bond, and waives notice of any change, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increase.

If the City shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgement, shall pay all costs and attorney's fees incurred by the City in enforcement of its rights hereunder. Venue for any action arising out of in in connection with this bond shall be in Pierce County, Washington.

Surety companies executing bonds must be authorized to transact business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Department of the Treasury.

One original bond shall be executed, and signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed power of attorney for the office executing on behalf of the surety.

Principal: [Supplier name]

By: _____

Surety:

By: _____

Agent's Name: _____

Agent's Address: _____