BID ADVERTISEMENT FOR THE WEEKS OF

May 1, 2024 & May 8, 2024

BID OPENS - WEDNESDAY MAY 22, 2024

FILE NO. 60-24 Purchase of Wood Poles

FOR THE DIVISION OF CLEVELAND PUBLIC POWER FOR THE DEPARTMENT OF PUBLIC UTILITIES AS AUTHORIZED BY ORDINANCE 1630-92. PASSED BY COUNCIL SEPTEMBER 21, 1992.

There will be a NON-MANDATORY Pre-Bid Meeting, Wednesday, May 9, 224 at 11:00 am., Via WebEx, to call into the meeting dial 1-415-655-0003,

Access Code 2311 740 8776.

Note: Bid must be delivered to the Office of the Commissioner of Purchases and Supplies, Cleveland City Hall, 601 Lakeside Avenue, Room 128, Cleveland, Ohio 44114 before 12 o'clock noon (Eastern Time).



CITY OF CLEVELAND, OHIO

DEPARTMENT OF FINANCE



DIVISION OF PURCHASES AND SUPPLIES

INVITATION TO BID

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CITY OF CLEVELAND
Department of Finance
Division of Purchases and Supplies
City Hall, Room 128
Cleveland, Ohio 44114
216-664-2620

AUTHORIZING ORDINANCE AS PUBLISHED IN THE CITY RECORD

129.26 Purchase of Poles, Wire, Transformers, and Other Equipment

The Director of Public Utilities is authorized to enter into one (1) or more standard purchase or requirement contracts duly let to the lowest and best bidder after competitive bidding for utility poles and crossarms, cable and wire, transformers, high voltage switching equipment, meters and metering equipment, streetlighting materials, manholes, rings and covers, all as deemed by the Director of Public Utilities to be necessary to the operations of the Division of Cleveland Public Power. Any purchase made pursuant to this section shall be made by the Commissioner of Purchases and Supplies and paid from the annual appropriations made for such purpose.

(Ord. No. 1630-92. Passed 9-21-92, eff. 9-25-92)

City of Cleveland

DEPARTMENT OF FINANCE
AHMED A. ABONAMAH
DIRECTOR



DIVISION OF PURCHASES AND SUPPLIES
TIFFANY JOHNSON
COMMISSIONER

BIDDER'S CHECK LIST

The City of Cleveland requires that each bid submitted must comply with certain legal requirements to be considered a valid and formal bid. The checklist below is provided to assist in avoiding rejection of your bid due to omission of required information or forms.

CHECK WHEN COMPLETED

A. 	Bid/Schedule of Items 1. Is (are) the bid page(s) completed as required and signed in the upper right-hand corner? 2. Are all prices (Unit and extension) clearly and accurately presented? 3. Is the payment discount given?
В.	Bid Bond 1. Is the bond made out in the names of and signed by both the principal and surety? 2. Is the bond amount sufficient for the amount of the bid? Must be 5% of the amount of the bid. 3. Is there a power of attorney attached to the bond?
C.	Bid Check (if submitted in lieu of Bid Bond) 1. Is the check in an amount sufficient for the amount of the bid? Must be 5% of the amount of the bid. 2. Is the check either properly certified or a cashier's check? 3. Is the Check made payable to: THE CITY OF CLEVELAND?
D.	Bid Form (not to be confused with the Bid Bond) 1. Is all the required information given? 2. Is the form signed?
E.	Affidavit 1. Does the affidavit contain all the information required ON BOTH SIDES? 2. Is it properly Signed? Is it properly notarized by a Notary Public?
F.	Contract Compliance Certifications 1. Did you read Item 13, the Equal Opportunity Clause, carefully, and understand it? If not, contact the Office of the Director of Equal Opportunity for further information (Phone 216/664-4152).
	 Did you read Item 14, the OEO Notice to Bidders, carefully, and understand it? If not, contact the Office of the Director of Equal Opportunity for further information (Phone 216/664-4152). Did you complete OEO Schedules 1, 2, and 4 carefully and completely? Did you include signed Schedule 3's from all certified subcontractors?
	4. If you are a Cleveland Area Small Business, minority business enterprise, or female business enterprise did you include a copy of your own certificate?
G.	Bid Envelope 1. Is the envelope identified with the correct title of the bid and the due date? 2. Is the envelope securely sealed?
н.	Performance Bond 1. Will you be able to furnish the Performance Bond if one is required in paragraph A-5a of INSTRUCTIONS TO BIDDERS, in paragraph B-8 of General Conditions? 2. Notice: A certified or cashier's check is not acceptable in lieu of a Performance Bond!

l.	1.	eral Tax ID Form (W-9) Is all the required information given? Is the form signed?
J.	1.	thern Ireland Fair Employment Practices Disclosure Is all the required information given? Is the form signed?
K.		se contact the Division of Purchases and Supplies at 216-664-2620 if you have additional stions on how to complete this bid form.

INSTRUCTIONS TO BIDDERS

A-1 INVITATION TO BID

Sealed bids endorsed as designated in the "Title of Bid" section of the bid sheet(s) will be received at the Office of the Commissioner of Purchases and Supplies, Room 128, Cleveland City Hall, Cleveland, Ohio 44114, until 12:00 o'clock noon, official time, on the date indicated in the "Bid Opening" section of Page 1 of the bid page(s) and thereafter will be publicly opened and read in Room 128.

A-2 FORM OF BID (BID FORM)

- a. Every bid must be made upon the blank form of bid attached hereto.
- b. Each bid must be clearly signed with the full name and address of every person, firm or corporation interested in such bid, followed by the date of such signing, in the space provided at the bottom of the bid form. If more than one person, firm or corporation has an interest in such bid, then the full name and address of each person, firm or corporation must be clearly signed on said bid. If the bidder is a partnership, the firm name and address, as well as the name and address of each individual partner must be given. If the bidder is a corporation, the name of the corporation, the name and title of the officer duly authorize to sign for the corporation, the business address of such officer and the name of the state in which the corporation is incorporated must be given.
- c. The bidder shall insert the amount of the bid bond, certified check or cashier's check in the space provided in the bid form.
- d. The bidder agrees to be bound by his bid from the time the bid is submitted until the earlier of the date stipulated by such bidder or the fourth regular meeting of the Board of Control after the bid submission date unless such time is extended by agreement between the bidder and the Board.

A-3 BIDDERS AFFIDAVIT

Each bidder shall submit with its bid an affidavit stating that neither it nor its agents, nor any other party for it has paid or agreed to pay, directly or indirectly, any person, firm or corporation any money or valuable consideration for assistance in procuring or attempting to procure the contract herein referred to, and further stating that no such money or reward will be hereafter paid. This affidavit must be on the form which is hereto attached.

A-4 BID BOND: CERTIFIED OR CASHIER'S CHECK

Each bid shall be accompanied by a bid bond signed by a surety company authorized to do business in Ohio, or by a cashier's check or certified check on a solvent bank, which bond or check shall be in the sum of five percent (5%) of the amount of the bid, except that with bids for purchase contracts not in excess of Fifty Thousand Dollars (\$50,000). Said bond or check shall be given as security that if the bid is accepted a contract will be entered into and the performance of it properly secured.

A-5 DISPOSITION OF BID BOND, CERTIFIED OR CASHIER'S CHECK

- When the bid is accepted, the bid bond, certified or cashier's check will be returned after the contract has been signed and the performance bond, if required, has been submitted to, and approved by, the City.
- b. If the successful bidder fails to enter into a contract, the bid bond, certified or cashier's check shall be forfeited and the principal amount of the bid bond shall be paid to the City, or the check shall be surrendered to the City as the agreed amount of liquidated damages.
- c. The bid bond, certified or cashier's check of the next lowest and best bidder will be retained until the lowest and best bidder has signed and secured the performance of its contract. If such lowest and best bidder fails to do so, the security of the next lowest and best bidder shall continue to be retained until it properly secures the contract awarded it. If such next lowest and best bidder defaults, the principal amount of its bid bond, or check shall also be forfeited to the City as liquidated damages.
- **d.** When a bid is rejected, the bid bond or check will be released or returned, respectively, to the bidder.

A-6 EXPLANATIONS WRITTEN OR ORAL

Any bidder finding a discrepancy or omission in the specifications or having any doubt as to their meaning, shall immediately notify the Commissioner of Purchases and Supplies, in writing. The Commissioner will respond by sending written notices or instructions to all bidders. The City will not be responsible for any oral instructions.

A-7 PRICE BIDS AND DISCOUNTS

- a. Unit Prices
 - In the Schedule of Items the bidder must give the unit price stated in figures of every item bid, in the space so provided.
- b. Trade Discounts
 - When the bidder offers a trade discount, the amount of such discount shall be stated on the Schedule of Items bid.
- c. Catalog Pricing
 - Where the bidder submits its quotation by filing its catalog price list and discount, such documents shall be part of the bid and must be separately signed by the same person and in the same manner as on the bid form.

A-8 BIDDER'S DESCRIPTION OF ITEMS

- **a.** Each bidder shall, in its bid, describe completely the goods or services it proposes to furnish in response to and under the terms of the bid.
- b. The Commissioner of Purchases and Supplies may require a bidder to furnish additional information and/or specifications concerning items to be purchased under the terms of the bid.

A-9 MANUFACTURER'S NAME

- a. The use of a manufacturer's or a trade name in the specifications is solely for the purpose of designating a standard of quality and type and for no other purpose.
- b. Every bidder shall state in its Schedule of Items bid the manufacturer's and the trade name, if any, of each item they propose to furnish.

A-10 SAMPLES

If the commissioner of Purchases and Supplies requests, a bidder shall provide samples of the items it proposes to furnish if awarded a contract pursuant to its bid.

A-11 TIME OF DELIVERY

Bidder must state in its bid the time, in calendar days, within which it will deliver the item(s) bid unless stated differently in the specifications.

A-12 PAYMENT DISCOUNT WHEN USED TO DETERMINE LOWEST AND BEST BID

- a. In determining the lowest and best bid, the City will consider all bids on a basis of the net price to be paid after deduction of the discount specified; except that if the terms of payment specified by the bidder require payment in less than thirty (30) days from the date of the invoice, the discount offered will not be deducted from the price stated in the bid to determine the lowest and best bidder, and the bid will be considered only on the basis of the unit price actually named in the bid. But if, notwithstanding the provisions of this paragraph such bid is determined to be the lowest and best bid, the City reserves the right to accept the terms named in the bid if such terms are to the advantage of the City as a basis for payment of invoices only, but not in any case as a basis for determining the lowest and best bidder.
- b. The City will take a discount of two percent (2%) on payments made within thirty (30) days from receipt of articles, commodities, materials, supplies, equipment or services, unless the bidder indicates otherwise on the space provided on the Schedule of Items bid.

PARAGRAPHS A-13 THROUGH A-15 APPLY <u>ONLY</u> IF THE "REQUIREMENT CONTRACT" BLOCK IS CHECKED ON PAGE 1 OF THE SCHEDULE OF ITEMS AND ON THE BID FORM.

A-13 REQUIREMENT CONTRACT DEFINED

- a. A requirement contract is a contract under which the contractor has a duty to provide the City's requirements during the contract term for all articles, commodities, supplies, materials, equipment and/or services set forth in the bid and required by the City's authorized users of the items approved for contract.
- **b.** A contract awarded under this bid will be termed a requirement contract.

A-14 PURCHASES UNDER A REQUIREMENT CONTRACT

- a. Under a requirement contract, a contractor shall supply all the City's requirements during the term for the articles, commodities, supplies, materials, services or equipment set forth in the *Invitation to Bid*. See <u>GENERAL CONDITIONS</u>, Section B-24, **Duration of Contract**.
- b. If the Schedule of Items in the Invitation to Bid is marked "requirement contract," then all quantities stated in the Schedule of Items are the City's good-faith estimates only. The City shall place each order under the

contract, whether singly or cumulatively more or less than the estimated quantities set forth in the *Schedule of Items*, by a Delivery Order against the contract and separately certified.

A-15 LIMITATION OF PERIOD OF CONTRACT

If the proposed duration of the contract would deprive the City of the best available market price, the bidder may offer an alternate bid as to duration of the contract, setting forth in the bid the longest period of time it can furnish and deliver the proportionate amount of items at the firm price set forth in the bid. No other provision of the Invitation to Bid shall be subject to an alternate bid unless specifically requested.

- A-16 BID DISCOUNTS APPLICABLE TO BIDS FOR GOODS AND SERVICES PURCHASE CONTRACTS AND PUBLIC IMPROVEMENT CONTRACTS IN EXCESS OF FIFTY THOUSAND DOLLARS (\$50,000).
 - a. Bid Discounts under Sections 187.03 and 187.05. If the bid of any prime contractor that is a CSB, MBE, FBE or a CSB, MBE or FBE joint venture is no more than five percent (5%) higher than the lowest actual bid for a contract that is not from a CSB, MBE, FBE or a CSB, MBE or FBE joint venture, the contracting department shall apply a Bid Discount of five percent (5%) to the CSB, MBE, FBE or CSB, MBE or FBE joint venture bid for the purpose of establishing a Comparison Bid. The City of Cleveland shall use the following ranking in determining who receives the preference:
 - Where the disparity study has determined that a disparity exists, the bid discount shall go to the bidders who are certified by the City as members of the specific MBE/FBE group for which the proven disparity exists. No other bidders shall receive any preference under Sections 187.03 and 187.05 at the prime contractor level.
 - Where no disparity has been proven, or when no bids are received from groups for which a proven disparity exists, the bid discount shall go to certified CSB bidders certified by the City as located within the city limits of Cleveland. No other bidders shall receive any preference under Sections 187.03 and 187.05 at the prime contractor level.
 - 3. Where no disparity has been proven, or when no bids are received from groups for which a proven disparity exists, and no bids were received from certified CSB firms certified by the City as located within the city limits of Cleveland, the bid discount shall go to Certified CSB bidders certified by the City as located within Cuyahoga County. No other bidders shall receive any preference under Sections 187.03 and 187.05 at the prime contractor level.
 - 4. In addition to any bid discounts at the prime contractor level, all prime contractors shall receive a bid discount of 5% of the total dollar amount of all CSB, MBE and/or FBE certified by the City that the prime contractor properly documents as subcontractors in their bid, for the purpose of establishing a Comparison Bid.
 - 5. The total Bid Discount awarded to any bidder on a bid pursuant to Sections 187.03 and 187.05 shall not exceed \$50,000.00.

b. Bid Discounts under Section 187A.02(a): Application of Bid Discount - A Contracting Department shall apply a Bid Discount of two percent (2%) to a bid received from a Local Producer (LPE); two percent (2%) to a bid received from a Local Food-Producer (LPE); and two percent (2%) to a bid received from a Local Sustainable Business (SUBE); provided that the maximum total Bid Discount applied under Section 187A.02 (a) shall not exceed four percent (4%). Bid Discounts applied under Section 187A.02 (a) shall be in addition to any Bid Discount applied under Sections 187.03 and 187.05. The maximum amount of any Bid Discounts applied under this Section 187A.02 (a) shall not exceed \$50,000.

c. Maximum Cumulative Amount of All Bid Discounts:

The maximum cumulative amount of all Bid Discounts that may be applied to the bid under Sections 187.03, 187.05, and 187A.02 shall not exceed \$75,000.00, or nine percent (9%), whichever is lower.

d. Comparison Bid to Determine Lowest and Best Bidder:

The City shall determine the Comparison Bid by totaling all applicable Bid Discounts under Sections 187.03, 187.05, and 187A.02. The City shall use the Comparison Bid in determining the lowest and best or lowest responsible bidder for the purpose of awarding the contract. If more than one CSB, MBE, FBE, LPE, SUBE or CSB, MBE, FBE LPE, SUBE joint venture prime contractor in the respective category submits a bid that is no more than five percent (5%) higher than the lowest actual bid that is not from a CSB, MBE, FBE, LPE, SUBE or from a CSB, MBE, FBE, LPE, SUBE joint venture, the contracting department shall recommend the CSB, MBE, FBE, LPE, SUBE, or CSB, MBE, FBE, LPE, SUBE joint venture submitting the lowest bid, after the inclusion of all applicable prime and subcontractor discounts, as the lowest and best or lowest responsible bidder.

The City shall use the Comparison Bid amount determined by applying the bid discounts described in <u>Articles A-16A</u>, and <u>A-16B</u>, above for evaluation purposes only; the City shall use the actual bid amount for the purposes of bid approval and contract award.

e. City of Cleveland Certification required: For the purpose of determining a bidder's eligibility for bid discounts, the City shall only consider bidders with valid certificates issued by the City of Cleveland's Office of Equal Opportunity. The certifications must be active on the date and time of the deadline for bid submission. Expired certification holders and pending certifications cannot be considered for calculation of bid discounts. Certifications from other public or private entities cannot be considered.

A-17 Good Faith Participation - APPLICABLE TO BIDS FOR GOODS AND SERVICES PURCHASE CONTRACTS AND PUBLIC IMPROVEMENT CONTRACTS IN EXCESS OF FIFTY THOUSAND DOLLARS (\$50,000).

Bidders are required to actively participate and demonstrate good faith in attempting to meet all OEO goals for this procurement. A good faith effort to meet certified CSB, MBE, and/or FBE subcontractor participation goals as established in this contract is of the essence of the contract.

Good faith participation shall include:

- Active cooperation in making and documenting a serious effort to gain and maintain participation from certified businesses at or above the specific goals set for this procurement;
- 2. Achieving or exceeding the CSB/MBE/FBE goals set for this particular procurement and/or documenting the practical steps taken by the bidder in attempting to comply;
- 3. Active attendance and participation in all prebid meetings, Notice to Proceed meetings, and progress meetings during the contract;
- 4. Active compliance and cooperation with Project Monitors from OEO and/or the Department; and,
- 5. Timely and accurate submittals of all required forms, including, but not limited to, electronic monitoring forms, employment reports and certified payrolls if applicable.

The final determination of good faith effort shall be made by the Office of Equal Opportunity based upon each bidder's actions as documented in the required forms and as verified by OEO follow up.

A-18 Cleveland Area Business Code Notice to Bidders & Schedules APPLICABLE TO BIDS FOR GOODS AND SERVICES PURCHASE CONTRACTS AND PUBLIC IMPROVEMENT CONTRACTS IN EXCESS OF FIFTY THOUSAND DOLLARS (\$50,000).

Sections 187 and 187A of the Codified Ordinances of the City of Cleveland Ohio, the Cleveland Area Business Code, in its entirety, whether reproduced in whole or in part within these documents, as well as the Cleveland Area Business Code Notice to Bidders & Schedules included in this bid document, shall become part of any contract awarded pursuant to this Invitation to Bid. Compliance with Section 187 and 187A is of the essence of the contract.

A-19 SUBCONTRACTING:

a. Any and all proposed subcontractors, whether City certified or not, must be divulged and listed in the sealed bid. Include all proposed subcontractors on OEO Schedule 2. A Schedule 3 is also required for each proposed subcontractor that is CSB, MBE, FBE, LPE, or SUBE certified. However, a Schedule 3 is not required for proposed subcontractors who are not City-certified as a CSB, MBE, FBE, LPE, or SUBE.

- b. If OEO <u>Schedule 2</u> is not included in the bid documents, you must submit a proposed subcontractor list on a separate, signed sheet of paper, listing the name, address, type of work or materials, and total subcontractor amount for each and every subcontractor that you propose to use on the contract.
- c. All proposed subcontractors listed in your bid must receive written Board of Control approval in advance. The subcontractors you propose in your sealed bid will be considered the subcontractors that you will use in the contract if awarded to you. See Article B-11 regarding the City's <u>Sub-contractor Addition and Substitution Policy and Procedure</u>. The City also reserves the right to approve an award, but not approve a proposed subcontractor.
- d. The City maintains a list of <u>Vendors Ineligible to Contract or Subcontract with the City</u> at the City of Cleveland website: <u>http://www.city.cleveland.oh.us</u>. It is each bidder's responsibility to propose only eligible contractors. The City cannot approve a subcontractor whose name appears in this listing.

(Rev. October 2018) Oppartment of the Treasury Internal Revenue Service

Request for Taxpayer **Identification Number and Certification**

► Go to www.irs.gov/FormW9 for instructions and the latest information

Give Form to the requester. Do not send to the IRS.

-		secons and the lates	C INCOMMENTAL	
	1 Name (as shown on your income fax return). Name is required on this line; do n	ot leave this line blank.		,
	2 Business name/disregarded entity name, if different from above			
s on page 3.		is entered on line 1. Chec	k only one of the	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
9 5	Single-member LLC			Exempt payer code (if any)
₹ 5	Limited liability company. Enter the tax classification (C=C corporation, S=S			
Print or type. Specific Instructions	Note: Check the appropriate box in the line above for the tax classification of LLC if the LLC is classified as a single-member LLC that is disregarded from unother LLC that is not disregarded from the owner for U.S. federal tax purples of the lax is the control of the lax is not disregarded from the tax.	the owner unless the owners. Otherwise, a single	mer of the LLC is i-member LLC that	Exemption from FATCA reporting code (if any)
ec	Other (see Instructions) >			(Applies to accounts maintained outside the U.S.)
See Sp	5 Address (number, street, and apt. or suite no.) See instructions.	[]	Requester's name a	nd address (optional)
Ø	6 City, stato, and ZIP code			
	7 List account number(s) here (optional)			
Par				
	your TIN in the appropriate box. The TIN provided must match the name up withholding. For Individuals, this is generally your social security numbers.			urity number
reside	ent allen, sole proprietor, or disregarded entity, see the instructions (or Pa es, it is your employer identification number (EIN). If you do not have a nur	rt i, later. For other		
TIN, la	ater.		or .	
	If the account is in more than one name, see the instructions for line 1. A	lso see What Name ar	nd Employer	Identification number
Number To Give the Requester for guidelines on whose number to enter.				-
Par	t II Certification			
Under	r penalties of perjury, I certify that:			
2. I an Ser	e number shown on this form is my correct taxpayer identification number in not subject to backup withholding because: (a) I am exempt from back rvice (IRS) that I am subject to backup withholding as a result of a failure t fonger subject to backup withholding; and	p withholding, or (b) I	have not been n	otified by the Internal Revenue
3. l an	n a U.S. citizen or other U.S. person (defined below); and			
4. The	FATCA code(s) entered on this form (if any) indicating that I am exempt	from FATCA reporting	is correct.	
you he	ication instructions. You must cross out item 2 above if you have been notil ave falled to report all interest and dividends on your lax return. For real estat sition or abandonment of secured property, cancellation of debt, contribution than interest and dividends, you are not required to sign the certification, but	e transactions, item 2 c s to an individual retirer	ices not apply. For	r mortgage interest paid,
Sign Here		. D:	ale 🗠	
Gei	neral Instructions	• Form 1099-DIV (divi	dends, including	those from stocks or mutual

Section references are to the Internal Revenue Code unless otherwise

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

Form 1099-INT (interest earned or paid)

- Form 1099-MISC (various types of Income, prizes, awards, or gross proceeds)
- · Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- · Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- · Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property) Use Form W-9 only If you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the tilled-out form, you:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
 - 2. Certify that you are not subject to backup withholding, or
- 3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
- 4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See What is FATCA reporting, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For tederal tax purposes, you are considered a U.S. person if you are:

- · An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- . An estate (other than a foreign estate); or
- · A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner
 of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

- The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
- 2. The treaty article addressing the income.
- The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
- 4. The type and amount of income that qualifies for the exemption from tax.
- Sufficient facts to justify the exemption from tax under the terms of the treaty article.

example. Article 20 of the U.S.-China Income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident allen for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the tirst Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident allen of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship Income would attach to Form W-9 a statement that Includes the Information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper contifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

- 1. You do not furnish your TIN to the requester,
- You do not certify your TIN when required (see the instructions for Part II for details),
- 3. The IRS tells the requester that you furnished an incorrect TIN,
- 4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
- You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See Exempt payee code, later, and the separate instructions for the Requester of Form W-9 for more information.

Also see Special rules for partnerships, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See Exemption from FATCA reporting code, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line :

You must enter one of the following on this line; do not leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. Individual. Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

- b. Sole proprietor or single-member LLC. Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or *doing business as" (DBA) name on line 2.
- c. Partnership, LLC that is not a single-member LLC, C corporation, or S corporation. Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.
- d. Other entities. Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.
- e. Disregarded entity. For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line $\bf 2$.

Line 3

Check the appropriate box on line 3 for the U.S. (ederal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n)	THEN check the box for
Corporation	Corporation:
 Individual Sole proprietorship, or Single-member limited liability company (LLC) ownod by an individual and disregarded for U.S. federal tax purposes. 	Individual/sole proprietor or single- member LLC
 LLC treated as a partnership for U.S. federal tax purposes, LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or LLC that is disregarded as an entity separate from its owner but 	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
the owner is another LLC that is not disregarded for U.S. federal tax purposes.	
Partnership	Partnership
Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2-The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5-A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8-A real estate investment trust
- 9—An entity registered at all times during the tax year under the investment Company Act of 1940
- 10-A common trust fund operated by a bank under section 584(a)
- 11 -- A financial institution
- 12—A middlernan known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The lollowing chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for	THEN the payment is exempt for
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA

- A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)
 - B-The United States or any of its agencies or instrumentalities
- C-A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)
- E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)
- F—A dealer in securities, commodities, or derivative linancial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state
 - G-A real estate investment trust
- H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the investment Company Act of 1940
 - I-A common trust fund as defined in section 584(a)
 - J-A bank as defined in section 581
 - K-A broker
- L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see How to get a TIN hellow.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See What Name and Number To Give the Requester, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by celling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/Businesses and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see Exempt payee cade, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

- Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.
 You must give your correct TIN, but you do not have to sign the certification.
- 2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.
- 3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.
- 4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain lishing boat crew members and fishermen, and gross proceeds paid to altorneys (including payments to corporations).
- 5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The Individual
Two or more individuals (Joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account.
Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
Custodial account of a milnor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
 b. So-called trust account that is not a legal or valid trust under state law 	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i) (A))	The grantor*
For this type of account:	Give name and EIN of:
Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity [±]
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
Association, club, religious, charltoble, educational, or other taxexompt organization	The organization
12. Partnership or multi-membor LLC 13. A broker or registered nominee	The partnership The broker or nominee

For this type of account:	Give name and EIN of
4. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
5. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1089 Filing Method 2 (see Regulations section 1,671-4(b)(210(8))	The trust

- List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.
- ² Circle the minor's name and furnish the minor's SSN.
- ⁹ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.
- List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see Special rules for partnerships, earlier.
- *Note: The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other Identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- · Protect your SSN.
- . Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by Identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity That! Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Their Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-386-4484. You can forward suspicious emails to the Federal Trade Commission at spam@uce.gov or report them at www.ftc.gov/complaint. You can contact the FTC at www.ftc.gov/idtheft or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see www.fdentityTheft.gov and Pub 5027

Visit www.irs.gov/IdentityTheft to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice-for civil and criminal illigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.



VENDOR INFORMATION FORM

Please fill in:		
Business Name		
Business Address		
City	State	Zip
Telephone ()		Extension
Toll Free Number 800	•	
Vendor Fax Number		
Vendor Email Address		
Ordering Address		
City	State	Zip
Telephone ()		Extension
Remit Address		
City	State	Zip
Telephone ()		Extension
Contact Person: (Ordering)		
Remit		

PLEASE INCLUDE THE ABOVE INFORMATION WHEN SUBMITTING YOUR BID OR PROPOSAL

NOTE: Sections 181.23 and 185.04 of The Codified Ordinances of Cleveland, Ohio 1976 require that this affidavit, properly executed and containing all required information, accompany your bid. IF YOU FAIL TO COMPLY, YOUR BID WILL NOT BE CONSIDERED.

STATE OF	_			
COUNTY OF	}	\$\$	AFFIDAVIT	
		****		being first
		duly sworn d	eposes and says:	
Individual only:	That he/she is an in	ndividual doing	business under the name	
				. in
			, State of	
Partnership only:	That he/she is the	duly authorized	representative of a partnership doing	business under
			, State of	
Corporation only:	That he/she is the	duly authorized,	, qualified and acting	
			of	

	a corporation orga	onized and exist	ting under the laws of the State of	
	and that said indivi	idual, said partn	nership or said corporation, is filling herev	wilh a bid to the City
			ne foregoing specifications;	
Individual only:	Affiant further say:	s that the follow	wing is a complete and accurate list	of the names and
			d in said proposed contract:	
·	Affiant further says	that he/she is r	epresented by the following attorneys:	
	and is also represe	ented by the foll	lowing resident agents in the City of Cle	eveland:
Partnership only:	Affiant further says	that the following	ng is a complete and accurate list of na	imes and addresses
	of the members of	·	•	
			ership is represented by the following c	attorneys:
			lowing resident agents in the City of Cl	eveland:

Corporation only:	Affiant further says that the following is a complete and accurate list of the officers, directors			
	and attorneys of said corporation:			
•	President	Directors:		
	Vice President			
	Secretary			
	Treasurer			
	Cleveland Manager or Agent	•		
	Attorneys			
	And that the following officers ar	re duly authorized to execute contracts on behalf of said		
	corporation:			
and has hat, directly a sham bid, or that any sought by agreemen bidder, or to fix any or advantage against to contained in such bid down thereof or the of directly or indirectly, of procuring or attempt association, organiza persons as hereinabor business; and further to consideration to any of or to any other individer	or indirectly, colluded, conspired, convone shall refrain from bidding; that it, communication or conference with verhead, profit, or cost element of such ecity of Cleveland or anyone in a contents thereof, or divulged informany money, or other valuable considing to procure the contract above tion, or to any member or agent the over disclosed to have a partnership that said bidder will not pay or agree corporation, partnership, company, corporation, partnership, partnership, corporation, partnership, corporation, partnership, partnership, partnership, partnership, partnership, partnership, partnership, partnership, partnersh	ed or solicited any other bidder to put in a false or sham bid, naived or agreed with any bidder or anyone else to put in a said bidder has not in any manner, directly or indirectly, ith anyone to fix the bid price of said bidder or any other uch bid price or that of any other bidder, or to secure any atterested in the proposed contract; that all statements directly or indirectly, submitted his bid price or any breaknation or data relative thereto, or paid or agreed to pay, eration for assistance or aid rendered or to be rendered in a referred to, to any corporation, partnership, company, ereof, or to any other individual, except to such person or or other financial interest with said bidder in his general to pay, directly or indirectly, any money or other valuable association, organization or to any member or agent thereof, see event the same is awarded to		
	(name of individ	ual, partnership or corporation)		
Further affiant said no	ot.			
	(Sign Here)			
Sworn to before me o	and subscribed in my presence this	day of,		
	nus contract in the prosperior in the	Gdy 01		
20	•			
	i	•		
	1			
		Notary Public		
		· .		

CITY OF CLEVELAND

BID BOND

KNOW ALL MEN BY THESE PRESENTS, That we

as Principal, and
a corporation duly authorized to do business in Ohio, as Surety, are held and firmly bound unto
THE CITY OF CLEVELAND
as Obligee, in the penal sum of
Dollars, lawful money of the United States of America, for the payment of which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.
SIGNED, sealed and dated this day of, 20
WHEREAS, the said principal is herewith submitting bid for
Now, THEREFORE, the condition of the above obligation is such that if the said principal shall execute a contract and give bond for the faithful performance within ten (10) working days after being notified in writing of the award of such contract to the principal, or if the principal or surety shall pay the obligee the sum, not exceeding the penalty hereof, by which the amount of the contract, covering the said proposal, properly and lawfully executed by and between the obligee and some third party, may exceed the amount bid by principal, then this obligation shall be void; otherwise it shall remain in full force and effect.
PRINCIPAL
BY:
TITLEBy
Attorney in Fact

CITY OF CLEVELAND

BID FORM

☐ STANDARD CONTRACT BID ☑ REQUIREMENT CONTRACT BID

TO: The Commissioner of Purchases and Supplies:

BID FOR: Purchase of Wood Poles

FOR: The Department of: Public Utilities						
The Undersigned proposes to furnish the abov ("items"), and to accept as full compensation therefor	e articles, commodities, materials, supplies, equipment or services the price per unit multiplied by the number of units of such items re set forth in the Schedule of Items hereto attached and made part of					
The Undersigned further proposes to execute th within ten (10) working days, excluding Saturdays, Sunday	e Contract Agreement and to furnish satisfactory performance bond ays and holidays, after notice of award of contract has been received.					
default to the City of Cleveland upon any debt or contract	he individual, firm or corporation making this bid) is not in arrears or ct, nor is a defaulter as surety or otherwise upon any obligation to said tract with said City and that there is no suit or claim pending as to any					
The Undersigned deposits with the bid a Bid Bo do business in Ohio, in the sum of \$	ond to the City of Cleveland signed by a surety company authorized to					
the performance of the same by a bond as required of	awarded the contract, he will enter into a written contract and secure an approved surety company authorized to do business in Ohio and the percentage of the total price bid set forth in Part B – General					
contract and furnish the satisfactory bond, as required, we the contract abandoned and this bid null and void. There	is accepted and contract awarded and he shall fail to execute said vithin the time above specified, then the City may, at its option, declare eupon the penal sum of the Bid Bond shall become due to the City, or ecome the property of the City as liquidated damages. Otherwise, the nt of such check shall be returned to the Undersigned.					
THE UNDERSIGNED UNDERSTANDS THAT THE CITY RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS.						
The firm, corporation, or individual name MUST BE SIGNED IN SPACE INDICATED. Complete: CERASURES MAY INVALIDATE THIS BID.						
If the bidder is a firm or corporation, the title of the officer signing and the State in which	gn Here By					
Incorporated must be indicated.	TLE OF OFFICER					
— BL	JSINESS ADDRESS OF BIDDER					

STATE OF INCORPORATION

BID SCHEDULE OF ITEMS								
City of Cleveland Division of Purchases and Supplies 128 City Hall Cleveland, Ohio 44114					BIDDER MUST COMPLETE AND SIGN BELOW			
TITLE OF BID					NAME OF FIRM			
	024 Purchase of	Ma	nd Pal	00		MAPIE OF FIRM		
ORDINANCE NO.	PASSED:	770	SIGNED			STREET ADDRESS CITY STATE ZIP CODE		
1630-92 Sec. 129.26	September 21, 1992	,						
DEPARTMENT	DIVISION		Septemo	er 25, 1992				
Public Utilities	Cleveland Public Power	·			**			
i I I			RD CONTRACT BID		AUTHORIZED SIGNATURE			
BUYER: Division of Purchases 216-664-2620	BUYER: Division of Purchases & Supplies BID OPENING:							
Purchasing@clevelandohio.	gov	1	OFFICIAL					
DESCRIPTION	and the second			QUANTITY	UOM	UNIT PRICE	EXTENSION	
Wood Poles as specified					1			
					-			
							,	
2 35' Class 3 Wood Poles	Manufacturer & Part No:				EA	\$ 	\$	
Manufacturer & Part No				40	_,	,		
3 40' Class 1 Wood Poles					EA	\$	<u> </u> \$	
Manufacturer & Part No				6	EA	 \$	\$	
4 40' Class 3 Wood Poles					LA	P	17	
Manufacturer & Part No:				25	EA	\$	\$	
5 45' Class 1 Wood Poles				10		1	T	
Manufacturer & Part No:				10	EA	\$	\$	
6 45' Class 3 Wood Poles				50				
Manufacturer & Part No:				30	EA	\$	\$	
7 50' Class 1 Wood Poles				10				
Manufacturer & Part No	;			10	EA	\$	\$	
8 50' Class 3 Wood Poles				50				
	Manufacturer & Part No:			30	EA	\$	\$	
9 50' Class H1 Wood Poles	•			5				
Manufacturer & Part No:	ana i wanarah i ia i i i i i i i i i i i i i i i i		*****		EA	\$	\$	
10 55' Class 1 Wood Poles				5			,	
Manufacturer & Part No. 11 55' Class 3 Wood Poles	**************************************				EA	<u> \$</u>	\$	
Manufacturer & Part No:				25	l	1		
				EA	\$	\$		
12 60' Class 1 Wood Poles			10					
Manufacturer & Part No:					EA	\$	\$	
Sub-total for items 1 - 12							\$	
					Delivery (Days)	Payment Discount		
ALL QUANTITIES LISTED ARE EXACT. THE CONTRACT, IF ANY, SHALL REQUIRE THE AWARDED BIDDER TO SHIP THE ITEMS AND QUANTITIES AWARDED UPON RECEIPT OF ORDER.					(33/3/			
, and the second							% Days	
ALL OF THIS BOUND INFORMATION MUST BE KEPT INTACT AND, TOGETHER WITH ANY ADDENDA						hasing use Only		
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ALL OF THIS BOUND INFORMATION MUST BE KEPT INTACT AND, TOGETHER WITH ANY ADDENDA ISSUED, MUST BE RETURNED WITH THE BID.
OTHERWISE, THE BID MAY BE CONSIDERED INFORMAL.

TITLE OF BID	NAME C	NAME OF FIRM				
2024 Purchase of Wood Poles AUTHORIZED SIGNATURE			DATE			
Wood Poles cont.						
13. 60' Class 3 Wood Poles	10					
Manufacturer & Part No:	10	EA	 \$	\$		
14. 60' Class H1 Wood Poles	4					
Manufacturer & Part No:		EA	 \$	\$		
15. 65' Class 1 Wood Poles	5					
Manufacturer & Part No:		EA	\$	\$		
16. 65' Class 3 Wood Poles	43					
Manufacturer & Part No:	17	EA	 \$	\$		
17. 70' Class 3 Wood Poles	7					
Manufacturer & Part No:		EA	\$	\$		
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ALL OF THIS BOUND INFORMATION MUST BE KEPT INTACT OTHERWISE, TH	AND, TOGETHER WITH ANY HE BID MAY BE CONSIDERED			E RETURNED WITH THE BID.		

GENERAL CONDITIONS

B-1 CONSIDERATION OF BIDS.

All bids received in conformity with the Invitation to Bid shall be endorsed with the contract or advertisement name or number and name and address of the bidder. All bids, immediately after being read, shall be tabulated and summarized and shall become public record in the office of the Commissioner of Purchases and Supplies.

B-2 UNACCEPTABLE BIDS.

No bid will be accepted from, nor a contract awarded to, any person, firm or corporation that is in arrears or is in default to the City upon any debt or contract, or is a defaulter as surety or otherwise upon any obligation to the City, or has failed to perform faithfully on any previous contract with the City of Cleveland.

B-3 REJECTION OR ACCEPTANCE OF BIDS.

The City through the Board of Control shall have the right to reject any or all bids, parts of such bid, and reserves the right to waive any informalities in the bid. In addition to bid price and discount, the City reserves the right to consider all elements entering into the question of determining the responsibility of the bidder. Any bid which is incomplete, conditional, obscure, contains additions not called for, or irregularities of any kind, may be cause for rejection of the bid.

B-4 EVIDENCE OF ABILITY TO FULFILL CONTRACT.

Bidders must present evidence to the Commissioner of Purchases and Supplies, when required by him to do so, to show they are fully competent and have the necessary source of supply, facilities and pecuniary resources to fulfill the conditions of the contract and specifications.

B-5 WITHDRAWAL OF BID.

No bid may be withdrawn after it has been deposited with the Commissioner of Purchases and Supplies.

B-6 TIME OF AWARD.

The Board of Control of the City of Cleveland shall make an award or reject all bids not later than the second regular meeting of said Board following the opening of bids, unless further time is required to analyze bids, to investigate responsibility of any bidder, or in the absence of a time limitation for acceptance set forth in the bid.

Any extension of time beyond the date fixed by the successful bidder or the fourth regular meeting of the Board of Control, whichever event shall occur first, shall be subject to agreement between said bidder and the Board.

B-7 AWARD CONTRACT.

No contract shall be awarded without the approval of the Board of Control, and then only to the lowest and best bidder.

B-8 PERFORMANCE BOND.

A. Contracts for the purchase of articles, supplies, commodities, materials, equipment or services shall be secured by a bond in the form and content prescribed by and acceptable to the Director of Law, with good and sufficient sureties and in an amount equal to at least twenty-five percent (25%) of the contract price on materials supplied and at least fifty percent (50%) of the contract price on services supplied. A check is not acceptable in place of a performance bond. A performance bond is not required for standard purchase and requirements contracts awarded in the amount of \$500,000.00 or less, except that standard purchase and requirements contracts that are labor and materials contracts including, but not limited to painting, carpentry, plumbing, electrical, masonry, landscaping, snow plowing, fencing and trucking over \$100. 000 but not more than \$250,000 shall require a bond of at least twenty-five percent of the contract price, and over \$250,000 but not more than \$500,000 shall require a bond of at least fifty percent of the contract price. The above policy notwithstanding, the City of Cleveland reserves the right to require a performance bond in various amounts or to modify the performance bond requirement whenever it is determined to be in the best interest of the City of Cleveland to do so.

B. No performance bond is required for any contract awarded pursuant to this Invitation to Bid in an amount of \$500,000.00 or less. Any contract over \$500,000.00 will require a Performance Bond for 25% of the contract amount.

B-9 RELEASE OF BOND.

Whenever a performance bond is required, the performance bond will not be released until all the provisions of the contract have been fulfilled.

B-10 CANCELLATION OF CONTRACT.

The City shall have the right to cancel this contract on five (5) days written notice if, in the opinion the Commissioner of Purchases and Supplies, the delivery of materials, supplies or equipment or the performance of work or services are not in accordance with contract specifications and the contractor fails to cure such deficiencies or comply with the contract specifications within ten (10) days after receipt of notice of default from the City, except where fulfillment of its obligation requires activity over a period of time and it has, within ten (10) days of the default notice commenced such activity. Additionally, the City shall have the right to cancel this contract, without cause, upon fifteen (15) days written notice upon the determination of the Board of Control of the City, expressed through its resolution, to do so.

B-11 SUBCONTRACTING OR ASSIGNMENT OF CONTRACT.

a. The contractor shall not subcontract, sublet, assign, transfer, convey or otherwise dispose of the contract, its duties, rights, title or interest in it or in any part thereof, or assign, by power of attorney or otherwise, any of the monies due or to become due under the contract, except, in each instance, with the prior written authorization of the Board of Control of the City, expressed through its resolution, and then only upon such terms and conditions as may be agreed to by said Board. No such subcontracting, subletting, assignment, transfer, conveyance or other disposal of the contract shall be valid until filed in the office of the Commissioner of Accounts.

- b. Prior written Board of Control consent is required for a City contractor to add a subcontractor, or to substitute one subcontractor for another subcontractor, under a City contract.
- c. The City assumes no obligation to pay, and will not pay, a contractor for any work and or services performed by a sub-contractor on the contract prior to Board of Control approval of that sub-contractor.
- d. The Director will not grant any City contractor additional time to meet project deadlines, and will not authorize or pay additional compensation or delay damages of any kind arising from the contractor's inability to add or substitute a subcontractor because the contractor failed to submit the approval request and supporting documentation at least 3 (three) weeks in advance of the date the additional or substitute sub-contractor is needed.
- e. The Office of Equal Opportunity shall evaluate each subcontractor addition and substitution for increased CSB, MBE, or FBE participation even if the original contract had no certified sub-contractor participation.
- f. The City's <u>Sub-contractor Addition and Substitution Policy and Procedure</u> is hereby incorporated by reference in its entirety. The complete document is available online at the City of Cleveland website: http://www.city.cleveland.oh.us.

B-12 DELAY FOR CAUSES BEYOND CONTROL.

If the contractor is delayed in complying with the terms of the contract by strikes, lockouts, fire, unusual delay by common carriers, unavoidable casualties, or any cause beyond the contractor's control including orders, limitations or restrictions of any Governmental agency having jurisdiction over the subject matter of the contract, or by delay authorized by the City, or for any cause by which the director shall decide to justify the delay; then for all such delays and suspensions, the contractor shall be allowed one calendar day extension beyond the time fixed for compliance with the terms of the contract for each and every calendar day of such delay so caused in the completion of the work, the same to be ascertained by the director.

B-13 PATENTS.

The Contractor shall be required to pay all royalties and license fees and shall hold and save the City and its officers, agents, servants and employees harmless from liability of any nature or kind, including cost and expenses, for or on account of any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the City of Cleveland unless otherwise specifically stipulated in the contract documents. In this respect the contractor shall defend all suits or claims for infringement of any patent or license rights.

B-14 DELIVERY.

The vendor shall adhere to all stipulated delivery terms (e.g., material / service delivery upon a pre-set schedule, upon orders being placed, etc.). All service performance / material deliveries should be made <u>only if</u> the City of Cleveland has issued a valid, open Purchase Order (PO) with a sufficient free balance to

cover the <u>full</u> costs of the service being performed or materials being delivered. The City will not pay vendors for goods or services that are either delivered to the City under an invalid or unauthorized PO or were ordered using an expired contract. The City is not responsible for, and will not pay for, goods or services delivered to the City that are not authorized under the PO and contract under which a sale was purportedly made. Therefore, the vendor <u>must not</u> perform any services nor deliver any materials without a valid, open PO that authorizes the services / materials and that carries a sufficient free balance to cover the services / materials.

Upon delivery, some form of delivery documentation must be left with the City of Cleveland Department. For service performed, some Proof of Service documentation must be given to a City employee. For materials delivered, some Proof of Delivery or Packing Slip must be given to a City employee. In all instances, the delivery documentation must be signed and dated by a City employee in order to substantiate the services provided or materials delivered were as indicated on the documentation. City employees are charged with performing this verification, so vendors should allow adequate time for this review to occur. Failure to provide some delivery documentation, which received a City signature and date upon delivery, may result in payment delays.

B-15 LABORATORY TEST.

The City of Cleveland reserves the right to test all materials, equipment or supplies delivered during the life of the contract, at an independent laboratory to be designated by the Commissioner of Purchases and Supplies of the City of Cleveland. Where the result of such test shows the materials, equipment or supplies are not equal to the specifications, then the expense of making such test shall be paid by the contractor.

B-16 FAILURE TO MEET SPECIFICATIONS.

The delivery of any material, supplies or equipment or the performance of any work or services under the contract which do not conform to contract specifications will be rejected and the contractor notified immediately in writing of such rejection and the reason therefore. If the time for performance has not expired, and the contractor wishes to remedy the deficient materials, supplies or equipment or performance, it may notify the Commissioner of Purchases and Supplies of its intention to cure and may within ten (10) days make a conforming delivery of performance unless such time is extended in writing by said Commissioner. If said contractor fails to replace such nonconforming materials, supplies or equipment or otherwise cure such deficient performance of work or services, the City of Cleveland will purchase such materials, supplies or equipment or obtain the performance of such work or services of the character required on the open market or in case of work and services, by performance by City employees. In such event, the contractor and his surety shall be liable to the City for any excess costs and expenses thereby incurred.

B-17 SAFEGUARDS.

Any equipment to be furnished by the terms of this bid, shall be provided with safety controls, guards, and housing meeting the requirements of the safety standards of the Industrial Commission and the Department of Industrial Relations of Ohio, and the cost shall be included as part of the bid.

B-18 STATE OR FEDERAL TAXES.

- a. The City of Cleveland is exempt form all sales, excise and transportation taxes, except State of Ohio gasoline tax. The price or prices bid shall be exclusive of all such taxes and will be so construed.
- b. The contract price is subject to increase by the amount of any additional tax imposed by the Federal Government or the State of Ohio subsequent to the receipt of bids. Such claim for increased prices must be presented to the City within thirty (30) days after such tax becomes effective and supported by evidence satisfactory to the Director of Law.
- The contract price is subject to reduction by that amount by which an applicable tax is reduced during the period of the contract.

B-19 SOCIAL SECURITIES ACT/EMPLOYEES BENEFIT PAYMENTS.

The contractor shall be and remain an independent contractor with respect to all services performed under said contract, and agrees to and accepts full and exclusive liability for the payment of any and all contributions or taxes for social security, unemployment insurance, old age retirement benefits, pensions, or annuities now or hereafter imposed under any state or federal law, which are measured by the terms of this contract and further agrees to obey all lawful rules and regulations and to meet all lawful requirements which are now or hereafter may be issued or promulgated under said respective laws by and duly authorized state or federal officials and said contractor also agrees to indemnify and save harmless the City of Cleveland from an such contributions or taxes or liability therefore.

B-20 FREIGHT ON DIRECT SHIPMENTS TO THE CITY.

The freight prices made in the bid are to be in accordance with lawful freight or cartage charges in existence at the time the bid is made, and contract prices shall be increased or decreased by changes in the freight or cartage rates, provided that claims for additional freight or cartage be presented to the City of Cleveland within thirty (30) days after said advance in freight or cartage rates becomes effective. Reductions in freight or cartage prices will be deducted from the contract price.

B-21 INVOICING AND PAYMENT.

The Contractor shall submit invoices that appropriately reflect the work performed. Original Invoices must be typed and legible. The City of Cleveland does not pay from duplicates or copies. Each invoice must be mailed as specified below:

- Original invoice to address as shown on Purchase Order under "BILL TO:"
- Optional: Copy of invoice to the City of Cleveland, Division of Accounts, 601 Lakeside Avenue, Cleveland, OH 44114, clearly marked "COPY".
- Address invoice questions first to the ordering department. The Division of Accounts will assist if the Department is unable to resolve the question.

The failure to deliver copies of invoices to the indicated location may lead to delays in payment.

Invoices submitted by the Contractor for payment <u>must</u> include the following information:

- Contractor Name, as it appears on the Contract:
- Contractor Mailing Address;
- Contractor Telephone Number;
- Contractor Facsimile Number:
- Contract Number:
- Purchase Order (PO) Number under which the work being invoiced was authorized;
- Contractor Invoice Number, which must be a unique (non-recurring) number:
- Invoice Date, reflecting the date that the invoice itself was issued to:
- Timeframe that the invoice covers:
- A detailed itemization of labor and materials provided, including:
 - Date that work was performed / material delivered.
 - Location for each item of service performed / material delivered.
 - Line Item Number from the Contract's Schedule of Items (SOI) that is being invoiced.
 - Quantity of items being invoiced under each Line Item,
 - Unit Cost of each Line Item.
 - Extended Cost by each Line Item.
- delivery documentation (e.g., Proof of Service / Delivery slip, Packing Slip, etc.) with an acknowledgement signature and date from a City of Cleveland employee;

The City of Cleveland is not subject to sales tax per Section 5739.01 (B)(1) O.R.C. Therefore invoices must not charge sales tax. The City's Tax Exemption Number is 34-6000646. Tax Exemption Certificates are available upon request from the Division of Purchases and Supplies.

Any applicable discounts, as stipulated through the contract and/or PO, must be itemized and applied to the invoice. Any special instructions contained within the contract must also be followed.

If any invoice is erroneous or does not include the above required information, the City shall inform the supplier as to the reasons thereof and any corrective actions necessary to qualify the invoice for payment by the City. The vendor is responsible for providing the delivery documentation at the time of delivery and for submitting the invoice.

B-22 EQUAL OPPORTUNITY.

This contract is a contract, and contractor is a contractor within the meaning of Chapter 187 of the Codified Ordinances of Cleveland, Ohio 1976. During the term, the contractor shall comply with all terms, conditions and requirements imposed on "contractor" in the Equal Opportunity Clause, Section 187.22(b) of

the Codified Ordinances of Cleveland, Ohio 1976, attached hereto and made a part hereof. A copy of such clause shall be made a part of every subcontract of agreement entered into for goods or services and shall be binding on all persons, firms and corporations with whom the contractor may deal.

PARAGRAPHS B-23 AND B-24 APPLY ONLY IF THE REQUIREMENT CONTRACT BID BLOCK IS MARKED ON BID PAGE 1 OF BID AND ON BID FORM.

B-23 DURATION OF CONTRACT.

The proposed contract shall be effective upon its execution and approval by the Director of Law of the City of Cleveland and, for the purpose of accepting delivery, shall continue in full force and effect for the period specified in the specifications and/or the Schedule of Items section of the bid, unless otherwise indicated.

B-24 REDUCTION IN PRICES.

The contractor agrees that if the price to the general trade is reduced while the contract is in effect, the City of Cleveland will receive the benefit of such reduction immediately. However, if the contract price is below the price to the general trade at the time the contract is awarded, the reduction provision will be effective only when the recognized price to the general trade reaches a level lower than the contract price or when the contractor reduces his own price to a level lower than the contract price.

B-25 EIGHT-HOUR DAY, MINIMUM WAGE, AND NON-DISCRIMINATION. The Contractor agrees that it shall comply with the following provisions of the Charter of the City of Cleveland, which are, respectively, as follows:

Section 196. Except in case of extraordinary emergencies, not to exceed eight (8) hours will constitute a day's work and not to exceed forty eight (48) hours a week's work, for any City employee of the City of Cleveland in the classified service thereof, and for any workmen engaged in public work carried on or aided by the municipality whether done by contract or otherwise. The Council shall by ordinance, provide for the enforcement of the provisions of this section.

Section 197. Every contract for public work entered into by the City of Cleveland shall contain, and no contract shall be entered into unless it contains the following stipulations:

The Contractor hereby agrees that all persons employed by him will be paid wages which are not less than are paid by the City of Cleveland for similar or like work; but if said City has not established a rate of wages for any particular class of work to be performed under the terms of this contract, then said employees shall be paid wages not less than are generally paid therefore by others employing union labor in said City.

The Contractor hereby further agrees that in the employment of labor, skilled or unskilled, under the Contract there will be no discrimination exercised against any citizen because of race, color, religion or national origin; and that any violation hereof shall be deemed a material breach of said contract.

B-26 LAWS, PERMITS, AND REGULATIONS

The contractor shall comply with all applicable laws of the Federal government, State, ordinances of the City or other municipality in which the work or services are being done and all applicable regulations and any authorized regulations, and shall be responsible for securing at his own expense any and all licenses, permits and certificates of inspection required by law or by the contract documents.

SERVICES, LABOR & MATERIALS - IF THIS CONTRACT IS FOR WORK, SERVICES, OR LABOR & MATERIALS, B-27, 28 AND B-29 APPLY

B-27 STATE INDUSTRIAL COMPENSATION FOR PURCHASE OF LABOR AND MATERIALS.

If this contract contains labor, whether in part or in all, the contractor shall, in all cases during the term of this contract, subscribe to and comply with the Worker's Compensation Laws of the State of Ohio and pay such premiums as may be required thereunder and to save said City hamless from any and all liability arising from said act. He shall also furnish at the time of delivery of this contract and such other times as may be requested, a copy of the official certificate or receipt showing the payments hereinbefore referred to. A copy of the official certificate or receipt showing the payments hereinbefore referred to, shall be submitted with the bid, or, if not included with the bid, shall be submitted with the signed contract. No work shall be commenced, or payments made, until the certificate or receipt is received by the City. The contractor shall maintain continuous coverage throughout the contract and shall notify the City in writing within 24 hours of receipt of notice of cancellation or reduction of coverage.

B-28 INDEMNITY

Contractor shall indemnify, defend, and hold harmless the City of Cleveland, Ohio, its officers, agents, and employees from all claims, demands, liabilities, loss, suits, causes of action, judgments, costs, and expenses, including attorneys' fees, arising, occurring, or allegedly arising or occurring from personal injury, including death, property damage, including loss of use, or otherwise, to any person or the property of any person, including third parties and employees of any party, as a result of negligent or intentional act or omission by Contractor or its agents, employees, subcontractors or suppliers, in performing work or services or furnishing labor and materials under this contract. This indemnification right is in addition to any other indemnification or contribution right of any indemnified party and shall survive completion of the work or services or furnishing of labor and materials.

B-29 WARRANTY

Contractor warrants, in addition to any other express or implied warranty required by law or the contract, that all work and services performed under this Agreement will be of good quality, free from faults and defects, conform to the contract documents, performed in a workmanlike manner according to good usage and

accepted practice, resulting in a merchantable product, and fit and suitable for their intended purpose, and that materials supplied will be of good quality and free from all defects, latent or patent.

B-30 OHIO CAMPAIGN FINANCE LAW

Pursuant to the Ohio Revised Code, as referenced below, the following language is hereby made a part of this document:

"Contractor hereby certifies that beginning on the date the contract is awarded and extending until one year following conclusion of the contract, all persons identified in Ohio Revised Code Sections 3517.13(I)(3) and 3517.13(J)(3), as applicable, are in compliance with Ohio Revised Code Sections 3517.13(I)(1) and 3517.13(J)(1)."

By submitting a signed sealed bid, those persons signing the document are affirming their compliance with the referenced sections of the Ohio Revised Code, herein incorporated into any contract created pursuant to this Invitation to Bid in its entirety.

B-31 TITLE 48 C.F.R. ETC:

Certification Re: Federal Debarment, Suspension, Ineligibility or Voluntary Exclusion: Title 48 Code of Federal Regulations, Part 9, and other regulations, preclude the City from participating in a covered transaction, as defined in subpart 9.4, with any agency, corporation, partnership, or other legal entity that has been debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by the Federal Government from participating in transactions involving Federal funds. By signing and submitting this document, the bidder certifies to City that it, its principals, any subcontractors, and subcontractor principals:

- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
 Have not within the three-year period immediately preceding the submission date of this document been convicted of or had a civil judgment rendered against them personally or the company for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- 3) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; or.
- 4) Have not within the three-year period immediately preceding submission date of this document had one or more public transactions (Federal, State or local) terminated for cause or default.

If the bidder is unable to certify to any of these statements in this certification, such prospective participant must attach a written explanation to this bid. Failure or inability to certify to any of these statements may be cause for rejection of the bid.

The Federal Debarred Listing is available at http://www.epls.gov/

By submitting a signed sealed bid, those persons signing the document are affirming their compliance with the referenced sections of the Code of Federal Regulations, herein incorporated into any contract created pursuant to this Invitation to Bid in its entirety.

SPECIFICATIONS/DESCRIPTIONS OF PRODUCTS AND/OR SERVICES CITY OF CLEVELAND – DIVISION OF CLEVELAND PUBLIC POWER

2024 PURCHASE OF WOOD POLES

SECTION C – SUPPLEMENTAL GENERAL CONDITIONS

C.1. SCOPE AND CONTRACT TERM

This Invitation to Bid is to provide for a STANDARD PURCHASE Contract (s) to furnish and deliver to Cleveland Public Power various sizes and classes of Wood Poles as described in this specification and as listed on the Bid Schedule of Items pages.

C.2. CITY FORMS

Failure to submit the following City forms properly, will cause your bid to be non-responsive.

- A. Bid Bond
 - 1. Use the City's Bid Bond form.
 - 2. Follow the instructions in Part B and C of the Bidder's Check List completely.
 - 3. A bid bond is not required if your total bid is \$50,000.00 or less.

B. Bid Form

- 1. Indicate whether you are submitting a bid bond or a cashier's check/certified check in the amount of 5% of your bid total.
- 2. The information at the bottom of the page must be filled out completely and signed by an officer of the corporation or firm.

C. Affidavit

- 1. The first three lines of the affidavit must be filled out stating the state, county, and name of the person being sworn.
- 2. The state on page one must be the same state as the notary's commission stamp that appears at the bottom of page two.
- 3. Be sure that the proper lines are used on page two for signing for the person that is being sworn.
- 4. Fill out all necessary information on both sides of the affidavit.

Any other forms that are included in the bid package should also be filled out completely and signed where necessary and returned.

C.3. NON-MANDATORY PRE-BID MEETING

A. A pre-bid meeting will be held on the date and time as per the advertisement announcement. Bidders are cautioned that questions, clarifications, and information that my result from this meeting, could affect your bid. In addition, by City of Cleveland (City) policy, this is the only opportunity for potential bidders to speak directly with Cleveland Public Power (CPP) personnel prior to the award of the contract. Attendance at the pre-bid meeting is non-mandatory.

SPECIFICATIONS/DESCRIPTIONS OF PRODUCTS AND/OR SERVICES CITY OF CLEVELAND – DIVISION OF CLEVELAND PUBLIC POWER

2024 PURCHASE OF WOOD POLES

SECTION C – SUPPLEMENTAL GENERAL CONDITIONS

B. The last day for questions is five (5) business days before the bid opening date by 12:00 p.m. All questions must be submitted in writing to the Division of Purchase & Supplies, by email to purchasing@clevelandohio.gov or via fax to 216-664-2177.

C.4. QUANTITIES

The quantities to be furnished as given for each item in the Bid Schedule of Items pages are for this Standard Purchase contract bid. They are statements and quantities to be provided or furnished under this contract.

C.5. UNIT PRICES

All prices quoted shall be on a per unit basis as indicated on the Bid - Schedule of Items pages and shall include all costs for handling and delivery, including unloading at the designated CPP facility, and F.O.B. point of delivery. The manufacturer's name shall be entered in the proper space on the Bid – Schedule of Items pages as designated.

C.6. METHOD OF AWARD

The City reserves the right to award a single contract for all items, or by individual items, or by groups to the lowest and best bidder(s) based on price, delivery time, discount offered and conformance to specifications as deemed advantageous after evaluation by the City. In order to receive an award by group, vendor must bid on all items within the group.

C.7. EVALUATION OF BIDS

Cleveland Public Power will recommend the rejection of bids for improper submittal of documentation, incomplete submittal of documentation and/or unsubstantiated information within the submittal. Performance, cost, delivery times, timeliness and safety shall be considered as the essence of the contract and/or contracts.

C.8. MATHEMATICAL ERRORS

- A. If a bidder makes any mathematical errors in the old sheets such that some or all of the bid numbers are mathematically inconsistent with each other, the City shall correct such errors as follows. The lowest level values or unit prices shall be deemed as indicating the bidder's true intent and shall be accepted as correct. All further calculations shall then be corrected, and these corrected values shall be cascaded throughout the entire set of bid sheets, potentially affecting the bidder's final bid price. Calculations subject to such correction include, but are not limited to:
 - 1. The summing of labor and material unit prices into a total unit price.
 - 2. The multiplication of unit price times quantity to are at the extension cost
 - 3. The summing of individual line items into totals or subtotals

SPECIFICATIONS/DESCRIPTIONS OF PRODUCTS AND/OR SERVICES CITY OF CLEVELAND — DIVISION OF CLEVELAND PUBLIC POWER

2024 PURCHASE OF WOOD POLES

SECTION C – SUPPLEMENTAL GENERAL CONDITIONS

- 4. The multiplication of any subtotals or other values by contingency percentages or other factors, If contingency allowance applies,
- 5. The transferring of subtotals or values from one sheet to another
- B. If the correction of any errors has an effect on the award of the contract, only the directly affected bidders will be noted in writing of the corrections and their affects.

C.9. METHOD OF SHIPMENT

All items shall be shipped as standard packages, except as noted on Delivery Orders, properly packed and identified. Successful bidder shall label all containers with labels that meet all U.S. Department of Transportation (USDOT) labeling requirements for hazardous contents.

C.10. MATERIAL SAFETY DATA SHEETS

The successful bidder shall mail Material Safety Data Sheets to:

Anthony Missig / Safety Programs Manager Cleveland Public Power 1300 Lakeside Ave Cleveland, Ohio 44114

C.11. GUARANTEE

The bidder shall guarantee that the material as furnished by him shall be free from all defects of design, material, and workmanship for a period of ten (10) years after delivery. He shall rectify, entirely at his own expense, any defects which may develop in the said guarantee period. The City will not pay freight or shipping charges.

C.12. DELIVERY (Supplemental to General Conditions B-14)

All items to be furnished and as ordered under the terms of these specifications shall be delivered between the hours of 8:30 A.M. and 3:30 p.m., Monday through Friday, to CPP, at the designated storage site.

It is imperative to call the CPP Storekeeper between the hours of 8:30 A.M. and 3:30 P.M., Monday through Friday, at (216) 664-4200 at least twenty-four (24) hours prior to the date and time of delivery to confirm the address of the CPP warehouse facility.

Contractor delivery, as herein specified, shall be made within sixty (60) calendars days of receipt of written order for any quantity.

SPECIFICATIONS/DESCRIPTIONS OF PRODUCTS AND/OR SERVICES CITY OF CLEVELAND – DIVISION OF CLEVELAND PUBLIC POWER

2024 PURCHASE OF WOOD POLES

SECTION C – SUPPLEMENTAL GENERAL CONDITIONS

Lots shall be in amounts required by CPP. Vendor must be able to provide all items awarded and CPP reserves the right to determine if the product is suitable upon delivery.

The trucks used for the delivery of the wood poles must be equipped with a selfunloader for unloading by driver and the cost for delivery and unloading, must be included in the unit price for each pole.

Storekeeper may refuse delivery of any items which do not meet the conditions stated above. Removal and replacement of any items which are refused shall be the sole responsibility of the contractor and shall be at no additional cost to the city.

C.13. PREFERENCE FOR RECYCLED MATERIALS (If Applicable)

Whenever the total price submitted by a bidder who includes recycled products and materials does not exceed by more than 5% the lowest price bid without recycled products and materials, will be given preference provided that those recycled products and materials are readily procurable and are of equal or superior quality to products and materials made from non-recycled materials.

C.14. INVOICING AND PAYMENT (Supplemental to General Condition B-21) A. INVOICING

The vendor shall submit invoices that appropriately reflect the material provided. Invoices must be typed and legible. Each invoice must be mailed as specified below:

Original invoice to the Department of Public Utilities, ATTN: Payable Unit, 1201 Lakeside Avenue, 4th Floor South, Cleveland, OH 44114. The email address is Payables Unit@ClevelandWater.com

- 1. The failure to deliver copies of invoices to the indicated location may lead to delays in payment.
- 2. A copy of the invoice should be delivered to the CPP location as listed on the delivery order.

B. PAYMENT

- 3. The vendor must adhere to the terms set forth above and under C-13 Delivery and C-15 Invoicing. CPP will review invoices upon receiving them. In order to perform this review, CPP requires all of the following documents.
- 4. Relevant sections (e.g., the Schedule of Items section) of the contract with vendor.

SPECIFICATIONS/DESCRIPTIONS OF PRODUCTS AND/OR SERVICES CITY OF CLEVELAND – DIVISION OF CLEVELAND PUBLIC POWER

2024 PURCHASE OF WOOD POLES

SECTION C - SUPPLEMENTAL GENERAL CONDITIONS

- 5. A City of Cleveland Delivery Order (DO) that authorized the specific materials being invoiced.
- 6. Delivery documentation (e.g., Delivery Slip, Packing Slip, etc.), with an acknowledgement signature and date from a CPP employee; and
- 7. An accurate invoice.

The vendor is responsible for providing the delivery documentation at the time of delivery and for submitting the invoice. The City will provide the contract and DO copies. A CPP employee will use the above four documents to perform cross-checks to ensure accuracy in invoicing. If all is in order (e.g., delivered / invoiced items were authorized under the contract and DO, invoice quantities were delivered, contract prices were invoiced, discounts applied, etc.), CPP will approve payment of the invoice through the City's internal processes. The City's Division of Account subsequently handles processing of the payment request, and the Division of Treasury issues the payment.

C.15. NO WAIVER OF LEGAL RIGHTS

Neither acceptance of, nor payments for, the work or goods or services hereunder, or any part of them, nor any extension of time, nor any possession taken by the City shall operate as a waiver of any portion of the Contract, nor shall a waiver or any default or breach of the Contract be held to be a waiver of any other or subsequent default or breach.

C.16. PUBLIC LIABILITY, PROPERTY DAMAGE AND AUTOMOBILE INSURANCE REQUIREMENTS

A. The Contractor shall maintain during the term of this contract such general liability insurance including but not limited to bodily injury, property damage, contractual liability, products/completed operations coverage, and personal injury coverage wherein the City of Cleveland is named as additional insured.

(Special hazards such as business automobile liability insurance are addressed below.) Coverage shall protect the Contractor and any subcontractor performing any work under this contract from claims for damage for personal injury, bodily injury, including accidental death, as well as for claims for property damage, which may arise from operations under this contract, whether such operations be by the Contractor or by any subcontractor or by anyone directly or indirectly employed by them. An original certificate of insurance and a copy of the additional insured endorsement naming the City of Cleveland as additional insured shall be deposited with the Director of Finance prior to execution of the contract. Such documents shall be as to form, coverage, carrier and limits satisfactory to and approved by the Director of Law. The additional insured coverage provided to the City under the

SPECIFICATIONS/DESCRIPTIONS OF PRODUCTS AND/OR SERVICES CITY OF CLEVELAND — DIVISION OF CLEVELAND PUBLIC POWER

2024 PURCHASE OF WOOD POLES

SECTION C - SUPPLEMENTAL GENERAL CONDITIONS

Contractor's insurance policy(ies) shall be primary with respect to Contractor's general liability, notwithstanding other insurance covering the City. The amounts of insurance shall be as described below.

B. General Liability

- 1. Including but not limited to Bodily Injury, Property Damage, Contractual Liability, Owners and Contractors Protective Liability, Products/Completed Operations and Personal Injury.
- 2. Such policy or policies shall be in an amount not less than a combined single limit of \$1,000,000.00 for bodily injury and property damage per occurrence and, in the aggregate, including but not limited to, contractual liability, owners and contractors' protective liability, personal injury as well as products/completed operations coverage of \$1,000,000.00.
- 3. Such coverage shall be on an occurrence basis. Coverage shall not be on a claim made basis.
- 4. If a deductible or self-insured retention is assumed, it may not exceed \$50,000.00 per occurrence and in the aggregate. This insurance shall include coverage for damage of property of any nature in the care, custody, or control of the Contractor, or any property over which the Contractor is directly or indirectly exercising physical control by reason of the work to be performed.

C. Special Hazards

Where site conditions warrant, special hazards shall be covered during the life of this Contract by rider or riders to the policy or policies above required, or by separate policies of insurance.

D. Business Automobile Liability

Business automobile insurance to cover each automobile, truck or other vehicle used in the performance of the contract in an amount not less than a combined single limit of \$1,000,000.00 for bodily injury, including death and property damage per occurrence.

E. The Contractor shall notify the Director of Law, in writing, at least ten (10) days before it cancels or reduces its insurance policy or coverage, and immediately upon the Contractor's receipt of notice from its insurance company of any cancellation or reduction of the required insurance policy or coverage.

SPECIFICATIONS/DESCRIPTIONS OF PRODUCTS AND/OR SERVICES CITY OF CLEVELAND — DIVISION OF CLEVELAND PUBLIC POWER

2024 PURCHASE OF WOOD POLES

SECTION C – SUPPLEMENTAL GENERAL CONDITIONS

- F. Self-insurance is not acceptable.
- G. Under no circumstances will the City assume control of vendor's employees, nor will the City assume or have the right to vendor's said employees and equipment. In no event will the City be responsible for any injury to said vendor's employees.

C-17. INDEMNITY CLAUSE (Supplemental to General Condition B-28)

The Contractor shall indemnify, keep and save harmless the City of Cleveland, Ohio, and its respective officers, agents and employees, against all suits or claims that may be based upon any injury to persons or property that may occur, or that may be alleged to have occurred in the course or as the result of the performance of all or any part of this Contract by the Contractor, whether or not it shall be claimed that the injury was caused through a negligent act or omission of the Contractor or its employee, and whether or not the person(s) injured or whose property was damaged were third parties, employees of the Contractor or employees of an authorized Subcontractor; and the Contractor shall at its own expense defend the City in all litigation, pay all attorney's fees and all costs and other expenses arising out of the ligation or claim incurred in connection therewith; and shall at its own expense, satisfy and cause to be discharged such judgments as may be obtained against the City, or any of its officers, agents or employees. Nothing herein shall be construed to limit the Contractor's indemnification obligations to the limits of insurance provided. The indemnification obligations shall survive any termination of the Contract.

In case of any and all claims against the City and its officers, agents or employees, by any employee of the Contractor, Subcontractors, its agents, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation of the above paragraph shall not be limited in any way by any limitation on the amount or type of dames, compensation or benefits payable by or for the Contractor, Subcontractors or other person under applicable worker's or workmen's compensation benefit or disability laws, it being clearly agreed and understood by the parties hereto that the Contractor expressly waives any immunity the Contractor might have had under such laws. By executing the Contract, the Contractor acknowledges that the foregoing waiver has been mutually negotiated by the parties.

C-18. OEO PARTICIPATION (Supplemental to A-17, A-18, and A-19) Under Chapter 187.13C of the Codified Ordinances, the OEO participation goal for this contract has been waived. Schedules 1-4 are not required.

There is no Subcontractor Participation (Utilization) Goal for this contract. However, per Section A-19(a) of the Instructions to Bidders, any and all proposed subcontractors,

SPECIFICATIONS/DESCRIPTIONS OF PRODUCTS AND/OR SERVICES CITY OF CLEVELAND – DIVISION OF CLEVELAND PUBLIC POWER

2024 PURCHASE OF WOOD POLES

SECTION C – SUPPLEMENTAL GENERAL CONDITIONS

whether City certified or not, must be divulged and listed in the sealed bid. If you do plan to utilize a subcontractor, submit a proposed subcontractor list on a separate, signed sheet of paper, listing the name, address, type of work or materials, and total subcontractor amount for each and every subcontractor that you propose to use on this contract.

You are encouraged to consider City-certified firms for any available subcontracting opportunities. A searchable database of all City-certified firms can be found on the City of Cleveland Office of Equal Opportunity Website: http://cleveland.diversitycompliance.com. On the website, click on CSB/MBE/FBE Registry.

C.29. NOTICE TO PROCEED

The term of this contract shall begin when CPP issues a Notice to Proceed to the awarded vendor. A Notice to Proceed shall not be issued until the contract has been fully executed and delivered to all parties.

< END OF SECTION C >

SPECIFICATIONS/DESCRIPTION OF PRODUCTS AND / OR SERVICES CITY OF CLEVELAND — DIVISION OF PUBLIC POWER

2024 WOOD POLES

SECTION D - DETAILED SPECIFICATIONS

D.1 Industry Standards

The following national standards are a part of this Specification.

All wood poles shall be cut from live trees and shall meet the applicable requirements of said standards:

D.1.1 American National Standards Institute (ANSI) (Current Edition)

Including but not limited to:

ANSI O5.1 - Specifications & dimensions for wood poles

ANSI C2 - National Electric Safety Code (NESC)

D.1.2 American Society for Testing & Materials (ASTM) (Current Edition)

Including but not limited to:

ASTM D9 - Standard Terminology Relating to Wood & Wood-Based Products

ASTM D3200 - Design Stresses for Round Timber Poles

ASTM D25 - Standard Specification for Round Timber Piles

ASTM D2899 - Establishing Design Stresses for Round Timber Piles

ANSI/ASTM - D1036-58 - Standard method of static tests of wood poles

D.1.3 American Wood-Protection (formerly "Preservers") Association (AWPA) Book of Standards (Current Edition)

Including but not limited to:

AWPA A3 - Standard Methods for Determining Penetration of Preservatives and Fire Retardants

AWPA A5 - Standard Methods for Analysis of Oil-Borne Preservatives

AWPA M4 - Standard for the Care of Preservative-Treated Wood Products

AWPA P8 - Standard for Oil-Borne Preservatives

AWPA T1 - Use Category System: Processing & Treatment Standard

AWPA U1 - Use Category System: User Specification for Treated Wood

Rural Electrical Administration (REA)

Specification DT5-B

USDA Rural Utilities Service (RUS) BULLETIN 1728F-700

https://www.rd.usda.gov/sites/default/files/uep bulletin 1728f-700 0 0.pdf

D.2 Preservative Treatment

All wood poles shall be processed, and pressure treated according to the requirements of AWPA T1 with the following clarifications:

SPECIFICATIONS/DESCRIPTION OF PRODUCTS AND / OR SERVICES CITY OF CLEVELAND — DIVISION OF PUBLIC POWER

2024 WOOD POLES

SECTION D – DETAILED SPECIFICATIONS

D.2.1 Preservative

The preservative used in the treatment of wood poles shall be "DCOI" or approved equivalent meeting the requirements of AWPA P8.

D.2.2 Process

All wood products shall be full-length treated by an empty-cell process in accordance with AWPA T1 and U1. All wood poles shall be clean and dry after treatment. Bleeders shall be rejected.

D.2.3 Incising

As a minimum requirement, wood products shall be incised according to the requirements of AWPA T1. If it is determined that additional incising is necessary to achieve the minimum penetration of preservative, then additional incising will be required.

D.2.4 Shaving Wood Poles

All poles shall be machine shaved full length before incising (if they are to be incised) and before treatment with preservative.

D.2.5 Net Retention of Preservative

The net retention of preservative shall not be less than that specified in AWPA U1

D.2.6 Penetration of Preservative

The penetration of preservative shall not be less than that specified in AWPA T1

D.3 Wood Pole Details

Wood pole use category shall be "UC4B" according to the requirements of AWPA U1 Western Red Cedar, Southern Pine and Douglas Fir poles are acceptable wood species. Wood pole quality and dimensions shall meet the requirements of ANSI O5.1 with the following clarifications:

D.3.1 Spiral Grain (Twist Grain)

No pole may have more than one (1) twist in any twenty (20) feet.

D.3.2 Knots

Poles with three (3) or more knots in a cluster are not acceptable.

D.3.3 Sweep

Sweep of poles shall be measured between the butt and top of the pole and shall be no more than one (1) inch for every ten (10) feet of total length.

SPECIFICATIONS/DESCRIPTION OF PRODUCTS AND / OR SERVICES CITY OF CLEVELAND — DIVISION OF PUBLIC POWER

2024 WOOD POLES

SECTION D - DETAILED SPECIFICATIONS

D.3.4 Short Crook

No more than one (1) inch deviation in any five (5) foot section of pole will be allowed.

D.3.5 Marking by Manufacturer (50 feet or less)

Poles 50 feet or less shall be burn-branded according to the requirements of ANSI O5.1 at 10' +- 2'' from the pole butt.

D.3.6 Marking by Manufacturer (55 feet to 100 feet)

Poles 55 feet to 100 feet shall be burn-branded according to the requirements of ANSI O5.1 at 14' +- 2'' from the pole butt.

D.3.7 Marking by Manufacturer (105 feet or more)

Poles 105 feet or more shall be burn-branded according to the requirements of ANSI O5.1 at 18' +- 2'' from the pole butt.

D.3.8 Gaining, and Drilling

Poles shall be gained and drilled in accordance with Cleveland Public Power Drawing #1-2-1-3 (copy attached). Or RUS Pole Framing Guide W1.1G (M20) (copy attached)

D.4 Inspection

As it is impracticable for the City to send an inspector to the pole yards to inspect poles before the same are loaded, the pole supplier shall assume said duties and shall deliver the poles in accordance with these specifications subject to inspection by the City when poles are unloaded.

The City shall inspect all poles when they are unloaded and all poles not complying with these specifications shall be rejected. Copies of inspection and testing records shall be supplied to the City by the supplier. (Please see Section (C.5 Delivery) regarding rejected and/or refused items.)

D.5 Apitong Wood Assembly Details

Apitong wood assemblies herein specified shall be constructed of Apitong wood having a modulus of rupture of 16,000 psi or greater. Assemblies shall be mounted utilizing extruded 6061-T6 aluminum alloy fittings to minimize weight and maintain strength.

D.6 Ferrous Metal Part Details

All ferrous metal parts shall be hot-dipped galvanized.

D.7 Material Safety Data Sheets

Material Safety Data Sheets (MSDS) shall be provided to the City per 29 CFR 1910,1200.

SPECIFICATIONS/DESCRIPTION OF PRODUCTS AND / OR SERVICES CITY OF CLEVELAND – DIVISION OF PUBLIC POWER

2024 WOOD POLES

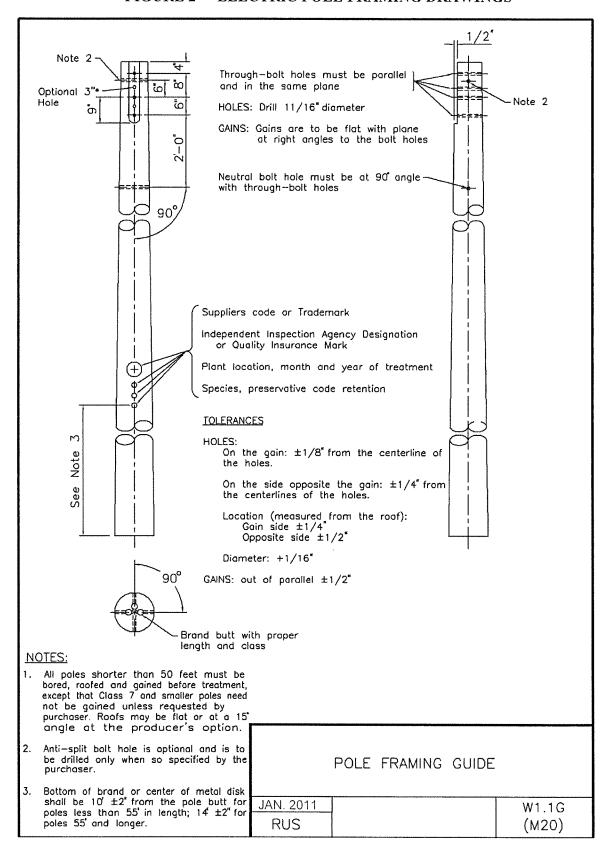
SECTION D – DETAILED SPECIFICATIONS

D.8 The successful bidder shall mail Material Safety Data Sheets to:

Anthony Missig / Safety Programs Manager Cleveland Public Power 1300 Lakeside Ave Cleveland, Ohio 44114

< END OF SECTION D >

FIGURE 2 ELECTRIC POLE FRAMING DRAWINGS



UNITED STATES DEPARTMENT OF AGRICULTURE Rural Utilities Service

BULLETIN 1728F-700

SUBJECT: RUS Specification for Wood Poles, Stubs and Anchor Logs

Incorporated by reference in 7 CFR Parts 1728 and 1755

TO: All RUS Electric Borrowers

Electric Program.

EFFECTIVE DATE: Date of Approval

OFFICE OF PRIMARY INTEREST: Engineering Standards Branch, Electric Program

INSTRUCTIONS: This bulletin replaces RUS Bulletin 1728F-700, RUS Specification for Wood Poles, Stubs and Anchor Logs, issued May 2011. File with 7 CFR Part 1728 (Electric Borrowers).

AVAILABILITY: This bulletin can be accessed via the Internet at: http://www.rd.usda.gov/publications/regulations-guidelines/bulletins/electric

PURPOSE: To describe: (1) The minimum acceptable quality of wood poles, stubs, and anchor logs permitted to be purchased by or for RUS borrowers; and (2) the plans of procurement under which these wood products may be purchased.

CHRISTOPHER MCLEAN	Digitally signed by CHRISTOPHER MCLEAN Date: 2021.09.09 08:22:59 -04'00'		
Christopher A. McLea		_	Date

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Figure 3 Telecommunications Pole Framing Drawing

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Metric Conversion Factors

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Poles Specifications Timber Products

ABBREVIATIONS

ACZA - Ammoniacal Copper Zinc Arsenate
ANSI - American National Standards Institute
ASTM - American Society for Testing and Materials
AWPA - American Wood Protection Association
CCA - Chromated Copper Arsenate
CuN - Copper Naphthenate
RUS - Rural Utilities Service
SPIB - Southern Pine Inspection Bureau
USDA - United States Department of Agriculture
WCLIB - West Coast Lumber Inspection Bureau

DEFINITIONS

Butt treated – poles that are only treated in the section of the pole in contact with the ground.

Certificate of compliance – a written certification by an authorized employee of the producer that the material shipped meets the requirements of this specification and any supplemental requirements specified in a purchase order from a borrower or the borrower's contractor.

Contractor – an organization retained by a RUS borrower to construct a power line in accordance with the contract under which the RUS borrower and contractor execute. The contractor agrees to provide and utilize only wood products that meet the requirements of this specification.

Independent inspection – refers to examination of material by a trained inspector employed by a commercial agency.

Inspection – an examination of material in sufficient detail to ensure conformity with all requirements of the specification under which it was purchased.

Producer – refers to the party who manufactures poles. In some cases the producer may also be the treating plant.

Purchaser – refers to either the RUS borrower or a contractor acting as a RUS borrower's agent, except where a part of the specification specifically refers to only the borrower or the contractor.

Quality control supervisor – refers to an employee of the producer designated to be responsible for quality control procedures carried out by said producer.

Reserve treated stock – treated material held in storage by a producer for purchase and immediate shipment to a borrower.

Supplier – term that may refer to the producer, the treater, or to a third party broker or distributorship involved in supplying RUS products to the borrowers.

Transmission poles – unless otherwise indicated, are any poles 50 feet or longer.

Treating charge – all the material treated in a cylinder at one time.

Treating plant – refers to the facility that applies the preservative treatment to the poles.

1 SCOPE

- This specification describes the minimum acceptable quality of wood poles, stubs, telephone pedestal stubs, and anchor logs (hereinafter called poles, except where specifically referred to as stubs or anchor logs) purchased by or for RUS borrowers. Where there is conflict between this specification and any other specification referred to herein, this specification shall govern.
- The requirements of this specification implement contractual provisions between RUS and borrowers receiving financial assistance from RUS. The contractual agreement between RUS and a RUS borrower requires the borrower to construct its system in accordance with RUS accepted plans and specifications. Each RUS electric and telecommunications borrower shall purchase only wood poles, stubs, and anchor logs produced in accordance with this specification. Each RUS electric or telecommunications borrower shall require a written confirmation from their selected contractor that all material utilized shall be produced in accordance with this specification.

2 RELATED SPECIFICATIONS

The following specifications may be considered as pertinent to this specification, subject to the restrictions in the paragraph under "Scope." All AWPA references shall be those in effect in the 2020 AWPA Book of Standards or latest version thereof.

- a ANSI O5.1.2017 American National Standard Specifications and Dimensions for Wood Poles;
- b ASTM D9-20 Standard Technology Relating to Wood and Wood Based Products;
- c Standard No. 17 Grading Rules for West Coast Lumber, West Coast Lumber Inspection Bureau, (2018);
- d Standard Grading Rules for Southern Pine Lumber, Southern Pine Inspection Bureau, (2014);
- e AWPA U1-20- Use Category: System User Specification for Treated Wood
- f AWPA T1-20- Use Category System: Processing and Treatment Standard
- g AWPA M1-20 Standards for the Purchase of Treated Wood Products
- h AWPA M4-15 Standard for the Care of Preservative-Treated Wood Products
- i AWPA A6-20 Method for the Determination of Oil-Type Preservatives and Water in Wood
- j AWPA A7-19 Standard Wet Ashing Procedure for Preparing Wood for Chemical Analysis

- k AWPA A9-20 Standard Method for Analysis of Treated Wood and Treating Solutions by X-ray Spectroscopy
- 1 AWPA A30-18 Standard Method for the Determination of 4,5 Dichloro-2-n-octyl-4 -isothizolin-3 one (DCOI) in Wood and Solutions by High Performance Liquid Chromatography

3 GENERAL STIPULATIONS

- a Quality control and inspection shall be in accordance with Bulletin 1728H-702, RUS Specification for Quality Control and Inspection of Timber Products. Provisions of this specification and ANSI O5.1, which are positive in their wording, shall not be interpreted or subjected to judgment by the quality control supervisor or a third party inspector. Judgment, although used by quality control personnel and independent inspectors, shall not be the basis for acceptance of material which does not conform to the minimum requirements of this specification.
- b Each purchase order shall contain a provision that requires the producer to comply with the provisions of this specification.
- c <u>Purchase Plans</u>. Plans which are acceptable for supplying poles under this specification include:
 - (1) Quality Assurance Plans: Under such plans, the producer furnishes poles conforming to this specification which have been inspected in accordance with the provisions of a RUS approved quality assurance plan. RUS borrower groups or agents for borrower groups endeavoring to operate Quality Assurance Plans shall submit their plans to the Chairman, Technical Standards Committee "A", Rural Utilities Service, 1400 Independence Ave, S.W., Stop 1569, Washington, DC 20250-1569. Written RUS approval of a submitted plan must be received from RUS before said plan can be implemented.
 - (2) <u>Independent Inspection Plan</u>: Under this plan, the producer furnishes poles meeting this specification, with all poles subsequently inspected by a qualified inspector.
 - The RUS borrower has the prerogative to contract directly with the agency for the inspection service. The borrower shall, where practical, select the inspection agency so that the inspector's continued employment is dependent <u>only</u> on performance acceptable to the borrower. The <u>selected agency</u> shall not subcontract the service to any other agency.
- d With the exception of reserve treated stock, all invoices for treated timber products shall be accompanied by a copy of the producer's Certificate of

Compliance and either a copy of the independent inspection report or a certificate confirming that the material was produced under a RUS approved quality assurance plan.

- e The method of inspection described in this section shall be used no matter which purchase plan timber products are purchased under.
- Poles failing to conform to any provision covered by this specification shall not be shipped to the purchaser. The producer shall remove all brands, quality or inspection marks from any such material.
- Poles shall be warranted to conform to this specification. Any pole found not in conformance with this specification, within 1 year from date of delivery to the purchaser, shall be promptly replaced by the producer.
- h Pole producers shall take out and maintain liability insurance for not less than \$1 million. Evidence of compliance shall be forwarded to RUS annually. The evidence shall be in the form of a dated certificate of insurance signed by a representative of the insurance company, that includes a provision that no changes in, or cancellation of said insurance will be made without prior written notice to the Chairman Technical Standards Committee "A", Rural Utilities Service,1400 Independence Ave, S.W., Stop 1569, Washington, DC 20250-1569.

4 QUALITY CONTROL

- a It is the responsibility of each producer to maintain a functional internal quality control system. In addition to maintaining plant and yard conditions that do not promote decay, the following is considered to be mandatory requirements of any plant involved in the production of RUS white or treated materials:
 - (1) Quality control shall be the responsibility of an experienced, competent individual designated for that specific purpose (quality control supervisor), together with such staff as may be required. The quality control supervisor shall have the necessary training to carry out both the analytical and product inspection procedures detailed in this specification and shall verify each step in the production process before releasing white or treated material for verification of conformance by a third party inspector. No material shall be treated before it has been inspected in the white and has the required quality assurance/inspection marks placed in the tips.
 - (2) The quality control supervisor and the third party inspector shall each perform all examinations, tests, and required analytical work individually and independently. Neither shall rely on the other individual's results in the discharge of their duties.

- (3) Treating and inspection records for all RUS materials shall be maintained by the producer for a minimum of two years from the original date of treatment.
- (4) Throughout the production process, the plant quality control supervisor shall withdraw all poles deemed non-conforming. Poles failing to meet all treatment requirements may be re-treated not more than twice, provided that the total allowable steaming times and temperatures are not exceeded. The producer shall promptly remove face brands/tags from all material found to be non-conforming, subject to the foregoing provision for retreatment.
- b The producer shall provide the inspector with all supplemental customer specification requirements (drawings, etc.) contained in a purchase order received from a borrower.
- c Providing "Treating Service Only" does not relieve the treating plant of any responsibilities associated with RUS poles being treated at said facility. The plant quality control supervisor shall verify that all poles are treated within 30 days of conditioning if kiln dried and within 10 days after being inspected in the white.
- d The producer shall maintain its own properly staffed and equipped analytical laboratory or contract with an independent testing laboratory at or near the treating plant to provide the required analytical service. On a case-by-case basis, with written permission from RUS, a producer with more than one treatment facility may be allowed to use a central laboratory.

5 RESERVE TREATED STOCK

Reserve treated stock shall be subject to the following conditions:

- a Producers shall treat material for reserve treated stock under any of the purchase plans (paragraph 3 c) described in the specification.
- b No material treated with creosote, pentachlorophenol, DCOI or copper naphthenate shall be shipped for use on a RUS borrower's system later than 2 years following the original treatment date branded on the material, unless it complies as follows:
 - (1) The material shall be re-assayed by the producer. If conforming to preservative retention requirements, as shown in Table 8, it may be shipped. Re-assayed poles shall be identified on the sawed butt surface with a metal tag showing date of re-assay.
 - (2) If the re-assayed material fails to meet retention requirements and is less than two years from its original treatment date, the producer must retreat, re-assay and butt tag said material per the tagging requirements in 5.b.1.

- (3) Waterborne treated poles need not be re-assayed.
- c No pole shall be shipped to a RUS borrower more than two years after its original treatment date.
- 6 MATERIAL REQUIREMENTS (see Appendix A)

All poles shall conform to the material requirements shown in Appendix A.

7 PRESERVATIVES

Creosote, water-borne preservatives, pentachlorophenol, DCOI and copper naphthenate shall conform to current AWPA Standard U1-20.

8 PRESERVATIVE TREATMENT

- a <u>Conditioning Prior to Treatment</u>: All poles, except as stated below, shall be sterilized by heating the pith center of the pole for one hour, at not less than 150°F, unless stated otherwise.
 - (1) Treatment Group "A" poles (see Table 2, Appendix A of this bulletin) may be seasoned by natural air circulation. Extreme care shall be taken to ensure that air seasoned poles do not have pretreatment decay in them. (refer also to paragraph 5.b of Appendix A). Treatment Group "A" poles are not required to be sterilized
 - (2) Treatment Group "B", "C" and "D" poles from Table 2, Appendix A of this bulletin, shall be conditioned by Boulton drying, by the steam-vacuum process or by kiln drying. The Boulton drying process and steam vacuum process shall have the following limits:

(a) Boulton Drying:

Boulton Drying			
Species	Temperature °F	Duration (hours)	
Green or partially seasoned Douglas - fir (coast)	220 max.	optional*	
Western Larch	220 max.	optional*	

^{*} Duration of Boulton drying shall be counted from the time the wood surface is warmed to approximately 150°F.

(b) Steam-Vacuum Process:

Steam (limits)				
Species	Temperature °F	Total Time ⁽⁴⁾ Max Hours		
Southern Pine	245 max.	17 ⁽¹⁾ , 20 ⁽²⁾		
Ponderosa Pine	240 max.	6 ⁽³⁾		

Notes:

- 1. Pole classes nominally less than 37.5 inches in circumference at 6 feet from butt.
- 2. Pole classes nominally 37.5 inches or larger in circumference at 6 feet from butt.
- 3. See Appendix A, paragraph 4.2.4 for specific limitations.
- 4. Initial treatment steaming time plus any re-treatment steaming time, combined, shall not exceed these maximums.
- (c) Kiln Drying: See paragraph 4.2.3 of Appendix A for limitations.
- b <u>Treatment (Pressure Process)</u>: All poles treated by this process shall be treated in a cycle in which the temperatures and pressures shown are not exceeded. These pressures and temperatures shall be recorded electronically, digitally or on a calibrated recording chart and shall be verified by visual observations of the direct reading gauges throughout the treating cycle by a qualified representative of the treating plant.

Pressure Process				
Species	Preservative Temperature in °F			Impregnation
	Creo. & Oil-borne	ACZA	CCA	Impregnation lb/in ²
Western Red Cedar	220	150	120	100
Alaska Yellow Cedar	220	150	120	100
Jack & Red Pine	220	150	120	150
Douglas-fir (coast) & Western Larch	220	150		150
Southern Pine	220	150	120	200
Ponderosa (Western) Pine	220	150	120	200

All poles treated with waterborne preservatives shall use the full cell or modified full cell process as described in AWPA Standard U1 except as modified by the provisions of ANSI O5.1.

- c <u>Thermal Process Full-Length and Butt Treatment</u>. Poles species shown in Table 8 may be treated by the Thermal process or Butt treated. AWPA Standards U1, T1, M1 and M4 shall apply.
 - (1) All poles treated by this process shall be adequately seasoned by natural and artificial methods prior to treatment so that specification requirements for penetration and retention are met.
 - (2) The temperature of the preservative during the hot oil phase shall not exceed 230°F.

d Results of Treatment

- (1) Penetration and retention of preservative shall be tested using borings taken at any point on the pole periphery approximately:
 - (a) 1 foot below nominal ground line of all butt treated poles.
 - (b) Six to twelve inches above the nominal ground line of western red cedar, Alaska yellow cedar and western larch poles.
 - (c) Within the zone one foot above to one foot below the brand on all other species of poles.
- (2) Retention of preservative shall be no less than that specified in Table 8.
- (3) Penetration of preservative, as determined in accordance with AWPA Standard A3, shall not be less than that specified in Table 8 of Appendix A. Chrome Azurol S shall be used to determine penetration of copper containing preservatives, Penta-Check for penetration of penta and Red-O dye for penetration of DCOI, respectively. Penetration depth shall be measured along a boring from the outer end toward the inner end for a distance throughout which there is continuous preservative penetration, as indicated by evidence of preservative in each annual ring included.
 - (a) For Group A poles (Those poles with a circumference of less than 37.5 inches at 6 feet from butt):
 - (1) Bore 20 poles or 20 percent of the poles in the charge, whichever is greater. Accept all poles in the charge for penetration if every boring in the sample conforms. If any sample fails penetration, bore all poles in the charge.

- (2) If more than 15% of the poles in the charge are found to be nonconforming, the entire charge shall be retreated. If 15% or less are found to be nonconforming, remove and retreat only those that are nonconforming.
- (b) For Group B poles (Those poles with a circumference of 37.5 inches or greater at 6 feet from butt):
 - (1) For Group B poles 45 feet and under, bore each pole in the charge. If more than 15% of these poles are found to be nonconforming, the entire charge shall be retreated. If 15% or less are found to be nonconforming, remove and retreat only those that are nonconforming.
 - (2) For Group B poles 50 feet and over, bore each pole twice at 90 degrees apart and accept only those poles conforming to penetration in both borings.
 - (3) When poles which have been deep incised or radial drilled are bored for penetration and retention testing, the borings shall be taken midway on a diagonal between an incision or hole in the next vertical row above or below.
 - (4) Non-conforming poles may be retreated only twice. The letter "R" shall be added to the original charge number in the butts of all poles that are retreated. Poles failing to meet treating requirements after two retreatments shall be permanently rejected and all brand and butt information removed. (See paragraph 9.e in Appendix A of this bulletin for branding information.)
- e All poles that are cutback after treatment shall be re-treated.
 - (1) <u>Creosote, Penta, DCOI and Copper Naphthenate</u>. Total steaming time, both for initial treatment and re-treatment, is cumulative and shall not exceed the limits for steam found in paragraph 8.a(2)(b). Re-treatment of cutback or reserve treated stock poles shall be by submersion in preservative for not less than 10 minutes under 25 pounds per square inch gauge pressure or not less than 30 minutes at atmospheric pressure.
 - Water-borne Preservatives: Poles which require re-treatment shall be air dried sufficiently to accept re-treatment. Re-treatment shall be within original treatment limitations. Re-treated poles shall conform fully to all the requirements of this specification; otherwise, they shall be permanently rejected.

9 DRAWINGS

The attached drawing W1.1G or M-20 in Appendix A shows in detail the standard framing (gains and bolt holes) for electric distribution poles ordered under this specification. Other distribution pole framings are shown in RUS specifications and drawings: Bulletin 1728F-803, Specifications and Drawings for 24.9/14.4 kV Line Construction and Bulletin 1728F-804, Specifications and Drawings for 12.5/7.2 kV Line Construction. Framing drawings for electric transmission poles are shown in Electric Transmission Specifications and Drawings: Bulletin 1728F-810, "Electric Transmission Specification and Drawings 34.5 through 69 kV" and Bulletin 1728F 811, "Electric Transmission Specifications and drawing 115 kV through 230 kV." Pole stub and anchor log dimensions are shown in the above specifications and drawings or Tables 9, 10 and 11 of Appendix A of this bulletin. The appropriate framing drawings shall be designated and provided by the purchaser.

10. DESTINATION INSPECTION

The RUS borrower shall have the prerogative to inspect materials at destination. All provisions of this specification shall apply to material inspected at destination. If a disagreement arises over conformance of materials received at destination, it shall be the responsibility of the supplier to attempt to resolve this matter with the purchaser.

11. PURCHASE OF RELATED SPECIFICATIONS AND STANDARDS

All ANSI and AWPA standards may be purchased from:

American Wood Protection Association (AWPA)

P.O. Box 361784

Birmingham, Alabama 35236-1784

Telephone: (205)733-4077

Standard Grading Rules for Southern Pine Lumber may be purchased from:

Southern Pine Inspection Bureau

4709 Scenic Highway

Pensacola, Florida 32504-9094

Telephone: (850) 434-2611

Standard Grading Rules for West Coast Lumber may be purchased from:

West Coast Lumber Inspection Bureau

P.O. Box 23145

Portland, Oregon 97281 Telephone: (503) 639-0651 Blank Page

APPENDIX A MATERIAL REQUIREMENTS

1 INTRODUCTION

The material specifications described in this section are primarily based on the ANSI O5.1 Specification and Dimensions (for Wood Poles). The purpose of this document is to describe the minimum acceptable quality of wood poles, stubs and anchor logs permitted to be purchased by or for RUS borrowers.

2 **DEFINITIONS**

The following definitions shall apply to the terms used in this standard:

Air Seasoning - Drying by the use of air where the air temperature is not more than 140°F either in the open or under cover.

Boulton Drying - Drying by heating in non-aqueous solution under vacuum.

Check - The lengthwise separation of the wood that usually extends across the rings of annual growth and commonly results from stresses set up in wood during seasoning.

Compression Wood - Abnormal wood formed on the lower side of branches and inclined trunks of softwood trees. Compression wood is identified by its relatively wide annual rings, usually eccentric; relatively large amount of summerwood, sometimes more than 50 percent of the width of the annual rings in which it occurs; and its lack of demarcation between springwood and summerwood in the same annual rings. Compression wood, compared with normal wood, shrinks excessively lengthwise.

Cross Break - A separation of the wood cells across the grain. Such breaks may be due to internal strains resulting from unequal longitudinal shrinkage or to external forces.

Dead Streak - An area, devoid of bark, resulting from progressive destruction of the growth cells of wood and bark at the edges of the streak. On a pole, a dead streak is characterized by a discolored weathered appearance and by lack of evidence of overgrowth along the edges of the deadened surface.

Decay - The decomposition of wood substance by fungi.

Decay, Advanced (or Typical) - The older stage of decay in which the destruction is readily recognized because the wood has become punky, soft and spongy, stringy, ringshaked, pitted, crumbly, or, in poles not stored or rafted in water, is in a soggy condition. Decided discoloration or bleaching of the rotted wood is often apparent.

Decay, Incipient - The early stage of decay that has not proceeded far enough to soften or otherwise perceptibly impair the hardness of the wood. It is usually accompanied by a slight discoloration or bleaching of the wood. Incipient Decay can occur in living trees.

Decayed Knot - A knot containing decay. Two types of decayed knots are recognized.

Type I Knots containing soft or loose fibers (decay) which may extend the full length of the knot into the pole and which are associated with heart rot.

Type II Knots containing soft or loose fibers (decay) which are not associated with heart rot.

Face of Pole - The concave side of greatest curvature in poles with sweep in one plane and one direction, or the side of greatest curvature between groundline and top in poles having reverse or double sweep.

Ground Line Section - That portion of a pole between 1 foot above and 2 feet below the ground line, as defined in the pole dimension tables (see Tables 3 through 7). (For purposes of defining the ground line when incising or radial drilling, see paragraphs 9.7.1 and 9.7.2.)

Hollow Heart - A void in the heartwood caused by decay or insect attack.

Hollow Pith Center - A small hole at the pith center of the trunk or of a knot caused by disintegration of the pith (small soft core occurring in the structural center of a tree or branch).

Insect Damage - Damage resulting from the boring into the pole by insects or insect larvae. Scoring or channeling of the pole surface is not classed as insect damage.

Kiln Drying - Drying by the use of heated air in batch or progressive-type kilns.

Knot Cluster - Two or more knots grouped together as a unit, the fibers of the wood being deflected around the entire unit; distinct from the group of single knots in which each is a unit. A knot cluster shall be considered as a single knot.

Knot Diameter - The diameter of a knot on the surface of the pole measured in a direction at right angles to the lengthwise axis of the pole. The sapwood as well as the heartwood portion of a knot shall be included in the measurement.

NOTE: For a description of means for defining the limits of knots, see American National Standard Definitions of Terms Relating to Timber, ASTM D9-20.

Lot - A quantity of poles of like size, conditioning, and fabrication usually making up one treating charge.

Red Heart - A condition caused by a fungus, Fomes pini, that occurs in the living tree. It is characterized in the early stages of infection by a reddish or brownish color in the heartwood; known as "firm red heart." Later the wood of the living tree disintegrates (decays) in small, usually distinct, areas that develop into white-lined pockets.

Sap Stain - A discoloration of the sapwood, caused by the action of certain molds and fungi, that is not accompanied by softening or other disintegration of the wood.

Scar - A depression in the surface of the pole resulting from a wound where the living tree has not compartmentalized the wound and reestablished the normal cross section of the pole.

Scar, Turpentine Acid Face - An area in the lower portion of a southern pine pole where bark hack removal with acid applied has caused resin to flow. No removal of sapwood has occurred.

Scar, Turpentine Cat Face - A depression in the surface of a southern pine pole resulting from a wood hack into the sapwood, where the tree has not compartmentalized the wound and reestablished the normal cross section of the pole.

Shake - A separation along the grain, the greater part of which occurs between the rings of annual growth.

Shelling - Ring separation extending to the surface of round or sawn timber normally following the growth rings and often associated with limiting defects such as knots, compression wood or shake. Ring separation usually becomes more pronounced as the product dries and may be further aggravated by stress developed during horizontal lifting or loading.

Short Crook - A localized deviation from straightness which, within any section 5 feet or less in length, is more than 1/2 the mean diameter of the crooked section (see Fig. 1, Diagram 3).

Spiral-Grained (Twist-Grained) Wood - Wood in which the fibers take a spiral course about the trunk of a tree instead of a vertical course. The spiral may extend in a right-hand or left-hand direction around the tree trunk. Spiral grain is a form of cross grain.

Split - A lengthwise separation of the wood extending completely through the piece from one surface to another.

Steam Conditioning - Subjecting poles in a closed vessel to steam prior to treatment.

Sweep - Deviation of a pole from straightness (see Fig. 1, Diagrams 1 and 2, Exhibit A).

3 POLE CLASSES

Poles meeting the requirements of this standard are grouped in the classes identified in Tables 3 through 7 of this Appendix, based on their circumference measured 6 feet from the butt. Poles of a given class and length are designed to have approximately the same load carrying capacity regardless of species.

4 MATERIAL REQUIREMENTS: GENERAL

- a Species:
 - (1) Poles. See Table 2, Appendix A.
 - (2) Pedestal Stubs
 - (a) All round pedestal stubs shall conform to material requirements for poles. Plywood peeler cores, and similar material where the sapwood has been largely removed, are not acceptable.
 - (b) All sawn stubs shall conform to the following material requirements:

All sawn stubs furnished under this specification shall be free of brashy wood, cross breaks, decay, insect holes larger than 3/32 of an inch, and dried to a moisture content of not more than 19 percent. The stubs shall be surfaced on four sides, shall meet additional requirements as shown on specification drawings, and shall be made of one of the following:

Coastal origin Douglas-fir conforming to provisions of No. 1 "Structural Joists and Planking," per paragraph 123b, of Standard 17, Grading Rules for West Coast Lumber.

Southern Yellow Pine conforming to the provision of No. 1 "Structural Joist and Planks" as per paragraph 312 of the Southern Pine Inspection Bureau (SPIB) Grading Rules.

b <u>Conditioning, Seasoning, and Treatment Limitations:</u>

(1) <u>Air Seasoning</u>: Air seasoning shall be in conformance with this specification for preservative treatment without developing pretreatment decay. Steaming before or after treatment is permitted for species in Treatment Group A. However, if such steaming is employed, the maximum temperature does not exceed 240°F. The total steaming time from the time steam is introduced into the cylinder, including both initial and final steam, shall not exceed 4 hours duration.

Pedestal stubs which are air-seasoned shall be checked to the heartwood. Their moisture content shall not exceed 25 percent at a depth of 1-1/2 inches or at the sapwood/heartwood line, whichever is less. All sawn pedestal stubs shall be dried to a moisture content of not more than 19 percent prior to treatment.

- (2) <u>Boulton Drying Temperature</u>: The temperature employed in Boulton drying poles of species listed under Treatment Group B of Table 2 shall not exceed 220°F. These poles may be steamed up to 240°F for a maximum time of 4 hours, but such steaming shall be limited to steaming after treatment.
- (3) Kiln Drying: Where kiln drying is employed on southern pine, ponderosa pine, red pine, jack pine, lodgepole pine, Douglas-fir (coast), and western larch, the maximum dry bulb temperature shall be increased gradually and shall not exceed 170°F (with the exception noted below). Where kiln drying is employed on western red cedar, the maximum dry bulb temperature shall be increased gradually and shall not exceed 160°F. In compartment kilns operating at temperatures up to 170°F, the maximum wet bulb depressions shall not exceed 50°F with the exception that during the first 24 hours there is no limitation on wet bulb depression. In progressive-type kilns operating at temperatures up to 170°F, the maximum wet bulb depression shall not exceed 50°F in the body of the kiln and 90°F at the entrance to the kiln. Exception: Drying over 170°F is permitted for southern pine, red pine, lodgepole pine, Douglas-fir (coast), and western larch species. The maximum dry bulb temperature shall not exceed 230°F for these species. For dry bulb temperatures over 200°F, the wet bulb depression shall be not less than 50°F with the exception that during the first 24 hours there is no limitation on wet bulb depression.

Temperature and humidity readings throughout the kiln shall be recorded on a recording chart and verified by observation of direct reading equipment. Gauges and recording equipment shall be calibrated annually.

- (4) <u>Steam Conditioning</u>: The steam temperature employed in steam conditioning for poles of species in Treatment Group C of Table 2 shall not exceed 245°F. The time duration for poles with specified circumferences 37.5 inches or less at 6 feet from the butt shall not exceed 17 hours. Poles with specified circumferences larger than 37.5 inches at 6 feet from the butt shall not exceed 20 hours.
- Solvent Recovery. When poles of any species have been treated with a system using an organic solvent-based preservative solution, a solvent recovery cycle of not over 15 hours at a maximum temperature of 225°F is permitted, provided each pole has a moisture content of 25% or below before treatment when measured with a calibrated resistance-type moisture meter at 2 inches from the surface at mid-length.
- d Rate of Growth: The average rate of growth measured on the sawed butt surface in the outer 2 inches of poles having a circumference of 37.5 inches or less at 6 feet from the butt, and in the outer 3 inches of poles having a circumference of more than 37.5 inches at 6 feet from the butt, shall not be less than six rings per

inch. Exception: Poles with four and five rings per inch are acceptable if 50 percent or more summerwood is present.

For poles exhibiting a non-uniform growth rate around the circumference, the average growth rate shall be determined at the midpoint of the shortest arc between the point showing the fewest growth rings in the required zone and the point showing the most growth rings in the required zone.

If visual observation of the rate of growth in the butt surface is inconclusive, the referee method for making such a determination is as follows; ring count and summerwood determination is made on an increment core taken 6 feet from the butt directly above the location where the average rate of growth is indicated on the butt surface.

5 MATERIAL REQUIREMENTS: PROHIBITED DEFECTS

- a <u>Cross breaks (cracks)</u>.
- b <u>Decay</u>, except as permitted for firm red heart in paragraph 6.a, defective butts in paragraph 7.d and decayed knots in paragraph 7.f of this Appendix. The presence of fungal fruiting bodies or mycelium on or in a piece of wood shall be considered as evidence of decay and the piece of wood shall be permanently rejected as nonconforming. In the absence of such visual signs of decay, if conditions such as surface softening or discoloration indicate the possibility of decay, a boring should be taken from the affected area and carefully examined by both the quality control supervisor and the third party inspector to determine if decay is present.
- c <u>Dead streaks</u>, except as permitted in paragraph 7.c in this Appendix.
- d <u>Holes</u>, other than drilled holes provided for in the specification, open or plugged, except holes for test purposes, which shall be plugged with treated plugs.
- e <u>Hollow butts or tops</u>, except as permitted under hollow pith centers and defective butts.
- f Marine borer damage.
- Mails, spikes and other metals not specifically authorized by the purchaser.

6 MATERIAL REQUIREMENTS: PERMITTED DEFECTS

- a <u>Firm Red Heart</u>: Firm red heart not accompanied by softening or other disintegration (decay) of the wood is permitted.
- b <u>Hollow Pith Centers</u>: Hollow pith centers in tops or butts and in knots are permitted in poles that are to be given full-length treatment.

- c <u>Sap Stain</u>: Sap stain that is not accompanied by softening or other disintegration (decay) of the wood is permitted.
- d <u>Scars</u>: Turpentine acid face scars are permitted anywhere on the pole surface.

7 MATERIAL REQUIREMENTS: LIMITED DEFECTS

- a <u>Bark Inclusions</u>: Depressions containing bark inclusions shall not be more than 2 inches in depth, measured from the surface of the pole.
- b <u>Compression Wood</u>: The outer 1 inch of all poles shall be free from visible compression wood.
- Dead Streaks: A single, sound dead streak is permitted in cedar, provided the greatest width of the streak is less than 1/4 of the circumference of the pole at the point of measurement.
- Defective Butts: Hollowing in the butt caused by "splinter pulling" in felling the tree is permitted, provided that the area of such a hollow is less than 10 percent of the butt area. Hollow heart or decay, or both, is permitted in cedar poles only, provided the aggregate area of the hollow heart or decay, or both, does not exceed 10 percent of the entire butt area and does not occur closer than 2 inches to the side surface and provided that the depth of the hollow does not exceed 2 feet, measured from the butt surface.
- e <u>Insect Damage</u>: Insect damage, consisting of holes 1/16 inch or less in diameter, or surface scoring or channeling is permitted. All other forms of insect damage are prohibited, except those associated with hollow heart in cedar poles.
- Knot: The diameter of any single knot and the sum of knot diameters in any 1foot section shall not exceed the limits of Table 1. In determining the sum of knot
 diameters in any 1-foot section, only those knots with diameters over 0.5 inch
 whose pitch centers fall within the section shall be included in the sum, and the
 one-foot section shall be located so as to include the maximum number of knots,
 i.e., the most severe condition. Type II "decayed knots" are permitted.

TABLE 1 LIMITS of KNOT SIZES				
		Maximum Knot Size	es Permitted	
		any single knot	Sum of diameters of all knots greater r than 0.5 inch in any 1-foot section	
Length of Pole	Classes H6 to 3 (Inches)	.Classes 4 to 10 (Inches)	All Classes	
45 Feet and Shorter				
Lower Half of Length	3	2	1/3 of the average circumference of the same 1' section or 8", whichever is	
Upper Half of Length	5	4	greater, but not to exceed 12" (Note 1)	
50 Feet and Longer				
Lower Half of Length	4	4	1/3 of the average circumference of the same	
Upper Half of Length	6	6	l' section or 10", whichever is greater, but not to exceed 14" (Note 1)	

Notes:

- 1. Both upper and lower halves.
- 2. See section 3 and Tables 3 through 7 of Appendix A for pole classes.
 - Scars (Cat Face): No pole shall have a scar or turpentine cat face (southern pine) located within 2 feet of the ground line. Turpentine scars need be trimmed only to the extent necessary for examination for evidence of fungus infection and insect damage. Other sound scars are permitted elsewhere on the pole surface, provided they are smoothly trimmed and do not interfere with the cutting of any gain and provided that:
 - (1) The circumference at any point on trimmed surfaces located between the butt and 2 feet below the ground line is not less than the minimum circumference specified at 6 feet from the butt for the class and length of the pole; and
 - (2) The depth of the trimmed scar is not more than 2 inches, if the diameter is 10 inches or less, or 1/5 the pole diameter at the location of the scar if the diameter is more than 10 inches.
 - h Shakes. Shakes in the butt surface which are not closer than 2 inches to the side surface of the pole are permitted, provided they do not extend to the ground line. Shakes or a combination of connected shakes which are closer than 2 inches to the side surface of the pole are permitted, provided they do not extend further than 2

feet from the butt surface and do not have an opening wider than 1/8 inch. Shakes in the top surface are permitted in poles that are to be given full-length preservative treatment, provided that the shake is not closer to the surface of the pole than the midpoint of a line extending from the pith to the surface (i.e., the shake is permitted if it is closer to the pith than to the surface of the pole).

- i <u>Shape</u>: Poles shall be free from short crooks. A pole may have sweep subject to the following limitations:
 - Where sweep is in one plane and one direction only: For all poles species, a straight line joining the surface of the pole at the ground line and the edge of the pole at the top shall not be distant from the surface of the pole at any point by more than 1 inch for each 10 feet of length between these points. (See figure 1).
 - Where sweep is in two planes (double sweep), or in two directions in one plane (reverse sweep), a straight line connecting the midpoint at the ground line with the midpoint at the top shall not at any intermediate point pass through the surface of the pole (See figure 1, diagram 2).
- j Shelling. Shelling on the surface of a pole shall be limited to no more than 1 inch in depth nor exceed 1/3 of the pole's circumference at the point of shelling.
- k Spiral Grain: Spiral grain (twist grain) is permitted as follows:

Length of Pole (Feet)	Maximum Twist of Grain Permitted
30 and shorter	1 complete twist in any 10 ft.
35-45, inclusive	1 complete twist in any 16 ft.
50 and longer	1 complete twist in any 20 ft.

l Splits and Checks:

- (1) In the top: A split or a combination of two single checks (each check terminating at the pith center and separated by not less than 1/6 of the circumference) having one or both portions located in a vertical plane within 30 degrees of the top bolt hole shall not extend downward along the pole more than 6 inches. All other combinations of checks or a split shall not extend downward along the pole more than 12 inches. (Two checks of approximately the same width, each check terminating at the pith center and separated by 1/2 inch or less of wood fiber at any point on the pole circumference, shall be considered as a single continuous check.)
- (2) <u>In the butt</u>: A split or a combination of two single checks, as defined in 7.12.1, in its entirety, shall not extend upward along the pole more than 2 feet.

8 DIMENSIONS

For dimensions of particular species of poles, see Tables 3 through 7. For dimensions of stubs and anchor logs, see Tables 9, 10, and 11.

- <u>Length</u>: Poles less than 50 feet in length shall not be more than 3 inches shorter or 6 inches longer than nominal length. Poles 50 feet or more in length shall not be more than 6 inches shorter or 12 inches longer than nominal length.
 - Length shall be measured between the extreme ends of the pole.
- Circumference: The minimum circumferences at 6 feet from the butt and at the top, for each length and class of pole, are listed in Tables 3 through 7. The circumference at 6 feet from the butt of a pole shall not be more than 7 inches or 20 percent larger than specified minimum, whichever is greater. The top dimensional requirement shall apply at a point corresponding to the minimum length permitted for the pole. Since poles are classed in the green condition, a reduction of up to 2 percent in circumference anywhere is acceptable after conditioning.
- Classification: The true circumference class shall be determined as follows: Measure the circumference at 6 feet from the butt. This dimension shall determine the true class of the pole, provided that its top (measured at the minimum length point) is large enough. Otherwise, the circumference at the top shall determine the true class, provided that the circumference at 6 feet from the butt does not exceed the specified minimum by more than 7 inches or 20 percent, whichever is greater.

9 MANUFACTURING REQUIREMENTS

a <u>Bark Removal</u>: Outer bark shall be completely removed from all poles.

On all poles, no patch of inner bark more than 1 inch wide shall be left on the pole surface between the butt and 2 feet below the ground line. On poles that are to be given full-length treatment, no patch of inner bark larger than 1 inch wide and 6 inches long shall be left on the pole surface between the top and 2 feet (below the ground line.

<u>NOTE</u>: These provisions are intended to allow an occasional patch of bark and shall not be interpreted to allow numerous patches of bark.

Sawing: All poles shall be neatly sawed at the top and at the butt along a plane which shall not be out of square with the axis of the pole by more than 2 inches per foot of diameter of the sawed surface. Beveling at the edge of the sawed butt surface not more than 1/12 the butt diameter in width, or an equivalent area unsymmetrically located, is permitted. The sawed surface shall be smooth enough to allow the inspector's mark to be clear and legible after treatment.

- Trimming. Branch stubs and completely or partially overgrown knots rising more than 1 inch above the pole surface shall be closely trimmed. Trimming may be done by shaving machine or by hand.
- Shaving: If shaving is used, the depth of cut shall not be more than necessary to remove inner bark and to trim smoothly and closely all branch stubs and overgrown knots. There shall be no abrupt change in the contour of the pole surface between the ground line and the aboveground sections. The lower 2 feet of poles may be trimmed to remove wood fibers causing butt flare, provided sufficient sapwood remains to obtain customer's minimum penetration requirement.
- Marking and Code Letters: The information in items (1) through (5) below shall be burn branded legibly and permanently on the pole face or included on a metal tag affixed thereto. The metal tag for the face of the pole shall be round, non-corrosive, tight-fitting, recessed 1/4 inch, and of such gauge to remain readable and last for the life of the pole. It shall be fastened with a barbed or serrated non-corrosive nail. The information in items (5) and (6) below shall be placed on the sawed butt surface. If desired by the producer or the purchaser, items (1), (3), and (4) below may also be placed on the sawed butt surface.
 - (1) The treater's code or trademark*
 - (2) Independent inspection agency designation or quality assurance mark.
 - (3) Plant location and month and year of treatment.
 - (4) Code letters denoting the pole species, preservative, and required retention.
 - (5) The true circumference-class numeral and numerals showing the length of the pole.
 - (6) The charge number. (An "R" shall also be diestamped, hammer-stamped or burn branded in the sawed butt surface of re-treated poles.)

NOTE: Broker or supplier's designation may also appear on pole, but shall be subordinate to the treater's code.

The code letters, not less than 5/8-inch high if burn branded, and not less than 1/8-inch high if on a metal tag, designating the pole species and preservative used, shall be as follows:

Pole Species	Code Letters
Cedar Alaska Yellow	YC
Western Red	WC WC
Douglas-fir (coast)	DF
Larch (western)	WL
Pine	
Jack	JP
Lodgepole Ponderosa	LP
Red (Norway)	WP NP
Southern Pine	
Loblolly	
Longleaf	SP
Shortleaf	
Slash	

Preservatives	Code Letters
Creosote	С
Pentachlorophenol-Petroleum (Heavy Solvent)	PA
DCOI	DA
Ammoniacal Copper Zinc Arsenate	SZ
Chromated Copper Arsenate	
Type A	SC
Type B	SJ
Type C	SK
Copper Naphthenate	N

For poles, the bottom of the brand or mark shall be placed squarely on the face of the pole and at 10 feet \pm 2 inches from the butt of poles 50 feet or less in length and at 14 feet \pm 2 inches from the butt of poles 55 feet or more in length or as otherwise specified in the purchase order. Anchor logs shall have the brand or mark at the midpoint and the designation for length and diameter (as prescribed in Table 10) on an end. For pedestal stubs the brand shall be placed 5 feet \pm 2 inches from the butt or end.

Example	Interpretation
HRL	Treater's Code or Trademark (e.g., Harry Roberts' Lumber Company)
XYZ	Independent Inspection Agency Designation or Quality Assurance Mark.
S5-08	Plant Location (e.g., Syracuse) Month and Year of Treatment (for example, May 2004)
SPC-9	Species and Preservative (e.g., southern pine, creosote) Retention (actual retention required by this specification)
5-35	Class and length (e.g., Class 5-35 foot pole)

f Framing

- (1) All poles and stubs should be bored, gained, and cut to length prior to final treatment. However, should special circumstances arise where additional framing may be required after treatment, all cut surfaces must subsequently be pressure treated or treated with preservative approved for use by AWPA.
- (2) All framing shall be in accordance with the attached drawings or with the drawings which accompany the order. Anchor logs shall be bored as required by the order for them.
- (3) When gains are required on one side only, they shall be cut on the face of the pole, and the gained surfaces shall be in approximately parallel planes. Transmission poles (e.g., poles 50 feet or longer) may be treated undrilled.
- (4) Transmission poles may be bored before treatment for fumigation if designated in the purchase order.
- (5) Bolt holes in poles treated with water-borne preservatives shall be drilled to the maximum dimension permitted by the RUS standard drawings (i.e., 1/16 inch over the nominal size).
- (6) Anchor logs shall be bored as required by the order for them.
- (7) With the approval of the borrower, anti-splitting devices may be added to the pole tops.
- Incising. Incising or radial drilling shall be done in line with the length of the pole and shall be done cleanly to prevent tearing or excessive shattering of fibers.
 - (1) <u>Distribution Poles</u>: Cedar distribution poles to be treated by the thermal process shall be ground line incised in the area from 2 feet above to 4 feet

below the designated ground line with a pattern and depth sufficient to insure uniform penetration of the total sapwood in the incised area.

- Transmission Poles: Cedar transmission poles to be treated by the thermal process shall be ground line incised in the area from 2 feet above to 4 feet below the designated ground line, with a pattern and depth sufficient to insure uniform penetration of the total sapwood in the incised area. All Douglas-fir (coast) transmission poles (poles 50 feet or longer) shall be deep-incised or radial drilled to a minimum depth of 2 1/2 inches in the area from 2 feet above to 4 feet below the designated ground line. Deep incising or radial drilling shall be, as minimum spacing, applied in a 3x6-inch vertical diamond pattern. Radial drilled holes shall not exceed 5/16 inch in diameter.
- (3) <u>Pedestal Stubs</u>: The lengthwise surface of sawn Douglas-fir stubs shall be incised to a depth of approximately 0.4 inches in a pattern that insures uniform preservative penetration. Cedar and western larch stubs that are to be treated by the thermal process shall be incised in the groundline section in accordance with AWPA Standards U1 and T1.
- (4) Should experience indicate the need for it, the purchaser may specify additional pole incising or radial drilling requirements, including the following:
 - (a) Through boring may be used as an alternative to deep incising or radial drilling.

DEEPER INC	ISING OR BORING SUG	GESTIONS
Length of Pole	DEEP RADIAL DRILLING PENETRATION	RADIAL DRILLING OR INCISING
50 through 65 feet	4.0 inches	2.5 inches
70 through 85 feet	4.5 inches	2.5 inches
90 feet or longer	5.0 inches	2.5 inches

10 STORAGE AND HANDLING

a <u>Storage</u>. When it is necessary to hold poles in storage, they shall be stacked on treated or other nondecaying skids of such dimensions and so arranged as to support the poles without producing noticeable distortion of any of them. The height of the poles shall be limited to avoid damage to poles on the bottom layers.

Poles shall be piled and supported in such a manner that all poles are, at any point, at least 1 foot above the general ground level and any vegetation growing. No decayed wood shall be permitted to remain underneath or adjacent to stored poles. With the exception of short-term piling associated with normal manufacturing procedures, unseasoned poles shall not be dead piled at any time.

b <u>Handling</u>: Poles shall not be dragged along the ground. Cant hooks, pole tongs, or other pointed tools shall not be applied to the ground line section of any pole.

Mechanical Damage: Poles are not acceptable if they contain indentations attributed to loading or handling slings that are 1/4 inch or more deep over 20 percent or more of the pole circumference, or more than 1/2 inch deep at any point. Other indentations or abrasions, for example, forklift damage, kiln sticker damage, chain-saw damage, etc., shall not be more than 1/10 the pole diameter at the point of damage up to a cumulative cross-sectional maximum of 1 inch. Such damage is permitted in an oversized section, where the excess of wood shall be taken into consideration in evaluating the effects of the damage. In any case, the remaining circumference shall meet or exceed the specification minimum.

TABLE 2 GENERAL REQUIREMENTS

Treatment Group	Genus Species	Fiber Stress (psi)
Treatment Group A (air seasoned)		
Cedar, western red	Thuja plicata	6000
Cedar, Alaska yellow	Chamaecyparis Nootkatensis	7400
Treatment Group B (Boulton drying)		
Douglas-fir, (coast)	Pseudotsuga Menziesii	8000
Larch, western	Larix occidentalis	8400
Treatment Group C (steam conditioned)		
Pine, southern Loblolly Longleaf Shortleaf Slash	Pinus taeda Pinus palustris Pinus echinata Pinus elliottii	8000
Treatment Group D (kiln drying)		
Cedar, western red	Thuja plicata	6000
Douglas-fir, (coast)	Pseudotsuga menziesii	8000
Larch, western	Larix occidentalis	8400
Pine, jack	Pinus banksiana	6600
Pine, lodgepole	Pinus contorta	6600
Pine, ponderosa	Pinus ponderosa	6000
Pine, red Pine, southern	Pinus resinosa	6600
Loblolly	Pinus taeda	
Longleaf	Pinus taeda Pinus palustris	8000
Shortleaf	Pinus palusurs Pinus echinata	0000
Slash	Pinus elliottii	

FIGURE 1 MEASUREMENTS OF SWEEP AND SHORT CROOK IN POLES

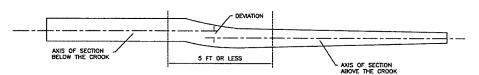
DIAGRAM 1 - MEASURMENT OF SWEEP IN ONE PLANE AND ONE DIRECTION



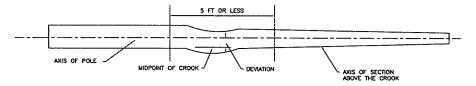
DIAGRAM 2 -- MEASURMENT OF SWEEP IN TWO PLANES (DOUBLE SWEEP)
OR IN TWO DIRECTION IN ONE PLANE (REVERSE SWEEP)



DIAGRAM 3 - MEASURMENT OF SHORT CROOK (THREE CASES SHOWN)



CASE 1: WHERE THE REFERENCE AXES ARE APPROXIMATELY PARALLEL



CASE 2: WHERE AXES OF SECTIONS ABOVE AND BELOW THE CROOK COINCIDE OR ARE PRACTICALLY COINCIDENT



CASE 3: WHERE AXIS OF SECTION ABOVE SHORT CROOK IS NOT PARALLEL OR COINCIDENT WITH AXIS BELOW THE CROOK

TABLE 3: DIMENSIONS OF WESTERN RED CEDAR¹ AND PONDEROSA PINE POLES

C	Class	Н-6	H-5	H-4	Н-3	H-2	H-1	1	2	3	4	5	6	7	9	10
Circu	nimum mference op (in.)	39	37	35	33	31	29	27	25	23	21	19	17	15	15	12
Length of pole (ft.)	Ground- line ² distance from butt (ft.)					Mi	inimum	circun	ıference (in.)	e at 6 ft	from b	utt				
20	4	-	-	-	-	-	-	33.5	31.5	29.5	27.0	25.0	23.0	21.5	18.5	15.0
25	5	-	-	-	-	-	-	37.0	34.5	32.5	30.0	28.0	25.5	24.0	20.5	16.5
30	5.5	-	-	-	_	-	-	40.0	37.5	35.0	32.5	30.0	28.0	26.0	22.0	-
35	6	-	-	-	-	48.0	45.5	42.5	40.0	37.5	34.5	32.0	30.0	27.5	-	-
40	6	-	-	56.5	53.5	51.0	48.0	45.0	42.5	39.5	36.5	34.0	31.5	-	~	-
45	6.5	64.5	62.0	59.0	56.0	53.5	50.5	47.5	44.5	41.5	38.5	36.0	33.0	-	-	-
50	7	67.0	64.5	61.5	58.5	55.5	52.5	49.5	46.5	43.5	40.0	37.5	-	-	-	- 1
55	7.5	70.0	67.0	64.0	61.0	57.5	54.5	51.5	48.5	45.0	42.0	-	-	-	-	-
60	8	72.0	69.0	66.0	63.0	59.5	56.5	53.5	50.0	46.5	43.5	-	-	-	-	-
65	8.5	74.5	71.5	68.0	65.0	61.5	58.5	55.0	51.5	48.0	45.0	-	-	-	-	-
70	9	76.5	73.5	70.0	67.0	63.5	60.0	56.5	53.0	49.5	46.0	-	-	-	-	-
75	9.5	78.5	75.5	72.0	68.5	65.0	61.5	58.0	54.5	51.0	-	-	-	-	-	-
80	10	80.5	77.0	74.0	70.5	67.0	63.0	59.5	56.0	52.0	-	-	-	-	-	-
85	10.5	82.5	79.0	75.5	72.0	68.5	64.5	61.0	57.0	53.5	-	-	-	-	-	-
90	11	84.5	81.0	77.0	73.5	70.0	66.0	62.5	58.5	54.5	-	-	-	-	-	-
95	11	86.0	82.5	79.0	75.0	71.5	67.5	63.5	59.5	-	-	-	-	-	-	-
100	11	87.5	84.0	80.5	76.5	72.5	69.0	65.0	61.0	-	-	-	-	-	-	-
105	12	89.5	85.5	82.0	78.0	74.0	70.0	66.0	62.0	~	-	-	-	-	-	-
110	12	91.0	87.0	83.5	79.5	75.5	71.5	67.5	63.0	-	-	-	-	-	-	-
115	12	92.5	88.5	84.5	80.5	76.5	72.5	68.5	64.0	-	-	-	-	-	-	-
120	12	94.0	90.0	86.0	82.0	78.0	74.0	69.5	65.0	-	-	-	-	-	-	- 1
125	12	95.5	91.5	87.5	83.0	79.0	75.0	70.5	66.0	-	_	-	-	-	-	

NOTES:

- 1. Dimensions of H Classes are applicable for western red cedar only.
- 2. The figures in this column are intended for use only when a definition of groundline is necessary in order to apply requirements relating to scars, straightness, etc
- 3. Classes and lengths for which circumferences at 6 feet from the butt are listed in bold face type are the preferred standard sizes. Those shown in light type are included for engineering purposes only.

TABLE 4: DIMENSIONS OF JACK PINE, LODGEPOLE PINE, RED PINE, REDWOOD, SITKA SPRUCE, WESTERN FIR, AND WHITE SPRUCE POLES

	Class	1	2	3	4	5	6	7	9	10
E .	Minimum cumference at top (in.)	27	25	23	21	19	17	15	15	12
Length of Pole (ft.)	Groundline ⁽¹⁾ Distance From butt (ft.)		M	inimum	circum	iference (in.)	at 6 ft.	from b	utt	
20	4	32.5	30.5	28.5	26.5	24.5	22.5	21.0	18.0	14.5
25	5	36.0	33.5	31.0	29.0	27.0	25.0	23.0	20.0	15.5
30	5.5	39.0	36.5	34.0	31.5	29.0	27.0	25.0	21.0	-
35	6	41.5	38.5	36.0	33.5	31.0	28.5	26.5	-	-
40	6	44.0	41.0	38.0	35.5	33.0	30.5	-	-	-
45	6.5	46.0	43.0	40.0	37.0	34.5	32.0	-	-	-
50	7	48.0	45.0	42.0	39.0	36.0	-	-	-	-
55	7.5	49.5	46.5	43.5	40.5	-	-	-	-	-
60	8.	51.5	48.0	45.0	42.0	-		-	-	-
65	8.5	53.0	49.5	46.0	43.0	-	-	-	-	-
70	9	54.5	51.0	47.5	44.5	-	-	-	-	-
75	9.5	56.0	52.5	49.0	-	-	-	-	-	-
80	10	57.5	54.0	50.5	-	-	-	-	-	-
85	10.5	58.5	55.0	51.5	-	-	-	-	-	-
90	11	60.0	56.5	52.5	-	-	-	-	-	-
95	11	61.5	57.5	-	-	-	_	-	-	-
100	11	62.5	58.5	-	-	-	-	-	-	-
105	12	63.5	60.0	-	-	-	-	-	-	-
110	12	65.0	61.0	-	-	-	-	-	-	-
115	12	66.0	62.0	-	-	-	~	_	-	-
120	12	67.0	63.0	-	-	-	-	-	-	-
125	12	68.0	64.0	-	-	-	_		-	-

NOTE - Classes and lengths for which circumferences at 6 feet from the butt are listed in boldface type are the preferred standard sizes. Those shown in light type are included for engineering purposes only.

¹⁾The figures in this column are intended for use only when a definition of groundline is necessary in order to apply requirements relating to scars, straightness, etc.

TABLE 5: DIMENSIONS OF ALASKA YELLOW CEDAR AND WEST HEMLOCK POLES

0	Class	9-H	н-5	H-4	H-3	H-2	H-1	1	2	3	4	S	9	7	6	10
Min Cireun at to	Minimum Circumference at top (in.)	39	37	35	33	31	29	27	25	23	21	19	17	15	15	12
Length	Ground-					Min			,	3,70	1					
pole	distance							Minimum circumierence at o 11 from Dun (in.)	ierenci (in.)	1 0 1 E a	шолг	nna				
(ft.)	from butt															
20	4	-	-	-	-		'	31.5	29.5	27.5	25.5	23.5	22.0	20.0	17.5	14.0
25	ĸ	ı	ı	ı	ı	1	1	34.5	32.5	30.0	28.0	26.0	24.0	22.0	19.5	15.0
30	5.5	ı	ı	ı	ı	ı	ı	37.5	35.0	32.5	30.0	28.0	26.0	24.0	20.5	ı
35	9	ı	ı	ı	ı	45.0	42.5	40.0	37.5	35.0	32.0	30.0	27.5	25.5	,	ı
40	9	ı	•	52.5	50.0	47.5	45.0	42.0	39.5	37.0	34.0	31.5	29.0	25.5	,	
45	6.5	0.09	57.5	55.0	52.5	49.5	47.0	44.0	41.5	38.5	36.0	33.0	30.5	ı	ı	•
20	7	62.5	0.09	57.0	54.5	51.5	49.0	46.0	43.0	40.0	37.5	34.5	ı	ı	1	ı
55	7.5	65.0	62.0	59.5	5.95	53.5	50.5	47.5	44.5	41.5	39.0	,	ı	1	1	
09	∞	67.0	64.0	61.5	58.5	55.5	52.5	49.5	46.0	43.0	40.0		1		ı	ı
65	8.5	69.0	0.99	63.0	0.09	57.5	54.0	51.0	47.5	44.5	41.5	ı	ı	ı	1	ı
70	6	71.0	68.0	65.0	62.0	58.5	55.5	52.5	49.0	46.0	42.5	1	ı	ı	1	ı
75	9.5	73.0	69.5	66.5	63.5	0.09	57.0	53.5	50.5	47.0	ı	ı	ı	ı	ı	
80	10	74.5	71.5	0.89	65.0	61.5	58.5	55.0	51.5	48.5	ı	1	ı	1	ı	1
85	10.5	76.0	73.0	70.0	66.5	63.0	59.5	56.0	53.0	49.5	ı	ı	ı	ı	ı	1
06	11	78.0	74.5	71.0	68.0	64.5	61.0	57.5	54.0	50.5	ı	1	ı	ı	,	ı
95	11	79.5	0.92	72.5	69.5	0.99	62.0	58.5	55.0	,	ı	ı	,	ı	,	1
100	11	81.0	77.5	74.0	70.5	0.79	63.5	0.09	56.0	ı	ı	ı	,	ı	ı	1
105	12	82.5	0.62	75.5	72.0	68.5	64.5	61.0	57.0	1	ı	,	1	ı	ı	,
110	12	84.0	80.5	77.0	73.0	69.5	65.5	62.0	58.0	ı	1	,	ı	ı	ı	,
115	12	85.5	81.5	78.0	74.5	70.5	67.0	63.0	59.0	ı	1	1	,	ı	1	,
120	12	86.5	83.0	79.5	75.5	72.0	68.0	64.0	60.0	ı	1	ı	,	,	ı	ı
125	12	88.0	84.5	80.5	76.5	73.0	0.69	65.0	61.0	1	ı	,	,	ı	ı	ı
NOTE - Classes and leng	NOTE - Classes and leng	gths for	ths for which circumferences at 6 feet from the butt are listed in bold face type are the preferred	ths for which circumferences at 6 feet from	ference	s at 6 fe	et fror	n the bu	utt are l	listed in	bold f	ace type	e are th	e prefe	пер	

standard sizes. Those shown in light type are included for engineering purposes only.

1) The figures in this column are intended for use only when a definition of groundline is necessary in order to apply requirements

TABLE 6: DIMENSIONS OF DOUGLAS FIR (BOTH TYPES) AND SOUTHERN YELLOW PINE POLES

	Class	9-H	H-5	H-4	Н-3	H-2	H-1	1	2	3	4	5	9	7	6	10
M Circ	Minimum Circumference	39	37	35	33	31	59	27	25	23	21	19	17	15	15	12
Length	Groundline ¹⁾															
ole Dole	distance from butt					Ξ	nimum	circum	ference	at 6 ft	Minimum circumference at 6 ft from butt	utt				
(ft.)	(ft.)								(:III)							
20	4	1	-	1	1	1	,	31.0	29.0	27.0	25.0	23.0	21.0	19.5	17.5	14.0
25	S	1	ı	1	ı	,	ı	33.5	31.5	29.5	27.5	25.5	23.0	21.5	19.5	15.0
30	5.5	ı	ı	1	ı	ı	ı	36.5	34.0	32.0	29.5	27.5	25.0	23.5	20.5	ı
35	9	ı	ı	ı	ı	43.5	41.5	39.0	36.5	34.0	31.5	29.0	27.0	25.0	1	ı
40	9	ı	ı	51.0	48.5	46.0	43.5	41.0	38.5	36.0	33.5	31.0	28.5	1	1	ı
45	6.5	58.5	56.0	53.5	51.0	48.5	45.5	43.0	40.5	37.5	35.0	32.5	30.0	ı	ı	ı
50	7	61.0	58.5	55.5	53.0	50.5	47.5	45.0	42.0	39.0	36.5	34.0	ı	ı	1	ı
55	7.5	63.5	60.5	58.0	55.0	52.0	49.5	46.5	43.5	40.5	38.0	1	ı	ı	ı	ı
09	&	65.5	62.5	59.5	57.0	54.0	51.0	48.0	45.0	42.0	39.0		1	ı	ı	ı
99	8.5	67.5	64.5	61.5	58.5	55.5	52.5	49.5	46.5	43.5	40.5	ı	ı	ı	ı	ı
70	6	69.0	66.5	63.5	60.5	57.0	54.0	51.0	48.0	45.0	41.5	1	1	1	ı	1
75	9.5	71.0	68.0	65.0	62.0	59.0	55.5	52.5	49.0	46.0	1	ı	ı	1	ı	ı
80	10	72.5	69.5	66.5	63.5	0.09	57.0	54.0	50.5	47.0	1	1	ı	ı	,	ı
85	10.5	74.5	71.5	68.0	65.0	61.5	58.5	55.0	51.5	48.0	ı	ı	1	ı	1	,
90	11	76.0	73.0	69.5	66.5	63.0	59.5	56.0	53.0	49.0	ı	ı		ı	ı	,
95	11	77.5	74.5	71.0	67.5	64.5	61.0	57.0	54.0	ı	1	ı	ı	ı	1	ı
100	11	79.0	76.0	72.5	69.0	65.5	62.0	58.5	55.0	ı	ı	,	ı	ı	1	1
105	12	80.5	77.0	74.0	70.5	67.0	63.0	59.5	56.0	ı	1	ı	ı	ı	1	1
110	12	82.0	78.5	75.0	71.5	68.0	64.5	60.5	57.0	ı	ı	1	ı	,	ı	ı
115	12	83.5	80.0	76.5	72.5	0.69	65.5	61.5	58.0	ı	ı	ı	1	ı	ı	,
120	12	85.0	81.0	77.5	74.0	70.0	66.5	62.5	59.0	ı	ı	1	1	ı	ı	ı
125	12	0.98	82.5	78.5	75.0	71.0	67.5	63.5	59.5	ı	ı	ı	ı	1	ı	1
NOTE - (NOTE – Classes and lengths for which circumferences at 6 feet from the butt are listed in bold face type are the preferred standard sizes	hs for w	hich cir	cumfere	ences at	6 feet fi	om the	butt are	listed in	bold f	ace type	are the	preferr	ed stand	ard sizes	

NOTE – Classes and lengths for which circumferences at 6 feet from the butt are listed in bold face type are the preferred standard sizes.

Those shown in light type are included for engineering purposes only.

The figures in this column are intended for use only when a definition of groundline is necessary in order to apply requirements relating to

scars, straightness, etc.

TABLE 7: DIMENSIONS OF WESTERN LARCH POLES

				10	10																				
10	12			13.5	14.5	,	1		ı	'	1	1	'	'	'	ı	ł		ı	1	1	1	1	1	1
6	15			17.0	18.5	19.5		ı	1	ı	,	ı	ı	1	ł	ı	1	ı	1	ı	ı	1	ı	1	ı
٢	15			19.0	21.0	23.0	24.5	1	ı	•	ı	,	ı	ı	1	ı		ı	,	ı	ı	1	1		1
9	17			21.0	23.0	24.5	26.5	28.0	29.0	ı	1		1	ı	ı	1	ı	ı	ı	ı	í	ı	ı	ı	ı
5	19	utt		22.5	24.5	26.5	28.5	30.0	31.5	33.0	ı	ı	ı	ı	ı	,	ı	ı	ı	ı	ı	ı	1	ı	ı
4	21	from b		24.5	26.5	29.0	31.0	32.5	34.0	35.5	37.0	38.5	39.5	41.0	ı	ı	1	ı	ı	ı	ì	ı	,	1	ı
3	23	at 6 ft		26.5	29.0	31.0	33.0	35.0	37.0	38.5	40.0	41.0	42.5	44.0	45.0	46.0	47.0	48.5	ı	ı	ı	ı	ı	1	ı
2	25	Minimum circumference at 6 ft from butt	(in.)	28.5	31.0	33.5	35.5	37.5	39.5	41.0	42.5	44.0	46.0	47.0	48.0	49.5	50.5	51.5	53.0	54.0	55.0	56.0	57.0	58.0	58.5
1	27	circum		30.0	33.0		38.0	40.0	42.0	44.0	45.5	47.0	48.5	50.0	51.5	52.5	54.0	55.0	5.95	57.5	58.5	59.5	60.5	61.5	62.5
H-1	29	imum		,	,	ı	40.5	43.0	45.0	47.0	48.5	50.0	52.0	53.5	54.5	56.0	57.5	58.5	0.09	61.0	62.0	63.0	64.0	65.0	0.99
Н-2	31	Min		,	ı	ı	43.0	45.5	47.5	49.5	51.5	53.0	55.0	5.95	58.0	59.0	60.5	62.0	63.0	64.5	65.5	66.5	68.0	0.69	70.0
Н-3	33			,	ı	,	ı	48.0	50.0	52.0	54.0	56.0	57.5	59.5	61.0	62.5	64.0	65.0	66.5	0.89	0.69	70.0	71.5	72.5	73.5
H-4	35			,	,	1	ı	50.5	52.5	55.0	57.0	59.0	60.5	62.5	64.0	65.5	67.0	68.5	70.0	71.0	72.5	73.5	75.0	76.0	77.5
Н-5	37			'	,	1	ı	ı	55.0	57.5	59.5	61.5	63.5	65.0	67.0	68.5	70.0	71.5	73.0	74.5	76.0	77.0	78.5	79.5	81.0
9-H	39			,		1	1	1	57.5	0.09	62.0	64.5	0.99	68.0	70.0	71.5	73.0	74.5	76.5	78.0	79.0	80.5	82.0	83.0	84.5
Class	Minimum Circumference at top (in.)	Groundline ¹⁾ distance	from butt (ft.)	4	w	5.5	9	9	6.5	_	7.5	∞	8.5	6	9.5	10	10.5	11	11	11	12	12	12	12	12
	Minimum at t	Length of	pole (ft.)	20	25	30	35	40	45	20	55	09	99	70	75	80	85	06	95	100	105	110	115	120	125

NOTE – Classes and lengths for which circumferences at 6 feet from the butt are listed in bold face type are the preferred standard sizes. Those shown in light type are included for engineering purposes only.

1) The figures in this column are intended for use only when a definition of groundline is necessary in order to apply requirements relating to

scars, straightness, etc.

TABLE 8 TREATMENT AND RESULTS OF TREATMENT

		2 2 2 2 2 2 2	1111111	XI IIV ILL	SCLIB	OI IND	AINENI			
			I	reservative Minimum I Pounds per	Retention	s ^H	Assay Zone		Penetrati	on
Species	Area Use	Creo- B sote	Penta ^C	DCOI-A	Water- borne ^D	CuN ^E	Inches from Surface	Inches from Surface		Percent of Sapwood
			.PRE	SSURE PI	ROCESS -	- FULL LE	NGTH TRI	EATMENT		
Southern Pine	1	9.0	0.45	0.15	0.60	0.080	0.50 to 2.0	3.50	or	90
Southern Pine	2	7.5	0.38	0.13		0.060	0.50 to 2.0	3.00	or	90
Douglas-fir ^{G,I,M}	1	12.0	0.60	0.20	0.60	0.095	0.25 to 1.0	0.75	and	85
Douglas-fir ^{G,I,M}	2	9.0	0.45	0.15		0.075	0.25 to 1.0	0.75	and	85
Ponderosa Pine ^G	1	9.0	0.45		0.60		0.50 to 2.0	3.50	or	90
Ponderosa Pine ^G	2	7.5	0.38				0.50 to 2.0	3.00 ^J	or	90
Red Pine	1	12.0	0.60	0.20	0.60	0.150	0.10 to 1.60	3.00	or	90
Red Pine	2	10.0	0.50	0.17	0.60	0.095	0.10 to 1.60	2.50	or	85
Jack Pine	2	12.0	0.60		0.60		0.10 to 0.75	1.50	or	85 ^K
Western Larch	2	18.0	0.80		0.60		0.10 to 0.60	0.50	and	100 ^L
Western Red Cedar	2	20.0	1.0	0.33	0.60	0.12	0.0 to 0.50	0.50	or	100
Lodgepole Pine	2	12.0	0.60		0.60		0.10 to 0.75	0.75	and	85
			THE	RMAL PF	OCESS -	FULL LE	NGTH TRE	EATMENT		
Western Larch	2	20.0	0.80		***		0.0 to 0.50	0.50	and	85
Western Red Cedar	2	20.0	1.0			0.15	0.0 to 0.50	to 0.50 0.50 or		100
Alaska Yellow Cedar	2	20.0	1.0	***		0.15	0.0 to 0.50	0.50	or	100
				THERMA	L PROC	ESS- BUT	T TREATM	IENT		
Alaska Yellow Cedar	2 ^F	20.0	1.0				0.0 to 0.50	0.50	or	100
Western Red Cedar	2 ^F	20.0	1.0				0.0 to 0.50	0.50	or	100

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Notes: A. Use Area 1- South of the 40th parallel of north latitude and east of the 95th meridian of west longitude, including the Gulf Coast of Texas. Use Area 2- Elsewhere than as defined for Use Area 1. B. Test By Toluene Extraction C. This retention for lime ignition or x-ray spectroscopy method. Copper pyridine method, which equals 90% of lime ignition results, is required when poles may have been in contact with salt water, and for all species native to the Pacific Region, unless it specifically states on the raw material invoice that the material has not been in contact with salt water or shown by analysis that there are no additional chlorides present in the wood before treating. D. Pressure Treatment Only E. In Decay Zone 5, shown in RUS Bulletin 1730B-121, minimum retentions are 0.130 PCF for Southern Pine and 0.150 PCF for Douglas-fir, for all poles within 50 miles of coastal waters. F. Allowed for use in low to moderate decay zones. G. Species native to the Pacific Coast region as per Agriculture Handbook 541 (1979). H. A reduction of 10 percent from the values shown above in any of the test zones is acceptable at destination within 6 months from the date of delivery. I. Coast type J. 3.5 inches of penetration for waterborne preservatives. K. 3.0 inches or 90% sapwood penetration for waterborne preservatives. L. Up to a maximum of 0.75 inches. M. A second (inner) assay zone is required for Douglas-fir transmission poles. The inner assay zone is 2.0" – 2.5" from
the surface. The preservative retention in this inner zone must be at least 50% of the required retention for the standard assay zone.

TABLE 9 DIMENSION OF ELECTRIC STUBS

Lodge pole Pine, Red Pine, Jack Pine

Length of Stub	M	Minimum Top Circumference * (Inches) Class of Stub					
(Feet)	1	2	3	4	5	6	7
10.5	37.0	34.5	32.0	29.5	27.0	25.0	22.5
11	39.5	37.5	34.0	31.5	29.5	26.5	24.0
11.5	42.0	39.0	36.0	33.5	31.0	28.5	26.0
12.5	43.5	40.5	37.5	34.5	32.0	29.5	27.0
13	45.5	42.5	39.5	36.5	33.5	31.0	28.5

^{*}Maximum circumference not more than these figures plus 4 inches

Southern Pine, Douglas fir (coast) and Western Larch

	N	Iinimur	n Top C	ircumf	erence	* (Inche	es)
Length of Stub	Class of Stub						
(Feet)	1	2	3	4	5	6	7
10.5	36.0	33.5	31.0	28.5	26.0	24.5	22.5
11	38.0	35.5	33.0	30.0	28.0	25.5	23.5
11.5	40.0	37.5	35.0	32.0	29.5	27.0	25.0
12.5	42.0	39.5	36.5	34.0	31.0	28.5	26.5
13	43.5	40.5	37.5	35.0	32.0	29.5	27.0

^{*}Maximum circumference not more than these figures plus 4 inches

TABLE 10 DIMENSIONS OF ANCHOR LOGS

Southern Pine, Lodgepole Pine, Red Pine, Jack Pine, Douglas fir and Western Larch

			Log Des	ignation		
	F2-1	F2-2	F2-3	F2-4	TA-2L	TA-4L
Log Length (Feet)	4.0	4.5	5.0	5.0	5.0	8.0
Minimum Diameter (Inches)	8.0	9.0	10.0	12.0	8.0	8.0

TABLE 11 TELEPHONE STUBS FOR MOUNTING BURIED PLANT TERMINAL HOUSINGS

Telephone Round Type Stubs

<u>Dimensions</u>: Top Diameter shall be 4 1/2" minimum. Butt Diameter shall be 5" minimum.

Bid Limit	
Designation	<u>Length</u>
BA-2	6'-6''
BA-3	8'-0"
BA-4	10'-0"
BA-5	13'-6"

Telephone Sawn Pedestal Stubs

<u>Dimensions</u>: Finished Minimum Cross-section of 3 1/2" x 4 1/2".

Bid Limit	
Designation	<u>Length</u>
BA-21	6'-6"
BA-22	8'-0"
BA-23	10'-0"

FIGURE 2 ELECTRIC POLE FRAMING DRAWINGS

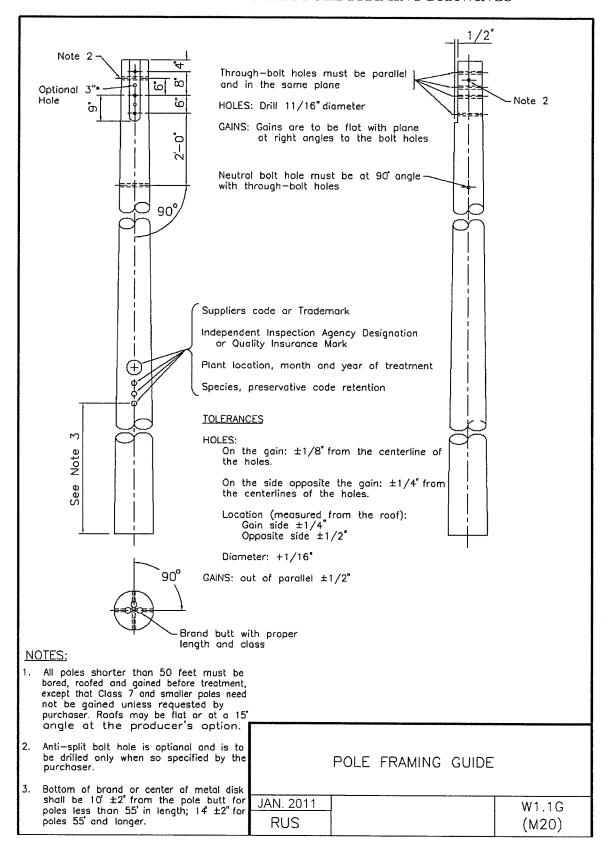
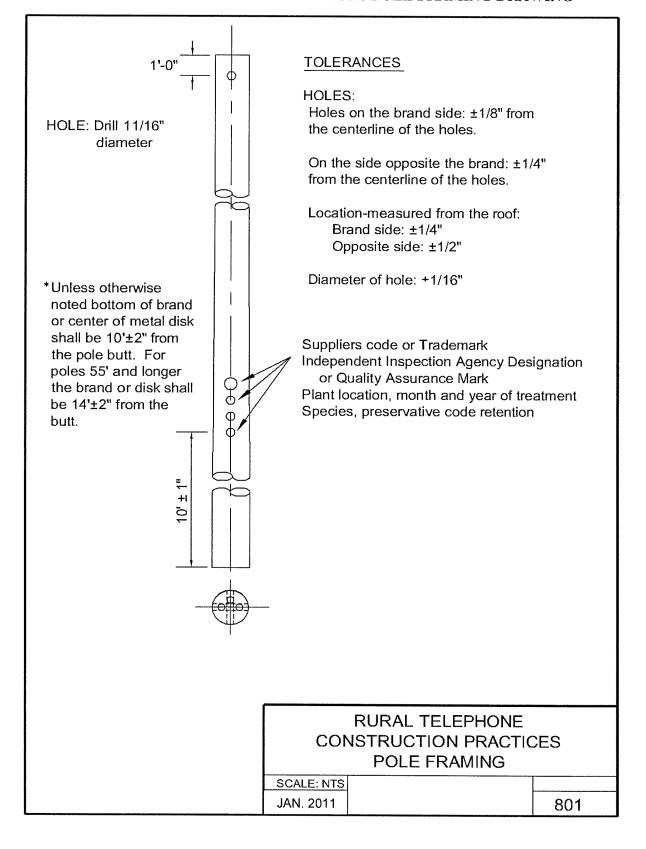


FIGURE 3 TELECOMMUNICATIONS POLE FRAMING DRAWING



METRIC CONVERSION FACTORS

TO CONVERT FROM	то	MULTIPLY BY
Foot (ft)	meter (m)	0.3048
Inch (in)	centimeter	2.54
Pound per cubic foot (pcf) (lb/ft ³)	kilogram per cubic meter (kg/m ³)	16.01846
Pound per square inch (psi) (lb/in ²)	kilogram per square meter (kg/m ²)	703.0696
Degrees Fahrenheit (°F)	degrees Celsius (°C)	5/9(°F-32)

SUPPLEMENTAL NOTICE TO BIDDERS

NORTHERN IRELAND FAIR EMPLOYMENT PRACTICES DISCLOSURE

INSTRUCTIONS: Under Sec. 181.36 Cleveland Codified Ordinances, the information requested on this page must be supplied by all Contractors and any Subcontractors having more than a fifty percent (50%) interest in the proposed contract before the City will award a contract. Any Contractor or Subcontractor that is found to have made a false statement in the Disclosure shall be in default of its bid and/or contract obligations and shall be subject to the remedies for default contained in its contract. For failure to cure such a default, a Contractor or Subcontractor shall be automatically ineligible to bid to supply any goods or services to the City for a period of two years.

CHECK WHICHEVER IS APPLICABLE:

- A. () The undersigned or any controlling shareholder, *subsidiary, or parent corporation of the undersigned is NOT ENGAGED IN ANY BUSINESS OR TRADING FOR PROFIT IN NORTHERN IRELAND. (If paragraph A. is checked, proceed to the signature line.)
- B. ()The undersigned or any controlling shareholder, *subsidiary, or parent corporation IS ENGAGED IN ANY BUSINESS OR TRADING FOR PROFIT IN NORTHERN IRELAND. (If paragraph B. is checked, please either check the stipulation contained in paragraph C. or attach documentation that shows that the undersigned has complied with the stipulation contained in paragraph C.
- C. ()The undersigned and all enterprises identified in paragraph B. are TAKING LAWFUL AND GOOD FAITH STEPS TO ENGAGE IN FAIR EMPLOYMENT PRACTICES WHICH ARE RELEVANT TO THE STANDARDS EMBODIED IN THE "MacBRIDE PRINCIPALS FOR FAIR EMPLOYMENT IN NORTHERN IRELAND." A copy of the MacBride Principles can be obtained from the Office of the Commissioner of Purchases and Supplies. In lieu of checking this paragraph, the undersigned must attach documentation which the undersigned believes shows compliance with the stipulation contained in this paragraph C.

Name of Contractor or Subcontractor
Ву:
Title:

"Controlling shareholder" means any shareholder owning more than fifty percent (50%) of the stock in the corporation or more than twenty-five percent (25%) of the stock in the corporation if no other shareholder owns a larger share of stock in the corporation.

SUPPLEMENTAL NOTICE TO BIDDERS

Subject: Submission of NORTHERN IRELAND FAIR EMPLOYMENT PRACTICES. DISCLOSURE

Each bidder and/or appropriate parties should complete the <u>DISCLOSURE</u> and submit it with the bid, if possible. If not submitted with the bid, it must be completed and submitted to the Commissioner of Purchases and Supplies before the City will award a contract. If a bidder or appropriate parties fall to complete and submit it, they shall not be eligible for a contract award.

EQUAL OPPORTUNITY CLAUSE (Section 187.22(b) C.O.)

Each Contract also shall contain the following equal opportunity clause:

"During the performance of this contract, the contractor agrees as follows:

- (1) The contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, sexual orientation, national origin, age, disability, ethnic group or Vietnamera or disabled veteran status. The contractor shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to race, religion, color, sex, sexual orientation, national origin, age, disability, ethnic group, or Vietnam-era or disabled veteran status. As used in this chapter, "treated" means and includes without limitation the following: recruited, whether by advertising or other means; compensated, whether in the form of rates of pay or other forms of compensation; selected for training, including apprenticeship, promoted, upgraded, demoted, downgraded, transferred, laid off and terminated. The contractor agrees to and shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by the hiring representatives of the contractor 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 the contractor is an equal opportunity employer.
- (3) The contractor shall send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract, or understanding, a notice advising the labor union or worker's representative of the contractor's commitments under the equal opportunity clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) It is the policy of the City that local businesses, minority-owned businesses and female-owned businesses shall have every practicable opportunity to participate in the performance of contracts awarded by the City subject to the applicable provisions of the Cleveland Area Business Code.
- (5) The contractor shall permit access by the Director or his or her designated representative to any relevant and pertinent reports and documents to verify compliance with the Cleveland Area Business Code, and with the Regulations. All such materials provided to the Director or designee by the contractor shall be considered confidential.
- (6) The contractor will not obstruct or hinder the Director or designee in the fulfillment of the duties and responsibilities imposed by the Cleveland Area Business Code.
- (7) The contractor agrees that each subcontract will include this Equal Opportunity Clause, and the contractor will notify each subcontractor, <u>material supplier</u> and supplier that the subcontractor must agree to comply with and be subject to all applicable provisions of the Cleveland Area Business Code. The contractor shall take any appropriate action with respect to any subcontractor as a means of enforcing the provisions of the Code."

Revision Date: January 3, 2022



MAYOR'S OFFICE OF EQUAL OPPORTUNITY

PARTICIPATION INFORMATION FORM

(Requirement and Standard Contracts)

The Subcontractor Participation Goals for this contract are:

0% CSB Participation

A searchable database of all CSB Subcontractors eligible to fulfill these subcontractor participation goals can be found on the City of Cleveland Office of Equal Opportunity Website:

http://www.city.cleveland.oh.us/CityofCleveland/Home/Business/Equal%20Opportunity

Click on CSB/MBE/FBE Registry.

Rev jeh 031



DIVISION OF PURCHASES & SUPPLIES

Subcontractors Notice

There is no Subcontractor Participation (Utilization) Goal for this contract. However, per Section A-19 or 22(a) of the <u>Instructions to Bidders</u>, any and all proposed subcontractors, whether City certified or not, must be divulged and listed in the sealed bid. If you do plan to utilize a subcontractor, submit a proposed subcontractor list on a separate, signed sheet of paper, listing the name, address, type of work or materials, and total subcontractor amount for each and every subcontractor that you propose to use on this contract.

You are encouraged to consider City-certified firms for any available subcontracting opportunities. A searchable database of all City-certified firms can be found on the City of Cleveland Office of Equal Opportunity Website:

http://www.city.cleveland.oh.us/oeo

On the website, click on <u>CSB/MBE/FBE Registry</u>.