

REQUEST FOR PROPOSALS

Item Description: Purchase of One (1) Backhoe Loader

Procurement/MinuteTraq #: 47680

Date to be opened: 12/30/2024

Issuing Department: Parks Department

QUESTIONS

- Please direct questions related to the bidding process, how to fill out forms, and how to submit a bid (Pages 1-8) to the Purchasing Department.
 - o Email: purchasing@providenceri.gov
 - Please use the subject line "Solicitation Question"
- Please direct questions relative to the Minority and Women's Business Enterprise Program and the corresponding forms (Pages 9-13) to the MBE/WBE Outreach Director for the City of Providence, Grace Diaz
 - o Email: gdiaz@providenceri.gov
 - Please use subject line "MBE WBE Forms"
- Please direct questions relative to the specifications outlined (beginning on page 14) to the issuing department's subject matter expert:
 - o Name: Brian Byrnes
 - o Title: Deputy Superintendent
 - o Email Address: Bbyrnes@providenceri.gov

Pre-bid Conference

There is no pre-bid conference schdeuled for this item.

Date of Pre-Bid Conference: None

Time: N/A

Other details: The Backhoe for Trade-In can be viewed by contacting Nick Discullio at 401-255-0044



INSTRUCTIONS FOR SUBMISSION

Meeting Date: 12/30/2024

Bids may be submitted up to **2:15 P.M.** on the above meeting date at the **Department of the City Clerk. Room 311, City Hall. 25 Dorrance Street, Providence.** At 2:15 P.M. all bids will be publicly opened and read at the Board of Contract Meeting in Conference Room 305, on the 3rd floor of City Hall.

- Bidders must submit 2 copies of their bid in sealed envelopes or packages labeled with the captioned Item Description and the City Department to which the solicitation and bid are related and must include the company name and address on the envelope as well. (On page 1).
- If required by the Department, please keep the original bid bond and check in only one of the envelopes.
- Communications to the Board of Contract and Supply that are not competitive sealed bids (i.e. product information/samples) should have "**NOT A BID**" written on the envelope or wrapper.
- Only use form versions and templates included in this solicitation. If you have an old version of a form do not recycle it for use in this bid.
- The bid envelope and information relative to the bid must be addressed to:

Board of Contract and Supply Department of the City Clerk – City Hall, Room 311 25 Dorrance Street Providence, RI 02903

**PLEASE NOTE: This bid may include details regarding information that you will need to provide (such as proof of licenses) to the issuing department before the formalization of an award.

This information is NOT requested to be provided in your initial bid by design.

All bids submitted to the City Clerk become public record. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record. The City has made a conscious effort to avoid the posting of sensitive information on the City's Open Meetings Portal, by requesting that such sensitive information be submitted to the issuing department only at their request.



BOARD OF CONTRACT AND SUPPLYCITY OF PROVIDENCE, RHODE ISLAND

BID PACKAGE CHECKLIST

Digital forms are available in the City of Providence Purchasing Department Office or online at http://www.providenceri.gov/purchasing/how-to-submit-a-bid/

The bid package **MUST** include the following, in this order:

- Bid Form 1: Bidder's Blank as the cover page/ 1st page (see page 6 of this document)
- Bid Form 2: Certification of Bidder as 2nd page (see page 7 of this document)
- Bid Form 3: Certificate Regarding Public Records (see page 8 of this document)
- Bid Form 4: Affidavit of City Vendor (see pages 9 and 10 of this document)
- Forms from the Minority and Women Business Enterprise Program: Based on Bidder Category. See forms and instructions enclosed (pages 11-112) or on:
 <u>https://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/</u>

*Please note: MBE/WBE forms must be completed for EVERY bid submitted and must be inclusive of ALL required signatures. Forms without all required signatures will be considered <u>incomplete</u>.

- Bidder's Proposal/Packet: Formal response to the specifications outlined in this RFP, including pricing information and details related to the good(s) or service(s) being provided. Please be mindful of formatting responses as requested to ensure clarity.
- Financial Assurance, <u>if requested</u> (as indicated on page 5 of this document under "Bid Terms")

All of the above listed documents are REQUIRED. (With the exception of financial assurances, which are only required if specified on page 5.)

***Failure to meet specified deadlines, follow specific submission instructions, or enclose all required documents with all applicable signatures will result in disqualification, or in an inability to appropriately evaluate bids.



NOTICE TO VENDORS

- 1. The Board of Contract and Supply will make the award to the lowest qualified and responsible bidder.
- 2. In determining the lowest responsible bidder, cash discounts based on preferable payment terms will not be considered.
- 3. Where prices are the same, the Board of Contract and Supply reserves the right to award to one bidder, or to split the award.
- 4. No proposal will be accepted if the bid is made in collusion with any other bidder.
- 5. Bids may be submitted on an "equal in quality" basis. The City reserves the right to decide equality. Bidders, must indicate brand or the make being offered and submit detailed specifications if other than brand requested.
- 6. A bidder who is an out-of-state corporation shall qualify or register to transact business in this State, in accordance with the Rhode Island Business Corporation Act, RIGL Sec. 7-1.2-1401, et seq.
- 7. The Board of Contract and Supply reserves the right to reject any and all bids.
- 8. Competing bids may be viewed in person at the Department of the City Clerk, City Hall, Providence, immediately upon the conclusion of the formal Board of Contract and Supply meeting during which the bids were unsealed/opened. Bids may also be accessed electronically on the internet via the City's Open Meetings Portal.
- 9. As the City of Providence is exempt from the payment of Federal Excise Taxes and Rhode Island Sales Tax, prices quoted are not to include these taxes.
- 10. In case of error in the extension of prices quoted, the unit price will govern.
- 11. The contractor will **NOT** be permitted to: a) assign or underlet the contract, or b) assign either legally or equitably any monies or any claim thereto without the previous written consent of the City Purchasing Director.
- 12. Delivery dates must be shown in the bid. If no delivery date is specified, it will be assumed that an immediate delivery from stock will be made.
- 13. A certificate of insurance will normally be required of a successful vendor.
- 14. For many contracts involving construction, alteration and/or repair work, State law provisions concerning payment of prevailing wage rates apply (RIGL Sec. 37-13-1 et seq.)
- 15. No goods should be delivered, or work started without a Purchase Order.
- 16. Submit 2 copies of the bid to the City Clerk, unless the specification section of this document indicates otherwise.
- 17. Bidder must certify that it does not unlawfully discriminate on the basis of race, color, national origin, gender, gender identity or expression, sexual orientation and/or religion in its business and hiring practices and that all of its employees are lawfully employed under all applicable federal, state and local laws, rules and regulations. (See Bid Form 2.)



BID TERMS

1.	Financial assurances may be required in order to be a successful bidder for Commodity or Construction and Service contracts. <u>If either of the first two checkboxes below is checked, the specified assurance must accompany</u> a bid, or the bid will not be considered by the Board of Contract and Supply. The third checkbox indicates the lowest responsible bidder will be contacted and required to post a bond to be awarded the contract.				
	a) A certified check for must be deposited with the City Clerk as a guarantee that the Contract will be signed and delivered by the bidder.				
	b) A bid bond in the amount of per centum (%) of the proposed total price, must be deposited with the City Clerk as a guarantee that the contract will be signed and delivered by the bidder; and the amount of such bid bond shall be retained for the use of the City as liquidated damages in case of default. Any person signing a bid bond as an attorney-in-fact shall include with the bid bond an original, or a photocopy or facsimile of an original, power of attorney.				
	c) A performance and payment bond with a satisfactory surety company will be posted by the bidder in a sum equal to one hundred per centum (100%) of the awarded contract.				
	d) No financial assurance is necessary for this item.				
2.	2. Awards will be made within nighty (90) days of bid opening . All bid prices will be considered firm, unless qualified otherwise. Requests for price increases will not be honored.				
3.	Failure to deliver within the time quoted or failure to meet specifications may result in default in accordance with the general specifications. It is agreed that deliveries and/or completion are subject to strikes, lockouts, accidents, and Acts of God.				

The following entry applies only for COMMODITY BID TERMS:

- 4. Payment for partial delivery will not be allowed except when provided for in blanket or term contracts. The following entries apply only for CONSTRUCTION AND SERVICE BID TERMS:
 - 5. Only one shipping charge will be applied in the event of partial deliveries for blanket or term contracts.
 - 6. Prior to commencing performance under the contract, the successful bidder shall attest to compliance with the provisions of the Rhode Island Worker's Compensation Act, <u>RIGL 28-29-1</u>, et seq. If exempt from compliance, the successful bidder shall submit a sworn Affidavit by a corporate officer to that effect, which shall accompany the signed contract.
 - 7. Prior to commencing performance under the contract, the successful bidder shall, submit a certificate of insurance, in a form and in an amount satisfactory to the City.



BOARD OF CONTRACT AND SUPPLYCITY OF PROVIDENCE, RHODE ISLAND

BID FORM 1: Bidders Blank

- 1. Bids must meet the attached specifications. Any exceptions or modifications must be noted and fully explained.
- 2. Bidder's responses must be in ink or typewritten, and all blanks on the bid form should be completed.
- 3. The price or prices proposed should be stated both in WRITING and in FIGURES, and any proposal not so stated may be rejected. Contracts exceeding twelve months must specify annual costs for each year.
- 4. Bids **SHOULD BE TOTALED** so that the final cost is clearly stated (unless submitting a unit price bid), however **each item should be priced individually**. Do not group items. Awards may be made on the basis of *total* bid or by *individual items*.
- 5. All bids MUST BE SIGNED IN INK.

Name of Bidder (Firm or Individual):	
Contact Name:	
Business Address:	
Business Phone #:	
Contact Email Address:	
Agrees to bid on (Write the "Item Description" here):	
If the bidder's company is based in a state <u>other than Rhode</u> <u>Island</u> , list name and contact information for a local agent for service of process that is located within Rhode Island	
Tot service of process that is tocuted within Anothe Island	
Delivery Date (if applicable):	
Name of Surety Company (if applicable):	
Total Amount in Writing:	
Total Amount in Figures:	
Use additional pages if necessary for additional bidding details.	
	Signature of Representation
	Title



BOARD OF CONTRACT AND SUPPLY CITY OF PROVIDENCE, RHODE ISLAND

BID FORM 2: Certification of Bidder

(Non-Discrimination/Hiring)

Upon behalf of		(Firm or Individual Bidding),			
Ι,	A	(Name of Person Making Certification),			
bei	ng its	(Title or "Self"), hereby certify that:			
1.	Bidder does not unlawfully discriminate orientation and/or religion in its busine	e on the basis of race, color, national origin, gender, sexual as and hiring practices.			
2.	All of Bidder's employees have been hired in compliance with all applicable federal, state and local laws, rules and regulations.				
I a:	ffirm by signing below that I am duly au	norized on behalf of Bidder, on			
thi	sday of	20			
		Signature of Representation			
		Printed Name			

Printed Name



BOARD OF CONTRACT AND SUPPLY CITY OF PROVIDENCE, RHODE ISLAND

BID FORM 3: Certificate Regarding Public Records

Upon	behalf of	(Firm or Individual Bidding),
Ι,		(Name of Person Making Certification),
being	its	(Title or "Self"), hereby certify an
unders	standing that:	
1.	(RFQ's), documents contained within, and the	Proposals (RFP's) and Requests for Qualification details outlined on those documents become public and opening at the corresponding Board of Contract
2.		
3.	The requested supplemental information may l	
4.5.	defined supplemental information prior to the submitted to the City Clerk, the City of Provid bears no liability associated with the informati The City of Providence observes a public and the bidding packet may not be submitted direct	ested is enclosed or if a bidder opts to enclose the issuing department's request in the bidding packet ence has no obligation to redact those details and on becoming public record. Example transparent bidding process. Information required in the ty to the issuing department at the discretion of the ch as pricing terms, from becoming public. Bidders
I affin	m by signing below that I am duly authorized on	behalf of Bidder, on
this	day of	_20
		Signature of Representation



BOARD OF CONTRACT AND SUPPLYCITY OF PROVIDENCE, RHODE ISLAND

BID FORM 4: Affidavit of City Vendor

Per our Code of Ordinances Sec. 21.-28.1 (e), this form applies to a) the business, b) any political action committee whose name includes the name of the business, c) all persons holding ten (10) percent or greater equity interest or five thousand dollars (\$5,000.00) or greater cash value interest in the business at any time during the reporting period, d) all executive officers of the business entity, e) any spouse or dependent child of any individual identified in a) though d) above.

Executive officers who are not residents of the state of Rhode Island are exempted from this requirement.

Per R.I.G.L. § 36-14-2, "Business" means a sole proprietorship, partnership, firm, corporation, holding company, joint stock company, receivership, trust, or any other entity recognized in law through which business for profit or not for profit is conducted.

f the person making this affidavit:		
n in the "Business"		
f Entity		
s:		_
number:		
mber of persons or entities in your entity that are	required to report under Sec. 2128.1 (e)	<u>:</u>
he following paragraph and answer one of the	options:	
in writing within the 12 month period preceding	the date of notification that the contract h	as reached the \$100,000 threshold,
embers of the Providence City Council? If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):	☐ No Contribution Amount(s):	
ndidates for election or reelection to the Provider If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):	nce City Council? Yes No Contribution Amount(s):	
	in the "Business"	the 12 month period preceding the date of this bid submission with the City of Providence in writing within the 12 month period preceding the date of notification that the contract hou made campaign contributions within a calendar year to (please list all persons or entities) embers of the Providence City Council? Yes No If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s): Contribution Amount(s):



BOARD OF CONTRACT AND SUPPLY CITY OF PROVIDENCE, RHODE ISLAND

c.	 If Yes, please complete the following: Recipient(s) of the Contribution: 		
	Contribution Date(s):	Contribution Amount(s):	
d.	Candidates for election or reelection to the office of If Yes, please complete the following: Recipient(s) of the Contribution:	f Mayor of Providence? □ Yes	□ No
	Contribution Date(s):	Contribution Amount(s):	
	Signed under the pains and penalties of perjury		
	Position		



BOARD OF CONTRACT AND SUPPLY CITY OF PROVIDENCE, RHODE ISLAND

MBE/WBE Participation Plan

Please complete separate forms for each MBE/WBE subcontractor/supplier to be utilized on the solicitation.

Bidder's Name:						
Bidder's Address:					· · · · · · · · · · · · · · · · · · ·	
Point of Contact:					· >**	
Telephone:						
Email:						
Procurement #:						
Project Name:						
Which one of the followiness' status in term Owned Business Enter State of Rhode Island?	ns of Minority and/orprise certification w	r Woman ith the	□МВЕ □	WBE 🗆	Neither MBE nor WE	BE
State of Rhode Island? (Check all that apply). This form is intended to capture commitments between the prime contractor/vendor and MBE/WBE subcontractors and suppliers, including a description of the work to be performed and the percentage of the work as submitted to the prime contractor/vendor. Please note that all MBE/WBE subcontractors/suppliers must be certified by the Office of Diversity, Equity and Opportunity at the time of bid. The MBE/WBE Directory can be found here. Please visit, the City's MBE/WBE page for details of the program (e.g. instructions and requirements). Nonprofit organizations are not required to complete the rest of this form. Construction projects unable to identify subcontractors prior to bid submission (e.g. Design Build) are required to provide updates to the MBE/WBE Outreach Office				ctor/vendor. portunity at the program (e.g.		
Name of Subcontracto						
Type of RI Certification		□MBE	□WBE	□N€	either	
Address:						
Point of Contact:						
Telephone:						
Email:		**************************************				
Detailed Description of Performed by Subcont to be Supplied by Sup of Work provided in to Total Contract Value	tractor or Materials plier Per the Scope he RFP		Subcontract		Participation	
Anticipated Date of Po	orformance:		Value (\$):		Rate (%):	
I certify under penalty		orgoing stat	rements are true and	correct		
		orgonig stat	ements are true and t	Title		Date
Prime Contractor/Vo	endor Signature			Tine		
Subcontractor/Supp	lier Signature			Title		Date

^{*}If you did not meet the 20% MBE/WBE combined participation goal, submit a Waiver Request Form.



BOARD OF CONTRACT AND SUPPLYCITY OF PROVIDENCE, RHODE ISLAND

MBE/WBE Waiver Request Form

or Duly Authorized Representative

Fill out this form only if you did not meet the 20% MBE/WBE participation goal.

State-certified MBE or WBE Prime Bidders are NOT REQUIRED to fill out this form.

Submit this form to the City of Providence MBE/WBE Outreach Director, Grace Diaz, at gdiaz@providenceri.gov, for review **prior** to bid submission. This waiver applies only to the current bid which you are submitting to the City of Providence and does not apply to other bids your company may submit in the future. In case a waiver is needed, City Department Directors should not recommend a bidder for an award if this form is not included, absent or is not signed by the city of Providence MBE/WBE director.

Prime Bidder:		Contact Email and Phone	
Company Name, Address:		Trade	
Project /Item Description (as seen	on RFP):	11ade	
			ne name of the primary individual witl
whom you interacted, and the rea			
MBE/WBE Company Name	Individual's Name	Company Name	Why did you choose not to work with this company?
waiver of % MBE/WBE	2 (20% minus the value of Box	F on the Subcontractor Disclo	f the total bid value. I am requesting a sure Form). If an opportunity is affort will be made to select MBE/WB
Signature of Prime Contractor / or Duly Authorized Representativ	Printed N	ame	Date Signed
Signature of City of Providence MBE/WBE Outreach Director /		ame of City of Providence	Date Signed



BOARD OF CONTRACT AND SUPPLYCITY OF PROVIDENCE, RHODE ISLAND

SUPPLEMENTAL INFORMATION

If the issuing department for this RFP determines that your firm's bid is best suited to accommodate their need, you will be asked to provide proof of the following prior to formalizing an award.

An inability to provide the outlined items at the request of the department may lead to the disqualification of your bid.

This information is <u>NOT</u> requested to be provided in your initial bid that you will submit to the City Clerk's office by the "date to be opened" noted on page 1. This list only serves as a list of items that your firm should be ready to provide on request.

All bids submitted to the City Clerk become public record. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record.

You must be able to provide:

- Business Tax ID will be requested after an award is approved by the Board of Contract and Supply.
- Certificate of Good Standing with the Rhode Island Secretary of State.



CITY OF PROVIDENCE STANDARD TERMS & CONDITIONS

- The terms "you" and "your" contained herein refer to the person or entity that is a party to the agreement with the City of Providence ("the City") and to such person's or entity's employees, officers, and agents.
- 2. The Request For Proposals ("RFP") and these Standard Terms and Conditions together constitute the entire agreement of the parties ("the Agreement") with regard to any and all matters. By your submission of a bid proposal or response to the City's RFP, you accept these Standard Terms & Conditions and agree that they supersede any conflicting provisions provided by bid or in any terms and conditions contained or linked within a bid and/or response. Changes in the terms and conditions of the Agreement, or the scope of work thereunder, may only be made by a writing signed by the parties.
- 3. You are an independent contractor and in no way does this Agreement render you an employee or agent of the City or entitle you to fringe benefits, workers' compensation, pension obligations, retirement or any other employment benefits. The City shall not deduct federal or state income taxes, social security or Medicare withholdings, or any other taxes required to be deducted by an employer, and this is your responsibility to yourself and your employees and agents.
- 4. You shall not assign your rights and obligations under this Agreement without the prior written consent of the City. Any assignment without prior written consent of the City shall be voidable at the election of the City. The City retains the right to refuse any and all assignments in the City's sole and absolute discretion.
- 5. Invoices submitted to the City shall be payable sixty (60) days from the time of receipt by the City. Invoices shall include support documentation necessary to evidence completion of the work being invoiced. The City may request any other reasonable documentation in support of an invoice. The time for payment shall not commence, and invoices shall not be processed for payment, until you provide reasonably sufficient support documentation. In no circumstances shall the City be obligated to pay or shall you be entitled to receive interest on any overdue invoice or payment. In no circumstances shall the City be obligated to

- pay any costs associated with your collection of an outstanding invoice.
- 6. For contracts involving construction, alteration, and/or repair work, the provisions of applicable state labor law concerning payment of prevailing wage rates (R.I. Gen. Laws §§ 37-13-1 et seq., as amended) and the City's First Source Ordinance (Providence Code of Ordinances §§ 21-91 et seq., as amended) apply.
- 7. With regard to any issues, claims, or controversies that may arise under this Agreement, the City shall not be required to submit to dispute resolution or mandatory/binding arbitration. Nothing prevents the parties from mutually agreeing to settle any disputes using mediation or non-binding arbitration.
- 8. To the fullest extent permitted by law, you shall indemnify, defend, and hold harmless the City, its employees, officers, agents, and assigns from and against any and all claims, damages, losses, allegations, demands, actions, causes of action, suits, obligations, fines, penalties, judgments, liabilities, costs and expenses, including but not limited to attorneys' fees, of any nature whatsoever arising out of, in connection with, or resulting from the performance of the work provided in the Agreement.
- 9. You shall maintain throughout the term of this Agreement the insurance coverage that is required by the RFP or, if none is required in the RFP, insurance coverage that is considered in your industry to be commercially reasonable, and you agree to name the City as an additional insured on your general liability policy and on any umbrella policy you carry.
- 10. The City shall not subject itself to any contractual limitations on liability. The City shall have the time permitted within the applicable statute of limitations, and no less, to bring or assert any and all causes of action, suits, claims or demands the City may have arising out of, in connection with, or resulting from the performance of the work provided in the Agreement, and in no event does the City agree to limit your liability to the price of the Agreement or any other monetary limit.
- 11. The City may terminate this Agreement upon five (5) days' written notice to you if you fail to observe any of the terms and conditions of this Agreement, or if the City believes your ability to perform the



terms and conditions of this Agreement has been materially impaired in any way, including but in no way limited to loss of insurance coverage, lapsing of a surety bond, if required, declaration of bankruptcy, or appointment of a receiver. In the event of termination by the City, you shall be entitled to just and equitable compensation for any satisfactory work completed and expenses incurred up to the date of termination.

- 12. Written notice hereunder shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity or to an officer of the entity for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known by the party providing notice.
- 13. In no event shall the Agreement automatically renew or be extended without a writing signed by the parties.
- 14. You agree that products produced or resulting from the performance of the Agreement are the sole property of the City and may not be used by you without the express written permission of the City.
- 15. For any Agreement involving the sharing or exchange of data involving potentially confidential and/or personal information, you shall comply with any and all state and/or federal laws or regulations applicable to confidential and/or personal information you receive from the City, including but not limited to the Rhode Island Identity Theft Protection Act, R.I. Gen. Laws § 11-49.3-1, during the term of the Agreement. You shall implement and maintain appropriate physical, technical, and administrative security measures for the protection of, and to prevent access to, use, or disclosure of, confidential and/or personal information. In the event of a breach of such information, you shall notify the City of such breach immediately, but in no event later than twenty-four (24) hours after discovery of such breach.
- 16. The Agreement is governed by the laws of the State of Rhode Island. You expressly submit yourself to and agree that any and all actions arising out of, in connection with, or resulting from the performance of the Agreement or relationship between the parties shall occur solely in the venue and jurisdiction of the State of Rhode Island or the federal court located in Rhode Island.
- 17. The failure of the City to require performance of any provision shall not affect the City's right to

- require performance at any time thereafter, nor shall a waiver of any breach or default of this Agreement constitute a waiver of any subsequent breach or default or a waiver of the provision itself.
- 18. If any term or provision of this Agreement, or the application thereof to any person or circumstance shall, in any extent, be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, and each term and provision shall be valid and enforceable to the fullest extent permitted by law.



SUPPLEMENTAL BID FORM

To whom it may concern:

- 1. The undersigned, having familiarized (himself) (themselves) (itself) with the Purchase of One (1) Backhoe Loader bid affecting the cost of work, and with the Contract Documents (which includes the Invitation for Bids, Instructions to Bidders, Form of Bid Bond, Form of Agreements, form of Non-Collusive Affidavia, Addenda (if any); as prepared by the Providence Parks Department, and on file in the office of the City Clerk 3rd Floor, City Hall, Providence RI 02903, hereby proposes to furnish all materials, and to deliver such as required for the Purchase of One (1) Backhoe Loader and such other required and incidental items and costs, delivered complete, all in accordance with the above listed documents and for the unit prices for work in-place for the following items and quantities.
- 2. In submitting this Bid, the bidder understands that the right is reserved by The Providence Parks Department to reject any and all Bids, If written notice of acceptance of this Bid is mailed, telegraphed or delivered to the undersigned within (90) days after the opening thereof, or at any time thereafter before this Bid is withdrawn, the undersigned agrees to execute and deliver a written commitment in the prescribed form to furnish the required materials/goods within (60) days after the Agreement is presented to him/her for signature.

Herewith in accordance with the instructions to Bidders.

- 3. Attached hereto is an affidavit in proof that the undersigned has not colluded with any person in respect to this. Bid or any bids for the Contractor for which this Bid is submitted. Also attached is a Statement of Bidder's Qualifications.
- 4. Application unit prices are contained in the Agreement (established as the result of either a Unit Price Bid or a Supplemental Schedule of Unit Prices), the City of Providence may order the Contractor to proceed with desired changes in the quantities for materials/goods, the value of such changes to be determined by the requested quantities involved and the application unit prices specified in the Contract.
- 5. The City of Providence reserves the right to determine the lowest responsible Bidder based on past experience with the City and/or recommendations by City and/or state agencies with an interest in this procurement. The City reserves the right to award the project to the appropriate bidder in the best interest of the City of Providence.

CERTIFICATION OF NON-SEGREGATED FACILITIES

The Bidder certifies that he/she does not maintain or provide for his/her employees any segregated facilities at any of his establishments, and that he/she does not permit his/her employees to perform their services at any location, under his/her control, where segregation facilities are maintained. The Bidder agrees that a breach of this certification will be a violation of the Equal Opportunity Clause in any contract resulting from acceptance of this Bid. As used in this certification, term "segregation facilities" means any waiting rooms, work rooms, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employee which are segregated by explicit directive or are in fact segregated on basis of race, color, religion, or national origin, because of habit, local custom, or otherwise.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. & 1001.



DATE, 20			
Name of Bidder and Official Address:	Name of Authorized Representative (Contact):		
	By(Signature)		
	(Signature) Title		
E-Mail:	Phone:		
Bidder shall indicate, in space provided, the earliest possible Delivery Date:	, 20		
ADDENDA: The undersigned acknowledges receipt o Any):	of the following Addenda, if any, and has included the provisions thereof in this Bid (
Addendum No. Date	Addendum No. <u>Date</u>		
, 20	, 20		
20	20		

BID PACKAGE SPECIFICATIONS

Procurement Description:

BASE BID: The Base Bid scope of work for this procurement shall include, but not be limited to the supply and delivery of the following materials/goods: The Providence Parks Department is looking for pricing for the **Purchase of One (1) Backhoe Loader** from companies authorized to sell the item(s) in Providence, RI.

ALTERNATES include: Additional Options as defined in the specifications and/or Trade-in of Vehicles (if any).

In addition to stating the Total Base Bid, the bidder shall state Unit Prices for related work listed under each bid item which represents the work items included in the Total Base Bid. The Unit Prices are quoted for computing adjustments to the Base Bid prior to Contract award, as well as during the course of construction, based upon extra work ordered by the City or for work countermanded, reduced or omitted by the City in order to stay within the Project budget.

Base Bid Items and Unit prices are to be Completed prices to be added or deducted on the basis of quantities of work involved, for each item in place in the unit indicated.



All of the Goods/Materials included in this Procurement Shall be Supplied as	nd Delivere	d for the lump sum of	?:
			Dollars
(\$), TOTAL BASE B	ID		
ALTERNATES:			
1. Deduct – Trade-In Value of One (1) Ford 675D Backhoe Loader - F	Per Lump S	um	
	LS	\$	
price in writing			·····
2. Add – 10 Ft Angle Blade Q/C Compatible with Edge and Float Fran	1e – Per Lu	mp Sum	
	LS	\$	
price in writing			
UNIT PRICES – BASE BID:			
1. None			
	EA	\$	
price in writing			

Please note that the list above is not intended to include all items required to complete the base bid scope of work but can and shall be used to adjust the contract prior to or after award - in the best interest of the City of Providence.

BIDDER:	



BID DOCUMENTS:

The complete set of Bid Documents consists of the Bid Forms, Technical Specifications and the Minority Participation Forms

TECHNICAL SPECIFICATION:

• The following technical specification is provided to be a 'basis for minimum requirements and so vendors can provide pricing on the exact item indicated in the technical specification and/or any item that is equal to or exceeds the specifications listed. If an alternate item is being provided the vendor must provide a side-by-side comparison for review by the owner.

ADDITIONAL INFORMATION REQUIRED WITH BID:

- Minority Participation Forms 10% MBE / 10 % WBE Goal on this Project
- Addenda (If Any) Must Be Acknowledged on Bid Form
- Product Information for Items Submitted as 'Or Equal' to Specified Materials

PROVISIONS OF THIS PROCUREMENT:

- The City of Providence is tax exempt and so no taxes should be included in the pricing of this item (Tax Exempt certificate Provided to Successful Bidder at Award
- Upon the Issuance of the Award from the Board of Contract the City shall issue a Purchase Order to the vendor incorporating the bid specifications and pricing. All Provisions of the Specifications are binding.

CLOSE OUT DOCUMENTS:

- Prior to Final Payment the Vendor Shall Provide the Following:
 - Operating Manuals and Warranties Shall Be Transferred and/or Delivered
 - o Training Shall be Provided to City Personnel
 - o Registration by Manufactures Representative (If Required)

Questions regarding this bid package shall be submitted via e-mail to Purchasing at <u>purchasing@providenecri.gov</u> and **Brian Byrnes – Deputy Superintendent of Parks – <u>Bbyrnes@providenceri.gov</u> no later than five (5) working days before the bid opening date.**



TECHNICAL SPECIFICATIONS:

Item:

2024-2025 John Deere 320P-Tier Loader Backhoe (per specifications below) At minimum shall include the following Options:

- FT4 Engine
- Pilot Controls
- Extendible Dipperstick
- 4 in 1 Multipurpose Q/C Loader Bucket
- 30" Cemetery Bucket
- Deluxe Cab with Radio, AC and Heat
- Powershift Transmission
- Ultimate JD Link



320 P-TIER BACKHOE LOADER SPECIFICATIONS



While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

	320 P-TIER
Engine	John Deere PowerTech™ EWL 4.5L turbocharged
Manufacturer and Model	EPA Final Tier 4/EU Stage IV
Non-Road Emission Standard	4,5 L (276 cu. in.)
Displacement	4.5 L (276 ct. iii.) 86 kW (115 hp) at 1,900 rpm
Gross Peak Power	84 kW (113 hp) at 1,900 rpm
Net Peak Power (ISO 9249)	
Net Peak Torque (ISO 9249)	459 Nm (339 lbft.) at 1,600 rpm
Net Torque Rise	30%
Lubrication	Pressure system with spin-on filter and cooler
Air Cleaner	Dual-stage dry type with safety element and evacuator valve
Cooling	
Fan Type	Electronically controlled, variable-rate, suction-type cooling fan standard
Engine Coolant Rating	–40 deg. C (–40 deg. F)
Engine Oil Cooler	Oil to water
Powertrain	
Transmission	5-speed, helical-cut gears, full PowerShift™ transmission with hydraulic reverser standard; electric clutch cutoff
	on loader lever; AutoShift transmission standard
Torque Converter	Single stage, dual phase with 2.63:1 stall ratio, 280 mm (11 in.)
PowerShift Standard Transmission	
Maximum Travel Speeds With Standard Engine,	
With 19.5L-24 Rear Tines	Forward Reverse
Gear 1	5.4 km/h (3.4 mph) 6.8 km/h (4.2 mph)
Gear 2	10.0 km/h (6.2 mph) 12.6 km/h (7.8 mph)
Gear 3	20.5 km/h (12.7 mph) 20.2 km/h (12.6 mph)
Gear 4	37.3 km/h (23.2 mph) —
Gear 5	40.0 km/h (24.9 mph) —
Axles	
Axle Oscillation, Stop to Stop, Front Axle	22 deg.
Axle Ratings	Front Rear
SAE J43	5500 kg (12,100 lb.) 7000 kg (15,400 lb.)
Dynamic	9000 kg (19,800 lb.) 10 000 kg (22,000 lb.)
Static	26 500 kg (58,400 lb.) 26 500 kg (58,400 lb.)
Ultimate	43 500 kg (95,900 lb.) 43 500 kg (95,900 lb.)
Differentials	
Mechanical-Front-Wheel-Drive (MFWD) Axle	Automatic, limited-slip traction control
Rear Axle	Foot actuated, hydraulically engaged 100% mechanical lock
Steering (ISO 5010)	Hydrostatic power steering and emergency steering
Axle	MFWD Non-Powered Front
Curb-Turning Radius	
With Brakes	3.52 m (11 ft. 7 in.) 3.45 m (11 ft. 4 in.)
Without Brakes	4.02 m (13 ft. 2 in.) 3.90 m (12 ft. 10 in.)
Bucket-Clearance Circle	
With Brakes	10.10 m (33 ft. 0 in.) 10.00 m (32 ft. 9 in.)
Without Brakes	10.80 m (35 ft. 6 in.) 10.70 m (35 ft. 0 in.)
Steering Wheel Turns (lock to lock)	2.6 to 3.6 31 to 4.3
MFWD Axle	Heavy duty, outboard planetary final drives distribute shock loads over 3 gears
Rear Axle	Heavy duty, outboard planetary final drives distribute shock loads over 4 gears
Brakes (ISO 3450)	
Service	Power assisted, hydraulic wet disc, mounted inboard, self-adjusting and self-equalizing
Parking	Spring applied, hydraulically released, wet, multi-disc, independent of service brakes with electric switch control
Hydraulics	
Main Pump	Pressure compensated load sensing (PCLS), axial-piston pump
Pump Flow at 2,200 rpm, Backhoe and Loader	163 L/m (43 gpm)
System Relief Pressure	2: post a la car al
Backhoe	24 993 kPa (3,625 psi)
Lift Mode	27 579 kPa (4,000 psi)
Loader	24 993 kPa (3,625 psi)
Controls	
Backhoe	2-lever mechanical standard; pilot controls with pattern select with electrohydraulic (EH) auxiliary functions optional
Loader	Single-lever control with electric clutch cutoff switch and MFWD (momentary) standard; single-lever control with
	electric clutch cutoff switch, EH proportional auxiliary roller, MFWD (momentary), and transmission quick-shift

optional

320 P-TIER BACKHOE LOADER SPECIFICATIONS

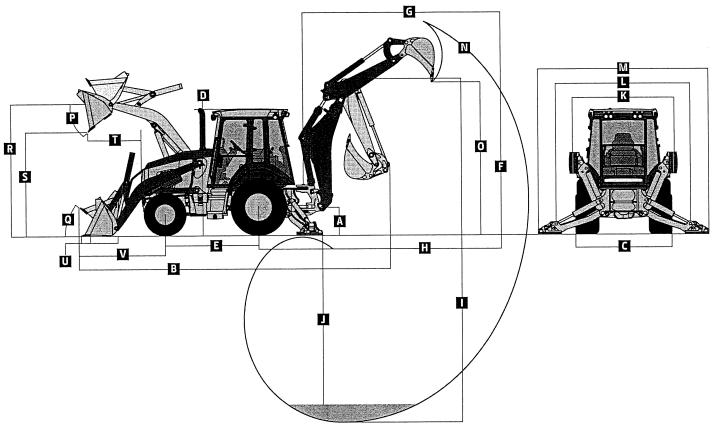




While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

may require modifications of additions to ensure compliance	with the local regulations of those countries.		
Cylinders	320 P-TIER		
Heat-treated, chrome-plated, polished rods; ha			
	Bore	Rod Diameter	Stroke
Loader Boom (2)	80 mm (3.15 in.)	50 mm (1.97 in.)	789 mm (31.08 in.)
Loader Bucket (1)	90 mm (3.54 in.)	50 mm (1.97 in.)	744 mm (29.29 in.)
Backhoe Boom (1)	120 mm (4.72 in.)	56 mm (2.20 in.)	794 mm (31.26 in.)
Heavy-Lift (HL) Option	125 mm (4.92 in.)	63 mm (2.48 in.)	887 mm (34.92 in.)
Backhoe Crowd (1)	115 mm (4.53 in.)	63 mm (2.48 in.)	602.5 mm (23.72 in.)
HL Option	120 mm (4.72 in.)	63 mm (2.48 in.)	591 mm (23:27 fn.)
Backhoe Bucket (1)	90 mm (3.54 in.)	56 mm (2.20 in.)	810 mm (31.89 in.)
Heavy-Duty Option	100 mm (3.94 in.)	63 mm (2.48 in.)	810 mm (31.89 in.)
HL Option	100 mm (3.94 in.)	63 mm (2.48 in.)	810 mm (31.89 in.)
Backhoe Swing (2)	90 mm (3.54 in.)	50 mm (1.97 in.)	278 mm (10.94 in.)
Backhoe Extendable Dipperstick (1)	70 mm (2.76 in.)	40 mm (1.57 in.)	1062 mm (41.81 in.)
HLOption	80 mm (3.15 in.)	45 mm (1.77 in.)	1062 mm (41.81 in.)
Backhoe Stabilizer (2)		and the community complete annual contracts of the community community community community community community	
Standard	90 mm (3.54 in:)	50 mm (1.97 in.)	500 mm (19.69 in.)
Extended Optional	100 mm (3.94 in.)	50 mm (1.97 in.)	500 mm (19.69 in.)
HL Option Extended	100 mm (3.94 in.)	50 mm (1:97 in.)	500 mm (19:69 in.)
Non-Powered Axle (1)	70 mm (2.76 in.)	42 mm (1.65 in.)	210 mm (8.27 in.)
MEWD (1)	65 mm (2.56 in.)	40 mm (1.57 in.)	210 mm (8.27 in.)
Electrical			
Voltage	12 volt		
Alternator Rating	145 amp		
Lights	10 halogen: 4 front, 4 rear, and 2 side	docking (32.500 candlepower each);	turn signals and flashers: 2 front and 2 rear;
Lights	stop- and taillights: and 2 rear reflect	tors: factory-installed option for 2 L	ED spotlights and 8 LED floodlights in lieu
	of standard halogen light package		
Operator Station			
Type (ISO 3471)	Fully enclosed cab, isolation mounted	d, ROPS/FOPS, left/right access, wit	th molded roof; optional quarter cab
31	(front glass only) and canopy	_	
Tires/Wheels			
	and the second second section of the second	tion of the contract of the co	
	Front	Rear	
Non-Powered Front Axle	Front 12.5/80-18 F3 (12)	19.5L-24 R4 (12)	
Non-Powered Front Axle	The second secon	Committee of the commit	
Non-Powered Front Axle With MFWD	12.5/80-18 F3 (12)	19.5L-24 R4 (12)	
	12.5/80-18 F3 (12) 14.5/75-16.1 F3 (16)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (12)	
	12.5/80-18 F3 (12) 14.5/75-16.1 F3 (16) 12.5/80-18 I3 (12)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10)	
	12.5/80-18 F3 (12) 14.5/75-16.1 F3 (16) 12.5/80-18 13 (12) 12.5/80-18 R4 (10)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (12)	
	12.5/80-18 F3 (12) 14.5/75-16.1 F3 (16) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 12.5/80-18 I3 (12)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12)	
	12.5/80-18 F3 (12) 14.5/75-16.1 F3 (16) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550	
With MFWD	12.5/80-18 F3 (12) 14.5/75-16.1 F3 (16) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 340/80R18 XMCL	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL	
	12.5/80-18 F3 (12) 14.5/75-16.1 F3 (16) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580	
With MFWD	12.5/80-18 F3 (12) 14.5/75-16.1 F3 (16) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued)	
With MFWD Serviceability	12.5/80-18 F3 (12) 14.5/75-16.1 F3 (16) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580	
With MFWD Serviceability Refill Capacities	12.5/80-18 F3 (12) 14.5/75-16.1 F3 (16) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 12.5/80-18 I3 (12) 12.5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System	126.8 L (33.5 gal.)
With MFWD Serviceability Refill Capacities Cooling System	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550 340/80R18 580	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan	
With MFWD Serviceability Refill Capacities Cooling System Cab	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 B3 (12) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550 340/80R18 580	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic Reservoir MFWD Axle	126.8 L (33.5 gal.) 45.0 L (11.9 gal.)
Serviceability Refill Capacities Cooling System Cab Canopy	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 B3 (12) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550 340/80R18 580 27.5 L (29.1 qt.) 25.7 L (27.2 qt.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.)
Serviceability Refill Capacities Cooling System Cab Canopy Rear Axle	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550 340/80R18 580 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic Reservoir MFWD Axle	126.8 L (33.5 gal.) 45.0 L (11.9 gal.)
Serviceability Refill Capacities Cooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 S50 340/80R18 550 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.)
With MFWD Serviceability Refill Capacities Cooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 XMCL 340/80R18 550 340/80R18 580 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 15.1 L (16.0 qt.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.)
With MFWD Serviceability Refill Capacities Cooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 XMCL 340/80R18 550 340/80R18 580 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 15.1 L (16.0 qt.) 128.7 L (34.0 gal.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.)
With MFWD Serviceability Refill Capacities Cooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights With Full Fuel Tank, 75-kg (165 lb.) Operator,	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 13 (12) 12:5/80-18 R4 (10) 12:5/80-18 B3 (12) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 XMCL 340/80R18 550 340/80R18 550 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 15.1 L (16.0 qt.) 128.7 L (34.0 gal.) 320 P-TIER	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.)
Serviceability Refill Capacities Cooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights With Full Fuel Tank, 75-kg (165 lb.) Operator, Standard Equipment, Canopy, and Bumper	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 13 (12) 12:5/80-18 R4 (10) 12:5/80-18 B3 (12) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 XMCL 340/80R18 550 340/80R18 550 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 15.1 L (16.0 qt.) 128.7 L (34.0 gal.) 320 P-TIER	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.)
Serviceability Refill Capacities Cooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights With Full Fuel Tank, 75-kg (165 lb.) Operator, Standard Equipment, Canopy, and Bumper Typical With Cab and Extendable Dipperstick 340-kg (750 lb.) Counterweight	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 13 (12) 12:5/80-18 R4 (10) 12:5/80-18 B3 (12) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 XMCL 340/80R18 550 340/80R18 550 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 15.1 L (16.0 qt.) 128.7 L (34.0 gal.) 320 P-TIER	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 S50 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each) 320 P-TIER H 7375 kg (16,57	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.) EAVY-LIFT (HL) OPTION 1 lb.)
Serviceability Refill Capacities Gooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights With Full Fuel Tank, 75-kg (165 lb.) Operator, Standard Equipment, Canopy, and Bumper Typical With Cab and Extendable Dipperstick 340-kg (750 lb.) Counterweight 454-kg (1,000 lb.) Counterweight	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 B3 (12) 12:5/80-18 B3 (12) 12:5/80-18 B3 (12) 12:5/80-18 R4 (10) 340/80R18 SMCL 340/80R18 550 340/80R18 550 340/80R18 580 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 13.0 L (13.7 qt.) 15.1 L (16.0 qt.) 128.7 L (34.0 gal.) 320 P-TIER 7146 kg (15,754 lb.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.) EAVY-LIFT (HL) OPTION 1 lb.)
Serviceability Refill Capacities Cooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights With Full Fuel Tank, 75-kg (165 lb.) Operator, Standard Equipment, Canopy, and Bumper Typical With Cab and Extendable Dipperstick 340-kg (750 lb.) Counterweight	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 B3 (12) 12:5/80-18 B3 (12) 12:5/80-18 B3 (12) 12:5/80-18 R4 (10) 340/80R18 SMCL 340/80R18 550 340/80R18 550 340/80R18 580 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 13.0 L (13.7 qt.) 15.1 L (16.0 qt.) 128.7 L (34.0 gal.) 320 P-TIER 7146 kg (15,754 lb.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 S50 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each) 320 P-TIER H 7375 kg (16,57)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.) EAVY-LIFT (HL) OPTION 1 lb.)
Serviceability Refill Capacities Gooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights With Full Fuel Tank, 75-kg (165 lb.) Operator, Standard Equipment, Canopy, and Bumper Typical With Cab and Extendable Dipperstick 340-kg (750 lb.) Counterweight 454-kg (1,000 lb.) Counterweight	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 340/80R18 J3 (12) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550 340/80R18 550 340/80R18 580 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 13.0 L (13.7 qt.) 15.1 L (16.0 qt.) 128.7 L (34.0 gal.) 320 P-TIER 7146 kg (15,754 lb.) 7908 kg (17,434 lb.) 7een base equipment and option) 284 kg (626 lb.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 S50 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each) 320 P-TIER H. 7375 kg (16,57)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.) EAVY-LIFT (HL) OPTION 1 lb.) 42 lb.)
Serviceability Refill Capacities Cooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights With Full Fuel Tank, 75-kg (165 lb.) Operator, Standard Equipment, Canopy, and Bumper Typical With Cab and Extendable Dipperstick 340-kg (750 lb.) Counterweight 454-kg (1,000 lb.) Counterweight Optional Components (weight difference betw	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 B3 (12) 12:5/80-18 B3 (12) 12:5/80-18 B3 (12) 12:5/80-18 R4 (10) 340/80R18 SMCL 340/80R18 550 340/80R18 550 340/80R18 580 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 13:0 L (13.7 qt.) 15.1 L (16.0 qt.) 128.7 L (34.0 gal.) 320 P-TIER 7146 kg (15,754 lb.) 7908 kg (17,434 lb.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 S50 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each) 320 P-TIER HT 7375 kg (16,57)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.) EAVY-LIFT (HL) OPTION 1 lb.) 42 lb.)
Serviceability Refill Capacities Gooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights With Full Fuel Tank, 75-kg (165 lb.) Operator, Standard Equipment, Canopy, and Bumper Typical With Cab and Extendable Dipperstick 340-kg (750 lb.) Counterweight 454-kg (1,000 lb.) Counterweight Optional Components (weight difference betv	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 340/80R18 J3 (12) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550 340/80R18 550 340/80R18 580 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 13.0 L (13.7 qt.) 15.1 L (16.0 qt.) 128.7 L (34.0 gal.) 320 P-TIER 7146 kg (15,754 lb.) 7908 kg (17,434 lb.) 7een base equipment and option) 284 kg (626 lb.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 S50 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each) 320 P-TIER H 7375 kg (16,57)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.) EAVY-LIFT (HL) OPTION 1 lb.) 42 lb.)
Serviceability Refill Capacities Gooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights With Full Fuel Tank, 75-kg (165 lb.) Operator, Standard Equipment, Canopy, and Bumper Typical With Cab and Extendable Dipperstick 340-kg (750 lb.) Counterweight 454-kg (1,000-lb.) Counterweight Optional Components (weight difference betv Cab MFWD With Tires	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 340/80R18 I3 (12) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550 340/80R18 550 340/80R18 580 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 13.0 L (13.7 qt.) 15.1 L (16.0 qt.) 128.7 L (34.0 gal.) 320 P-TIER 7146 kg (15,754 lb.) 7908 kg (17,434 lb.) — Reen base equipment and option) 284 kg (626 lb.) 137 kg (302 lb.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 S50 500/70R24 550 500/70R24 550 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each) 320 P-TIER H 7375 kg (16,57) — 8320 kg (18,34) 284 kg (626.ll 137 kg (302 lb 207 kg (456 lb 145 kg (320 lb)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.) EAVY-LIFT (HL) OPTION 1 lb.) 42 lb.) .)
Serviceability Refill Capacities Gooling System Cab Canopy Rear Axle Engine Oil (including vertical spin-on filter) Torque Converter and Transmission Fuel Tank (with ground-level fueling) Operating Weights With Full Fuel Tank, 75-kg (165 lb.) Operator, Standard Equipment, Canopy, and Bumper Typical With Cab and Extendable Dipperstick 340-kg (750 lb.) Counterweight 454-kg (1,000-lb.) Counterweight Optional Components (weight difference betv Cab MFWD With Tires Extendable Dipperstick	12:5/80-18 F3 (12) 14:5/75-16.1 F3 (16) 12:5/80-18 I3 (12) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 12:5/80-18 R4 (10) 340/80R18 J3 (12) 12:5/80-18 R4 (10) 340/80R18 XMCL 340/80R18 550 340/80R18 550 340/80R18 580 27.5 L (29.1 qt.) 25.7 L (27.2 qt.) 18.0 L (19.0 qt.) 13.0 L (13.7 qt.) 15.1 L (16.0 qt.) 128.7 L (34.0 gal.) 320 P-TIER 7146 kg (15,754 lb.) 7908 kg (17,434 lb.) — Reen base equipment and option) 284 kg (626 lb.) 137 kg (302 lb.) 138 kg (304 lb.)	19.5L-24 R4 (12) 19.5L-24 R4 (12) 19.5L-24 R4 (10) 19.5L-24 R4 (10) 19.5L-24 R4 (12) 21L-24 R4 (12) 21L-24 R4 (12) 500/70R24 XMCL 500/70R24 S50 500/70R24 550 500/70R24 580 Refill Capacities (continued) Diesel Exhaust Fluid (DEF) Tan Hydraulic System Hydraulic System Hydraulic Reservoir MFWD Axle Differential Housing Planetary (each) 320 P-TIER H 7375 kg (16,57)	126.8 L (33.5 gal.) 45.0 L (11.9 gal.) 6.5 L (6.9 qt.) 0.9 L (1.0 qt.) EAVY-LIFT (HL) OPTION 1 lb.) 42 lb.) .)

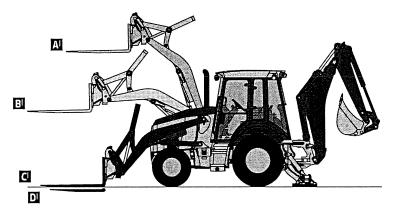
Overall Dimensions	320 P-TIER	320 P-TIER HEAVY-LIFT (HL) OPTION
A Ground Clearance, Minimum	330 mm (13 in.)	310 mm (12 in.)
B Overall Length, Transport	7.28 m (23 ft. 11 in.)	
C Width Over Tires	2.20 m (7 ft. 3 in.)	2.34 m (7 ft. 8 in.)
D Height to Top of ROPS/Cab	2.79 m (9 ft. 2 in.)	2.81 m (9 ft. 3 in.)
E Length From Axle to Axle		
Non-Powered Front Axle	2.16 m (7 ft. 1 in.)	2:16 m (7 ft.:1 in.)
MFWD Axle	2.19 m (7 ft. 2 in.)	2.19 m (7 ft. 2 in.)



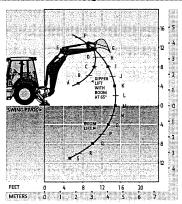
				230 B TIEB III ON	ELOSI	
Backhoe Dimensions and Performance Backhoe specifications are with 610-mm x 0.21	320 P-TIER	t) bucket: dinner lis		320 P-TIER HL OP		
	305–610 mm (12–2		re spees are with a r	305–610 mm (12–2	-y. 4 in 1	
Bucket Range	ביין וווווו טוט–נטנ	50 111.1			.1:1149/	
Digging Force Bucket Cylinder	55.0 kN (12,356 lb.	Y		69.9 kN (15,723 lb.)		
Lift Mode	60.6 kN (13,634 lb.			77.2 kN (17,349 lb.)		
A Assessment of the control of the c	67.9 kN (15,254 lb.			77.2 ((17,5 (5 (6.)		
With Heavy-Duty Cylinder Option Lift Mode	74.9 kN (16.832 lb.			_		
	36.6 kN (8,229 lb.)			- 38.2 kN (8,581 lb.)		
Crowd Cylinder Lift Mode	40.4 kN (9,080 lb.	v -6 x 0 -600° 0 - 10 - 10 - 10 - 10 - 10 - 10 - 10		42.1 kN (9,468 lb.)		
	180 deg.]		180 deg.		
Swing Arc	2 levers			2 levers		
Operator Control		ional Extendable Di	nnerstick		ional Extendable Dij	pperstick
	With Standard	IOIIUI EXCENDUDIC DI	ррегоиск	With Standard	.0.,0	4/4-01-12-1
	Backhoe	Retracted	Extended	Backhoe	Retracted	Extended
F Loading Height, Truck Loading Position					3.62 m (11 ft. 10 in.)	4.24 m (13 ft. 11 in.)
G Reach From Center of Swing Pivot	5 52 m (18 ft. 1 in.)	5.61 m (18 ft. 5 in.)	6.62 m (21 ft. 9 in.)	5.68 m (18 ft. 8 in.)	5.62 m (18 ft. 5 in.)	6.61 m (21 ft. 8 in.)
H Reach From Center of Rear Axle	6.58 m (21 ft . 7 in.)	6.68 m (21 ft. 11 in.)	7.68 m (25 ft, 2 in.)	6.74 m (22 ft. 1 in.)	6.68 m (21 ft. 11 in.)	7.67 m (25 ft. 2 in.)
I Digging Depth (SAE maximum)	4.35 m (14 ft. 3 in.)	4.50 m (14 ft. 9 in.)	5.55 m (18 ft. 2 in.)	4.59 m (15 ft. 1 in.)	4.53 m (14 ft. 10 in.)	5.53 m (18 ft. 2 in.)
J Digging Depth (SAE)		, in the second second				
610-mm (2 ft.) Flat Bottom	4.32 m (14 ft. 2 in.)	4.45 m (14 ft. 7 in.)	5.51 m (18 ft. 1 in.)	4.55 m (14 ft. 11 in.)	4.49 m (14 ft. 9 in.)	5.50 m (18 ft. 0 in.)
2440-mm (8 ft.) Flat Bottom	3.99 m (13 ft. 1 in.)	4.13 m (13 ft. 7 in.)	5.25 m (17 ft. 3 in.)	4.25 m (13 ft. 11 in.)	4.18 m (13 ft. 8 in.)	5.28 m (17 ft. 4 in.)
K Stabilizer Width, Transport		2.18 m (7 ft. 2 in.)		2.18 m (7 ft. 2 in.)		2.18 m (7 ft. 2 in.)
L. Stabilizer Spread, Operating						
Standard Stabilizers	3.10 m (10 ft. 2 in.)	3.10 m (10 ft. 2 in.)	3.10 m (10 ft. 2 in.)	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)
Extended Stabilizers	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)			.=
M Stabilizer Overall Width, Operating						
Standard Stabilizers					4.03 m (13 ft, 3 in.)	4.03 m (13 ft. 3 in.)
Extended Stabilizers	4.03 m (13 ft. 3 in.)	4.03 m (13 ft. 3 in.)	4.03 m (13 ft. 3 in.)	_		-

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

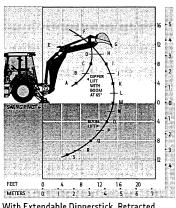
Backhoe Dimensions and Performance (continued)	*************************	h Optional Exte	ındahle Dinner	stick	*******************************	EAVY-LIFT (HI	L) OPTION endable Dipper	stick
	- With Standar	ď			With Standar	ď		
N Bucket Rotation	Backhoe 190 deg.	Retracte 190 deg.	CANONIA THEOREM SOCIETY CONTRACTOR	ended dea.	Backhoe 190 deg.	Retracte 190 deg	0 . 10 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ended) deg.
O Transport Height	3.48 m (11 ft.			m (11 ft. 5 in.)				
Loader Dimensions and Performance Isee line art of P Bucket Dump Angle, Maximum	on page 8] 45 deq.				45 deg.			
Q Rollback Angle at Ground Level	40 deg.				40 deg.			
		Heavy-duty				Heavy-duty		
	Heavy-duty	long lip	Heavy-duty	Multipurpose		long lip	Heavy-duty	Multipurpose
Bucket Capacity	0.86 m³ (1.12 cu; yd.)	0.96 m³ (1.25 cu. yd.)	1.00 m³ (1.31 cu. yd.)	1.00 m³ (1.31 cu. yd.)	0.86 m³ (1.12 cu. yd.)	0.96 m³ (1.25 cu. yd.)	1.00 m³ (1.31 cu. yd.)	1.00 m³ (1.31 cu. yd.)
Width	2184 mm	2184 mm	2337 mm	2337 mm	2184 mm	2184 mm	2337 mm	2337 mm
	(86 in.)	(86 in.)	(92 in.)	(92 in.)	(86 in.)	(86 in.)	(92 in.)	(92 in.)
Weight	390 kg	405 kg	521 kg	863 kg	390 kg	405 kg	521 kg	863 kg
	(860 lb.)	(892 lb.)	(1,148 ГБ.)	(1,902 lb.)	(860 lb.)	(892 lb.)	(1,148 lb.)	(1,902 lb.)
Breakout Force	49.2 kN	46.4 kN	46.9 kN	43.2 kN	49.4 kN	46.7 kN	47.1 kN	43.5 kN
	(11,052 lb.) 3492 kg	(10,442 lb.) 3224 kg	(10,541 lb.) 3352 kg	(9,722 lb.) 2862 kg	(11,116 lb.) 3425 kg	(10,503 lb.) 3166 kg	(10,598 lb.) 3286 kg	(9,778 lb.) 2801 kg
Lift Capacity, Full Height	(7,698 lb.)	- 5224 kg - (7,108 lb.)	- 5552 kg - (7,390 lb.)	2662 kg (6,309 lb.)	(7,552 lb.)	(6,980 lb.)	7.244 lb.)	(6,175 lb.)
R Height to Bucket Hinge Pin, Maximum	3:47 m	3.47 m	3.47 m	3.47 m	3.46 m	3.46 m	3.46 m	3.46 m
	(11 ft. 5 in.)	(11 ft. 5 in.)	(11 ft. 5 in.)	(11 ft. 5 in.)	(11 ft. 4 in.)	(11 ft. 4 in.)	(11 ft. 4 in.)	(11 ft. 4 in.)
S Dump Clearance, Bucket at 45 deg.	2.76 m	2.66 m	2.70 m	2.67 m	2.75 m	2.65 m	2.69 m	2.66 m
	(9 ft. 1 in.)	(8 ft. 9 in.)	(8 ft. 10 in.)	(8 ft. 9 in.)	(9 ft. 0 in.)	(8 ft. 8 in.)	(8 ft. 10 in.)	(8 ft. 9 in.)
T Reach at Full Height, Bucket at 45 deg.	678 mm	804 mm	675 mm	716 mm	724 mm	850 mm	720 mm	762 mm
U Digging Depth Below Ground, Bucket Level	(26.7 in.) 83 mm	(31.7 in.) 64 mm	(26.6 in.) 128 mm	(28.2 in.) 124 mm	(28.5 in.) 101 mm	(33.5 in.) 81 mm	(28.4 in.) 145 mm	(30.0 in.) 141 mm
o Digging Depth Below Glodin, Bucket Level.	(3.3 in.)	(2.5 in.)	(5.0 in.)	(4.9 in.)	(4.0 in.)	(3.2 in.)	(5.7 in.)	(5,6 in.)
V Length From Front Axle Centerline to Bucket	1.96 m	2.10 m	2.03 m	2,08 m	1.97 m	2.11 m	2.04 m	2.09 m
Cutting Edge	(6 ft. 5 in.)	(6 ft. 11 in.)	(6 ft. 8 in.)	(6 ft. 10 in.)	(6 ft. 6 in.)	(6 ft. 11 in.)	(6 ft. 8 in.)	(6 ft. 10 in.)
Lift Capacity With Quick-Coupler Forks Isee line of						400		
Hydraulic Capacity	1219-mm (48	and the contract of the contra	1524-mm (60		1219-mm (48	and the bank of the control of the c	1524-mm (60	Straffer academic blanca comment and
Al Maximum Height	2067 kg (4,55	•	1932 kg (4,26		2028 kg (4,47		1896 kg (4,18	
BI Maximum Reach CI At Ground Line	3183 kg (7,017 4020 kg (8,8	***************************************	3001 kg (6,61 3768 kg (8,30		3163 kg (6,97 3997 kg (8,81		2982 kg (6,5) 3781 kg (8,33	
D ^I Below Ground Line	198 mm (7.8 i		198 mm (7.8 i		216 mm (8.5 i	Section 2011 100000000000000000000000000000000	216 mm (8.5	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,



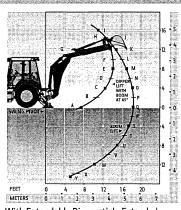
Lift Capacities [see charts on page 10]



With Standard Dipperstick



With Extendable Dipperstick, Retracted

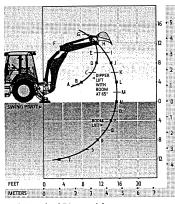


With Extendable Dipperstick, Extended

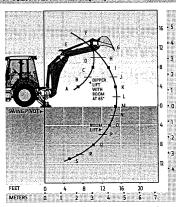
Lift Capacities (continued)	[see line art on page 9]	320 P-TIER		and the second s			
Lift capacities are over-end values in kg (lb.). Figures listed are 100% of the maximum lift force available.							
With Standard Dippersti	sk .		xtendable Dipperstick, Retrac		xtendable Dipperstick, Extended		
Standard Lift	Lift Mode	Standard Lift	Lift Mode	Standard Lift	Lift Mode		
A 4782 kg (10,543 lb.)	4858 kg (10,710 lb.)	4604 kg (10,151 lb.)	4604 kg (10,151 lb.)	3554 kg (7,834 lb.)	3946 kg (8,699 lb.)		
B 3673 kg (8,097 lb.)	3673 kg (8,097 lb.)	3251 kg (7,166 lb.)	3251 kg (7,166 lb.)	2480 kg (5,468 lb.)	2758 kg (6,081 lb.)		
C 3236 kg (7,135 lb.)	3236 kg (7,135 lb.)	2913 kg (6,423 lb.)	2913 kg (6,423 lb.)	2156 kg (4,753 lb.)	2399 kg (5,290 lb.)		
D 3168 kg (6,985 lb.)	3168 kg (6,985 lb.)	2859 kg (6,302 lb.)	2859 kg (6,302 lb.)	2012 kg (4,436 lb.)	2185 kg (4,817 lb.)		
E 3038 kg (6,698 lb.)	3364 kg (7,415 lb.)	2619 kg (5,775 lb.)	2912 kg (6,420 lb.)	1918 kg (4,228 lb.)	2087 kg (4,601 lb.)		
F 1839 kg (4,054 lb.)	2051 kg (4,522 lb.)	1488 kg (3,281 lb.)	1678 kg (3,699 lb.)	1830 kg (4,034 lb.)	2038 kg (4,493 lb.)		
G 1936 kg (4,269 lb.)	2165 kg (4,773 lb.)	1635 kg (3,604 lb.)	1846 kg (4,070 lb.)	1715 kg (3,782 lb.)	1912 kg (4,214 lb.)		
H 1918 kg (4,228 lb.)	2147 kg (4,734 lb.)	1652 kg (3,643 lb.)	1869 kg (4,120 lb.)	1525 kg (3,362 lb.)	1701 kg (3,749 lb.)		
1 1873 kg (4,128 lb.)	2099 kg (4,628 lb.)	1633 kg (3,599 lb.)	1850 kg (4,078 lb.)	1059 kg (2,334 lb.)	1198 kg (2,641 lb.)		
J 1820 kg (4,013 lb.)	2043 kg (4,504 lb.)	1599 kg (3,526 lb.)	1815 kg (4,001 lb.)	1187 kg (2,616 lb.)	1344 kg (2,962 lb.)		
K 1768 kg (3,897 lb.)	1986 kg (4,379 lb.)	1562 kg (3,443 lb.)	1775 kg (3,913 lb.)	1236 kg (2,726 lb.)	1401 kg (3,089 lb.)		
L 1717 kg (3,786 lb.)	1932 kg (4,259 lb.)	1524 kg (3,360 lb.)	1735 kg (3,825 lb.)	1253 kg (2,763 lb.)	1422 kg (3,135 lb.)		
M 1671 kg (3,685 lb.)	1882 kg (4,150 lb.)	1489 kg (3,283 lb.)	1698 kg (3,743 lb.)	1254 kg (2,765 lb.)	1425 kg (3,141 lb.)		
N 1630 kg (3,594 lb.)	1838 kg (4,053 lb.)	1458 kg (3,214 lb.)	1665 kg (3,671 lb.)	1247 kg (2,749 lb.)	1418 kg (3,127 lb.)		
o 1596 kg (3,518 lb.)	1802 kg (3,972 lb.)	1443 kg (3,160 lb.)	1640 kg (3,615 lb.)	1236 kg (2,724 lb.)	1407 kg (3,102 lb.)		
P 1571 kg (3,463 lb.)	1776 kg (3,916 lb.)	1419 kg (3,128 lb.)	1626 kg (3,585 lb.)	1223 kg (2,696 lb.)	1394 kg (3,073 lb.)		
Q 1563 kg (3,447 lb.)	1771 kg (3,904 lb.)	1424 kg (3,140 lb.)	1635 kg (3,605 lb.)	1210 kg (2,667 lb.)	1381 kg (3,044 lb.)		
R 1609 kg (3,547 lb.)	1827 kg (4,027 lb.)	1486 kg (3,276 lb.)	1710 kg (3,769 lb.)	1198 kg (2,642 lb.)	1369 kg (3,019 lb.)		
S 1735 kg (3,824 lb.)	1975 kg (4,353 lb.)	1604 kg (3,537 lb.)	1849 kg (4,076 lb.)	1190 kg (2,622 lb.)	1361 kg (3,001 lb.)		
Т —	-	_		1186 kg (2,614 lb.)	1359 kg (2,995 lb.)		
U # 1				1190 kg (2,623 lb.)	1365 kg (3,009 lb.)		
V —	-	_	_	1208 kg (2,664 lb.)	1388 kg (3,061 lb.)		
w =				1261 kg (2,780 lb.)	1451 kg (3,199 lb.)		
X -	-	_	_	1446 kg (3,188 lb.)	1666 kg (3,674 lb.)		
Υ —				1986 kg (4,377 lb.)	2289 kg (5,047 lb.)		

Lift capacities are over end with stabilizers down and tires tangent to ground.

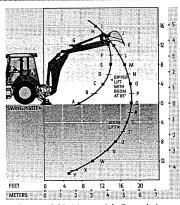
lift Canacities (continued) [see line art and charts below] 320 P-TIER HEAVY-LIFT (HL) OPTIC



With Standard Dipperstick



With Extendable Dipperstick, Retracted



With Extendable Dipperstick, Extended

Lift capacities are over-end values in kg (lb.). Figures listed are 100% of the maximum lift force available.

With Standard Dipperstic		With 106-m (3.ft 6 in 1.f	xtendable Dipperstick, Retract	ed With 1.06-m (3 ft. 6 in.) E	ktendable Dipperstick, Extended
Standard Lift	Lift Mode	Standard Lift	Lift Mode	Standard Lift	Lift Mode
A 5625 kg (12,402 lb.)	5625 kg (12,402 lb.)	5350 kg (11,795 lb.)	5350 kg (11,795 lb.)	4082 kg (8,999 lb.)	4537 kg (10,003 lb.)
B 4697 kg (10,356 lb.)	4697 kg (10,356 lb.)	3613 kg (7,966 lb.)	3613 kg (7,966 lb.)	2709 kg (5,972 lb.)	3018 kg (6,653 lb.)
C 3547 kg (7,819 lb.)	3547 kg (7,819 lb.)	3204 kg (7,064 lb.)	3204 kg (7,064 lb.)	2366 kg (5,216 lb.)	2638 kg (5,817 lb.)
D 3220 kg (7,098 lb.)	3220 kg (7,098 lb.)	3122 kg (6,883 lb.)	3122 kg (6,883 lb.)	2231 kg (4,918 lb.)	2412 kg (5,317 lb.)
E 3164 kg (6,976 lb.)	3164 kg (6,976 lb.)	3117 kg (6,871 lb.)	3282 kg (7,235 lb.)	2153 kg (4,747 lb.)	2295 kg (5,059 lb.)
F 3095 kg (6,823 lb.)	3327 kg (7,336 lb.)	1317 kg (2,903 lb.)	1496 kg (3,297 lb.)	2088 kg (4,604 lb.)	2268 kg (5,000 lb.)
G 1472 kg (3,244 lb.)	1645 kg (3,627 lb.)	1649 kg (3,636 lb.)	1871 kg (4,125 lb.)	2004 kg (4,418 lb.)	2236 kg (4,931 lb.)
H 1801 kg (3,971 lb.)	2016 kg (4,445 lb.)	1744 kg (3,845 lb.)	1980 kg (4,365 lb.)	1851 kg (4,080 lb.)	2067 kg (4,557 lb.)
1. 1907 kg (4,204 lb.)	2136 kg (4,710 lb.)	1767 kg (3,896 lb.)	2008 kg (4,428 lb.)	904 kg (1,992 lb.)	1031 kg (2,273 lb.)
J 1940 kg (4,278 lb.)	2176 kg (4,798 lb.)	1761 kg (3,883 lb.)	2004 kg (4,418 lb.)	1152 kg (2,540 lb.)	1312 kg (2,892 lb.)
K 1944 kg (4,285 lb.)	2182 kg (4,810 lb.)	1743 kg (3,843 lb.)	1986 kg (4,378 lb.)	1267 kg (2,793 lb.)	1442 kg (3,179 lb.)
L 1933 kg (4,262 lb.)	2172 kg (4,789 lb.)	1720 kg (3,792 lb.)	1962 kg (4,326 lb.)	1326 kg (2,923 lb.)	1509 kg (3,327 lb.)
M 1918 kg (4,228 lb.)	2156 kg (4,754 lb.)	1698 kg (3,743 lb.)	1939 kg (4,275 lb.)	1356 kg (2,989 lb.)	1545 kg (3:405 lb.)
N 1902 kg (4,192 lb.)	2140 kg (4,719 lb.)	1679 kg (3,702 lb.)	1921 kg (4,235 lb.)	1370 kg (3,021 lb.)	1562 kg (3,444 lb.)
0 1889 kg (4,166 lb.)	2129 kg (4,693 lb.)	1669 kg (3,680 lb.)	1912 kg (4,215 lb.)	1376 kg (3,033 lb.)	1570 kg (3,461 lb.)
P 1886 kg (4,157 lb.)	2126 kg (4,688 lb.)	1674 kg (3,691 lb.)	1920 kg (4,234 lb.)	1377 kg (3,035 lb.)	1573 kg (3,467 lb.)
Q 1897 kg (4,183 lb.)	2142 kg (4,722 lb.)	1711 kg (3,773 lb.)	1965 kg (4,333 lb.)	1376 kg (3,034 lb.)	1574 kg (3,470 lb.)
R 1941 kg (4,279 lb.)	2194 kg (4,836 lb.)	2057 kg (4,535 lb.)	2119 kg (4,671 lb.)	1376 kg (3,034 lb.)	1576 kg (3,474 lb.)
S 2077 kg (4,578 lb.)	2350 kg (5,181 lb.)	2057 kg (4,535 lb.)	2365 kg (5,213 lb.)	1380 kg (3,042 lb.)	1582 kg (3,487 lb.)
T 3270 kg (7,210 lb.)	3709 kg (8,176 lb.)			1390 kg (3,065 lb.)	1595 kg (3,516 lb.)
U. —				1412 kg (3:113 lb.)	1622 kg (3,575 lb.)
V —	-			1457 kg (3,212 lb.)	1674 kg (3,691 lb.)
W				1556 kg (3,430 lb.)	1789 kg (3,944 lb.)
X —				1873 kg (4,130 lb.)	2154 kg (4,748 lb.)
Υ —				2846 kg (6,274 lb.)	3266 kg (7,200 lb.)

Additional equipment

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

- Coolant recovery tank with low-level indicator
- Foldout, hinged cooling system
- Serpentine belt with automatic belt tensioner
- Electronically controlled, variable-rate suctiontype cooling fan
- Self-cleaning exhaust aftertreatment system
- Chrome exhaust extension
- 1,000-watt electric engine coolant heater
 - Electronic fuel lift pump

Powertrain

- PowerShift™ transmission: Torque converter with twist-grip TCL and neutral safety switch interlock (1st through 5th gears)
- 5th-gear overdrive
- AutoShift transmission
- Transmission oil cooler •
- Transmission remote oil-sampling port
- Differential lock, electric foot actuated, protection • on/off (software enabled)
- Auto shutdown
- Planetary final drives
- Power-assisted hydraulic service brakes (conform to ISO 3450): Inboard, wet multi-disc, self-adjusting and self-equalizing
- Parking/emergency brake with electric switch control (conforms to ISO 3450): Spring applied, hydraulically released wet multi-disc / Independent of service brakes
- Hydrostatic power steering with emergency manual mode
- Non-powered front axle
- Mechanical-front-wheel drive (MFWD) with traction-control limited-slip differential: Electric on/off control / Sealed axle
- Automatic MFWD braking
- MFWD driveshaft guard
- Backhoe
- Lift mode
- Precision mode Standard dipperstick digging depth
- 4.35 m (14 ft. 3 in.) [4.59 m (15 ft. 1 in.) for Heavy-Lift (HL) configuration]
 - Extendable dipperstick extension
- 1,06 m (3 ft. 6 in.)
- Heavy-duty (HD) backhoe bucket cylinder (standard for HL configuration)
- ISO (Deere) 2-lever mechanical backhoe controls (not available for HL configuration)
- 2-lever pilot controls with pattern-selection feature (standard for HL configuration)
- Backhoe transport lock lever
- Swing lock pin stored in operator's station
- Stabilizers with 2-direction anti-drift valves
- Extended (long) stabilizers with reversible pads (standard for HL configuration)
- ▲ Severe-duty backhoe bucket with lift loops
 - Backhoe couplers for John Deere, Case, and Cat buckets

Backhoe (continued)

- Auxiliary backhoe valve with 1-way flow for hammers and compactors with plumbing
- Auxiliary backhoe valve with 1- and 2-way flow. for swingers, thumbs, augers, etc. with plumbing
- Hydraulic thumb
- Rear hydraulic coupler
- Spring-type coupler

Loader[†]

- Loader bucket anti-spill (rollback)
- Return-to-dig feature
- Single-lever control with electric clutch disconnect
- Bucket-level indicator
- Loader boom service lock
- Loader valve with integrated anti-drift checks for hydraulic cylinders controlling loader boom up and bucket dump
- Auxiliary loader hydraulics with single control lever with EH auxiliary control (MFWD and clutch disconnect)
- Hydraulic coupler for buckets, forks, etc.
- Auto ride control

Hydraulic System

- 163-L/m (43 gpm) axial-piston pump, pressurecompensated load-sensing (PCLS) system
- Auto-idle
- Economy mode
- Dedicated hydraulic reservoir
- Electrical System 12-volt system
- 145-amp alternator
- Single battery with 175-min. reserve capacity and
- Dual batteries with 350-min, reserve capacity and 1,900 CCA
- Remote jump posts and battery disconnect
- Halogen lights (10), 32,500 candlepower each (4 front driving/working, 4 rear working, and 2 side docking)
- Turn signal/flashing (2 front and 2 rear)
- Rear stop and tail (2)
- LED light package
- Boom-light field kit (2 LED floods)

Operator's Station

- Modular-design ROPS/FOPS (Level 2) canopy with molded roof (meets ISO 3449 and ISO 3471/ SAE J1040): Isolation mounted
- Molded floor mats (with pilot controls only)
- 12-volt outlet
- Lockable right-side storage .
- Lockable left-hand storage with cup holders
- Interior front-view mirror
- Outside rearview mirrors •
- Rotary-dial hand throttle
- Suspended foot throttle
- Mechanical-suspension seat, cloth cover
- Air-suspension heated seat (with cab only)
- Air-suspension vinyl seat

320 P Operator's Station (continued)

- Tilt steering, infinitely adjustable (with cab only)
- Tilt steering, infinitely adjustable (with canopy and quarter cab)
- Keyless start
- Machine security (enabled through monitor)
- Digital display of engine hours, engine rpm, and svstem voltage
- Sealed-switch module (SSM)
- Multi-function lever: Turn signals / Windshield wipers / Some light functionality
- Monitor system with audible and visual warnings: Engine air restriction / Low alternator voltage / Engine oil pressure / Hydraulic filter restriction / Parking brake on/off / Aftertreatment temperature / Transmission fluid temperature / Fuel / Hour meter / Machine diagnostic information via 4-push-button/LCD operator interface
- Canopy: Mechanical-suspension deluxe vinyl swivel seat with lumbar adjustment and armrests (fully adjustable)
- Quarter Cab: Mechanical-suspension deluxe vinyl swivel seat with lumbar adjustment and armrests (fully adjustable), front windshield, and windshield
- Cab With Dual Doors and A/C: Mechanicalsuspension deluxe fabric swivel seat with lumbar adjustment / Headliner, dome light, left and right cab doors, tinted safety glass, windshield wipers (1 rear and 1 front), front windshield washer, freshair intake, and heater/defroster/pressurizer (11.7-kW [40,000 Btu/h] heater) / A/C (7.6-kW [26,000 Btu/h] output and CFC-free R134a refrigerant
- AM/FM/weather-band (WB) radio (with cab only)
- Premium radio package (with cab only; includes additional 12-volt and USB outlets)

Overall Vehicle

- 1-piece unitized construction mainframe
- Vehicle tie-downs (2 front and 2 rear)
- Remote grease bank for front axle
- Front bumper cover
- HD front bumper
- Front counterweight 204 kg (450 lb.), 340 kg (750 lb.), 454 kg (1,000 lb.), or 567 kg (1,250 lb.)
- Rubber grille bumpers
- Fuel tank, 128.7 L (34 gal.), ground-level fueling
- 2-position easy-tilt hood
- Extended grille frame •
- Toolbox with padlock hasp
- Vandal protection for locking monitor, engine hood, toolbox, hydraulic reservoir, and fuel tank
- Reverse warning alarm
- Dent-resistant full-coverage rear fenders
- Backhoe boom-protection plate
- JDLink wireless communication system (available in specific countries; see your dealer for details)
- HD front grille screen

▲ HD stabilizer pads *See dealer for range of HD, multipurpose, and coupler buckets and forks.