



INVITATION TO BID

(This is not an order.)

CITY OF CLEVELAND

Division of Purchases & Supplies
 601 Lakeside Avenue
 Room 128
 Cleveland, OH 44114

Buyer: Tiffany Johnson
 216-664-2620
 TWhiteJohnson@city.cleveland.oh.us

Requestor: Richard Switalski
 216-664-2390
 rswitalski@city.cleveland.oh.us

Procurement Folder	RFB No.	RFB Description	
147752	RFB 0103 202400000000312	Repair of non-complaint sidewalk	
RFB Closing Date/Time		Department/Division	Public Bid Opening Date/Time
July 15, 2024 3:00 PM		0103	July 15, 2024 3:00 PM

SCHEDULE OF EVENTS

Event Description			Event Date	
Group/Line#	Commodity Description	Item Quantity/UOM	Service Dates	Catalog Discount
1 / 1	Sidewalk, Remove & replace for Wards 1,2,4 and 8		From To	

Sidewalk, Remove & replace for Wards 1,2,4 and 8

Ship To:
 Engineering and Const. - Admin
 Engineering and Const. - Admin
 601 Lakeside Ave, Room 518
 Cleveland, OH 44114

Vendor Response		
		Contract Amount
	\$	

Vendor Response	Vendor Total Amount for Items	Vendor Total Amount for Services	Payment Discount Offer	
	\$	\$	%	Day(s)

TERMS OF DELIVERY

- Price quoted shall be F.O.B. delivered to the place designated on purchase order. No other terms will be acceptable.
- Delivery quoted must be stated in terms of work days after receipt of the order.
- All charges for shipping must be included within the Unit Price for each item quote unless otherwise designated by a separate line with a specified dollar amount inclusive of all shipping charges.
- No freight charges will be considered nor processed for payment unless apart of the original quote submitted prior to bid award.

BIDDER AGREES TO COMPLY WITH ALL TERMS AND CONDITIONS BELOW AND ON REVERSE SIDE OF THIS BID

No Price increase

This Purchase Order does not permit price increases.

Equal Opportunity Clause

The enclosed Section 187.22(b) is hereby incorporated in its entirety

Missing information

It is each bidder's individual responsibility to determine for themselves, in advance of bid submission, the accuracy and completeness of any and all information in an RFB. If a potential bidder does not notify the Division of Purchases and Supplies in advance of the bid opening date of any possible discrepancy then any such discrepancy or erratum cannot be the basis for a protest of award. Contact the Buyer immediately if there is a question of accuracy or completeness in these bid documents.



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BIDDER MUST COMPLETE & SIGN BELOW

NAME OF THE FIRM:		
STREET ADDRESS:		
CITY:	STATE:	ZIP CODE:
FED ID # / SSN #:		
PHONE NO.:	FAX NO.:	
EMAIL ADDRESS:		
PLEASE PRINT CONTACT NAME:		
AUTHORIZED SIGNATURE:	DATE:	

All bids and related documents must be enclosed in a sealed envelope and marked with the RFB number.

RETURN BID TO: Division of Purchases & Supplies
601 Lakeside Ave
Room 128, City Hall
Cleveland, OH 44114

Effective Immediately: In accordance with Codified Ordinance 181.13 (I) the City shall receive competitive sealed bids through email. All City of Cleveland bids estimated to be less than 50K in value will be submitted and received electronically via email. All bids must be emailed to CityofClevelandbids@clevelandohio.gov. Upon receipt of your bid, you will receive a reply indicating your bid has been received.

Bidder's Instructions

See enclosed Terms & Conditions. Read and follow all terms and conditions of the bid.

Bids must be submitted to CityofClevelandbids@clevelandohio.gov, the Document ID Number and Buyer's Name must be identified in the email subject line. Also clearly state the Document ID Number, Bid Description, Buyer's Name and Closing Date.

Bids received after the Closing Date, Closing Time and sent to any other email address not identified in the Bidders Instruction cannot be considered.

Northern Ireland Affidavit must be completed, signed and included with each bid.

The bid must be submitted to: CityofClevelandbids@Clevelandohio.Gov

Bids received after the Closing Date, Closing Time and sent to any other email address not identified in the Bidders Instruction cannot be considered.

The bid documents must include:

- The Document ID Number and Buyers Name in email subject line
- PDF File of Request For Bid Form
- Terms & Conditions.
- Northern Ireland Affidavit.

Contact the Buyer immediately at the number on the Bid Form if you do not have all the required documents.

TERMS AND CONDITIONS

1. **Acceptance of Purchase Order.** This Purchase Order shall be effective when Seller executes it, otherwise indicates its acceptance, or delivers to the City of Cleveland any of the goods ordered herein or renders for the City any of the services ordered herein. If this Purchase Order has been issued by the City in response to an offer, then the issuance of this Purchase Order by the City shall constitute an acceptance of such offer subject to the express condition that the Seller assent to any additional or different terms contained herein. Any additional or different terms or conditions contained in any acknowledgement of the purchase by the Seller shall automatically be deemed objected to by the City and shall not be binding upon the City unless specifically accepted by the City in writing.
2. **Entire Agreement.** This order, the instructions to bidders, the Request for Bid, the Bid Schedule of Items, and any specification and/or other attachments, if any, incorporated hereby by reference, constitute the entire agreement between the parties and replaces and supersedes any prior or contemporaneous communications, representations, or agreements, whether oral or written with respect to such matter.
3. **Indemnification.** Seller shall indemnify, defend, and hold harmless the City, its officers, agents, and employees from all claims, demands, liabilities, losses, suits, cause of action, judgments, costs, and expenses, including attorneys' fees, arising, occurring, or allegedly arising or occurring from the 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 of Seller or its agents, employees, subSellers or suppliers, in the furnishing of the goods covered by this PO, or because of any imperfection or defect in said goods, or based upon any claim of product liability of strict liability in tort, or because of the failure of such goods to be in accordance with the description of such goods as may appear in any catalog, analytical information report or other technical bulletin as is furnished or used by the City, or because of the failure of such goods to be produced in compliance with the requirements of this PO.
4. **Limit of Liability.** In no event shall the City be liable for anticipated profits, incidental or consequential damages, or penalties of any description. The City's liability on any claim arising out of or connected with or resulting from this contract or from the performance or breach thereof shall in no case exceed the price allocable to the goods or services or unit thereof which gives rise to the claim.
5. **Remedies.** The city's remedies shall be cumulative and remedies herein specified do not exclude any remedies allowed by law or in equity. Waiver of any breach shall not constitute waiver of any other breach of the same or any other provision. Acceptance of any items or payment therefore shall not waive any breach.
6. **Default.** Payment or acceptance of any items after the delivery date shall not constitute a waiver of the City's right to cancel this order with respect to subsequent deliveries. The City reserves the right to reasonable testing and inspection before payment or acceptance. The City's failure to inspect and accept or reject goods, materials, or articles shall not relieve Seller from liability for tender or delivery of nonconforming goods nor constitute a waiver of any of the City's rights or remedies for breach of contract. The City reserves the right to reject any or all items not in conformity with the specifications noted within this purchase order in any respect.
7. **F.O.B. Destination.** Freight terms are F.O.B. Destination, Freight Prepaid, unless otherwise approved in writing by the Commissioner of Purchases and Supplies.
8. **Non-Assignment.** Neither this contract, nor any interest herein, shall be assigned or subcontracted by the Seller except upon the prior written consent of the City.
9. **Patent, Trademark or Copyright Infringement.** Seller agrees to defend, entirely at its own expense, all claims, demands, and actions that may be asserted against the City for all alleged patent, trademark, and/or copyright infringement resulting from the use or resale of goods covered by the PO, and to indemnify and hold the City harmless against all costs, expenses, legal fees, and judgments related to such claims, demands, and actions.
10. **Timing.** Time is of the essence in this contract. Failure to deliver within the time specified shall entitle the City, in addition to any other rights or remedies, to cancel this order and purchase the goods elsewhere, in which event the Seller shall be responsible for any increase in cost.
11. **Implied Warranty.** In addition to its standard warranty, Seller warrants that all goods supplied will be free and clear of all liens and encumbrances, good and merchantable title being in the Seller. Upon receipt by Seller of payment, good and merchantable title will vest in the City. All goods will be free from any defects in design, materials or workmanship and will be of good and merchantable quality. All goods will conform to the City's specifications or the approved sample as the case may be, and will be fit for the known purposes for which purchased, and that Seller will not substitute anything without the City's written consent.
12. **Change Orders.** No changes in the PO, its prices, terms, conditions, length, or attachments are permitted, without the City's prior written approval.
13. **Cancellation.** The City shall have the right to cancel this order, or any undelivered portion of this order, without cause, and its liability for such cancellation shall be limited to Seller's actual cost for work and materials applicable solely to this order that have been expected when Seller receives notice of cancellation. The City may, at its option, cancel this order without liability to Seller (except for conforming shipments the City previously accepted) if Seller (a) ceases to exist, (b) becomes insolvent, (c) becomes the subject of bankruptcy or insolvency proceedings, or (d) commits a breach in the performance of any obligation under this agreement or of any other written agreement with the City of Cleveland.
14. **Compliance with Laws.** Seller shall comply with all federal, state, and local laws, ordinances, rules, and regulations in the manufacture and sale of the goods and performance of the services. Seller shall defend and hold the City harmless from any losses, damages, or costs arising from or caused in any way by Seller's actual or alleged violation of any federal, state, or local law, ordinance, rule or regulation.
15. **Access to Records.** Seller shall provide access to pertinent records relative to this contract/order for a period of three (3) years after the last receipt of payment is made under this contract/order, whichever occurs last.
16. **Material Safety Data Sheets:** Any substance delivered as a part of this order must be properly labeled in accordance with all applicable regulations and must be accompanied by a Material Safety Data sheet (MSDS).
17. **Venue.** Any dispute arising under this order not disposed of by agreement shall be decided by a court of competent jurisdiction in Cuyahoga County in the State of Ohio. Pending settlement on final decision of any dispute, Seller shall proceed diligently with the performance of this order in accordance with the City's direction. The Charter and Ordinance of the City of Cleveland shall govern.
18. **Tax.** Buyer is exempt from Federal and State taxes for tangible personal property. Sellers doing business with the Buyer may not be exempt from paying sales tax to their suppliers for materials to fulfill contractual obligations with the Buyer, nor shall any Seller be authorized to use the Buyer's Tax Exemption number in acquiring such materials, without the prior issuance of a signed Tax Exemption Certificate. A Tax Exemption Certificate is available upon written request.
19. **Documentation.** Seller shall clearly mark all documentation with the applicable valid PO number.
20. **Payment Terms.** Payment will be made in accordance with the terms on the face of this contract, or the Seller's invoice, whichever are more favorable to the City and payment date therefore shall be calculated from the receipt of invoice or receipt or final acceptance of the goods or services, whichever is later. All claims for money due or to become due from the City shall be subject to deduction or setoff by the City by reason of any counterclaim arising out of this or any other transaction with the Seller. The acceptance by the Seller of final payment shall operate as a full and complete release of the City. No payment for goods or services shall constitute acceptance of any defective or nonconforming goods or services by the city. Unless otherwise stated in the PO, the terms of payment shall be net 30 days from the receipt of a proper invoice. It shall be understood that the cash discount period, if any, to the City will date from receipt by the City of acceptable goods and invoice and not from date of invoice.
21. **Insurance.** Unless otherwise stated in the specifications, whenever labor is involved, the Seller shall procure and maintain insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the services, materials, equipment and/or supplies provided to the City. The insurer(s) must be licensed for business in the State of Ohio and maintain an A.M.Best rating of no less than A: VII or be an insurer approved by the City. The Seller shall submit all required insurance certificates to the City before commencing work. The City is to be added to each policy as an additional insured. The Seller shall notify the City in writing at least 30 days before it cancels or reduces its insurance policy or coverage and immediately upon the Company's receipt of notice from the carrier of any cancellation or reduction of the coverage or policy. Seller must demonstrate the following minimum insurance coverage in accordance with the estimated value limits: 1) **Purchases less than \$50,000:** General Liability Insurance, with a \$500,000 combined single limit. 2) **Purchases \$50,000 and over:** General Liability Insurance with bodily injury and property damage limits of \$1,000,000 for each occurrence with a \$2,000,000 general aggregate and \$2,000,000 products and completed operations aggregate. Automobile Liability Insurance must be in effect for any owned, hired and non-owned vehicle used in the performance of the work, with bodily injury limits of \$1,000,000 for each person and \$1,000,000 for each accident, and with property damage limits of \$1,000,000 for each accident; OR \$1,000,000 combined single limits, including bodily injury and property damage. The above limits are the minimum acceptable and do not infer or place a limit on the liability of the Seller. The Seller's insurance shall be primary and any insurance or self-insurance maintained by the City shall be excess for the City and not contribute with the coverage maintained by the Seller.
22. **Workman's Compensation:** Whenever labor is involved, the Seller shall subscribe to and comply with the Workmen's Compensation Laws of the State of Ohio and pay such premiums as may be required there under and to save the City harmless from any and all liability arising from or under said act. He shall also furnish a copy of the official certificate or receipt showing the payments herein referred to before commencing any work.
23. **Authority to Bind.** All parties to this order agrees that the representatives named herein, including in all attachments, possess full and complete authority to bind said parties.
24. **Inspection and Acceptance.** No material received by the City pursuant to the purchase order issued under the terms and conditions of this bid document shall be deemed accepted until the City has had reasonable opportunity to inspect said material. All material which is discovered to be defective or which does not conform to any warranty of the Seller herein, upon initial inspection, or at any later time if the defects contained in the material were not reasonably ascertainable upon the initial inspection, may be returned at the Seller's expense for full credit or replacement. No goods returned as defective shall be replaced without written authorization from the Commissioner of Purchases and Supplies. Such return shall in no way affect the City's discount privileges. Such right to return, offered to the City arising from the City's receipt of defective goods, shall not exclude any other legal, equitable or contractual remedies the City may have therefore.
25. **Non-appropriation of Funds.** As with any other public entity, an Agreement, Contract, or issuance of Purchase Order by the City is contingent upon the legal availability of funding and the allocation of said funds. The City reserves the right to cancel any ongoing Agreement, Contract, or Purchase Order immediately, by giving written notice to the Seller, in the case of a failure by the appropriating body to appropriate funds or funding for the specific project, commodity or service.
26. **Equal Opportunity.** This Agreement is a "contract", and the Seller is a "contractor" within the meaning of Chapter 187 of the Codified Ordinances of Cleveland, Ohio 1976. During the term of this Purchase Order, the Seller shall comply with all terms, conditions and requirements imposed on a "contractor" in the Equal Opportunity Clause, Section 187.22(b) C.O., and herein made a part of this Agreement by reference. A complete copy of the Equal Opportunity Clause is available at the City of Cleveland website.

Subject: Submission of NORTHERN IRELAND FAIR EMPLOYMENT PRACTICES DISCLOSURE

Each bidder and/or appropriate parties should complete the DISCLOSURE 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 prior to any contract being awarded by the City. If a bidder or appropriate parties fail to complete and submit it, they shall not be eligible for a contract award.

NORTHERN IRELAND FAIR EMPLOYMENT PRACTICES DISCLOSURE

INSTRUCTIONS: Pursuant to Codified Ordinance Sec. 181.36, 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 prior to any contract being awarded by the City of Cleveland. Any Contractor or Subcontractor who is deemed to have made a false statement shall be declared to have acted in default of its contract and shall be subject to the remedies for default contained in its contract. For failure to cure such a default, the Contractor or Subcontractor shall be automatically excluded from bidding for the supply of any goods or services for use by 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
By: _____
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.



**City of Cleveland
Mayor's Office of Capital Projects
Division of Engineering and Construction**

Contract and Specifications

**For
50/50 Sidewalk Residential Replacement Program
Contract #4 (Ward 1, 2, 4, & 8)**

June 2024

Notice to Bidders

1. The Contract work shall be performed during the period of 24 months starting from the date of the Notice to Proceed. The Contractor shall complete the work required in full compliance with the specifications and shall be acceptable to the City Engineer or designated person.
2. The safety requirements of the State of Ohio, Ohio Administrative Code, and Chapter 4, 121:1-3 will be enforced during the contract term. The Ohio Bureau of Workers Compensation, Division of Safety and Hygiene book, "Specific Safety Requirements of the Ohio Bureau of Workers Compensation Relating to Construction", is hereby incorporated into these specifications.
3. An optional pre-bid conference for this project has been scheduled on **Tuesday July 9, 2024 at 9:00 am**. It will be a recorded virtual Microsoft Teams meeting, which can be accessed by any of the methods described below:

Microsoft Teams [Need help?](#)

[Join the meeting now](#)

Meeting ID: 228 476 611 833

Passcode: u898Mv

Dial in by phone

[+1 216-306-2628,,559053380#](#) United States,
Cleveland [Find a local number](#)

Phone conference ID: 559 053 380#

4. Please note that the deadline for all bidders' questions shall be **Thursday, July 11, 2024 at 5:00 pm**. Absolutely no further questions will be accepted after the deadline.
5. The City will provide responses and any addendum if needed by **Friday July 12, 2024**.
6. **Bids will be opened on Tuesday, July 16, 2024 at 12 pm.**

**50.50 RESIDENTIAL SIDEWALK REPAIR PROGRAM
SCHEDULE OF ITEMS - WARD 1, 2, 4, 8**

BID ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	TOTAL COST (\$)
1	Item Special - Mobilization & Traffic Control as per D-4	LS		1	\$ -
2	Item 608 - 4" Concrete sidewalk including removal and disposal of existing sidewalk, driveway, apron, treelawn and excavation or embankment, complete in place, as per D-16 & D-17	SQ. FT.		1502	\$ -
3	Item 608 - 6" Concrete sidewalk, driveway aprons including removal and disposal of existing sidewalk, driveway, apron, treelawn and excavation or embankment, complete in place, as per D-16 & D-17	SQ. FT.		149	\$ -
4	Item 609 - Concrete Type 6 curb cast in place, including removal and disposal of existing curb, complete in place, as per D-16 & D-17	FOOT		110	\$ -
5	Item 202 - Unsuitable Subgrade, as per D-23	SQ. FT.		24	\$ -
6	Bond Fees, as per D-24	LS		1	\$ -
SUBTOTAL (\$)					\$ -
10% CONTINGENCY (\$)					\$ -
GRAND TOTAL (\$)					\$ -

Part E - SIDEWALK REPAIR LOCATIONS- Wards 1,2,4, & 8

No.	Address
1	4407 Archer Rd (Archer Frontage)
2	4407 Archer Rd (Millcreek Frontage)
3	300 E 151st St.
4	17819 Landseer Rd.
5	3549 E 110th St.
6	17216 Walden Ave.
7	16006 Holmes Ave.
8	4238 MLK Jr. Dr.
9	11324 Clarebird Ave
10	4159 E. 142nd St
11	17704 Schenely ave
12	12018 Soika ave
13	16106 Stockbridge Ave.

PART D – DETAIL SPECIFICATIONS

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PART D – DETAIL SPECIFICATIONS

D-01 PROJECT SCOPE

The Contractor shall perform only such work under this Contract as the Administrative Manager of the Division of Engineering & Construction, or the Manager's designee, orders by signed work with, when necessary, one or more plan attachments.

The Division intends to utilize all unit items listed in this Contract on an "as needed" basis for existing and new construction ordered.

The Contract is subject to having at least two (2) separate crews. The City reserves the right to require additional crews as needed to complete the work. A crew will consist of all equipment and manpower required to complete the work within the allocated time as determined by the City.

D-02 SEASONAL SUSPENSION OF WORK

Prior to the seasonal suspension of work the Contractor all areas and locations disturbed by the contractor's operation must be restored to a safe and passable condition for pedestrian and vehicular access as determined by the Engineer.

Temporary sidewalk installation, if necessary, shall be constructed as per ODOT Item 608 concrete walk. Temporary street installation, if necessary, shall be constructed using 12" of ODOT Item 304 aggregate base per ODOT CMS with the dimensions for same to be approved by the Engineer.

Temporary work due to seasonal suspension of work will be maintained for the duration of the suspension and at the Contractors expense. All temporary work will be removed and replaced with permanent construction materials at the resumption of Contractor operations, weather permitting.

D-03 CONTRACTOR OVERTIME

Unless the requirement is specifically replaced in the City specifications, the Contractor shall pay for any overtime which requires City inspection. Prior to the commencement of construction the Contractor shall deposit a minimum of \$1,000 with the Division of Accounts to cover the City inspector's overtime costs.

Any remaining balance will be returned to the Contractor after the project has been completed. No additional compensation shall be given for such expense. If the deposit is exhausted before the end of the project, another minimal deposit of \$1,000 will be required before any additional overtime work is authorized. The estimated overtime rate for inspection shall be the current billing rate established by the City of Cleveland.

PART D – DETAIL SPECIFICATIONS

D-04 MOBILIZATION AND MAINTENANANCE OF TRAFFIC (ITEM SPECIAL)

This work shall consist of Mobilization and Maintenance of Traffic for Work assigned.

The unit item cost shall include work and all incidentals necessary to mobilize onsite and maintain vehicular and pedestrian traffic with the exception of advance parking notice signage, the MOT plan, and detour routes, which shall be provided by the Division of Traffic Engineering through the Engineer. Law enforcement officers shall be provided through the Cleveland Police Department unless otherwise indicated under a separate bid item. The contractor shall furnish and maintain all necessary safeguards as detailed in ODOT Item 614 Maintaining Traffic so as to avoid damage and/or injury to vehicles and persons using the roadway during construction.

Examples of incidentals for mobilization include, but are not limited to, fuel costs, hourly equipment costs, and all labor, operator, supervisor, or administration costs for same. Examples of incidentals for maintenance of traffic include, but are not limited to, traffic compacted surface (Type A or B), temporary asphalt concrete walk, temporary ramping of driveways and/or castings, work zone pavement markings and signage, plastic drums, Type III barricades, lighting, flaggers, and administrative costs for same.

Unless directed by the Engineer, safe and satisfactory access for abutting properties and adjacent streets shall be maintained AT ALL TIMES by the Contractor through the use of partial width construction. The contractor shall divert traffic from normal channels through the use of plastic drums, traffic signs, and pavement markings as per the work MOT plan. All construction traffic control devices used shall conform to the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) for streets and shall be furnished, erected, maintained, and removed by the Contractor with the exception of the advance parking notice signage.

All existing lanes shall be open to traffic between November 15 and March 15.

Two-way traffic shall be maintained at all times on the side streets adjacent to the roadway location listed in the work and is incidental to the maintenance of traffic work.

The Contractor shall furnish and supply water for dust control as directed by the City at no cost to the City.

The construction drums and signage which become damaged by traffic for reasons beyond the control of the contractor shall be replaced in kind at no cost to the City when ordered by the City.

The acceptance and payment of the maintenance of traffic is subject to the Contractor setting a proper zone for the work as per the OMUTCD. At the acceptance of the work completion, all maintenance of traffic items shall be removed at no cost to the City when ordered by the City. In no case shall maintenance of traffic items be stored or remain in the right-of-way for more than thirty days.

PART D – DETAIL SPECIFICATIONS

D-05 MAINTAINING PEDESTRIAN ACCESS

Pedestrian Access to all property owners, including residences and businesses, shall be made available at all times during construction. The contractor shall make available during the construction, steel plates, bridges, or other means approved by the engineer to bridge across open excavations to provide pedestrian access full time (24 hr – 7 days a week) to abutting properties at locations determined by the Superintendent of Sidewalks. A minimum of 72 hours prior to starting the removal of any paved surface the contractor shall inform the residents by letter approved by the Superintendent of Sidewalks stating the extent of work, start of work date and a 24 hour phone number in which the contractor can be reached in case of emergency.

D-06 COMPLETE IN PLACE ITEMS

Items labeled “COMPLETE IN PLACE” in their item description shall include all the work necessary to accomplish the job; the work may include but not restricted to the following: saw-cut, removal, disposal, minor excavation, sub-grade compaction, furnishing and providing required sub-grade, dowelling holes, dowels, reinforcement, all form and material to build the structure, providing or cutting joints, joint fillers, joint sealers, curing agents, surface treatments, all surrounding disturbed area restoration and other relevant work which is necessary but not being paid separately.

D-07 CONSTRUCTION SCHEDULE

This specification replaces Part C-9 Contractor Schedule in the Supplemental Conditions.

For each work, the Contractor shall provide, at a minimum, a completion date for the work for each location. The Contractor shall also furnish weekly schedule updates during active construction seasons.

If requested by the City, the Contractor shall provide two (2) copies of the current construction schedule. This schedule must be provided within five (5) days of receipt of each work. The failure to providing a schedule in the allocated time will be considered a delay in the completion of the work.

The schedule duration for most local street resurfacing is expected to be no more than three weeks after the beginning of milling operations. The schedule will also include the clean-up and restoration of the work site work which will occur within fourteen (14) days after the completion of the work work along with removal of all forms, pins, and any other items brought to the site by the Contractor.

An excusable delay in the completion of the work work is defined in Part B-6 of the General Conditions. An extension of time to the work schedule will be granted for reasons as stated in Part B-6 and as determined by the City. No other compensation will be provided for delays in the completion of the work.

PART D – DETAIL SPECIFICATIONS

D-08 CONTRACTOR WORK HOURS AND NOISE CONTROL

The default Contractor work hours shall be an eight-hour day, five days a week for a maximum of 40 hours, unless a different work schedule has been submitted by the Contractor and approved by the City.

The Contractor shall restrict his working hours to those permitted by local or other applicable ordinance, laws and regulations unless a written variance has been accepted from the appropriate governing authorities.

The noise level resulting from Contractor operations shall be within the limits specified by local ordinances and OSHA regulations.

D-09 RESTORATION OF ROADWAYS, DRIVEWAYS, SIDEWALKS, CURBING, AND TREELAWNS

The Contractor shall properly and promptly restore all roadways, driveways, sidewalks, curbing, and treelawns not designated on the plans that have been damaged or disturbed during construction or due to Contractor negligence at no cost to the City.

The areas for restoration also include behind the sidewalk and the Right-of-Way line.

Partial restoration will be permitted only if approved by the City and granted by the Engineer.

D-10 INCONVENIENCE TO THE PUBLIC

The construction work shall be done in a timely and efficient manner to minimize the inconvenience to the general public. With the exception of the seasonal suspension of work, the Contractor shall submit bi-weekly updated construction schedules to the Engineer prior to construction progress meetings and as part of the invoice submittal process to ensure the work is occurring in a timely and efficient manner. The schedule submittal shall be done at the Contractor's expense and at no cost to the City.

D-11 WORK PERMITS AND FEES

The Contractor shall obtain all work permits and pay all applicable fees to the respective municipalities, regional agencies, and the City of Cleveland for project construction work. Fees include cost for plan reviews, utility field inspection, and utility connection fees. The cost for said fees shall be included in the applicable unit prices bid by the

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Contractor and the City will not reimburse the Contractor for fees incurred during construction unless otherwise noted in the plans or supplemental specifications.

D-12 WATER SUPPLY

Water will be supplied to the Contractor at the nearest hydrant. The cost of the water supply and permit fees for same shall be paid by the Contractor. The Contractor shall obtain the necessary permit from the City of Cleveland Water Department.

The Contractor will be required to provide approved standard tight hose and fittings with which to make connections to hydrants and outlets. No improper, wasteful, or undue use of water will be permitted.

Payment for the waste management plan is considered incidental to site mobilization and demobilization and will not be paid for separately.

D-13 REDUCTION/ELIMINATION OF WORK AND/OR INCREASE IN WORK

The City of Cleveland reserves the right to reduce or eliminate portions of work or items of work. If the project is over budget, work will be eliminated and quantities will be adjusted accordingly.

A revised schedule of items will be prepared using the reduced quantities and the bid unit prices and submitted to the Contractor and other vested agencies for review and approval for the adjusted work total.

D-14 MATERIAL DISPOSAL

The Contractor shall institute a waste management plan detailing the procedures for disposal and/or recycling of construction materials for the project. Included in the plan will be the identification of project waste, disposal sites, and the handling of said materials. Payment for the waste management plan is considered incidental to site mobilization and demobilization and will not be paid for separately.

The Contractor shall not dispose of any construction materials or implement the waste management plan prior to the written approval of the waste management plan by the Director of the Mayor's Office of Capital Projects or duly appointed representative.

Payment for the waste management plan is considered incidental to site mobilization and demobilization and will not be paid for separately.

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D-15 EROSION CONTROL (SWPP)

All of the work performed under this contract shall be in compliance with all the pertinent plan specifications and/or details, local regulations, State agencies (i.e. Ohio Environmental Protection Agency), and Federal regulatory agencies regulating the control of erosion and sediment.

At the pre-construction meeting, the Contractor shall submit their SWPP for the erosion and sediment control measures, within the construction limits, for review and acceptance by the City for compliance with all applicable regulations.

Construction shall not begin until all sediment and erosion control measures have been installed and approved by the Engineer.

The City's acceptance does not relieve the Contractor from full compliance with erosion and sediment controls required by the above agencies. It is the Contractor's responsibility to control any sediment or erosion produced by the Contractor's activities.

Sediment controls shall be installed as a first order of work. Sediment controls shall remain in place until the project is completed and disturbed areas are restored.

All devices are to be maintained and kept in good condition. Any additional sediment control devices as directed by the Engineer shall be placed at no additional cost to the City.

After construction of the project, all disturbed areas are to be restored as provided in these specifications and/or plans. Upon approval of the Engineer, the Contractor shall remove all sediment control devices and insure that the project site and structures are in reasonably clean condition. If sediment and erosion control devices fail, the contractor shall clean the site of sediment including all structures and conduits within the project limits at no additional cost to the City.

Those areas outside that are affected by such failure shall also be cleaned at no additional cost to the City.

If no unit bid item is provided in the contract, erosion and sediment control shall be considered incidental to the Project/Bid Items. If erosion and sediment control Unit Bid Items are provided, payment will be made under those bid items.

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D-16 CONSTRUCTION OF CONCRETE BASE, PAVEMENT, SIDEWALKS,

DRIVEWAYS AND CURB (ODOT ITEMS 305, 451, 452, 608 & 609, SPECIAL)

1. WORK INCLUDED

The Contractor under this section of the specifications shall construct concrete base, pavement, sidewalk, driveway aprons, curb, curb and gutter sections, handicap ramps, and integral radius curb and walk. This includes the restoration of all adjacent surfaces which are disturbed by this construction and not scheduled to be restored under a separate item of payment.

2. MATERIALS

The concrete used shall be the concrete design mix as per D-17, as appropriate, of these specifications.

3. GRADING

Grading shall include all excavation, fill, and embankment required to permit the construction of the proposed pavement, sidewalk, driveway aprons, and curb to the designated lines and grades.

a. Excavation

- i. The cost of all excavation for proposed work shall be included in the price bid for the various items of work including removal and disposal. Excavation shall include the removal of all concrete, stone, earth, roots, and other material of every description within the limits of the proposed work.
- ii. Except as otherwise ordered, excavation at the elevation of the finished grade of the construction shall extend one (1) foot beyond each edge and then on a slope of one (1) vertical to one and one-half (1-1/2) horizontal and shall be paid for as excavation at the price per cubic yard for such work as it appears on the price sheet of the contract. When so ordered, excavation shall extend to a sufficient width to permit proper drainage with the cost of excavating beyond the limit stated above paid for as excavation.
- iii. The cost of excavation for a depth in excess of the thickness of the concrete base/pavement slab shall be paid for as excavation at the lump sum or unit price bid for Item 203 - Excavation.
- iv. The Contractor shall use extreme care, by whatever methods and procedures are necessary, in the removal of pavement, sidewalk, driveway aprons, and curb, to ensure that no adjacent slabs beyond those

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marked for removal by the City Inspector will be disturbed, removed or damaged. Should any pavement, walk, driveway apron or curb be damaged, either in whole or in part, other than that which is marked for removal by the City Inspector, the Contractor shall remove and replace said damaged slabs, in whole, without cost to the City.

- b. Fill or Embankment
 - i. Fill or embankment shall be ODOT Item 203-Embankment as per plan notes and meet the following two (2) requirements:
 - ii. It shall be substantially free from vegetable or organic matter and shall contain not more than ten (10) percent of loam or clay.
 - iii. It shall weight not less than ninety (90) pounds per cubic foot, dry compacted weight.
 - iv. The upper six (6) inches of embankment outside of the edge of the sidewalk, driveway apron or curb shall be topsoil or excavated material approved by the engineer (No sand).
 - v. Fill shall extend at least one and one-half (1-1/2) feet beyond each side of the construction unless otherwise ordered or permitted. Side slopes shall be trimmed to a slop of one (1) vertical to one and one-half (1- 1/2) horizontal, except as otherwise ordered by the City.
 - vi. Fill shall be in place in advance of construction to allow for settlement. The fill material shall be thoroughly compacted by tamping or rolling, or both, so as to produce a solid dense sub-grade.
 - vii. It shall be the Contractor’s responsibility to raise all municipally owned utility castings to finished grade of new work. Adjusting these castings to new grade shall constitute a separate item of work and payment.
 - viii. Non-municipally owned castings are the responsibility of their respective owners to adjust to the proper grade, but coordinating the work is the responsibility of the Contractor. Adjusting these castings to the new grade shall not be paid for under this contract.

4. CONCRETE DELIVERABLES

- a) All concrete delivered shall be subjected to any or all tests described in the “Testing of Construction Materials” section of these Detail Specifications. All concrete failing any of these tests shall be removed and replaced as many times as necessary, until it passes all required tests. The removal and replacement shall be at no cost to the City.

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- b) All concrete delivered to the construction site shall be accompanied by dray slips. Dray slips shall contain all of the information required by ASTM C-94, Paragraph #16, and Batch Ticket Information. Any concrete truck without a dray slip or with an incomplete dray slip shall be rejected.
- c) Trucks shall conform to AASHTO M 157 - 10.1, 10.2, 11.5, 11.6, 11.7, & 11.8.
- d) The slump and percent of air entrainment shall conform to the limits shown in section D-17 (Concrete Design Mix) of these specifications.
- e) All concrete shall be discharged from the truck within ninety (90) minutes of the batching time as indicated on the dray slip.
- f) The temperature of the concrete at the time of placement shall be between minimum concrete temperatures as per AASHTO M157-1997 section 11.1.1. Minimum concrete temperature table as shown below and ninety (90) degrees Fahrenheit as per the American Concrete Institute (ACI) recommendations for hot weather concrete.

<u>Air Temperature</u>	<u>Thin Sections and Uniformed Slabs</u>	<u>Heavy Sections and Mass Concrete</u>
<u>Fahrenheit</u>	<u>Degrees</u>	<u>Degrees</u>
30 to 45 degrees	60	50
0 to 30 degrees	65	55
Below 0 degrees	70	60
<u>Centigrade</u>		
-1 to 7 degrees	16	10
-18 to -1 degrees	18	13
Below -18 degrees	21	16

- g. Rejected Trucks and Loads - Any truck and its load of concrete rejected for failure to meet all the requirements of paragraph's 4c and 4d as stated above shall have the following condition imposed:

Any truck rejected from any construction site covered by this section of the specifications shall also be banned from all construction sites covered by this section of the specifications.

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- h. Any concrete which fails to meet all of the requirements of paragraph's 4e, 4f, and 4g as stated above, or the requirements of the job mix, shall not be used on this or any other construction project where the specifications have been prepared by the Division of Engineering & Construction.

5. CONSTRUCTION

All of the various types of pavement, sidewalk, driveway aprons, curb or any combination thereof shall be constructed as per these specifications, plans, details and the respective Standard Drawings.

Except as otherwise directed, all concrete for pavement, sidewalk, driveways aprons, curb, handicap ramps and integral radius curb and walk shall be of one (1) course. Sidewalk shall be a minimum of four inches (4") thick. Driveway aprons shall be a minimum of six inches (6") thick for residential and eight inches (8") thick for commercial driveways. The minimum thickness for integral concrete radius curb and walk shall be eight inches (8") and as also shown on City of Cleveland Standard Drawing #244ME.

The thickness of the pavement, sidewalk and/or driveway aprons shall be increased as indicated on the plans or as directed by the Engineer. Sidewalk through the driveway and driveway aprons of the same thickness may be combined into one item of work and payment.

5.1 Forms

- a. Forms for pavement, sidewalk, and integral concrete radius curb and walk, and driveway apron construction shall be made of steel.
- b. Where standard lengths of steel forms cannot properly be used, a wooden form will be permitted for closure. Said wooden form shall not be less than one and five-eighths inches (1-5/8") in thickness. The minimum depth shall be as shown below:

Sidewalk	4", 6" or 8"
Driveway Apron	6" or 8"
Integral Concrete Radius	8"
Curb and Walk	8"
Base, Plain and Reinforced Pavement	9", 10" or 12"

5.2 Saw Cutting and Concrete Removal

When existing concrete pavement, drive aprons, curb or sidewalk necessitates cutting into the existing slab for removal, the cutting shall be accomplished by using a suitable concrete power saw which will produce

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a straight and smooth finish along the sawed edge. The depth of cutting or scoring shall be such that no damage will result to the remaining slab after removal of the designated section.

The location of all saw cuts shall be determined by the Engineer. Any damage to the slab not designated for removal shall be replaced at no expense to the City.

5.3 Affidavit

An affidavit shall be secured from each company supplying the concrete stating that only the concrete design mix as per City of Cleveland specifications will be supplied. This affidavit shall also state that the material supplier has read the specifications relative to the concrete being supplied. It shall be signed by an officer of the supplying company and notarized.

5.4 Placing Concrete

- a. No concrete shall be poured until the inspector has approved the preparation of the foundation bed.
- b. No concrete shall be poured unless the inspector is on the jobsite observing the work.
- c. If any concrete is poured without the observation by the inspector or without the prior approval of the foundation bed, the concrete poured shall not be accepted by the City for payment.
- d. Foundation beds shall be sprinkled immediately prior to depositing of concrete during hot or dry weather conditions.
- e. All welded steel wire fabric for concrete reinforcement, as per construction plans, shall meet the requirements of Section 709.10 of ODOT Construction and Material Specifications.
- f. Concrete shall be continuously deposited between bulkheads to a uniform thickness and to the full depth and width. The concrete, after being placed, shall be thoroughly compacted and brought to the proper pitch and grade with a template or straightedge.
- g. No concrete showing segregation or clumps of material shall be deposited in the work.
- h. Immediately prior to the finishing of the surface, the concrete shall be cut into slabs not longer than six feet (6') on any one side for walks and driveways. Pavements shall be cut as per plan details and Standard

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Construction Drawings. The joints shall be formed by a cutting tool or some other means satisfactory to the City and shall not be less than one-quarter (1/4) of the depth of the slab. All edges shall be rounded, with an approved edging tool, to a radius of one-quarter inch (1/4”).

5.5 Surface Finish

- a. The finishing of the concrete shall immediately follow the placing and compacting of the concrete. Unless otherwise ordered, a broom finish shall be required. Rubbing with floats or other acceptable method shall be done only at the direction of the Engineer. All concrete slabs shall be edged around the entire perimeter unless otherwise directed by the Engineer. The surface shall be free from depressions and inequalities.
- b. The application of dry cement to hasten drying of the surface is prohibited.

5.6 White Liquid Film Method

- a. All concrete pavement, sidewalk, driveway aprons, curb, curb and gutter sections, handicap ramps, and integral radius curb and walk shall be cured by the use of white liquid film. This white liquid film shall have twenty-five (25%) to thirty percent (30%) effective solids and meet the requirements of ODOT Construction Materials Specifications Item 705.07 Type 2.
- b. The white liquid film may be used for curing all concrete placed except for concrete which is to be bonded to future concrete placement.
- c. The curing materials shall be applied uniformly by means of an approved pressure spray distributor at the rate of one (1) gallon to each two hundred (200) square feet of surface, and it shall be so applied that the concrete surface is completely coated and sealed in one (1) application. The curing material shall be applied immediately after the concrete surface to be cured has been finished and before any marked dehydration has occurred. After the surface has been coated, it shall be protected from all traffic or abrasive action from any source.
- d. When this method of curing is used, a complete duplicate spraying system shall be on the site before starting the placement of the concrete.

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- e. Final curing by the white liquid film method shall be considered to extend for two (2) complete days from the time the material is placed. During this period, the surface of the concrete shall be protected by barricades from all traffic or work operations.
- f. A transparent liquid film may be substituted with the prior written approval of the Engineer.

5.7 Expansion Joints

- a) Prepared strips of preformed expansion joint material meeting the requirements of 705.03 of the ODOT Construction and Material Specifications shall be one-half inch (1/2") in thickness and of sufficient width to extend the entire depth of the concrete. They shall be placed in such a manner that the joint will be filled to within one-half inch (1/2") of the finished surface of the walk. Joints shall be constructed at intervals no greater than fifty feet (50') in all sidewalks, driveway aprons, curb and gutter section, cast-in-place curb and integral curb and walk unless otherwise ordered. Pavement expansion joints shall be placed as per plan details.
- b) Joints shall be placed where the walk abuts curbing or other lateral walks and along the building line where the walk is placed full width from the curb to the building or other structures or as otherwise directed by the Inspector in the field. The edges of all joints so placed shall be rounded as herein before specified. The cost for expansion joints shall be included in the unit price bid for the respective items of work.
- c) Where new concrete curb or the curb portion of integral concrete radius curb and walk abuts existing pavement, a three-quarter inch (3/4") thick preformed expansion strip as called for in 705.03 of the ODOT Construction and Material Specifications shall be placed to separate the pavement and curb. The upper one-half inch (1/2") of the joint shall be hot sealed.

5.8 Contraction Joints

All concrete for ADA ramps, sidewalks, and driveways shall have retraced picture frame tooled edge joints.

5.9 ODOT Item 305-Portland Cement Concrete Base

ODOT Item 305 – Portland Cement Concrete Base shall meet all requirements for Item 452 – Non-Reinforced Portland Cement Concrete Pavement. All jointing and transfer devices are to be installed. The concrete shall have a broom finish.

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5.10 Payment

The quantity as provided shall be paid for at the applicable contract price per unit of measurement, which price and payment shall be full compensation for all materials, labor, equipment, tools, and incidentals necessary to complete the work required by this section of the specifications.

D-17 CONCRETE DESIGN MIX

All applicable work items specified in D-16 shall be bid using the concrete mix design specified in this section. Under this section of specification the Contractor is required to submit a separate mix design for each combination of cement type, aggregate type and concrete supplier for use under this contract. Each mix shall be designed in accordance with ASTM-C94-14 Option C and as herein modified.

1. MINIMUM COMPRESSIVE STRENGTH

4,000 PSI strength for 28-day test. Four cylinders will be taken and tested as per ASTM C-39-14. One to be tested at seven days and the remaining three will be tested at twenty-eight days. Acceptance will be based on the average results of the three cylinders.

2. MINIMUM CEMENT CONTENT

650 lbs. per cubic yard. The cement shall conform to ASTM C-150-04 or ASTM C-595 Type 1L upon review and approval of the submittal by the Engineer.

3. WATER CEMENT RATIO

0.45 maximum.

4. SLUMP

Nominal three inches (3") as per ASTM C-94-14 (2"- 4" actual). The use of chemical admixtures meeting ASTM C-494, to increase the slump to a maximum of 7", may be used with prior approval of the Engineer upon review of the admixture and resultant maximum slump.

5. AIR CONTENT

Four percent (4%) to seven and one half percent (7-1/2%) ASTM C-173-14 or C-231-14.

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6. AGGREGATE

Aggregate Size No. 57 for course aggregate shall be limestone, gravel or crushed air-cooled blast furnace slag. Both course & fine aggregate as per ASTM C-33-04.

If crushed air-cooled blast furnace slag is used it shall meet all of the requirements of ODOT 703.01 and 703.02. Copies of all tests and certifications for the crushed air-cooled blast furnace slag, if used, shall be submitted as a part of the concrete mix design.

Steel Slag Aggregate (703.01E) is not permitted for use in Cleveland 650 Concrete Mix.

When high early strength is required, cements or admixtures in accordance with ASTM C-494 shall be used.

The Contractor is required to furnish a signed affidavit, in triplicate, from each concrete supplier to the Engineer giving dry weight and type of cement, saturated surface-dry weight and the type of fine and course aggregate, quantity, type and name of each admixture and weight of water per cubic yard of concrete.

Hot and cold weather protection (Blankets, heaters, ice, etc.) shall be included in the unit bid price.

The Contractor is required to comply with all the above requirements. The contractor shall require that all of the sub-contractors placing concrete under this contract also comply with all of the above requirements.

D-18 ADJUSTING CASTINGS (ODOT ITEM 611)

- 1) DESCRIPTION: All manholes, catch basins, water meter manholes, valve boxes and Cleveland Public Power castings shall be brought to proper grade by the contractor by adjusting said castings with mortar, brick, or stone masonry as may be directed by the Engineer. No adjusting rings or bands will be permitted.
- 2) CONSTRUCTION: The Contractor shall use extreme care in the removal and adjustment of the castings. The Contractor shall remove existing pavement as required to adjust the casting and shall replace same with approved concrete mix design described in D-17

Unless otherwise directed by the Engineer, all castings shall be brought to grade after the binder or leveling course is placed and before the wearing course is placed.

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Castings belonging to private utilities shall be adjusted to grade by utility owner and do not constitute a part of the Contractor's obligations. However, the Contractor is responsible to coordinate this work. The price paid for bringing each street casting to line and grade shall be the Contractor's bid unit price for each and shall include all labor and material necessary for this work.

Care shall be exercised in moving the castings so as not to damage the casting or the structure. Damaged castings or structures shall be repaired or replaced at the Contractor's expense.

- 3) **MEASUREMENT & PAYEMENT:** Items outlined shall be paid for under ODOT Item 611- Adjusting Street Castings to Grade.
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D-19 TREE REMOVAL (ITEM SPECIAL)

- 1) **DESCRIPTION:** Tree removal shall be done only under the direction of the Project Arborist acting on behalf of the City of Cleveland's Urban Forester.
- 2) **EXECUTION:** The Contractor shall obtain a Tree Removal Permit from the Urban Forestry Manager prior to the removal of any tree in the City right-of-way. Contact Jennifer Kipp at 216-664-2388, or jkipp@clevelandohio.gov
- 3) **STUMPS:** Existing stumps partially or completely inside the area of excavation for sidewalks, handicap ramps, driveways, or curbs shall be completely removed as part of the excavation requirements.

Contractor to remove all roots 18 inches below surface under tree or stump removal.

- 4) **DEFINITIONS:**
 - a) Tree diameter is defined as the tape measurement of the tree from a height of 54 inches above the ground.
 - b) Brush is defined as trees up to and including 3 inches in diameter.
- 5) **MEASUREMENT & PAYMENT:**
 - a) Bid prices shall be based on the diameter of the trees at four and one-half (4-1/2) feet above ground level, referred to as diameter at breast height, or DBH.
 - b) The Project Arborist shall measure tree diameter. When measuring a tree that does not have a single, straight trunk, utilize the following guidance:
 - i. https://extapps.dec.ny.gov/docs/lands_forests_pdf/dbhguidelines.pdf

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- c) SCHEDULE OF SIZES: Trees scheduled for removal shall be measured with the following schedule:
1. Over 3 inches to 12 inches
 2. Over 12 inches to 24 inches.
 3. Over 24 inches to 36 inches.
 4. Over 36 inches to 60 inches
 5. Over 60 inches.

The quantity as provided shall be paid for at the applicable contract price per unit of measurement, which price and payment shall be full compensation for all materials, labor, equipment, tools, and incidentals necessary to complete the work required by this section of the specifications.

D-20 TREE PRUNING

- 1) DESCRIPTION: The following information and instruction as per City of Cleveland Urban Forestry tree pruning specifications below.
- 2) QUALIFICATIONS: In general, trees are to be pruned in accordance with the International Society of Arboriculture best practices, by a skilled tree care professional approved by Urban Forestry. See pruning specification #15.
- 3) EXECUTION: Under the “No Fee” permit, which the Contractor must obtain from the Urban Forestry Manager 72 hours in advance of starting construction, the contractor shall prune every tree to be saved to forestall damage by construction equipment. See tree pruning specifications below; specifically, #5 and #6. The Contractor shall also remove all debris resulting from the pruning, which has accumulated within the area’s limits.

TREE PRUNING SPECIFICATIONS

For tree pruning operations, ANSI A300 Pruning Standards shall be followed.

- 1) Maintain house and/or structure clearance of fifteen feet
- 2) Clear branches from any and all objects as directed by Urban Forestry
- 3) Remove all dead limbs four inches or greater in diameter
- 4) Remove broken and/or hanging limbs four inches or greater in diameter
- 5) Maintain street side overhead clearance of fourteen feet
- 6) Maintain sidewalk overhead clearance of eight feet
- 7) Do not climb a tree to be pruned with tree climbing spikes or spurs except in the case of emergency to rescue an injured climber.
- 8) Do not remove more than twenty-five percent of the tree canopy in a single year.
- 9) Do not use wound paint unless directed by Urban Forestry (as in oak tree pruning from April through October).
- 10) Pruning cuts shall be made with sharp pruning tools.
- 11) Shall not top or lions-tail trees.
- 12) Shall not cut off the branch collar (no flush cuts).

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- 13) Do not use equipment or practices that would damage bark or cambium beyond the scope of work.
- 14) Pruning operations shall be performed by an ISA Certified Arborist or under the on-site supervision of an ISA Certified Arborist.

The Contractor shall carefully protect against damage to all existing trees and turf and other features designated to remain. The Contractor shall be liable for any and all damage to such vegetation, features and other real property and vehicles, caused by their work. Damage to trees are subject to penalties under §509.99. The Contractor shall be responsible for restoring or replacing to their original condition, and to the satisfaction of the Urban Forestry Manager or their designee, any and all of these items damaged during the performance for this work.

- 4) MEASUREMENT & PAYMENT: Tree Pruning shall be made at the contract unit price bid for each. Payment shall be full compensation for all materials, labor, tools, equipment and all parts necessary.

The Project Arborist shall perform inspections of pruned trees to ensure ANSI A300 standards & City specifications are followed.

D-21 ROOT PRUNING (ITEM SPECIAL)

- 1) DESCRIPTION: Root pruning shall be performed under the direction of the City and under the supervision by project Arborist.
- 2) QUALIFICATION: Root pruning by machine must be done by either a qualified tree worker or an equipment operator experienced in root cutting for sidewalk repair, but only after adequate instruction by the PA. A qualified tree worker is a person who has 3+ years of experience working with trees and has an understanding of tree biology and physiology. This person should be an ISA certified arborist.
- 3) SUBMITTALS: The PA will conduct a pre-construction tree inventory utilizing the City's current ArcGIS tree layer to update individual tree assets. Any changes to tree assets during construction shall be updated by the PA in the ArcGIS tree asset layer.
- 4) EXECUTION: During sidewalk replacement, the project Arborist (PA) will inspect the roots after the sidewalk panels are lifted. If the tree or roots are damaged during sidewalk removals, the contractor shall be penalized in accordance with §509.99. During this assessment, the PA will make recommendations about root pruning. The UFM will review the recommendations and give final approval.

After the UFM agrees that root pruning will be necessary, all root pruning operations shall be performed under the direct supervision of the PA working under the auspices of the Urban Forestry Section.

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For trees with a diameter less than fifteen inches, roots greater than or equal to 1/5 trunk diameter shall not be cut, torn or crushed. The Project Arborist shall recommend a course of action for root treatment. Recommendations for root treatments may include, but are not limited to, hand or air knife excavation to expose roots and/or root pruning with a diamond blade/tip saw.

After sidewalk panels are removed, the PA will submit an Excel report including the following information for UFM review/approval:

- Tree address
- Tree species
- Tree diameter
- Tree condition
- Action recommended (tree removal, root pruning, sidewalk width reduction, sidewalk easement onto private property)

The City's goals are the preservation of healthy trees, public and private while improving pedestrian and wheelchair use of sidewalks. If root pruning is recommended, the PA will direct both the contractor performing the cement repair and the contractor performing the root pruning on sidewalk adjustment/change in design and the amount of root removal needed.

A final inspection of the area may also be required, after the root pruning has been completed and before any backfill has been added, to re-evaluate the condition of the tree and on the performance of the root removal operation.

The PA shall advise the sidewalk repair contractor of proper root pruning techniques prior to or at the start of construction.

Caution!! Ripping/tearing roots with equipment causes damage to trees. Root pruning performed with hand tools may be performed by non- arboriculture employees of the sidewalk repair contractor only after a briefing and instruction by the PA.

Roots shall not be torn off or removed using power equipment such as, but not limited to, backhoes, skid steer loaders, or front end loaders.

Exposed roots should be kept moist by applying water and adding an organic layer over the exposed area, until the site can be returned to a pre-construction condition. The contractor shall include all cost in the unit price bid for tree root pruning for moisture control and placement of organic matter.

Clean up shall be completed within two hours after debris has been ground out around each site where root removal operations are taking place. The work site shall be left in a manner that is equal or cleaner than pre-work conditions. It shall be the responsibility of the contractor to remove and dispose of any wood debris (Chips,

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roots, limbs, etc.) in a proper and acceptable manner.

The contractor must have in their possession or available to them by formal agreement trucks, stump grinders, hand tools, and other equipment and supplies which are necessary to perform the outlined work as specified.

The contractor performing the root removal is responsible for contacting the necessary utility agencies any time work is being performed around overhead or underground utility installations. The contractor shall protect all utilities from damage, shall immediately contact the appropriate utility should damage occur, and shall be responsible for all claims of damage due to the operation.

Tree damage caused by the contractor shall be immediately reported to the PA for investigation and may be subject to penalty under §509.99. If the PA and/or UFM determines that the damage warrants tree removal, the tree shall be removed within the timeframe specified by the PA or UFM at no cost to the City. All tree removals shall be completed before project completion unless otherwise specified by the PA or UFM.

All penalties assessed for tree damage shall be paid to the City of Cleveland Urban Forestry office located at 750 East 88th Street, Cleveland Ohio, 44108. Payments for tree damage are deposited into the Tree Preservation Fund per ordinance.

If the damage resulted in the removal of the tree, the City may accept replacement trees at the combined diameters of the tree or trees removed. All replacement trees shall be approved by the Urban Forestry Manager or designee prior to planting.

- 5) REFERENCES: All equipment to be used and all work to be performed must be in full compliance with the most current version of the American National Standards Institute (ANSI) Standard Z-133 Safety Standards and ANSI A300 Part 8. OSHA and ANSI Standards are made part of this contract by this reference.
- 6) MEASUREMENT & PAYMENT: Payment for accepted quantities of the work described herein, complete in place, shall be made at the contract unit price for this item. This shall include all tools, labor, materials, equipment, power, transport delivery, and disposal necessary to complete this item of work as described, and to the satisfaction of the City.

D-22 TREE PRESERVATION AND PROTECTION

- 1) DESCRIPTION: The Project Arborist shall be responsible for identifying and enforcing Tree Protection Zones (TPZ). The tree protection requirements begin prior to construction and are enforced for the entire construction contract period.
- 2) EXECUTION: The Project Arborist should ensure the tree protection zone considers:

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- 1) Grading and storage of soil
- 2) Construction access, including entry and exit
- 3) Vehicle parking – construction vehicle and worker
- 4) Space for operation and maintenance of construction equipment
- 5) Utility and drainage corridors including storm water management systems
- 6) Grade changes and excavations
- 7) Above ground vertical space for aerial equipment activity
- 8) Space for temporary construction buildings
- 9) Intrusion into undisturbed areas by the future landscape
- 10) Material storage and staging
- 11) Fueling and mixing area (keep slope in mind in case of spill)
- 12) Washout for concrete trucks
- 13) Debris piles
- 14) Tree Protection Zone (TPZ) fencing
- 15) Sediment control barriers

The Project Arborist determines the tree protection zone (TPZ) for each site. The TPZs shall be established before any site work begins. Trees on adjacent properties may also need to have TPZ established if they are close to construction activities.

The table on page 24 provides recommended minimum tree protection zones based on the diameter of the trees to be preserved. The Project Arborist should consult this table for best practices when determining the size of individual tree protection zones. Depending on the tree and the surrounding environment, larger tree protection zones may be required by the Project Arborist or Urban Forestry Manager to realistically protect the trees.

Once all tree and site protection measures have been installed the contractor shall notify the Project Arborist or the Urban Forestry Manager to arrange for an inspection of the sites and approvals of the tree protection measures.

The tree protection barriers must remain in effective condition until all site activities including landscaping are complete. Tree protection signage on page 2 shall be attached to the fencing and visible to vehicle and pedestrian traffic.

Any work that has to be done within the Tree Protection Zone (TPZ) must have approval from the Urban Forestry Manager, or their designee, prior to the start of the project

The contractor must provide written notice to the Project Arborist or the Urban Forestry Manager prior to the removal of the tree protection barriers.

Tree Protection Zone fencing shall be installed around the perimeter of the TPZ. Fencing shall be sturdy and highly visible to discourage entrance and disturbance of the area within the TPZ. The fencing shall be 4 to 6 feet tall or higher and solidly anchored into the ground. Plywood hoarding may be required by the Project Arborist or Urban Forestry Manager to adequately preserve a mature tree with a high ecological and aesthetic value. See Detail TP-1.

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When trees are within a few feet of construction activities that the trunk may be mechanically damaged, those parts shall be protected. This shall be done by installing 2x4 wood planks around the trunk on a closed cell foam pad or atop a triple layer of burlap wrap. Tether straps or wire shall be used to bind the planks in place. NO fasteners shall be driven into the tree. Trunk protection should be adjusted to allow growth if it is in place for a period longer than one year. See Detail TP-4.

The following is a chart showing minimum recommended distances for determining a Tree Protection Zone (TPZ) for City-owned trees located on a City street or in City parks. Some trees and some site conditions may require a larger TPZ as determined by the Project Arborist. See Detail TP-2.

Tree Protection Zones: Trunk Diameter (DBH) *	Minimum Protection Distances Recommended City-owned Trees (3 to 5 times trunk diameter)**	Minimum Protection Distances Required for Trees in Park Areas
< 4 in	1- 2 feet	The drip line or 2.0 ft.
4 – 11 in	1 - 5 feet	The drip line or 5.0 ft.
12 – 16 in	3 - 6 feet	The drip line or 7.0 ft.
17 – 20 in	4 - 8 feet	The drip line or 8.0 ft.
21 – 24 in	5 - 10 feet	The drip line or 10.0 ft.
25 – 28 in	6 - 11 feet	The drip line or 11.0 ft.
29 – 32 in	7 - 13 feet	The drip line or 13.0 ft.
33 – 36 in	8 - 15 feet	The drip line or 15.0 ft.
37 – 40 in	9 - 16 feet	The drip line or 16.0 ft.
> 40 in	17 + feet	17 + feet

Diameter at breast height (DBH) = measurement of the tree trunk taken at 4 feet, 6 inches above the ground.

**Smaller tree protection zones may need to be used during construction due to limitations of working in the right-of-way.

1. Tree Protection Zone distances shall be measured from the outside edge of the tree base.
2. The general guideline for tree protection barriers is equal to the distance of three to five times the trunk diameter. The project Arborist may recommend greater tree protection barriers in the tree preservation plan.

Within a TPZ there shall be:

1. No construction

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2. No altering of grade by adding fill, excavating, trenching, scraping, dumping or disturbance of any kind.
3. No storage of construction materials, equipment, soil, construction waste or debris.
4. No disposal of any liquids e.g. concrete sludge, gas, oil, paint.
5. No movement of vehicles, equipment or pedestrians.
6. No parking of vehicles or machinery.

Any roots or branches that extend beyond the TPZ which may require pruning, shall be pruned by an ISA Certified Arborist or qualified tree professional under supervision of the Project Arborist. All pruning of tree roots shall be in accordance with the Root Pruning Specification D-15.

A sign that is similar to the illustration below is required to be mounted on two sides of a tree protection barrier for trees protected by plywood hoarding. The sign should be a minimum of 8 ½” x 11” and made of white gator board or equivalent weather resistant material.

TREE PROTECTION ZONE (TPZ)

No grade change, storage of materials or equipment is permitted within this TPZ. Tree protection barrier must not be removed without the written authorization of City of Cleveland, Urban Forestry Section.

For information call the Urban Forestry Section at:
(216) 664-3104

- 3) MEASUREMENT & PAYMENT: The City will measure Tree Protection by each tree regardless of size. Payment shall be full compensation for all materials, labor, tools, equipment and all parts necessary.

D-23 UNSUITABLE SUBGRADE (SIDEWALK)

- 1) DESCRIPTION: The item shall consist of the removal of unsuitable material to the top of the existing base course and replacing void with suitable material. The limits for removal shall be indicated on the plans and/or as directed by the Engineer.
- 2) EXECUTION: Removing and disposing of items pursuant to ODOT Item 202.05, including but not limited to pavement concrete, aggregate base course, wearing course removals, sidewalk, driveways, and pipe shall include the cost for full depth saw cutting.

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The City does not guarantee the pavement composition is uniform through the sidewalk.

- 3) **MEASUREMENT & PAYMENT:** The quantity as provided shall be paid for at the applicable contract price per unit of measurement, which price and payment shall be full compensation for all materials, labor, equipment, tools, and incidentals necessary to complete the work required by this section of the specifications. No additional compensation will be made in the performance of this item
-

D-24 BOND FEES

- 1) **DESCRIPTION:** The following cost is added to the bid Schedule of Items for payment to the contractor:
- 2) **MEASUREMENT & PAYMENT:** The Contractors cost for the fees associated with the procurement of the project construction bond shall be included as part of the bid for cost not to exceed 1% of the total construction cost. Payment to the contractor for said costs will be performed with the City's receipt of the construction bond fees payable to the surety.

END

Notice to Bidders

1. The Contract work shall be performed during the period of 12 months starting from the date of the Notice to Proceed. The Contractor shall complete the work required in full compliance with the specifications and shall be acceptable to the City Engineer or designated person.
2. The safety requirements of the State of Ohio, Ohio Administrative Code, and Chapter 4, 121:1-3 will be enforced during the contract term. The Ohio Bureau of Workers Compensation, Division of Safety and Hygiene book, "Specific Safety Requirements of the Ohio Bureau of Workers Compensation Relating to Construction", is hereby incorporated into these specifications.
3. An optional pre-bid conference for this project has been scheduled on **Friday July 12, 2024 at 10:30 am**. It will be a recorded virtual Microsoft Teams meeting, which can be accessed by any of the methods described below:

Microsoft Teams [Need help?](#)

[Join the meeting now](#)

Meeting ID: 228 476 611 833

Passcode: u898Mv

Dial in by phone

[+1 216-306-2628,,559053380#](tel:+12163062628559053380) United States,
Cleveland [Find a local number](#)

Phone conference ID: 559 053 380#

4. **Bids will be opened on Monday, July 15, 2024 at 12 pm.**