CITY OF ANN ARBOR INVITATION TO BID



GALLUP PARK VEHICLE AND PEDESTRIAN BRIDGE

ITB No. 4736

Due Date: Friday, August 25, 2023 11:00AM (Local Time)

City of Ann Arbor Community Services Area / Parks and Recreation Services

Issued By:

City of Ann Arbor Procurement Unit 301 E. Huron Street Ann Arbor, MI 48104

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ATTACHMENTS

City of Ann Arbor Prevailing Wage Declaration Form City of Ann Arbor Living Wage Forms City of Ann Arbor Vendor Conflict of Interest Disclosure Form City of Ann Arbor Non-Discrimination Ordinance Declaration Form and Notice

NOTICE OF PRE-BID CONFERENCE

A pre-bid conference for this project will be held on **Thursday**, **August 10**, **2023 at 1:00pm (local time)** at the Gallup Park Canoe Livery patio, located near the main park entrance at 3000 Fuller Road, Ann Arbor, MI. Limited parking is located along the park road so be prepared to allow time to walk. Additional parking is available in the boat launch parking lot off Geddes Rd, located at approximately 3313 Geddes Road, Ann Arbor, MI. Please be sure to plan ahead and allow time to find parking and walk.

Attendance at this conference is highly recommended. Administrative and technical questions regarding this project will be answered at this time. The pre-bid conference is for information only. Any answers furnished will not be official until verified in writing by the Financial Service Area, Procurement Unit. Answers that change or substantially clarify the bid will be affirmed in an addendum.

INSTRUCTIONS TO BIDDERS

General

The purpose of this Invitation to Bid (ITB) is to select a firm to provide construction services for the removal of the existing Gallup Park vehicle and pedestrian bridge and construction of the new vehicle and pedestrian bridge as described in the plans and specifications.

Work to be done under this Contract is generally described through the detailed specifications and must be completed fully in accordance with the contract documents. All work to be done under this Contract is located in or near the City of Ann Arbor.

Any Bid which does not conform fully to these instructions may be rejected.

American Rescue Plan Act (ARPA) Funding

The City of Ann Arbor has received funds from the United States Department of the Treasury (the "Treasury") pursuant to the Coronavirus State and Local Fiscal Recovery Fund under CFDA 21.027 ("ARPA Funds"), under Section 602 and 603 of Title VI the Social Security Act, as amended by Section 9901 of the American Rescue Plan Act of 2021 ("ARPA"); and the City has allocated ARPA Funds to provide funding for appropriate and qualifying expenditures as allowed under the Treasury Guidance Interim Final Rule "Coronavirus State and Local Fiscal Recovery Funds" (86 Fed. Reg. 267878). ARPA Funds will be used, in whole or in part, for services contracted pursuant to this ITB. The contract awarded will include the City of Ann Arbor American Rescue Plan Act (ARPA) Contract Addendum which contains additional terms and conditions required by ARPA in addition to those outlined in the sample contract attached hereto. Contractor will be expected to comply with all applicable federal, state, and local regulations. If a contract is awarded, the selected contractor will be required to register in SAM.gov and provide a Unique Entity ID number to the City prior to starting any work. Additionally, this project is not subject to the federal Davis-Bacon Act but is subject to compliance with the City of Ann Arbor's prevailing wage policy.

Bidders are encouraged to closely review the sample contract and City of Ann Arbor American Rescue Plan Act (ARPA) Contract Addendum attached hereto.

Preparation of Bids

Bids should be prepared providing a straight-forward, concise description of the Bidder's ability to meet the requirements of the ITB. Bids shall be written in ink or typewritten. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed and dated in ink by the person signing the Bid.

Bids must be submitted on the "Bid Forms" provided with each blank properly filled in. If forms are not fully completed it may disqualify the bid. No alternative bid will be considered unless alternative bids are specifically requested. If alternatives are requested, any deviation from the specification must be fully described, in detail on the "Alternate" section of Bid form.

Each person signing the Bid certifies that he/she is the person in the Bidder's firm/organization responsible for the decision as to the fees being offered in the Bid and has not and will not participated in any action contrary to the terms of this provision.

Questions or Clarifications / Designated City Contacts

All questions regarding this ITB shall be submitted via email. Emailed questions and inquires will be accepted from any and all prospective Bidders in accordance with the terms and conditions of the ITB.

All questions shall be due on or before **Friday**, **August 11**, **2023 3:00pm** and should be addressed as follows:

Scope of Work/ITB Content questions shall be e-mailed to Robert Breen, Wade Trim Associates; **rbreen@wadetrim.com** and Hillary Hanzel, City of Ann Arbor; **hhanzel@a2gov.org**.

Bid Process and Compliance questions shall be e-mailed to Colin Spencer, Buyer - **CSpencer@a2gov.org.**

Should any prospective bidder be in doubt as to the true meaning of any portion of this ITB, or should the prospective bidder find any ambiguity, inconsistency, or omission therein, the prospective bidder shall make a written request for an official interpretation or correction by the due date for questions above.

Addenda

If it becomes necessary to revise any part of the ITB, notice of the Addendum will be posted to Michigan Inter-governmental Trade Network (MITN) www.mitn.info and/or City of Ann Arbor web site www.A2gov.org for all parties to download.

Each Bidder must in its Bid, to avoid any miscommunications, acknowledge all addenda which it has received; but the failure of a Bidder to receive, or acknowledge receipt of; any addenda shall not relieve the Bidder of the responsibility for complying with the terms thereof.

The City will not be bound by oral responses to inquiries or written responses other than written addenda.

Bid Submission

All Bids are due and must be delivered to the City of Ann Arbor Procurement Unit on or before **Friday, August 25, 2023 11:00am (local time).** Bids submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile **will not** be considered or accepted.

Each Bidder must submit one (1) original Bid and **two (2)** Bid copies in a sealed envelope clearly marked: **ITB No. 4736 Gallup Park Vehicle and Pedestrian Bridge.**

Bids must be addressed and delivered to:

City of Ann Arbor Procurement Unit, c/o Customer Services, 1st Floor 301 East Huron Street Ann Arbor, MI 48104 All Bids received on or before the Due Date will be publicly opened and recorded immediately. No immediate decisions are rendered.

The following forms provided within this ITB Document should be included in submitted bids.

- City of Ann Arbor Prevailing Wage Declaration of Compliance
- City of Ann Arbor Living Wage Ordinance Declaration of Compliance
- Vendor Conflict of Interest Disclosure Form
- City of Ann Arbor Non-Discrimination Ordinance Declaration of Compliance

Bids that fail to provide these forms listed above upon bid opening may be rejected as non-responsive and may not be considered for award.

Hand delivered bids may be dropped off in the Purchasing drop box located in the Ann Street (north) vestibule/entrance of City Hall which is open to the public Monday through Friday from 8am to 5pm (except holidays). The City will not be liable to any Bidder for any unforeseen circumstances, delivery or postal delays. Postmarking to the Due Date will not substitute for receipt of the Bid. Each Bidder is responsible for submission of their Bid.

Additional time for submission of bids past the stated due date and time will not be granted to a single Bidder; however, additional time may be granted to all Bidders when the City determines in its sole discretion that circumstances warrant it.

Award

The City intends to award a Contract(s) to the lowest responsible Bidder(s). On multi-divisional contracts, separate divisions may be awarded to separate Bidders. The City may also utilize alternatives offered in the Bid Forms, if any, to determine the lowest responsible Bidder on each division, and award multiple divisions to a single Bidder, so that the lowest total cost is achieved for the City. For unit price bids, the Contract will be awarded based upon the unit prices and the lump sum prices stated by the bidder for the work items specified in the bid documents, with consideration given to any alternates selected by the City. If the City determines that the unit price for any item is materially different for the work item bid than either other bidders or the general market, the City, in its sole discretion, in addition to any other right it may have, may reject the bid as not responsible or non-conforming.

The acceptability of major subcontractors will be considered in determining if a Bidder is responsible. In comparing Bids, the City will give consideration to alternate Bids for items listed in the bid forms. All key staff and subcontractors are subject to the approval by the City.

Official Documents

The City of Ann Arbor officially distributes bid documents from the Procurement Unit or through the Michigan Intergovernmental Trade Network (MITN). Copies of the bid documents obtained from any other source are not Official copies. Addenda and other bid information will only be posted to these official distribution sites. If you obtained City of Ann Arbor Bid documents from other sources, it is recommended that you register on www.MITN.info and obtain an official Bid. Bidders do not need to be shown on the plan holders list provided by MITN to be considered an official plan holder.

Bid Security

Each bid <u>must be accompanied</u> by a certified check, or Bid Bond by a surety licensed and authorized to do business within the State of Michigan, in the amount of 5% of the total of the bid price.

Withdrawal of Bids

After the time of opening, no Bid may be withdrawn for the period of one hundred and eighty (180) days

Contract Time

Time is of the essence in the performance of the work under this Contract. The available time for work under this Contract is indicated on page C-2, Article III of the Contract. If these time requirements can not be met, the Bidder must stipulate on Bid Form Section 3 - Time Alternate its schedule for performance of the work. Consideration will be given to time in evaluating bids.

Liquidated Damages

A liquidated damages clause, as given on page C-2, Article III of the Contract, provides that the Contractor shall pay the City as liquidated damages, and not as a penalty, a sum certain per day for each and every day that the Contractor may be in default of completion of the specified work, within the time(s) stated in the Contract, or written extensions.

Liquidated damages clauses, as given in the General Conditions, provide further that the City shall be entitled to impose and recover liquidated damages for breach of the obligations under Chapter 112 of the City Code.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

Human Rights Information

All contractors proposing to do business with the City shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the Section 9:158 of the Ann Arbor City Code. Breach of the obligation not to discriminate as outlined in Section 5, beginning at page GC-2 shall be a material breach of the contract. Contractors are required to post a copy of Ann Arbor's Non-Discrimination Ordinance attached at all work locations where its employees provide services under a contract with the City.

Wage Requirements

Section 4, beginning at page GC-1, outlines the requirements for payment of prevailing wages and for payment of a "living wage" to employees providing service to the City under this contract. The successful bidder and its subcontractors must comply with all applicable requirements and provide proof of compliance.

Pursuant to Resolution R-16-469 all public improvement contractors are subject to prevailing wage and will be required to provide to the City payroll records sufficient to demonstrate compliance with the prevailing wage requirements. Use of the Sample Certified Payroll form provided in the Appendix section or a City-approved equivalent will be required along with wage rate interviews.

For laborers whose wage level are subject to federal, state and/or local prevailing wage law the appropriate Davis-Bacon wage rate classification is identified based upon the work including within this contract. The U.S. Department of Labor (DOL) has provided explanations to assist with classification in the following resource link: beta.SAM.gov.

For the purposes of this ITB the Construction Type of Heavy will apply.

The wage determination applicable to this contract is #MI20230074 attached to this ITB as an appendix

Conflict Of Interest Disclosure

The City of Ann Arbor Purchasing Policy requires that prospective Vendors complete a Conflict of Interest Disclosure form. A contract may not be awarded to the selected Vendor unless and until the Procurement Unit and the City Administrator have reviewed the Disclosure form and determined that no conflict exists under applicable federal, state, or local law or administrative regulation. Not every relationship or situation disclosed on the Disclosure Form may be a disqualifying conflict. Depending on applicable law and regulations, some contracts may awarded on the recommendation of the City Administrator after full disclosure, where such action is allowed by law, if demonstrated competitive pricing exists and/or it is determined the award is in the best interest of the City. A copy of the Vendor Conflict of Interest Disclosure Form is attached.

Major Subcontractors

The Bidder shall identify on Bid Form Section 4 each major subcontractor it expects to engage for this Contract if the work to be subcontracted is 15% or more of the bid sum or over \$50,000, whichever is less. The Bidder also shall identify the work to be subcontracted to each major subcontractor. The Bidder shall not change or replace a subcontractor without approval by the City.

Debarment

Submission of a Bid in response to this ITB is certification that the Bidder is not currently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

Disclosures

After bids are opened, all information in a submitter's bid is subjected to disclosure under the provisions of Michigan Public Act No. 442 of 1976, as amended (MCL 15.231 et seq.) known as the "Freedom of Information Act." The Freedom of Information Act also provides for the complete disclosure of contracts and attachments thereto except where specifically exempted.

Bid Protest

All Bid protests must be in writing and filed with the Purchasing Agent within five (5) business days of the award action. The bidder must clearly state the reasons for the protest. If a bidder contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the bidder to the Purchasing Agent. The Purchasing Agent will provide the bidder with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee whose decision shall be final.

Any inquiries or requests regarding this procurement should be only submitted in writing to the Designated City Contacts provided herein. Attempts by any prospective bidder to initiate contact with anyone other than the Designated City Contacts provided herein that the bidder believes can influence the procurement decision, e.g., Elected Officials, City Administrator, Selection Committee Members, Appointed Committee Members, etc., may lead to immediate elimination from further consideration.

Cost Liability

The City of Ann Arbor assumes no responsibility or liability for costs incurred by the Bidder prior to the execution of a contract with the City. By submitting a bid, a bidder agrees to bear all costs incurred or related to the preparation, submission and selection process for the bid.

Reservation of Rights

The City of Ann Arbor reserves the right to accept any bid or alternative bid proposed in whole or in part, to reject any or all bids or alternatives bids in whole or in part and to waive irregularity and/or informalities in any bid and to make the award in any manner deemed in the best interest of the City.

Idlefree Ordinance

The City of Ann Arbor adopted an idling reduction Ordinance that went into effect July 1, 2017. The full text of the ordinance (including exemptions) can be found at: www.a2gov.org/idlefree.

Under the ordinance, No Operator of a Commercial Vehicle shall cause or permit the Commercial Vehicle to Idle:

- (a) For any period of time while the Commercial Vehicle is unoccupied; or
- (b) For more than 5 minutes in any 60-minute period while the Commercial Vehicle is occupied.

In addition, generators and other internal combustion engines are covered

(1) Excluding Motor Vehicle engines, no internal combustion engine shall be operated except when it is providing power or electrical energy to equipment or a tool that is actively in use.

Environmental Commitment

The City of Ann Arbor recognizes its responsibility to minimize negative impacts on human health and the environment while supporting a vibrant community and economy. The City further recognizes that the products and services the City buys have inherent environmental and economic impacts and that the City should make procurement decisions that embody, promote, and encourage the City's commitment to the environment.

The City encourages potential vendors to bring forward emerging and progressive products and services that are best suited to the City's environmental principles.

INVITATION TO BID

City of Ann Arbor Guy C. Larcom Municipal Building Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including City Nondiscrimination requirements and Declaration of Compliance Form, Living Wage requirements and Declaration of Compliance Form, Prevailing Wage requirements and Declaration of Compliance Form, Vendor Conflict of Interest Form, Notice of Pre-Bid Conference, Instructions to Bidders, Bid, Bid Forms, Contract, Bond Forms, General Conditions, Standard Specifications, Detailed Specifications, all Addenda, and the Plans (if applicable) and understands them. The Bidder declares that it conducted a full investigation at the site and of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance. The Bidder also declares that it has extensive experience in successfully completing projects similar to this one.

The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

The undersigned proposes to perform all work shown on the plans or described in the bid documents, including any addenda issued, and to furnish all necessary machinery, tools, apparatus, and other means of construction to do all the work, furnish all the materials, and complete the work in strict accordance with all terms of the Contract of which this Bid is one part.

In accordance with these bid documents, and Addenda numbered _____, the undersigned, as Bidder, proposes to perform at the sites in and/or around Ann Arbor, Michigan, all the work included herein for the amounts set forth in the Bid Forms.

The Bidder declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

The Bidder declares that it has become fully familiar with the provisions of Chapter 14, Section 1:320 (Prevailing wages) and Chapter 23 (Living Wage) of the Code of the City of Ann Arbor and that it understands and agrees to comply, to the extent applicable to employees providing services to the City under this Contract, with the wage and reporting requirements stated in the City Code provisions cited. Bidder certifies that the statements contained in the City Prevailing Wage and Living Wage Declaration of Compliance Forms are true and correct. Bidder further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

The Bidder declares that it has become familiar with the City Conflict of Interest Disclosure Form and certifies that the statement contained therein is true and correct.

The Bidder encloses a certified check or Bid Bond in the amount of 5% of the total of the Bid Price. The Bidder agrees both to contract for the work and to furnish the necessary Bonds and insurance documentation within 10 days after being notified of the acceptance of the Bid.

If this Bid is accepted by the City and the Bidder fails to contract and furnish the required Bonds and insurance documentation within 10 days after being notified of the acceptance of this Bid, then the Bidder shall be considered to have abandoned the Contract and the certified check or Bid Bond accompanying this Bid shall become due and payable to the City.

If the Bidder enters into the Contract in accordance with this Bid, or if this Bid is rejected, then the accompanying check or Bid Bond shall be returned to the Bidder.

In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

SIGNED THIS 24th DAY OF_

16750 Livedin St Grand Hoson Official Address MI, 49417

CIL 846 8442 Telephone Number

Authorized Signature of Bidder

LEGAL STATUS OF BIDDER

(The Bidder shall fill out the appropriate form and strike out the other three.)

Bidder declares that it is: * A corporation organized and doing business under the laws of the State of Michigan, for whom Nahan Wagennahr, bearing the office title whose signature is affixed to this Bid, is authorized to execute contracts. NOTE: If not incorporated in Michigan, please attach the corporation's Certificate of Authority A limited liability company doing business under the laws of the State of ______ whom bearing the title of ____ whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC. * A partnership, organized under the laws of the state of _____ and filed in the county of _____, whose members are (list all members and the street and mailing address of each) (attach separate sheet if necessary): * An individual, whose signature with address, is affixed to this Bid: (initial here) Authorized Official

Fax 60 846-6761

Section 1 - Schedule of Prices

Company: Anlaan Corporation

Project: JNIT PRIC	ITB #4736 Gallup Park Vehicle a E BID -						
tem No.	Primary Description	Supplemental Description		Estimated Quantity	Unit Price		Total Price
1100001	Mobilization, Max		LSUM	1,\$	400,000.00	\$	400,000.00
2010001	Clearing		Acre	0.1 \$	16,000.00	\$	1,600.00
2020004	Tree, Rem, 6 inch to 18 inch		Ea	10 \$	375.00	\$	3,750.00
2020008	Stump, Rem, 6 inch to 18 inch		Ea	10 \$	130.00	\$	1,300.00
2040020	Curb and Gutter, Rem		Ft	190 \$	10.00	\$	1,900.00
2040025	Fence, Rem		Ft	73 \$	10.00	\$	730.00
2040045	Masonry and Conc Structure, Rem		Cyd	44 \$	150.00	\$	6,600.00
2040050	Pavt, Rem		Syd	1330 \$	12.00	\$	15,960.00
2040055	Sidewalk, Rem		Syd	1080 \$	9.00	\$	9,720.00
2080016	Erosion Control, Gravel Access Approach		Ea	2 \$	3000	\$	6,000.00
2080020	Erosion Control, Inlet Protection, Fabric Drop		Ea	2 .	200.00	\$	400.00
2080036	Erosion Control, Silt Fence		Ft	1330 \$	5.00	\$	6,650.00
3020016	Aggregate Base, 6 inch		Syd	975 \$	15.00	\$	14,625.00
3020020	Aggregate Base, 8 inch		Syd	48 \$	28.00	\$	1,344.00
3020026	Aggregate Base, 10 inch		Syd	762 _{\$}	30.00	\$	22,860.00
3060010	Aggregate Surface Cse, 6 inch		Syd	232 \$	20.00	\$	4,640.00
4010012	Culv End Sect, 12 inch		Ea	1 \$	1,000.00	\$	1,000.00
4020987	Sewer, Cl IV, 12 inch, Tr Det B		Ft	125 \$	80.00	\$	10,000.00
4030040	Dr Structure Cover, Type G		Ea	2 \$	800.00	\$	1,600.00
4030210	Dr Structure, 48 inch dia		Ea	2 \$	3,500.00	\$	7,000.00
5012013	HMA, 3EML		Ton	123 _S	215.00	\$	26,445.00
5012025	HMA, 4EML		Ton	63 \$	215.00	\$	13,545.00
5012037	HMA, 5EML		Ton	93 \$	215.00	\$	19,995.00
6020100	Conc Pavt, Nonreinf, 6 inch		Syd	48 s	70.00	\$	3,360.00
6027001	-	Straight Curb, Conc, 18 inch wide	Ft		125.00	\$	16,000.00
8020038	Curb and Gutter, Conc, Det F4		Ft	107	38.00	\$	4,066.00
8030010	Detectable Warning Surface		Ft		80.00	\$	2,560.00
8030046	Sidewalk, Conc, 6 inch		Sft		9.00	-	58,023.00
8087050	_	Tree Protection Fence, 4 foot Ht.	Ft		100.00	\$	2,300.00
8100405	Sign, Type IIIB		Sft	8 \$	22.00	\$	176.00
8107050	_	Bollard, Wood	Ea	49 \$	500.00	\$	24,500.00
8107050	_	Regulatory Sign, Relocate	Ea	5 \$	100.00	\$	500.00
8107050	_	Memorial Sign, Relocate	Ea	1 8	600.00	\$	600.00
8107050	_	Bike Repair Station, Relocate	Ea	1 8	1,000.00	\$	1,000.00
8107050	_	Border to Border Trail Marker, Relocate	Ea	1 \$	250.00	\$	250.00
8107050	_	Concrete Wheel Stop, Relocate	Ea	10 \$	100.00	\$	1,000.00
8107050	_	Light Pole, Relocate	Ea		5,525.00	\$	11,050.00
8107050		Sign, Type R1-6 (Vertical Delineator)	Ea		850.00	\$	3,400.00

Item No.	Primary Description	Supplemental Description		Estimated Quantity	Unit Price		Total Price
8110110	Pavt Mrkg, Polyurea, 12 inch, Crosswalk		Ft	50 \$	30.00	\$	1,500.00
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn		Ea	10	80. 00	\$	800.00
8120026	Pedestrian Type II Barricade, Temp		Ea	6	120.00	\$	720.00
8120027	Pedestrian Type II channelizer, Temp		Ft	1320	20.00	\$	26,400.00
8120170	Minor Traf Devices		LSUM	¹ s	200,000.00	\$	200,000.00
8120252	Plastic Drum, Flourescent, Furn		Ea	30 \$	35.00	\$_	1,050.00
8120310	Sign Cover		Ea	4 \$	45.00	\$	180.00
8120350	Sign, Type B,Temp, Prismatic, Furn		Sft	240 \$	6.00	\$	1,440.00
8120351	Sign, Type B, Temp, Prismatic, Oper		SFt	240 \$	0.01	\$	2.40
8120370	Traf Regulor Control		LSUM	1 \$	500.00	\$	500.00
8122250	Pedestrian Path, Temp		Ft	660 \$	100.00	\$	66,000.00
8122251	Pedestrian Ramp, Temp		Ea	2 \$	2,500.00	\$	5,000.00
8127010		Temporary Detectable Warning Surface	Sft	4 \$	500.00	\$	2,000.00
8127051		Maintaining River Traffic	LSUM	1 \$	20,000.00	\$	20,000.00
8157011		Seeded Lawn	Syd	3059 \$	12,00	\$	36,708.00
8157021	_	Planting Mixture, 12 inch	Cyd	59 \$	100.00	\$	5,900.00
8157050	_	Workout Equipment, Relocate	Ea	1 \$	1,200.00	\$	1,200.00
8157050	-	Bench, Relocate	Ea	1 \$	1,000.00	\$	1,000.00
8157050	-	Water Fountain, Relocate	Ea	1 \$	2,500.00	\$	2,500.00
8157050	_	Amelanchier x grandiflora 'Autumn Brilliance, 2 1/2 cal, B&B	Ea	1 \$	650.00	\$	650.00
8157050	_	Betula populifolia 'Whitespire', 8' ht, B&B	Ea	4 \$	650.00	\$	2,600.00
8157050		Acer rubrum 'Franksred', 3 cal. B&B	Ea	3 s	650. 00	\$	1,950.00
8157050	_	Nyssa sylvatica, 3 cal. B&B	Ea	3 \$	650.00	\$	1,950.00
8157050	-	Plantanus x acerifolia 'bloodgood', 3 cal. B&B	Ea	3 \$	650. 00	\$	1,950.00
8157050	_	Quercus bicolor, 3 cal. B&B	Ea	1 \$	650. 00	\$	650.00
8157050		Aronia melanocarpa 'UCONNAM165', 18 spd. Cont	Ea		75.00	\$	3,450.00
8157050	_	Cornus Sericea 'Baileyi', 24 spd. Cont.	Ea	27 \$	75.00	\$	2,025.00
8157050	_	Carex vulpinoidea, No 1 Cont	Ea	65 \$	35.00	\$	2,275.00
8157050	1	Iris virginica, No. 1 Cont	Ea	68 \$	35.00	\$_	2,380.00
8157 050		Liatris spicata 'Kobold', No. 1 Cont	Ea	40 \$	35.00	\$	1,400.00
8157 050	_	Penstemon digitalis, No. 1 Cont	Ea	86	35.00	\$	3,010.00
8157050	_	Rudbeckia fulgida sullivantii 'Goldstrum', No. 1 Cont	Ea	87 \$	35.00	\$_	3,045.00
8157050	_	Symphyotrichum novae-angliae 'Purple Dome', No. 1 Cont	Ea	26 \$	35.00	\$	910.00
8167021		Shredded Bark Mulch, 2 inch	Cyd	10 \$	100.00	\$	1,000.00
8167021		Topsoil	Cyd		40.00	\$_	13,600.00
8240001	Contractor Staking		LSUM	1 \$	26,000.00	\$	26,000.00

item No.	Primary Description	Supplemental Description		Estimated Quantity	Unit Price	Total Price
2040060	Structures, Rem		LSUM	1 \$	777,000.00	\$ 777,000.00
2060002	Backfill, Structure, CIP		Cyd	389 \$	40.00	\$ 15,560.00
2060010	Excavation, Fdn		Cyd	366 \$	35.00	\$ 12,810.00
2080042	Erosion Control, Turbidity Curtain, Deep		Ft	380 \$	30.00	\$ 11,400.00
4040031	Underdrain, Fdn, 4 inch		Ft	292 \$	8.00	\$ 2,336.00
4040091	Underdrain Outlet, 4 inch		Ft	102 s	16.00	\$ 1,632.00
6020208	Joint, Expansion, E3		Ft	73 \$	17.00	\$ 1,241.00
7040007	Cofferdam		LSUM	1	100,000.00	100,000.00
7050001	Prebore, Fdn Piling		Ft	653 \$	10.00	\$ 6,530.00
7050002	Pile Driving Equipment, Furn		LSUM	1 \$	350,000.00	\$ 350,000.00
7050025	Pile Point, CIP Conc		Ea	7 \$	530.00	\$ 3,710.00
7050026	Pile, CIP Conc, Furn and Driven, 16 inch		Ft	535 \$	75.00	\$ 40,125.00
705 0027	Test Pile, CIP Conc, 16 inch		Ea	1 \$	1,000.00	\$ 1,000.00
7050034	Pile, Steel, Furn and Driven, 14 inch		Ft	1560	60.00	\$ 93,600.00
7050035	Test Pile, Steel, 14 inch		Ea	2		
7050038	Pile, Galv		LSUM	1 \$	1,000.00	\$ 2,000.00
7050039	Pile Point, Steel		Ea	22 \$	10,000.00	\$ 10,000.00 3,520.00
7050050	Pile, Steel, Splice		Ea	29 \$	1.00	\$ 29.00
7060001	Bridge Ltg, Furn and Rem		LSUM	1 8	1,000.00	\$ 1,000.00
7060002	Bridge Ltg, Oper and Maintain		Cyd	228	1.00	\$ 228.00
7060020	Conc, Low Temp Protection		Cyd	536	10.00	 5,360.00
7060040	Elec Grounding System		Ea	1 \$	5,99 5.00	\$ 5,995.00
7060050	Expansion Joint Device		Ft	73	250. 00	\$ 18,250.00
7060051	Expansion Joint Device, Cover Plate		Ft	40 \$	180. 00	\$ 7,200.00
7060060	False Decking		Sft	9925 \$	0.01	\$ 99.25
7060092	Reinforcement, Steel, Epoxy Coated		Lb	88405	1.65	\$ 145,868.25
7060100	Substructure Conc		Cyd	228 \$	300	\$ 68,400.00
7060110	Superstructure Conc		Cyd	80 \$	250	\$ 20,000.00
7060111	Superstructure Conc, Form, Finish, and Cure		LSUM	1 \$	150,000.00	\$ 150,000.00
70601 12	Superstructure Conc, Form, Finish, and Cure, Night Casting		LSUM	1 \$	300,000.00	\$ 300,000.00
70601 13	Superstructure Conc, Night Casting		Cyd	228	300. 00	\$ 68,400.00
7067010		Cobblestone Veneer	Sft	1600	45.00	72,000.00
7067010	_	Stone Cap	Sft	205	130.00	26,650.00
7070016	Bearing, Elastomeric, 2 inch		Sin	7400	0.01	\$ 74.00
7070053	Steel Diaphragm, Prest Conc Beam, Furn and Fab		Lb	1546	5. 25	\$ 8,116. 50

Item No.	Primary Description	Supplemental Description		Estimated Quantity	Unit Price		Total Price
7070054	Steel Diaphragm, Prest Conc	Supplemental Description	Lb	1546			
7000440	Beam, Erect Prest Conc Bulb-Tee Beam,		F4	707	5.00	\$	7,730.00
7080110	Furn, 36 inch by 49 inch		Ft	707 \$	456.00	\$	322,392.00
7080111	Prest Conc Bulb-Tee Beam, Erect, 36 inch by 49 inch		Ft	707	40.00	\$	28,280.00
7097010		Timber Walkway	Sft	5200 _{\$}	1.00	\$	5,200 .00
7100003	Joint Waterproofing, Expansion		Sft	105	12.00	\$	1,260.00
7100011	Conc Surface Coating		Syd	462 \$	42 .50	\$	19,635.00
7117001	_	Timber Railing, Pedestrian	Ft	360 \$	100.00	\$	36,000.00
7117001	_	Timber Railing, Vehicular	Ft	348 \$	150.00	\$	52,200.00
8007051	_	Vibration Monitoring	LSUM	1 \$	10,000.00	\$	10,000.00
				BASE BID	SUB-TOTAL	\$	3,961,025.40
							and the second s
		OPTION 'A' - RIPRAP CHAN			400.00	là l	45.500.00
8137011 8137021		Riprap, Spec, Class III Ledge Stone Bank Reinforcement, 12 inch	Syd Cyd	455 \$ 23 \$	100.00 900.00	\$	45,500.00 20,700.00
8137021	_	Ledge Stone Bank Reinforcement, 12 inch	Cyd	170 \$	800.00	S	136,000.00
3020002	Aggregate Base, LM	Leage Storie Bank Nemiorcenters, 24 mor	Cyd	231 \$	90.00	\$	20,790.00
				Ontic	on 'A' Sub-tota	1 8	222.990.00
						1	
0407044		OPTION 'B' - RIPRAP CHAN	NEL PROTECTION Syd	455 \$	100.00	\$	45,500.00
8137011 8137021		Riprap, Spec, Class III Ledge Stone Bank Reinforcement, 12 inch	Cyd	435 \$ 5 \$	900.00	\$	4,500.00
8137021	=	Ledge Stone Bank Reinforcement, 12 inch	Cyd	55 \$	800.00	\$	44,000.00
8137031	-	Riprap, Fieldstone, Spec	Ton	300 \$	110.00	\$	33,000.00
3020002	Aggregate Base, LM		Cyd	231 \$	90.00	\$	20,790.00
				Optio	on 'B' Sub-tota	1 \$	147,790.00
							-
			BASE BID	+ OPTION 'A'	TOTAL BID	\$	4,184,015.40
				1 1 1			

Section 2 - Material, Equipment and Environmental Alternates

The Base Bid proposal price shall include materials and equipment selected from the designated items and manufacturers listed in the bidding documents. This is done to establish uniformity in bidding and to establish standards of quality for the items named.

If the Contractor wishes to quote alternate items for consideration by the City, it may do so under this Section. A complete description of the item and the proposed price differential must be provided. Unless approved at the time of award, substitutions where items are specifically named will be considered only as a negotiated change in Contract Sum.

If an environmental alternative is bid the City strongly encourages bidders to provide recent examples of product testing and previous successful use for the City to properly evaluate the environmental alternative. Testing data from independent accredited organizations are strongly preferred.

Item Number	Description	Add/Deduct Amount
Rem Number	<u>Description</u>	

If the Bidder does not suggest any material or equipment alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any material or equipment alternate under the Contract.

Signature of Authorized Representative of Bidder

_ Date <u>8/24/23</u>

Section 3 - Time Alternate

If the Bidder takes exception to the time stipulated in Article III of the Contract, Time of Completion
page C-2, it is requested to stipulate below its proposed time for performance of the work
Consideration will be given to time in evaluating bids.

If the Bidder does not suggest any time alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any time alternate under the Contract.

Signature of Authorized Representative of Bidder

_Date <u>&/24/23</u>

Section 4 - Major Subcontractors

For purposes of this Contract, a Subcontractor is anyone (other than the Contractor) who performs work (other than or in addition to the furnishing of materials, plans or equipment) at or about the construction site, directly or indirectly for or on behalf of the Contractor (and whether or not in privity of Contract with the Contractor), but shall not include any individual who furnishes merely the individual's own personal labor or services.

Contractor agrees that all subcontracts entered into by the Contractor shall contain similar wage provision to Section 4 of the General Conditions covering subcontractor's employees who perform work on this contract.

For the work outlined in these documents the Bidder expects to engage the following major subcontractors to perform the work identified:

Subcontractor (Name and Address)	<u>Work</u>	Amount
Sommerset Pasing	Hon A	465,00000
GM & SONS, INC	MISC CONC	95,25000
Miller Landscape	Seeding dlandscape	\$ 90,000°0
Prennetic Restoration	Conc Surfee Cooting	120,0000
Alpina Ensinearing	Continuter Staking	126 0000

If the Bidder does not expect to engage any major subcontractor, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT expect to engage any major subcontractor to perform work under the Contract.

Date <u>8/24/23</u>

Signature of Authorized Representative of Bidder

Section 5 - References

Include a minimum of <u>five (5)</u> references from similar projects completed within the past five (5) years.

[Refer also to Instructions to Bidders for additional requirements, if any]

5) I-196 WB of Growd Fiver Project Name		2017 2019 Date Constructed
	,	11 077. 4791

N.J. O. Druven

Contact Name

Contact Name

Contact Name

Contact Name

Contact Name

Section 6 - Contractor Information and Responsible Contractor Criteria

Backup documentation may be requested at the sole discretion of the City to validate all of the responses provided herein by bidders. False statements by bidders to any of the criteria provided herein will result in the bid being considered non-responsive and will not be considered for award.

Failure to provide responses to all questions may result in being deemed non-responsive.

Attach additional pages as needed if space below is insufficient.

Pursuant to Sec 1:312(20) of the City Code which sets forth requirements of a responsible bidder, Bidder is required to submit the following:

1. Organization Name: ANIAN Corporation
Social Security or Federal Employer I.D. #: 382675420
Address: 16750 Lincoln St
City: Grand Haven State: MI Zip: 49417
Type of Organization (circle one below):
Individual Partnership Corporation Joint Venture Other
If "Other" please provide details on the organization:
Year organization established: 1986
Current owners/principals/members/managing members/partners of the organization:
See attached Cossent Resolution
3. Assumed Names, "doing business as" d/b/a, and/or former organization names(s) if applicable:
Explanation of any business name changes: \mathcal{N} / \mathcal{A}

pending and within the past five years, including an explanation of each (parties, court/forum, legal claims, damages sought, and resolution).
N/A
5. Qualifications of management and supervisory personnel to be assigned by the bidder: To be determined
6. List the state and local licenses and license numbers held by the bidder:
7. Will all subcontractors, employees and other individuals working on the construction project maintain current applicable licenses required by law for all licensed occupations and professions? No
8. Will contractors, subcontractors, employees, and other individuals working on the construction project be misclassified by bidder as independent contractors in violation of state or federal law?
Yes
9. Submit a statement as to what percentage of your work force resides within the City of Ann Arbor, and what percentage resides in Washtenaw County, Michigan, and the same information for any major subcontractors.
10. Submit documentation as to bidder's employee pay rates (e.g., certified payroll without SSN or personal identifying information, or chart of job titles and pay rates, or other evidence).
11. State whether bidder provides health insurance, pension or other retirement benefits, paid leave (vacation, personal time, sick leave, etc), or other benefits to its

employees, and if so, state whether each benefit is provided directly to employees, by payments or contributions to a third-party administered plan, in cash (e.g., fringe benefit

portion of prevailing wages), or other manner.

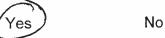
12. State whether bidder is an equal opportunity employer and does not discriminate in its hiring on the basis of race, sex, pregnancy, age, religion, national origin, marital status, sexual orientation or gender identity, height, weight, or disability.



13. State whether bidder has Equal Employment Opportunity Programs for minorities, women, veterans, returning citizens, and small businesses, and if so, submit supporting documentation or other evidence of such program(s).

See Attached

14. Has bidder had any violations of state, federal, or local laws or regulations, including OSHA or MIOSHA violations, state or federal prevailing wage laws, wage and hour laws, worker's compensation or unemployment compensation laws, rules or regulations, issued to or against the bidder within the past five years?



If you answered "yes" to the question above, for each violation provide an explanation of the nature of the violation, the agency involved, a violation or reference number, any other individual(s) or party(ies) involved, and the status or outcome and resolution.

15. Does bidder have an existing Fitness for Duty Program (drugs and alcohol testing) of each employee working on the proposed jobsite?

Yes No

If you answered "Yes", please submit documentation of the Fitness for Duty Program and what it entails.

- 16. Submit documents or evidence of any debarment by any federal, state or local governmental unit and/or findings of non-responsibility or non-compliance with respect to any public or private construction project performed by the bidder. \mathcal{N}
- 17. Proof of insurance, including certificates of insurance, confirming existence and amount of coverage for liability, property damage, workers compensation, and any other insurances required by the proposed contract documents.

18. Does bidder have an on-going MIOSHA-approved safety-training program for employees to be used on the proposed job site?
Yes No
If bidder answered "yes" to the question above, submit documentation of your safety-training program.
19. Does bidder have evidence of worker's compensation Experience Modification Rating ("EMR")?
Yes No
EMR =
20. Will bidder use masters, journeypersons and apprentices on the project?
(Yes) No
If bidder answered "yes" to the question above, provide the ratio of masters and journeypersons to apprentices for this project.
Ratio: 15-1 77 pre col
If bidder answered "no" to the question above, submit documentation regarding the qualifications of each worker who may or will be assigned on the project.
If, yes, Ratio =
21. Can bidder provide documentation that it participates in a Registered Apprenticeship Program (RAP) that is registered with the United States Department of Labor Office of Apprenticeship or by a State Apprenticeship Agency recognized by the Office of Apprenticeship? No
If bidder answered "yes" to the question above, please submit a copy of the program document(s) and evidence of its registration. $Arrc_c$
If bidder answered "no" to the question above, please provide details on how you assess the skills and qualifications of any employees who do not have master or journeyperson certification or status, or are not participants in a Registered Apprenticeship Program.

22. Will bidder comply with all applicable state and federal laws and visa requirements regarding the hiring of non-US citizens, and disclosure of any work visas sought or obtained by the bidder, any of the bidder's subcontractors, or any of the bidder's employees or independent contractors, in order to perform any portion of the project?

No

- 23. Submit evidence that bidder has financial resources to start up and follow through on the project and to respond to damages in case of default as shown by written verification of bonding capacity equal to or exceeding the amount of the bidders scope of work on the project. The written verification must be submitted by a licensed surety company rated B+ or better in the current A.M. Best Guide and qualified to do business within the State of Michigan, and the same audited financial information for any subcontractor estimated to be paid more than \$100,000 related to any portion of the project.
- 24. Submit evidence of a quality assurance program used by the bidder and the results of same on the bidder's previous projects. $A = \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) \left(\frac{1}{2} + \frac{1}{2} \right) \left(\frac{1}{2} + \frac{1}{2} \right) \left(\frac{1}{2} + \frac{1}{2} + \frac{1}{2} \right)$

CITY OF ANN ARBOR PREVAILING WAGE DECLARATION OF COMPLIANCE

The "wage and employment requirements" of Section 1:320 of Chapter 14 of Title I of the Ann Arbor City Code mandates that the city not enter any contract, understanding or other arrangement for a public improvement for or on behalf of the city unless the contract provides that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. Where the contract and the Ann Arbor City Code are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used. Further, to the extent that any employees of the contractor providing services under this contract are not part of the class of craftsmen, mechanics and laborers who receive a prevailing wage in conformance with section 1:320 of Chapter 14 of Title I of the Code of the City of Ann Arbor, employees shall be paid a prescribed minimum level of compensation (i.e. Living Wage) for the time those employees perform work on the contract in conformance with section 1:815 of Chapter 23 of Title I of the Code of the City of Ann Arbor.

At the request of the city, any contractor or subcontractor shall provide satisfactory proof of compliance with this provision.

The Contractor agrees:

- (a) To pay each of its employees whose wage level is required to comply with federal, state or local prevailing wage law, for work covered or funded by this contract with the City,
- (b) To require each subcontractor performing work covered or funded by this contract with the City to pay each of its employees the applicable prescribed wage level under the conditions stated in subsection (a) or (b) above.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the wage and employment provisions of the Chapter 14 of the Ann Arbor City Code. The undersigned certifies that he/she has read and is familiar with the terms of Section 1:320 of Chapter 14 of the Ann Arbor City Code and by executing this Declaration of Compliance obligates his/her employer and any subcontractor employed by it to perform work on the contract to the wage and employment requirements stated herein. The undersigned further acknowledges and agrees that if it is found to be in violation of the wage and employment requirements of Section 1:320 of the Chapter 14 of the Ann Arbor City Code it shall has be deemed a material breach of the terms of the contract and grounds for termination of same by the City.

Signature of Authorized Representative

Date

Wather Connective Date

Print Name and Vitle

16750 67000 Hosen M1 49417

Address, City, State, Zip

616-246-247

Phone/Email address

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500

CITY OF ANN ARBOR LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than \$10,000 for any twelvemonth contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than \$10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than \$10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the Living Wage Ordinance. If this exemption applies to your company/non-profit agency please check here [___] No. of employees__

The	Contractor	or	Grantee	agrees
1110	CONGRACION	Oi	Charles	ugices.

Section 1:815(3).	(a)	To pay each of its employees whose wage level is not required to comply with federal, state or lot prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than Living Wage. The current Living Wage is defined as \$15.90/hour for those employers that provemployee health care (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less that \$17.73/hour for those employers that do not provide health care. The Contractor or Grantor understated that the Living Wage is adjusted and established annually on April 30 in accordance with the Ordinal and covered employers shall be required to pay the adjusted amount thereafter to be in compliance of Section 1:815(3).
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Check the applicable box below which applies to your workforce					
	Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage without health benefits				
<u> </u>	Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage with health benefits				

- (b) To post a notice approved by the City regarding the applicability of the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.
- (e) To take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee covered by the Living Wage Ordinance or any person contracted for employment and covered by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services or agrees to accept financial assistance in accordance with the terms of the Living Wage Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Living Wage Ordinance, obligates the Employer/Grantee to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract or grant of financial assistance.

Aulago Corporation	Street Address
Signature of Authorized Representative S/24/23 Date	Grand Hasen MI 49417 City, State, Zip
Nathan Watermoler Controllar Print Name and Title	<u>(パレ・ダリレッ 8リリと</u> Phone/Email address

CITY OF ANN ARBOR LIVING WAGE ORDINANCE

RATE EFFECTIVE APRIL 30, 2023 - ENDING APRIL 29, 2024

\$15.90 per hour

If the employer provides health care benefits*

\$17.73 per hour

If the employer does **NOT** provide health care benefits*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than \$10,000 in a twelve-month period of time must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.

ENFORCEMENT

The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than \$500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

* Health Care benefits include those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed \$.50 an hour for an average work week; and the employer cost or contribution must equal no less than \$1/hr for the average work week.

The Law Requires Employers to Display This Poster Where Employees Can Readily See It.

For Additional Information or to File a Complaint contact Colin Spencer at 734/794-6500 or cspencer@a2gov.org



Vendor Conflict of Interest Disclosure Form

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

- 1. No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
- 2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
- 3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
- 4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
- 5. Please note any exceptions below:

Conflict of Interest Disclosure*						
Name of City of Ann Arbor employees, elected	() Relationship to employee					
officials or immediate family members with whom there may be a potential conflict of interest.	() Interest in vendor's company () Other (please describe in box below)					
*Disclosing a potential conflict of interest does not disqua conflicts of interest and they are detected by the City, ve	alify vendors. In the event vendors do not disclose potential andor will be exempt from doing business with the City.					
I certify that this Conflict of Interest Disclo contents are true and correct to my knowle certify on behalf of the Vendor by my signat	sure has been examined by me and that its edge and belief and I have the authority to so ure below:					
ANLARN Corporation 616-846-8442						
Vendor Name	Vendor Phone Number					
1/2 Fal - 8/2	21/22 Natan Vagenmake					
Signature of Vendor Authorized Representative	Printed Name of Vendor Authorized Representative					
	of Ann Arbor Phone: 734/794-6500, procurement@a2gov.org					

CITY OF ANN ARBOR DECLARATION OF COMPLIANCE

Non-Discrimination Ordinance

The "non discrimination by city contractors" provision of the City of Ann Arbor Non-Discrimination Ordinance (Ann Arbor City Code Chapter 112, Section 9:158) requires all contractors proposing to do business with the City to treat employees in a manner which provides equal employment opportunity and does not discriminate against any of their employees, any City employee working with them, or any applicant for employment on the basis of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight. It also requires that the contractors include a similar provision in all subcontracts that they execute for City work or programs.

In addition the City Non-Discrimination Ordinance requires that all contractors proposing to do business with the City of Ann Arbor must satisfy the contract compliance administrative policy adopted by the City Administrator. A copy of that policy may be obtained from the Purchasing Manager

The Contractor agrees:

- (a) To comply with the terms of the City of Ann Arbor's Non-Discrimination Ordinance and contract compliance administrative policy, including but not limited to an acceptable affirmative action program if applicable.
- (b) To post the City of Ann Arbor's Non-Discrimination Ordinance Notice in every work place or other location in which employees or other persons are contracted to provide services under a contract with the City.
- (c) To provide documentation within the specified time frame in connection with any workforce verification, compliance review or complaint investigation.
- (d) To permit access to employees and work sites to City representatives for the purposes of monitoring compliance, or investigating complaints of non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the Ann Arbor Non-Discrimination Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Non-Discrimination Ordinance, obligates the Contractor to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract.

Awlada Corporation	
Company Name	
2/8 + W 8/24/	23
Signature of Authorized/Representative	Date
Nother Codgenucher Controller	
Print Name and Title	
16750 Lincoln, Grand Hoven MI	49417
Address, City, State, Zip	
616-846-8442/	
Phone/Email Address /	

2016 Rev 0

CITY OF ANN ARBOR NON-DISCRIMINATION ORDINANCE

Relevant provisions of Chapter 112. Nondiscrimination, of the Ann Arbor City Code are included below.

You can review the entire ordinance at www.a2gov.org/humanrights.

Intent: It is the intent of the city that no individual be denied equal protection of the laws; nor shall any individual be denied the enjoyment of his or her civil or political rights or be discriminated against because of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight.

<u>Discriminatory Employment Practices:</u> No person shall discriminate in the hire, employment, compensation, work classifications, conditions or terms, promotion or demotion, or termination of employment of any individual. No person shall discriminate in limiting membership, conditions of membership or termination of membership in any labor union or apprenticeship program.

Discriminatory Effects: No person shall adopt, enforce or employ any policy or requirement which has the effect of creating unequal opportunities according to actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight for an individual to obtain housing, employment or public accommodation, except for a bona fide business necessity. Such a necessity does not arise due to a mere inconvenience or because of suspected objection to such a person by neighbors, customers or other persons.

Nondiscrimination by City Contractors: All contractors proposing to do business with the City of Ann Arbor shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All city contractors shall ensure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon any classification protected by this chapter. All contractors shall agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of any applicable protected classification. All contractors shall be required to post a copy of Ann Arbor's Non-Discrimination Ordinance at all work locations where its employees provide services under a contract with the city.

Complaint Procedure: If any individual believes there has been a violation of this chapter, he/she may file a complaint with the City's Human Rights Commission. The complaint must be filed within 180 calendar days from the date of the individual's knowledge of the allegedly discriminatory action or 180 calendar days from the date when the individual should have known of the allegedly discriminatory action. A complaint that is not filed within this timeframe cannot be considered by the Human Rights Commission. To file a complaint, first complete the complaint form, which is available at www.a2gov.org/humanrights. Then submit it to the Human Rights Commission by email (hrc@a2gov.org), by mail (Ann Arbor Human Rights Commission, PO Box 8647, Ann Arbor, MI 48107), or in person (City Clerk's Office). For further information, please call the commission at 734-794-6141 or e-mail the commission at hrc@a2gov.org.

<u>Private Actions For Damages or Injunctive Relief:</u> To the extent allowed by law, an individual who is the victim of discriminatory action in violation of this chapter may bring a civil action for appropriate injunctive relief or damages or both against the person(s) who acted in violation of this chapter.



GRETCHEN WHITMER
Governor

STATE OF MICHIGAN DEPARTMENT OF TRANSPORTATION Lansing

Vendor ID: 02946

PAUL C. AJEGBA Director

August 8, 2023

Anlaan Corporation PO Box 599 Grand Haven MI 49417-0599

Dear Contractor:

Thank you for your interest in doing business with the Michigan Department of Transportation (MDOT) as a prequalified construction contractor. This is to inform you that the application submitted for pregualification by **Anlaan Corporation has been approved.**

In accordance with our <u>Administrative Rules</u>, an **overall financial rating of \$214,853,000.00** has been established which covers numerical ratings in the classifications(s) listed below:

1000 200 214853 214853 214853 3000 200	(\$1,000,000.00) (\$200,000.00) (\$214,853,000.00) (\$214,853,000.00) (\$214,853,000.00) (\$3,000,000.00) (\$200,000.00)	Ba Cb Ea Fa Fb Fd I	Concrete Pavement Patching And Widening Hot Mix Asphalt/Bituminous Paving Grading, Drainage Structures & Agg. Cons Bridges And Special Structures Structural Steel(Erection) Pumphouses Sodding And Seeding/Turf Establishment Concrete C, C&G, Driveways, Sidewalks
2000 5000	(\$2,000,000.00) (\$5,000,000.00)	K	Sewers and Watermains
20000	(\$20,000,000.00)	N2	Clearing & Grubbing
1000	(\$1,000,000.00)	N7	Waterproofing
4000	(\$4,000,000.00)	N91F	Hydrodemolition
1000	(\$1,000,000.00)	N95B	Caisson Drilling
100	(\$100,000.00)	N96K	Attenuators

This prequalification rating is effective until April 30, 2025; a renewal application must be submitted by this date to prevent removal of prequalification.

If the assigned rating is not satisfactory, the Prequalification Committee must be notified in writing within 15 days of having been advised of the rating granted. MDOT may declare a prequalified bidder ineligible to bid at any time because of developments subsequent to prequalification which, in its opinion, would affect the responsibility of the bidder or their ability to perform the contract work.

If you have any questions or need additional information, please use the following contacts:

Construction Prequalification: MDOTPrequal@michigan.gov, Prequalification Website
Bid Letting (electronic bidding process): MDOT-BidLetting@michigan.gov, Bid Letting Website

Congratulations on your status as an MDOT Construction Prequalified Contractor. MDOT's Construction Prequalification team looks forward to working with you!

MURRAY D. VANWAGONER BUILDING • P.O. BOX 30050 • LANSING, MICHIGAN 48909 www.michigan.gov • (517) 373-2090

LH-LAN-0(01/11)

ANLAAN CORPORATION

CONSENT RESOLUTION OF THE BOARD OF DIRECTORS

The undersigned, being all of the members of the board of directors ("Board of Directors") of Anlaan Corporation, a Michigan corporation (the "Corporation") pursuant to Section 525 of the Michigan Business Corporation Act, waive all notice of the time, place and purpose of a meeting and hereby consent to and adopt the following resolution and all actions contemplated by this resolution:

RESOLVED, that the Board of Directors of the Corporation hereby authorize Ryan E. O'Donnell, as President, Nicholas F. Baker, as Vice President, Thomas A. Wagenmaker, as Senior Estimator, and Nathan Wagenmaker, as Controller as persons authorized to bind the Corporation with respect to the Corporation's construction bids, construction proposals, construction contracts, and other commitments of similar nature during the calendar year 2023.

IN WITNESS OF WHICH CONSENT, the undersigned executed this writing effective January 1, 2023.

Dated: 12 13 22

Dated: 12/13/22

Dated: 12/13/12

Dated: 12/13/22

Ryan O'Donnell, Director

Nicholas F. Baker, Director

Thomas A. Wagenmaker, Director

Gerrit TerLaan, Director

Quality Assurance:

Regarding quality, AnLaan always strives to provide a final product that exceeds owner expectations. AnLaan field and office staff are constantly looking for value engineering options and identifying scopes that will provide long term benefit to the project and owner. We are known for our innovative approach and have partnered with MDOT, local agencies like the City of Grand Rapids, and the City of Ann Arbor in recent years to provide pre-construction insight on various projects and scopes. Likewise, we gladly welcome the opportunity to partner with the City of Ann Arbor on this project extending the lifespan of this critical infrastructure facility. We will warranty our materials and workmanship for 1 year in accordance with the RFP.

We take great pride in our Peer Review Quality Assurance Structure— implemented by a chain of command which incorporates and system of checks and balances. The chain of command is as follows:

- Foreman: Complete their respective scope of work and oversee their crew.
- Superintendent: Oversee all onsite activities and ensure compliance to all regulations and quality of work.
- General Superintendent: Perform quality evaluations, safety checks and oversee all crucial job functions.
- Associate Project Manager: Monitors progress, schedules and other administrative functions of the project.
- Project Manager: Responsible for project execution. Ensures field procedures and will achieve the desired outcome, coordinates and facilitates communication between all parties invested in the project.
- Quality Assurance/Control Manager: Will oversee all construction efforts and ensure that we are meeting the expectations for all parties involved.

Section B. Workplace Safety

For over 35 years, AnLaan has worked diligently to make safety a core value that is indoctrinated in our business efforts and demonstrated on all our construction projects. Through this persistent effort, we have achieved an Experience Modification Rate (EMR) of 0.86 based on the last three years average, which falls below the industry average. We continue to grow and expand our efforts in driving a safety focused culture throughout our company via regular safety trainings and process improvements company wide. We follow a safety matrix that lists required OSHA safety programs and trainings. All employees are required to complete OSHA 10-hour training, and our field supervision is now required to complete OSHA 30-hour training.

AnLaan holds an Annual Safety training that we require all employees to attend, here we discuss the OSHA required topics such as: lead exposure, silica exposure, fire safety, fall protection, first-aid and CPR. In addition to the annual

meeting, we hold a Mid-Season Supervisors Safety Meeting that requires the attendance of all office staff, general superintendents, superintendents, and foremen.

In addition to the required trainings, we implement programs like Job Hazard Analysis Reports or Daily Pre-Task Plans. These documents are a great way for our field supervision to begin thinking about safe ways of completing work before we ever send crews to begin work. Our JHA's are drafted once the contract is awarded and are a useful



AnLaan is a union contractor that is signatory to the labors, carpenters, and operators' unions. As part of the collective bargaining agreements established with each union, all pay rates, health insurance, pension and other benefits are set and controlled by the individual unions. Our apprenticeship program is also part of the individual's specific union. All of facets of the respective unions mentioned above meet the requirements of the United States Department of Labor

WORK CLASSSIFICAITON	# OF EMPLOYEES	BASE WAGE STRAIGHT TIME		VACATION RATE STRAIGHT TIME		VACATION RATE OVER TIME		FRINGES	
FOREMAN	1	\$	38.65					\$	30.06
CARPENTERS	1	\$	35.50					\$	28.35
LABORERS	1	\$	27.37	\$	4.65	\$	6.98	\$	14.42
OPERATORS	1	\$	33.80	\$	5.06	\$	7.59	\$	25.14
CERT. OPERATORS	1	\$	35.30	\$	5.29	\$	7.93	\$	25.14

Section D. Equity and Sustainability

The following is AnLaan's Statement of Policy from our EEO Policy:

A. <u>Statement of Policy on EEO -</u> The Company is committed to providing EEO to all qualified persons regardless of race, color, religion, sex, national origin, sexual orientation, gender identity, disability, or age. Nicholas Baker at AnLaan Corporation of Grand Haven, MI (hereinafter "Affirmative Action Administrator"), has been designated to administer the Company's affirmative action program and will monitor that program and report on a periodic and continuing basis to management. All employment and personnel policies and practices-recruiting, hiring, promotions, reassignments, Company-sponsored training, compensation, benefits, layoff and recalls and terminations will be administered according to EEO principles. The Company, as part of its commitment to EEO and affirmative action, has established the following AAP in compliance with the regulations provided by the Secretary of Labor in 41 C.F.R. Part 60-1 et seq.

Furthermore, AnLaan continually recruits women and minorities for our trainee program. We also participate in the Federal Highway Administration and Michigan Department of Transportation On-the-Job-Training (OJT) Program and are listed on MDOT's website as a participating contractor, this list and in its entirety can be found with our digital copy. This program is designed to offer equal opportunity to minorities, women, and disadvantaged persons. The

effort between the FHWA, MDOT and contractors aims to create a greater pool of skilled individuals, create an environment that welcomes on-site training and work towards creating a more inclusive culture for our industry.



CONTRACT

THIS CONTRACT is between the CITY OF ANN ARBOR, a Michigan Municipal Corporation, 301 East Huron Street, Ann Arbor, Michigan 48104 ("City") and <u>Anlaan Corporation</u> ("Contractor") a corporation in the state of Michigan at P.O. Box 599 Grand Haven, MI 49417.

Based upon the mutual promises below, the Contractor and the City agree as follows:

ARTICLE I - Scope of Work

The Contractor agrees to furnish all of the materials, equipment and labor necessary; and to abide by all the duties and responsibilities applicable to it for the project titled **ITB#4736 Gallup Park Vehicle and Pedestrian Bridge** in accordance with the requirements and provisions of the following documents, including all written modifications incorporated into any of the documents, all of which are incorporated as part of this Contract:

Non-discrimination and Living Wage Declaration of Compliance Forms (if applicable)
Vendor Conflict of Interest Form Prevailing Wage Declaration of Compliance Form (if applicable)
Bid Forms
Contract and Exhibits
Bonds

General Conditions
Standard Specifications
Detailed Specifications
Plans
Addenda
ARPA Contract Addendum

ARTICLE II - Definitions

Administering Service Area/Unit means Community Services Area / Parks and Recreation Services

Project means ITB# 4736 Gallup Park Vehicle and Pedestrian Bridge

Supervising Professional means the person acting under the authorization of the manager of the Administering Service Area/Unit. At the time this Contract is executed, the Supervising Professional is: **Hillary Hanzel** whose job title is **Landscape Architect IV**. If there is any question concerning who the Supervising Professional is, Contractor shall confirm with the manager of the Administering Service Area/Unit.

Contractor's Representative means **Josh Goldsworthy** whose job title is **Project Manager/Estimator**.

ARTICLE III - Time of Completion

(A)	The work to be completed under this Contract shall begin immediately on the date
	specified in the Notice to Proceed issued by the City.

(B)	The entir	e work	for	this	Contract	shall	be	completed	within	 ()
consecutive calendar davs.											

(C) Failure to complete all the work within the time specified above, including any extension granted in writing by the Supervising Professional, shall obligate the Contractor to pay the City, as liquidated damages and not as a penalty, an amount equal to \$500 for each calendar day of delay in the completion of all the work. If any liquidated damages are unpaid by the Contractor, the City shall be entitled to deduct these unpaid liquidated damages from the monies due the Contractor.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

ARTICLE IV - The Contract Sum

(A) The City shall pay to the Contractor for the performance of the Contract, the unit prices as given in the Bid Form for the Base Bid and Option A for the estimated bid total of:

\$4,184,015.40 Dollars

(B) The amount paid shall be equitably adjusted to cover changes in the work ordered by the Supervising Professional but not required by the Contract Documents. Increases or decreases shall be determined only by written agreement between the City and Contractor.

ARTICLE V - Assignment

This Contract may not be assigned or subcontracted any portion of any right or obligation under this contract without the written consent of the City. Notwithstanding any consent by the City to any assignment, Contractor shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under this contract unless specifically released from the requirement, in writing, by the City.

ARTICLE VI - Choice of Law

This Contract shall be construed, governed, and enforced in accordance with the laws of the State of Michigan. By executing this Contract, the Contractor and the City agree to venue in a court of appropriate jurisdiction sitting within Washtenaw County for purposes of any action arising under this Contract. The parties stipulate that the venue referenced in this Contract is for convenience and waive any claim of non-convenience.

Whenever possible, each provision of the Contract will be interpreted in a manner as to be effective and valid under applicable law. The prohibition or invalidity, under applicable law, of any provision will not invalidate the remainder of the Contract.

ARTICLE VII - Relationship of the Parties

The parties of the Contract agree that it is not a Contract of employment but is a Contract to accomplish a specific result. Contractor is an independent Contractor performing services for the City. Nothing contained in this Contract shall be deemed to constitute any other relationship

between the City and the Contractor.

Contractor certifies that it has no personal or financial interest in the project other than the compensation it is to receive under the Contract. Contractor certifies that it is not, and shall not become, overdue or in default to the City for any Contract, debt, or any other obligation to the City including real or personal property taxes. City shall have the right to set off any such debt against compensation awarded for services under this Contract.

ARTICLE VIII - Notice

All notices given under this Contract shall be in writing, and shall be by personal delivery or by certified mail with return receipt requested to the parties at their respective addresses as specified in the Contract Documents or other address the Contractor may specify in writing. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; or (2) three days after mailing certified U.S. mail.

ARTICLE IX - Indemnification

To the fullest extent permitted by law, Contractor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result, in whole or in part, from any act or omission, which is in any way connected or associated with this Contract, by the Contractor or anyone acting on the Contractor's behalf under this Contract. Contractor shall not be responsible to indemnify the City for losses or damages caused by or resulting from the City's sole negligence. The provisions of this Article shall survive the expiration or earlier termination of this contract for any reason.

ARTICLE X - Entire Agreement

This Contract represents the entire understanding between the City and the Contractor and it supersedes all prior representations, negotiations, agreements, or understandings whether written or oral. Neither party has relied on any prior representations in entering into this Contract. No terms or conditions of either party's invoice, purchase order or other administrative document shall modify the terms and conditions of this Contract, regardless of the other party's failure to object to such form. This Contract shall be binding on and shall inure to the benefit of the parties to this Contract and their permitted successors and permitted assigns and nothing in this Contract, express or implied, is intended to or shall confer on any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Contract. This Contract may be altered, amended or modified only by written amendment signed by the City and the Contractor.

ARTICLE XI – Electronic Transactions

The City and Contractor agree that signatures on this Contract may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this Contract. This Contract may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

FOR CONTRACTOR	FOR THE CITY OF ANN ARBOR
By Nathan Wagenmaker Its: <u>Controller</u>	By Christopher Taylor, Mayor
	By Jacqueline Beaudry, City Clerk
	Approved as to substance
	By Milton Dohoney Jr., City Administrato
	By Derek Delacourt, Community Services Area Administrator
	Approved as to form and content
	Atleen Kaur, City Attorney

<u>CITY OF ANN ARBOR</u> AMERICAN RESCUE PLAN ACT (ARPA) CONTRACT ADDENDUM

Notice: The contract or purchase order to which this addendum is attached is made using federal assistance provided to the City of Ann Arbor by the U.S. Department of Treasury under the American Rescue Plan Act ("ARPA" and "ARPA Funds"), Sections 602(b) and 603(b) of the Social Security Act, Pub. L. No. 117-2 (March 11, 2021). In using such funds, the City must comply with the terms of ARPA, regulations issued by the U.S. Department of the Treasury ("Treasury") governing the expenditure of monies distributed from the ARPA Funds (including, without limitation, the Interim Final Rule (86 Fed. Reg. 26,786 (May 17, 2021) and Final Rule (87 Fed. Reg. 4,338 (Jan. 27, 2022)), the Award Terms and Conditions applicable to the ARPA Funds, and such other guidance as Treasury has issued or may issue governing the expenditure of monies distributed from the ARPA Funds (collectively, the "Regulatory Requirements"). Additionally, pursuant to the Regulatory Requirements, the City must comply with the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 C.F.R. Part 200 other than such provisions as Treasury has determined or may determine are inapplicable to the ARPA Funds and pursuant to 2 C.F.R. §200.327 the City must include within any contract applicable provisions described in Appendix II to 2 C.F.R. Part 200, each of which is contained in this Addendum.

The following terms and conditions apply to you, the contractor or vendor, as a contractor of the City of Ann Arbor, according to the City's Award Terms and Conditions; by ARPA and its implementing regulations; and as established by the Treasury Department.

- ARPA Requirements. Contractor agrees to comply with the requirements of Section 603 of ARPA, the Treasury's regulations implementing that section, and guidance issued by Treasury regarding the foregoing. Contractor also agrees to comply with all other applicable federal laws, regulations, and executive orders, and Contractor shall provide for such compliance by other parties in any agreements it enters into with other parties relating to this Contract.
- 2. Termination for Cause and for Convenience, The City reserves the right to immediately terminate this Contract in the event of a breach or default of the Contract by Contractor in the event Contractor fails to: 1) meet schedules, deadlines, and/or delivery dates within the time specified in the Contract; 2) make any payments owed; or 3) otherwise perform in accordance with the Contract. The City also reserves the right to terminate this Contract immediately, with written notice to Contractor, for convenience, if the City believes, in its sole discretion that it is in the best interest of the City to do so. Contractor will be compensated for work performed and accepted and goods accepted by the City as of the termination date if the Contract is terminated for convenience of the City.

3. Equal Employment Opportunity

A. Contractor shall comply with Executive Order 11246, "Equal Employment Opportunity," as amended by EO 11375, "Amending Executive Order 11246 Relating to Equal Employment

- Opportunity," and as supplemented by regulations at 41 CRF part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."
- B. If this contract is a Federally Assisted Construction Contract exceeding \$10,000, during the performance of this Contract, Contractor agrees as follows:
 - i. Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
 - ii. Contractor will, in all solicitations or advertisements for employees placed by or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
 - iii. Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with Contractor's legal duty to furnish information.
 - iv. Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
 - v. Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
 - vi. Contractor will furnish to the Administering Agency and the Secretary of Labor all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the Administering Agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- vii. In the event of Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended, in whole or in part, and Contractor may be declared ineligible for further Government contracts or Federally Assisted Construction Contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965. Such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- viii. Contractor will include the provisions of paragraphs B(i) through (vii) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each Subcontractor or vendor. Contractor will take such action with respect to any Subcontract or purchase order as the Administering Agency may direct as a means of enforcing such provisions, including sanctions for noncompliance.

Provided, however, that in the event Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Administering Agency, Contractor may request the United States to enter into such litigation to protect the interests of the United States.

The City further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work. Provided, that if the City so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality, or subdivision of such government which does not participate in work on or under the Contract.

- ix. The City agrees that it will assist and cooperate actively with the Administering Agency and the Secretary of Labor in obtaining the compliance of Contractor and any Subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor; that it will furnish the Administering Agency and the Secretary of Labor such information as they may require for the supervision of such compliance; and that it will otherwise assist the Administering Agency in the discharge of the agency's primary responsibility for securing compliance.
- x. The City further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and Federally Assisted Construction Contracts pursuant to the Executive Order and that it will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon Contractor and any Subcontractors by the Administering Agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the City agrees that if it fails or refuses to comply with these undertakings, the Administering Agency may take any or all of the following actions: cancel, terminate, or suspend, in whole or in part, this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from

- such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.
- C. If this Contract is not a Federally Assisted Construction Contract exceeding \$10,000, the provisions of this section shall not apply.
- 4. <u>Copeland "Anti-Kickback" Act.</u> Contractor and any subcontractors performing work under the Contract shall comply with all applicable provisions of the Copeland "Anti-Kickback" Act (18 U.S.C. § 874; 40 U.S.C. §3145) as supplemented by Department of Labor regulations (29 C.F.R. Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The City shall report all suspected or reported violations to Treasury.
- 5. Contract Work Hours and Safety Standards Act. If this Contract is for an amount in excess of \$100,000 and involves the employment of mechanics or laborers, Contractor must comply with 40 U.S.C. §§3702 and 3704, as supplemented by Department of Labor regulations (29 C.F.R. Part 5). Under 40 U.S.C. §3702 of the Act, Contractor must compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. §3704 are applicable to construction work and provide that no laborer or mechanic must be required work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.
- 6. Rights to Inventions Made Under a Contract or Agreement. Contracts or agreements for the performance of experimental, developmental, or research work shall provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 C.F.R. part 401, "Rights to Inventions Made by Non-profit Organizations and Small Business Firms Under Government Grants, Contracts, and Cooperative Agreements," and any applicable implementing regulations.

7. Clean Air Act and Federal Water Pollution Control Act

- A. Clean Air Act. Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§7401 et seq. Contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to Treasury and the appropriate Environmental Protection Agency Regional Office. Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed, in whole or in part, with federal assistance provided by Treasury.
- B. Federal Water Pollution Control Act. Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251 et seq. Contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to Treasury and the appropriate Environmental Protection Agency Regional Office. Contractor agrees to include these requirements in each

Subcontract exceeding \$150,000 financed, in whole or in part, with federal assistance provided by Treasury.

8. <u>Debarment and Suspension</u>

- A. This Contract is a covered transaction for purposes of 2 CFR §180.210 and 31 CFR §19.210. Therefore, this Contract is a lower-tier covered transaction for purposes of 2 C.F.R. Part 180 and 31 C.F.R. Part 19 if (1) the amount of this Contract is greater than or equal to \$25,000 (2 C.F.R. §180.220(b)(1); 31 C.F.R. §19.220(b)(1)); (2) the Contract requires the consent of an official of the Department of the Treasury (2 C.F.R. §180.220(b)(2); 31 C.F.R. §19.220(b)(2)); or (3) this Contract is for federally required audit services (2 C.F.R. §180.220(b)(3); 31 C.F.R. §19.220(b)(3)).
- B. As a covered transaction, Contractor is required to verify that its principals (defined at 2 CFR §180.995) or its affiliates (defined at 2 CFR §180.905) of both Contractor and its principals are not excluded (defined at 2 CFR §180.935) and are not disqualified (defined at 2 CFR §180.935). Contractor represents and warrants that, as of the execution of this Contract, neither Contractor and its principals nor any subcontractor or sub-consultant performing work under this Contract (at any tier) is included on the federally debarred bidder's list listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. §180 that implement Executive Orders 12549 (3 C.F.R. part 1986 Comp., p. 189) and 12689 (3 C.F.R. part 1986 Comp., p. 235), "Debarment and Suspension." Additionally, Contractor's completed Certification Regarding Debarment, Suspension and Other Responsibility Matters is attached hereto (Attachment 2) and incorporated herein. This certification is a material representation of fact relied upon by the City and all liability arising from an erroneous representation shall be borne solely by Contractor.
- C. If at any point during the Contract term, Contractor or its principals or any subcontractor or sub-consultant performing work at any tier is included on the federally debarred bidder's list, Contractor shall notify the City immediately.
- D. If any of the foregoing persons are excluded or disqualified and the Secretary of the Treasury has not granted an exception pursuant to 31 C.F.R. §19.120(a) (a) this Contract shall be void; (b) City shall not make any payments of federal financial assistance to Contractor; and (c) City shall have no obligations to Contractor under this Contract.
- E. Contractor must comply with 2 CFR pt. 180, subpart C and 31 CFR pt. 19, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- F. If it is later determined that Contractor did not comply with 2 CFR pt. 180, subpart C and 31 CFR pt. 19, in addition to remedies available to the City, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- 9. <u>Byrd Anti-Lobbying Amendment.</u> Contractor certifies that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee

of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. §1352. Contractor shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

Purchases over \$100,000 - Contractors must sign the certification included as Attachment 1 and shall cause any subcontractors with a subcontract (at any tier) exceeding \$100,000 to file with the tier above it the same certification

10. <u>Procurement of Recovered Materials</u>

- A. This section shall apply if (1) this Contract involves the purchase of an item designated by the Environmental Protection Agency ("EPA") in 40 C.F.R. Part 247 that exceeds \$10,000 or (2) the total value of such designated items acquired during The City's preceding fiscal year exceeded \$10,000.
- B. In the performance of the Contract, Contractor shall make maximum use of products containing recovered materials that are EPA-designated items, unless the product cannot (1) be acquired competitively within a timeframe providing for compliance with the Contract performance schedule, (2) meet Contract performance requirements, or (3) be acquired at a reasonable price.
- C. Information about this requirement, along with the list of EPA-designated items, is available on EPA's website. Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.
- 11. Prohibition on Contracting for Covered Telecommunications and Video Surveillance Services or Equipment. Contractor shall not use funds under this Contract to purchase, or enter into subcontracts to purchase, any equipment, services, or systems that use telecommunications equipment or services as a substantial or essential component of a system that is subject to 2 CFR § 200.216 (generally, video surveillance or telecommunications equipment produced by Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company, their subsidiaries or affiliates, or any entity that the Secretary of Defense reasonably believes to be an entity owned or controlled by the government of a foreign country). In the event Contractor identifies covered telecommunications equipment or services that constitute a substantial or essential component of any system, or as critical technology as part of any system that is subject to 2 CFR § 200.216, during Contract performance, Contractor shall alert the City as soon as possible and shall provide information on any measures taken to prevent recurrence.
- 12. <u>Buy USA Domestic Preferences for Certain Procurements Using Federal Funds.</u> Contractor should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award. For purposes of this section "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of

coatings, occurred in the United States and "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

- 13. <u>Solicitation of Minority and Women-Owned Business Enterprises.</u> Contractor hereby agrees to comply with the following when applicable: The requirements of Executive Orders 11625 and 12432 (concerning Minority Business Enterprise), and 12138 (concerning Women's Business Enterprise), when applicable. Accordingly, the contractor hereby agrees to take affirmative steps to assure that women and minority businesses are utilized when possible as sources of supplies, equipment, construction and services. Affirmative steps shall include the following:
 - A. Including qualified women's business enterprises and small and minority businesses on solicitation lists;
 - B. Assuring that women's enterprises and small and minority businesses are solicited whenever they are potential sources;
 - C. When economically feasible, dividing total requirements into smaller tasks or quantities so as to permit maximum participation by small and minority business, and women's business enterprises;
 - D. Where the requirement permits, establishing delivery schedules which will encourage participation by women's business enterprises and small and minority business; and
 - E. Using the services and assistance of the Small Business Administration, and the U.S. Office of Minority Business Development Agency of the Department of Commerce; and the North Carolina Office for Historically Underutilized Businesses.

For the purposes of these requirements, a Minority Business Enterprise (MBE) is defined as an enterprise that is at least 51 percent owned and controlled in its daily operation by members of the following groups: Black, Hispanic, Asian or Pacific Islander, American Indian, or Alaskan Natives. A Women Business Enterprise (WBE) is defined as an enterprise that is at least 51 percent owned and controlled in its daily operation by women.

14. Access to Records; Record Retention

A. Contractor agrees to provide the City, the Department of the Treasury, the Treasury Office of Inspector General, the Government Accountability Office, and the Comptroller General of the United States, or any authorized representatives of these entities, access to any records (electronic and otherwise) of Contractor which are directly pertinent to this Contract to conduct audits or any other investigations. Contractor agrees to permit any of

- the foregoing parties to reproduce such records by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- B. Contractor agrees to provide the Treasury Department or authorized representatives access to construction or other work sites pertaining to the work being completed under the Contract.
- C. No language in this Contract is intended to prohibit audits or internal reviews by the Treasury Department or the Comptroller General of the United States.
- D. Contractor agrees to retain all records covered by this section through December 31, 2031, or such longer period as is necessary for the resolution of any litigation, claim, negotiation, audit, or other inquiry involving the Contract.
- **15.** Assurances of Compliance with Title VI of the Civil Rights Act of 1964. Contractor and any subcontractor, or the successor, transferee, or assignee of Contractor or any subcontractor, shall comply with Title VI of the Civil Rights Act of 1964, which prohibits recipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. §§2000d et seq.), as implemented by the Department of the Treasury's Title VI regulations, 31 C.F.R. Part 22, which are herein incorporated by reference and made a part of this Contract. Title VI also provides protection to persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, 42 U.S.C. §§2000d et seq., as implemented by Treasury's Title VI regulations, 31 C.F.R. Part 22, and herein incorporated by reference and made a part of this Contract.
- **16.** Other Non-Discrimination Statutes. Contractor acknowledges that the City is bound by and agrees, to the extent applicable to Contractor, to abide by the provisions contained in the federal statutes enumerated below and any other federal statutes and regulations that may be applicable to the expenditure of ARPA Funds:
 - A. The Fair Housing Act, Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), which prohibits discrimination in housing on the basis of race, color, religion, national origin, sex, familial status, or disability;
 - B. Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of disability under any program or activity receiving federal financial assistance;
 - C. The Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101 et seq.), and Treasury's implementing regulations at 31 C.F.R. Part 23, which prohibit discrimination on the basis of age in programs or activities receiving federal financial assistance; and
 - D. Title II of the Americans with Disabilities Act of 1990, as amended (42 U.S.C. §§12101 et seq.), which prohibits discrimination on the basis of disability in programs, activities, and

services provided or made available by state and local governments or instrumentalities or agencies thereto.

17. Other Applicable Statutes and Regulations

- A. Prohibition on Providing Funds to the Enemy (2 CFR 183)
 - i. The Contractor must exercise due diligence to ensure that none of the funds, including supplies and services, received under this Contract are provided directly or indirectly (including through subcontracts) to a person or entity who is actively opposing the United States or coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities. The Contractor must terminate or void in whole or part any subcontract with a person or entity listed in the System Award Management Exclusions (SAM) as a prohibited or restricted sources pursuant to subtitle E of Title VIII of the NDAA for FY 2015, unless the Federal awarding agency provides written approval to continue the subcontract.
 - ii. The Federal awarding agency has the authority to terminate or void this Contract, in whole or in part, if the Federal awarding agency becomes aware that the Contractor failed to exercise due diligence as required by paragraph (i) of this clause of if the Federal awarding agency becomes aware that any funds received under this Contract have been provided directly or indirectly to a person or entity who is actively opposing coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities.
 - iii. In addition to any other existing examination-of-records authority, the Federal Government is authorized to examine any records of the Contractor and its Subcontracts to the extent necessary to ensure that funds, including supplies and services, available under this Contract are not provided, directly or indirectly, to a person or entity that is actively engaged in hostilities.
 - iv. The Contract must include the substance of this clause, including paragraph, in subcontracting agreements that have an estimated value over \$50,000 and will be performed outside the United States, including its outlying areas.
- B. Contractor agrees to comply with the Regulatory Requirements applicable to this Contract, which include, without limitation, the following:
 - i. 2 C.F.R. Part 200 Appendix II requirements;
 - ii. Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 C.F.R. Part 200, as applicable;
 - iii. Universal Identifier and System for Award Management (SAM), 2 C.F.R. Part 25, pursuant to which the award term set forth in Appendix A to 2 C.F.R. Part 25;
 - iv. OMB (Office of Management and Budget) Guidelines to Agencies on Government-wide Debarment and Suspension (Non-procurement), 2 C.F.R. Part 180, including the requirement to include a term or condition in all lower tier covered transactions (contracts and subcontracts described in 2 C.F.R. Part 180, subpart B) that the

- award is subject to 2 C.F.R. Part 180 and Treasury's implementing regulation at 31 C.F.R. Part 19;
- v. Recipient Integrity and Performance Matters, pursuant to which the award term set forth in 2 C.F.R. Part 200, Appendix XII to Part;
- vi. Government-wide Requirements for Drug-Free Workplace, 31 C.F.R. Part 20; and
- vii. Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328), which limits certain political activities of federal employees, as well as certain other employees who work in connection with federally funded programs.

18. Conflicts of Interest; Gifts and Favors

- A. Contractor understands that (1) the City will use ARPA Funds to pay for the cost of this Contract and (2) the expenditure of ARPA Funds is governed by the City's Conflict of Interest Policy and the Regulatory Requirements (including, without limitation, 2 C.F.R. §200.318(c)(1)).
- B. Contractor certifies to the City that as of the date hereof, to the best of its knowledge after reasonable inquiry, no employee, officer, or agent of the City involved in the selection, award, or administration of this Contract (each a "Covered Individual"); no member of a Covered Individual's immediate family; no partner of a Covered Individual; and no organization (including Contractor) which employs or is about to employ a Covered Individual has a financial or other interest in, or has received a tangible personal benefit from, Contractor. Should Contractor obtain knowledge of any such interest or any tangible personal benefit described in the preceding sentence after the date hereof, Contractor shall promptly disclose the same to the City in writing.
- C. Contractor certifies to the City that it has not provided, nor offered to provide, any gratuities, favors, or anything of value to an officer, employee, or agent of the City. Should Contractor obtain knowledge of the provision, or offer of any provision, of any gratuity, favor, or anything of value to an officer, employee, or agent described in the preceding sentence after the date hereof, Contractor shall promptly disclose the same to the City in writing.
- **19.** <u>Publications.</u> Any publications produced with funds from this award must display the following language: "This project [is being] [was] supported, in whole or in part, by federal award number [enter project FAIN] awarded to [name of recipient] by the U.S. Department of Treasury."

20. Miscellaneous

A. *Increasing Seat Belt Use in the United States*. Pursuant to Executive Order 13043, 62 Fed. Reg. 19,216 (Apr. 18, 1997), the City encourages Contractor to adopt and enforce

- on-the-job seat belt policies and programs for its employees when operating companyowned, rented, or personally owned vehicles.
- B. Reducing Text Messaging While Driving. Pursuant to Executive Order 13513, 74 Fed. Reg. 51,225 (Oct. 6, 2009), the City encourages Contractor to adopt and enforce policies that ban text messaging while driving.
- **21.** Conflicts and Interpretation. To the extent that any portion of this Addendum conflicts with any term or condition of this Contract expressed outside of this Addendum, the terms of this Addendum shall govern.

- (This form is required only for purchases of more than \$100,000) -

ATTACHMENT 1 CITY OF ANN ARBOR AMERICAN RESCUE PLAN ACT (ARPA) CONTRACT ADDENDUM

31 C.F.R. PART 21 – New Restrictions On Lobbying CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of the undersigned's knowledge and belief, that:

- 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, or the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31 of the U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, Anlaan Corporation, certifies and affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chapter 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official
Print Title and Name of authorized representative
Date

ATTACHMENT 2 CITY OF ANN ARBOR AMERICAN RESCUE PLAN ACT (ARPA) CONTRACT ADDENDUM CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

The undersigned bidder, proposer, contractor, or subcontractor, as appropriate, certifies to the best of its knowledge and belief that neither it nor any of its officers, directors, or managers who will be working under the Contract, or persons or entities holding a greater than 10% equity interest in it (collectively "Principals"):

- 1. Are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal or state department or agency in the United States:
- 2. Have within a three-year period preceding this proposal, bid, or agreement been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or state anti-trust or procurement statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- 3. Are presently indicted for or otherwise criminally or civilly charged by a government entity, (federal, state or local) with commission of any of the offenses enumerated in paragraph 2 of this certification; and
- 4. Have within a three-year period preceding this application/proposal had one or more public transactions (federal, state or local) terminated for cause or default.

The undersigned bidder, proposer, contractor, or subcontractor, as appropriate, certifies that the are "Actively" registered with SAM (System for Award Management) and have been assigned to following Unique Entity Identifier (UEI): The undersigned furthese that it shall not knowingly enter any transaction with any subcontractor, material supplied or vendor who is debarred, suspended, declared ineligible, or voluntarily excluded from cover transactions by any federal or state department/agency.					
I understand that a false statement on this certification may be grounds for rejection proposal or bid, or termination of the award or, in some instances, criminal prosecution. The Contractor,, certifies as stated above:					
Signature	Date				
Print Title and Name of authorized representative					
am unable to certify to one or more the above statements. Attached is my explanation.					
Signature	Date				
Print Title and Name of authorized representative					

ATTACHMENT 3

CITY OF ANN ARBOR AMERICAN RESCUE PLAN ACT (ARPA) CONTRACT ADDENDUM

System for Award Management (SAM) record search for business name and business principal

— (Screenshot of Results)

PERFORMANCE BOND

(1)		
` ,	of	(referred to as "Principal"),
	and	, a corporation duly authorized
	to do business in the State of Mic	chigan (referred to as "Surety"), are bound to the City of Ann Arbor,
		for \$, the payment of which Principal and Surety bind
		rs, administrators, successors and assigns, jointly and severally,
(2)	by this bond.	ton Contract with the City antitled
(2)	The Principal has entered a writing	ten Contract with the City entitled
	for ITB No. and	this bond is given for that Contract in compliance with Act No. 213
		963, as amended, being MCL 129.201 et seg.
(3)		red by the City to be in default under the Contract, the Surety may
` '	promptly remedy the default or s	
	(a) complete the Contract in acc	cordance with its terms and conditions; or
	(b) obtain a bid or bids for subn	sission to the City for completing the Centract in accordance with
		nission to the City for completing the Contract in accordance with upon determination by Surety of the lowest responsible bidder,
		such bidder and the City, and make available, as work progresses,
		t of completion less the balance of the Contract price; but not
		s and damages for which Surety may be liable hereunder, the
	amount set forth in paragraph 1.	
(4)		to the City if the Principal fully and promptly performs under the
(7)	Contract.	to the Oity if the Filmoipal faily and promptly performs ander the
(5)		xtension of time, alteration or addition to the terms of the Contract
` '		hereunder, or the specifications accompanying it shall in any way
	affect its obligations on this bo	nd, and waives notice of any such change, extension of time
	alteration or addition to the terms	s of the Contract or to the work, or to the specifications.
(6)		gree that signatures on this bond may be delivered electronically
		nd agree to treat electronic signatures as original signatures that
		ond may be executed and delivered by facsimile and upon such
	delivery, the facsimile signature	will be deemed to have the same effect as if the original signature
	had been delivered to the other	party.
SIGNE	ED AND SEALED this day	v of 202
Oloin	TO AND GEALED THIS day	, 01, 202
(Name	e of Surety Company)	(Name of Principal)
`	• • • • • • • • • • • • • • • • • • • •	. ,
БУ <u></u>	ignature)	. Ву
()	ignature)	(Signature)
Its		Its
	le of Office)	(Title of Office)
(110		(Title of Office)
Appro	ved as to form:	Name and address of agent:
• •		ŭ
Atlaca	Kour City Attorney	
Aueer	n Kaur, City Attorney	
		

LABOR AND MATERIAL BOND

(1)							
	of	(referred to as					
	"Principal"), and	, a corporation duly authorized					
	to do business in the State of Michigan, (referred to as "Surety"), are bound to the City of Ann Arbor,						
	Michigan (referred to as "City"), for the use and benefit of claimants as defined in Act 213 of Michigan						
	Public Acts of 1963, as amended, being MCL 1	29.201 <u>et seq</u> ., in the amount of					
	\$, for the payment of w	which Principal and Surety bind themselves, their heirs					
	executors, administrators, successors and assi	igns, jointly and severally, by this bond.					
(2)	The Principal has entered a written Contract with the Cityentitled						
	for ITB No	; and this bond is					
		o. 213 of the Michigan Public Acts of 1963 as amended;					
(2)	·	·					
(3)		y claimants for labor and material reasonably required					
(4)	under the Contract, the Surety shall pay those						
(4)		ount stated in paragraph 1, and Surety shall have no					
/E\	obligation if the Principal promptly and fully pay						
(၁)	Principal, Surety, and the City agree that signatures on this bond may be delivered electronically in lieu						
	of an original signature and agree to treat electronic signatures as original signatures that bind them to						
	this bond. This bond may be executed and delivered by facsimile and upon such delivery, the facsimile						
	•	ect as if the original signature had been delivered to the					
	other party.						
SIC	GNED AND SEALED this day of	, 202_					
	ame of Surety Company)	(Name of Principal)					
Ву	(Signature)	Ву					
	(9	(Signature)					
lts <u></u>	(Title of Office)	Its (Title of Office)					
	(Title of Office)	(Title of Office)					
Ар	proved as to form:	Name and address of agent:					
Atl	een Kaur, City Attorney						

GENERAL CONDITIONS

Section 1 - Execution, Correlation and Intent of Documents

The contract documents shall be signed in 2 copies by the City and the Contractor.

The contract documents are complementary and what is called for by any one shall be binding. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the work. Materials or work described in words which so applied have a well-known technical or trade meaning have the meaning of those recognized standards.

In case of a conflict among the contract documents listed below in any requirement(s), the requirement(s) of the document listed first shall prevail over any conflicting requirement(s) of a document listed later.

(1) Addenda in reverse chronological order; (2) Detailed Specifications; (3) Standard Specifications; (4) Plans; (5) General Conditions; (6) Contract; (7) Bid Forms; (8) Bond Forms; (9) Bid.

Section 2 - Order of Completion

The Contractor shall submit with each invoice, and at other times reasonably requested by the Supervising Professional, schedules showing the order in which the Contractor proposes to carry on the work. They shall include the dates at which the Contractor will start the several parts of the work, the estimated dates of completion of the several parts, and important milestones within the several parts.

Section 3 - Familiarity with Work

The Bidder or its representative shall make personal investigations of the site of the work and of existing structures and shall determine to its own satisfaction the conditions to be encountered, the nature of the ground, the difficulties involved, and all other factors affecting the work proposed under this Contract. The Bidder to whom this Contract is awarded will not be entitled to any additional compensation unless conditions are clearly different from those which could reasonably have been anticipated by a person making diligent and thorough investigation of the site.

The Bidder shall immediately notify the City upon discovery, and in every case prior to submitting its Bid, of every error or omission in the bidding documents that would be identified by a reasonably competent, diligent Bidder. In no case will a Bidder be allowed the benefit of extra compensation or time to complete the work under this Contract for extra expenses or time spent as a result of the error or omission.

Section 4 - Wage Requirements

Under this Contract, the Contractor shall conform to Chapter 14 of Title I of the Code of the City of Ann Arbor as amended; which in part states "...that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of

subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. At the request of the City, any contractor or subcontractor shall provide satisfactory proof of compliance with the contract provisions required by the Section.

Pursuant to Resolution R-16-469 all public improvement contractors are subject to prevailing wage and will be required to provide to the City payroll records sufficient to demonstrate compliance with the prevailing wage requirements. A sample Prevailing Wage Form is provided in the Appendix herein for reference as to what will be expected from contractors. Use of the Prevailing Wage Form provided in the Appendix section or a City-approved equivalent will be required along with wage rate interviews.

Where the Contract and the Ann Arbor City Ordinance are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used.

If the Contractor is a "covered employer" as defined in Chapter 23 of the Ann Arbor City Code, the Contractor agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Contractor agrees to pay those employees providing Services to the City under this Contract a "living wage," as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Contract are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

Contractor agrees that all subcontracts entered into by the Contractor shall contain similar wage provision covering subcontractor's employees who perform work on this contract.

Section 5 - Non-Discrimination

The Contractor agrees to comply, and to require its subcontractor(s) to comply, with the nondiscrimination provisions of MCL 37.2209. The Contractor further agrees to comply with the provisions of Section 9:158 of Chapter 112 of Title IX of the Ann Arbor City Code, and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.

Section 6 - Materials, Appliances, Employees

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, and other facilities necessary or used for the execution and completion of the work. Unless otherwise specified, all materials incorporated in the permanent work shall be new, and both workmanship and materials shall be of the highest quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

The Contractor shall at all times enforce strict discipline and good order among its employees, and shall seek to avoid employing on the work any unfit person or anyone not skilled in the work

assigned.

Adequate sanitary facilities shall be provided by the Contractor.

Section 7 - Qualifications for Employment

The Contractor shall employ competent laborers and mechanics for the work under this Contract. For work performed under this Contract, employment preference shall be given to qualified local residents.

Section 8 - Royalties and Patents

The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringements of any patent rights and shall hold the City harmless from loss on account of infringement except that the City shall be responsible for all infringement loss when a particular process or the product of a particular manufacturer or manufacturers is specified, unless the City has notified the Contractor prior to the signing of the Contract that the particular process or product is patented or is believed to be patented.

Section 9 - Permits and Regulations

The Contractor must secure and pay for all permits, permit or plan review fees and licenses necessary for the prosecution of the work. These include but are not limited to City building permits, right-of-way permits, lane closure permits, right-of-way occupancy permits, and the like. The City shall secure and pay for easements shown on the plans unless otherwise specified.

The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the contract documents are at variance with those requirements, it shall promptly notify the Supervising Professional in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work.

Section 10 - Protection of the Public and of Work and Property

The Contractor is responsible for the means, methods, sequences, techniques and procedures of construction and safety programs associated with the work contemplated by this contract. The Contractor, its agents or sub-contractors, shall comply with the "General Rules and Regulations for the Construction Industry" as published by the Construction Safety Commission of the State of Michigan and to all other local, State and National laws, ordinances, rules and regulations pertaining to safety of persons and property.

The Contractor shall take all necessary and reasonable precautions to protect the safety of the public. It shall continuously maintain adequate protection of all work from damage, and shall take all necessary and reasonable precautions to adequately protect all public and private property from injury or loss arising in connection with this Contract. It shall make good any damage, injury or loss to its work and to public and private property resulting from lack of reasonable protective precautions, except as may be due to errors in the contract documents, or caused by agents or employees of the City. The Contractor shall obtain and maintain sufficient insurance to cover damage to any City property at the site by any cause.

In an emergency affecting the safety of life, or the work, or of adjoining property, the Contractor is, without special instructions or authorization from the Supervising Professional, permitted to act at its discretion to prevent the threatened loss or injury. It shall also so act, without appeal, if authorized or instructed by the Supervising Professional.

Any compensation claimed by the Contractor for emergency work shall be determined by agreement or in accordance with the terms of Claims for Extra Cost - Section 15.

Section 11 - Inspection of Work

The City shall provide sufficient competent personnel for the inspection of the work.

The Supervising Professional shall at all times have access to the work whenever it is in preparation or progress, and the Contractor shall provide proper facilities for access and for inspection.

If the specifications, the Supervising Professional's instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the Supervising Professional timely notice of its readiness for inspection, and if the inspection is by an authority other than the Supervising Professional, of the date fixed for the inspection. Inspections by the Supervising Professional shall be made promptly, and where practicable at the source of supply. If any work should be covered up without approval or consent of the Supervising Professional, it must, if required by the Supervising Professional, be uncovered for examination and properly restored at the Contractor's expense.

Re-examination of any work may be ordered by the Supervising Professional, and, if so ordered, the work must be uncovered by the Contractor. If the work is found to be in accordance with the contract documents, the City shall pay the cost of re-examination and replacement. If the work is not in accordance with the contract documents, the Contractor shall pay the cost.

Section 12 - Superintendence

The Contractor shall keep on the work site, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Supervising Professional. The superintendent will be responsible to perform all on-site project management for the Contractor. The superintendent shall be experienced in the work required for this Contract. The superintendent shall represent the Contractor and all direction given to the superintendent shall be binding as if given to the Contractor. Important directions shall immediately be confirmed in writing to the Contractor. Other directions will be confirmed on written request. The Contractor shall give efficient superintendence to the work, using its best skill and attention.

Section 13 - Changes in the Work

The City may make changes to the quantities of work within the general scope of the Contract at any time by a written order and without notice to the sureties. If the changes add to or deduct from the extent of the work, the Contract Sum shall be adjusted accordingly. All the changes shall be executed under the conditions of the original Contract except that any claim for extension of time caused by the change shall be adjusted at the time of ordering the change.

In giving instructions, the Supervising Professional shall have authority to make minor changes in

the work not involving extra cost and not inconsistent with the purposes of the work, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the Supervising Professional, and no claim for an addition to the Contract Sum shall be valid unless the additional work was ordered in writing.

The Contractor shall proceed with the work as changed and the value of the work shall be determined as provided in Claims for Extra Cost - Section 15.

Section 14 - Extension of Time

Extension of time stipulated in the Contract for completion of the work will be made if and as the Supervising Professional may deem proper under any of the following circumstances:

- (1) When work under an extra work order is added to the work under this Contract;
- (2) When the work is suspended as provided in Section 20;
- (3) When the work of the Contractor is delayed on account of conditions which could not have been foreseen, or which were beyond the control of the Contractor, and which were not the result of its fault or negligence;
- (4) Delays in the progress of the work caused by any act or neglect of the City or of its employees or by other Contractors employed by the City;
- (5) Delay due to an act of Government;
- (6) Delay by the Supervising Professional in the furnishing of plans and necessary information;
- (7) Other cause which in the opinion of the Supervising Professional entitles the Contractor to an extension of time.

The Contractor shall notify the Supervising Professional within 7 days of an occurrence or conditions which, in the Contractor's opinion, entitle it to an extension of time. The notice shall be in writing and submitted in ample time to permit full investigation and evaluation of the Contractor's claim. The Supervising Professional shall acknowledge receipt of the Contractor's notice within 7 days of its receipt. Failure to timely provide the written notice shall constitute a waiver by the Contractor of any claim.

In situations where an extension of time in contract completion is appropriate under this or any other section of the contract, the Contractor understands and agrees that the only available adjustment for events that cause any delays in contract completion shall be extension of the required time for contract completion and that there shall be no adjustments in the money due the Contractor on account of the delay.

Section 15 - Claims for Extra Cost

If the Contractor claims that any instructions by drawings or other media issued after the date of the Contract involved extra cost under this Contract, it shall give the Supervising Professional written notice within 7 days after the receipt of the instructions, and in any event before proceeding to execute the work, except in emergency endangering life or property. The procedure shall then be as provided for Changes in the Work-Section 13. No claim shall be valid unless so made.

If the Supervising Professional orders, in writing, the performance of any work not covered by the contract documents, and for which no item of work is provided in the Contract, and for which no unit price or lump sum basis can be agreed upon, then the extra work shall be done on a Cost-Plus-Percentage basis of payment as follows:

- (1) The Contractor shall be reimbursed for all reasonable costs incurred in doing the work, and shall receive an additional payment of 15% of all the reasonable costs to cover both its indirect overhead costs and profit;
- (2) The term "Cost" shall cover all payroll charges for employees and supervision required under the specific order, together with all worker's compensation, Social Security, pension and retirement allowances and social insurance, or other regular payroll charges on same; the cost of all material and supplies required of either temporary or permanent character; rental of all power-driven equipment at agreed upon rates, together with cost of fuel and supply charges for the equipment; and any costs incurred by the Contractor as a direct result of executing the order, if approved by the Supervising Professional;
- (3) If the extra is performed under subcontract, the subcontractor shall be allowed to compute its charges as described above. The Contractor shall be permitted to add an additional charge of 5% percent to that of the subcontractor for the Contractor's supervision and contractual responsibility;
- (4) The quantities and items of work done each day shall be submitted to the Supervising Professional in a satisfactory form on the succeeding day, and shall be approved by the Supervising Professional and the Contractor or adjusted at once;
- (5) Payments of all charges for work under this Section in any one month shall be made along with normal progress payments. Retainage shall be in accordance with Progress Payments-Section 16.

No additional compensation will be provided for additional equipment, materials, personnel, overtime or special charges required to perform the work within the time requirements of the Contract.

When extra work is required and no suitable price for machinery and equipment can be determined in accordance with this Section, the hourly rate paid shall be 1/40 of the basic weekly rate listed in the Rental Rate Blue Book published by Dataquest Incorporated and applicable to the time period the equipment was first used for the extra work. The hourly rate will be deemed to include all costs of operation such as bucket or blade, fuel, maintenance, "regional factors", insurance, taxes, and the like, but not the costs of the operator.

Section 16 - Progress Payments

The Contractor shall submit each month, or at longer intervals, if it so desires, an invoice covering work performed for which it believes payment, under the Contract terms, is due. The submission shall be to the City's Finance Department - Accounting Division. The Supervising Professional will, within 10 days following submission of the invoice, prepare a certificate for payment for the work in an amount to be determined by the Supervising Professional as fairly representing the acceptable work performed during the period covered by the Contractor's invoice. To insure the proper performance of this Contract, the City will retain a percentage of the estimate in accordance with Act 524, Public Acts of 1980. The City will then, following the receipt of the Supervising Professional's Certificate, make payment to the Contractor as soon as feasible, which is anticipated will be within 15 days.

An allowance may be made in progress payments if substantial quantities of permanent material have been delivered to the site but not incorporated in the completed work if the Contractor, in the opinion of the Supervising Professional, is diligently pursuing the work under this Contract. Such materials shall be properly stored and adequately protected. Allowance in the estimate shall be at the invoice price value of the items. Notwithstanding any payment of any allowance, all risk of loss due to vandalism or any damages to the stored materials remains with the Contractor.

In the case of Contracts which include only the Furnishing and Delivering of Equipment, the payments shall be; 60% of the Contract Sum upon the delivery of all equipment to be furnished, or in the case of delivery of a usable portion of the equipment in advance of the total equipment delivery, 60% of the estimated value of the portion of the equipment may be paid upon its delivery in advance of the time of the remainder of the equipment to be furnished; 30% of the Contract Sum upon completion of erection of all equipment furnished, but not later than 60 days after the date of delivery of all of the equipment to be furnished; and payment of the final 10% on final completion of erection, testing and acceptance of all the equipment to be furnished; but not later than 180 days after the date of delivery of all of the equipment to be furnished, unless testing has been completed and shows the equipment to be unacceptable.

With each invoice for periodic payment, the Contractor shall enclose a Contractor's Declaration - Section 43, and an updated project schedule per Order of Completion - Section 2.

Section 17 - Deductions for Uncorrected Work

If the Supervising Professional decides it is inexpedient to correct work that has been damaged or that was not done in accordance with the Contract, an equitable deduction from the Contract price shall be made.

Section 18 - Correction of Work Before Final Payment

The Contractor shall promptly remove from the premises all materials condemned by the Supervising Professional as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute the work in accordance with the Contract and without expense to the City and shall bear the expense of making good all work of other contractors destroyed or damaged by the removal or replacement.

If the Contractor does not remove the condemned work and materials within 10 days after written notice, the City may remove them and, if the removed material has value, may store the material

at the expense of the Contractor. If the Contractor does not pay the expense of the removal within 10 days thereafter, the City may, upon 10 days written notice, sell the removed materials at auction or private sale and shall pay to the Contractor the net proceeds, after deducting all costs and expenses that should have been borne by the Contractor. If the removed material has no value, the Contractor must pay the City the expenses for disposal within 10 days of invoice for the disposal costs.

The inspection or lack of inspection of any material or work pertaining to this Contract shall not relieve the Contractor of its obligation to fulfill this Contract and defective work shall be made good. Unsuitable materials may be rejected by the Supervising Professional notwithstanding that the work and materials have been previously overlooked by the Supervising Professional and accepted or estimated for payment or paid for. If the work or any part shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good the defect in a manner satisfactory to the Supervising Professional. The judgment and the decision of the Supervising Professional as to whether the materials supplied and the work done under this Contract comply with the requirements of the Contract shall be conclusive and final.

Section 19 - Acceptance and Final Payment

Upon receipt of written notice that the work is ready for final inspection and acceptance, the Supervising Professional will promptly make the inspection. When the Supervising Professional finds the work acceptable under the Contract and the Contract fully performed, the Supervising Professional will promptly sign and issue a final certificate stating that the work required by this Contract has been completed and is accepted by the City under the terms and conditions of the Contract. The entire balance found to be due the Contractor, including the retained percentage, shall be paid to the Contractor by the City within 30 days after the date of the final certificate.

Before issuance of final certificates, the Contractor shall file with the City:

- (1) The consent of the surety to payment of the final estimate;
- (2) The Contractor's Affidavit in the form required by Section 44.

In case the Affidavit or consent is not furnished, the City may retain out of any amount due the Contractor, sums sufficient to cover all lienable claims.

The making and acceptance of the final payment shall constitute a waiver of all claims by the City except those arising from:

- (1) unsettled liens;
- (2) faulty work appearing within 12 months after final payment;
- (3) hidden defects in meeting the requirements of the plans and specifications;
- (4) manufacturer's quarantees.

It shall also constitute a waiver of all claims by the Contractor, except those previously made and still unsettled.

Section 20 - Suspension of Work

The City may at any time suspend the work, or any part by giving 5 days notice to the Contractor in writing. The work shall be resumed by the Contractor within 10 days after the date fixed in the

written notice from the City to the Contractor to do so. The City shall reimburse the Contractor for expense incurred by the Contractor in connection with the work under this Contract as a result of the suspension.

If the work, or any part, shall be stopped by the notice in writing, and if the City does not give notice in writing to the Contractor to resume work at a date within 90 days of the date fixed in the written notice to suspend, then the Contractor may abandon that portion of the work suspended and will be entitled to the estimates and payments for all work done on the portions abandoned, if any, plus 10% of the value of the work abandoned, to compensate for loss of overhead, plant expense, and anticipated profit.

Section 21 - Delays and the City's Right to Terminate Contract

If the Contractor refuses or fails to prosecute the work, or any separate part of it, with the diligence required to insure completion, ready for operation, within the allowable number of consecutive calendar days specified plus extensions, or fails to complete the work within the required time, the City may, by written notice to the Contractor, terminate its right to proceed with the work or any part of the work as to which there has been delay. After providing the notice the City may take over the work and prosecute it to completion, by contract or otherwise, and the Contractor and its sureties shall be liable to the City for any excess cost to the City. If the Contractor's right to proceed is terminated, the City may take possession of and utilize in completing the work, any materials, appliances and plant as may be on the site of the work and useful for completing the work. The right of the Contractor to proceed shall not be terminated or the Contractor charged with liquidated damages where an extension of time is granted under Extension of Time - Section 14.

If the Contractor is adjudged a bankrupt, or if it makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of its insolvency, or if it persistently or repeatedly refuses or fails except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials, or if it fails to make prompt payments to subcontractors or for material or labor, or persistently disregards laws, ordinances or the instructions of the Supervising Professional, or otherwise is guilty of a substantial violation of any provision of the Contract, then the City, upon the certificate of the Supervising Professional that sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor 3 days written notice, terminate this Contract. The City may then take possession of the premises and of all materials, tools and appliances thereon and without prejudice to any other remedy it may have, make good the deficiencies or finish the work by whatever method it may deem expedient, and deduct the cost from the payment due the Contractor. The Contractor shall not be entitled to receive any further payment until the work is finished. If the expense of finishing the work, including compensation for additional managerial and administrative services exceeds the unpaid balance of the Contract Sum, the Contractor and its surety are liable to the City for any excess cost incurred. The expense incurred by the City, and the damage incurred through the Contractor's default, shall be certified by the Supervising Professional.

Section 22 - Contractor's Right to Terminate Contract

If the work should be stopped under an order of any court, or other public authority, for a period of 3 months, through no act or fault of the Contractor or of anyone employed by it, then the Contractor may, upon 7 days written notice to the City, terminate this Contract and recover from the City payment for all acceptable work executed plus reasonable profit.

Section 23 - City's Right To Do Work

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this Contract, the City, 3 days after giving written notice to the Contractor and its surety may, without prejudice to any other remedy the City may have, make good the deficiencies and may deduct the cost from the payment due to the Contractor.

Section 24 - Removal of Equipment and Supplies

In case of termination of this Contract before completion, from any or no cause, the Contractor, if notified to do so by the City, shall promptly remove any part or all of its equipment and supplies from the property of the City, failing which the City shall have the right to remove the equipment and supplies at the expense of the Contractor.

The removed equipment and supplies may be stored by the City and, if all costs of removal and storage are not paid by the Contractor within 10 days of invoicing, the City upon 10 days written notice may sell the equipment and supplies at auction or private sale, and shall pay the Contractor the net proceeds after deducting all costs and expenses that should have been borne by the Contractor and after deducting all amounts claimed due by any lien holder of the equipment or supplies.

Section 25 - Responsibility for Work and Warranties

The Contractor assumes full responsibility for any and all materials and equipment used in the construction of the work and may not make claims against the City for damages to materials and equipment from any cause except negligence or willful act of the City. Until its final acceptance, the Contractor shall be responsible for damage to or destruction of the project (except for any part covered by Partial Completion and Acceptance - Section 26). The Contractor shall make good all work damaged or destroyed before acceptance. All risk of loss remains with the Contractor until final acceptance of the work (Section 19) or partial acceptance (Section 26). The Contractor is advised to investigate obtaining its own builders risk insurance.

The Contractor shall guarantee the quality of the work for a period of one year. The Contractor shall also unconditionally guarantee the quality of all equipment and materials that are furnished and installed under the contract for a period of one year. At the end of one year after the Contractor's receipt of final payment, the complete work, including equipment and materials furnished and installed under the contract, shall be inspected by the Contractor and the Supervising Professional. Any defects shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. Any defects that are identified prior to the end of one year shall also be inspected by the Contractor and the Supervising Professional and shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. The Contractor shall assign all manufacturer or material supplier warranties to the City prior to final payment. The assignment shall not relieve the Contractor of its obligations under this paragraph to correct defects.

Section 26 - Partial Completion and Acceptance

If at any time prior to the issuance of the final certificate referred to in Acceptance and Final Payment - Section 19, any portion of the permanent construction has been satisfactorily completed, and if the Supervising Professional determines that portion of the permanent construction is not required for the operations of the Contractor but is needed by the City, the Supervising Professional shall issue to the Contractor a certificate of partial completion, and immediately the City may take over and use the portion of the permanent construction described in the certificate, and exclude the Contractor from that portion.

The issuance of a certificate of partial completion shall not constitute an extension of the Contractor's time to complete the portion of the permanent construction to which it relates if the Contractor has failed to complete it in accordance with the terms of this Contract. The issuance of the certificate shall not release the Contractor or its sureties from any obligations under this Contract including bonds.

If prior use increases the cost of, or delays the work, the Contractor shall be entitled to extra compensation, or extension of time, or both, as the Supervising Professional may determine.

Section 27 - Payments Withheld Prior to Final Acceptance of Work

The City may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any certificate to the extent reasonably appropriate to protect the City from loss on account of:

- (1) Defective work not remedied;
- (2) Claims filed or reasonable evidence indicating probable filing of claims by other parties against the Contractor;
- (3) Failure of the Contractor to make payments properly to subcontractors or for material or labor:
- (4) Damage to another Contractor.

When the above grounds are removed or the Contractor provides a Surety Bond satisfactory to the City which will protect the City in the amount withheld, payment shall be made for amounts withheld under this section.

Section 28 - Contractor's Insurance

(1) The Contractor shall procure and maintain during the life of this Contract, including the guarantee period and during any warranty work, such insurance policies, including those set forth below, as will protect itself and the City from all claims for bodily injuries, death or property damage that may arise under this Contract; whether the act(s) or omission(s) giving rise to the claim were made by the Contractor, any subcontractor, or anyone employed by them directly or indirectly. Prior to commencement of any work under this contract, Contractor shall provide to the City documentation satisfactory to the City, through City-approved means (currently myCOI), demonstrating it has obtained the required policies and endorsements. The certificates of insurance endorsements and/or copies of

policy language shall document that the Contractor satisfies the following minimum requirements. Contractor shall add registration@mycoitracking.com to its safe sender's list so that it will receive necessary communication from myCOI. When requested, Contractor shall provide the same documentation for its subcontractor(s) (if any).

Required insurance policies include:

(a) Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

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Bodily Injury by Accident - $500,000 each accident
Bodily Injury by Disease - $500,000 each employee
Bodily Injury by Disease - $500,000 each policy limit
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(b) Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 04 13 or current equivalent. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements specifically for the following coverages: Products and Completed Operations, Explosion, Collapse and Underground coverage or Pollution. Further there shall be no added exclusions or limiting endorsements that diminish the City's protections as an additional insured under the policy. The following minimum limits of liability are required:

\$1,000,000	Each occurrence as respect Bodily Injury Liability or Property
	Damage Liability, or both combined.
\$2,000,000	Per Project General Aggregate
\$1,000,000	Personal and Advertising Injury
\$2,000,000	Products and Completed Operations Aggregate, which,
	notwithstanding anything to the contrary herein, shall be
	maintained for three years from the date the Project is completed.

- (c) Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 10 13 or current equivalent. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements that diminish the City's protections as an additional insured under the policy. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.
- (d) Umbrella/Excess Liability Insurance shall be provided to apply excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1.000.000.
- (2) Insurance required under subsection (1)(b) and (1)(c) above shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its

insurer against the City for any insurance listed herein.

- (3) Insurance companies and policy forms are subject to approval of the City Attorney, which approval shall not be unreasonably withheld. Documentation must provide and demonstrate an unconditional and un-qualified 30-day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number(s); name of insurance company(s); name and address of the agent(s) or authorized representative(s); name(s), email address(es), and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which may be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified Contractor shall furnish the City with satisfactory certificates of insurance and endorsements prior to commencement of any work. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) and all required endorsements to the City. If any of the above coverages expire by their terms during the term of this Contract, the Contractor shall deliver proof of renewal and/or new policies and endorsements to the Administering Service Area/Unit at least ten days prior to the expiration date.
 - (4) Any Insurance provider of Contractor shall be authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of "A-" Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-authorized insurance companies are not acceptable unless approved in writing by the City.
 - (5) City reserves the right to require additional coverage and/or coverage amounts as may be included from time to time in the Detailed Specifications for the Project.
- (6) The provisions of General Condition 28 shall survive the expiration or earlier termination of this contract for any reason.

Section 29 - Surety Bonds

Bonds will be required from the successful bidder as follows:

- (1) A Performance Bond to the City of Ann Arbor for the amount of the bid(s) accepted;
- (2) A Labor and Material Bond to the City of Ann Arbor for the amount of the bid(s) accepted.

Bonds shall be executed on forms supplied by the City in a manner and by a Surety Company authorized to transact business in Michigan and satisfactory to the City Attorney.

Section 30 - Damage Claims

The Contractor shall be held responsible for all damages to property of the City or others, caused by or resulting from the negligence of the Contractor, its employees, or agents during the progress of or connected with the prosecution of the work, whether within the limits of the work or elsewhere. The Contractor must restore all property injured including sidewalks, curbing, sodding, pipes, conduit, sewers or other public or private property to not less than its original condition with new work.

Section 31 - Refusal to Obey Instructions

If the Contractor refuses to obey the instructions of the Supervising Professional, the Supervising Professional shall withdraw inspection from the work, and no payments will be made for work performed thereafter nor may work be performed thereafter until the Supervising Professional shall have again authorized the work to proceed.

Section 32 - Assignment

Neither party to the Contract shall assign the Contract without the written consent of the other. The Contractor may assign any monies due to it to a third party acceptable to the City.

Section 33 - Rights of Various Interests

Whenever work being done by the City's forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Supervising Professional, to secure the completion of the various portions of the work in general harmony.

The Contractor is responsible to coordinate all aspects of the work, including coordination of, and with, utility companies and other contractors whose work impacts this project.

Section 34 - Subcontracts

The Contractor shall not award any work to any subcontractor without prior written approval of the City. The approval will not be given until the Contractor submits to the City a written statement concerning the proposed award to the subcontractor. The statement shall contain all information the City may require.

The Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and all other contract documents applicable to the work of the subcontractors and to give the Contractor the same power to terminate any subcontract that the City may exercise over the Contractor under any provision of the contract documents.

Nothing contained in the contract documents shall create any contractual relation between any subcontractor and the City.

Section 35 - Supervising Professional's Status

The Supervising Professional has the right to inspect any or all work. The Supervising Professional has authority to stop the work whenever stoppage may be appropriate to insure the proper execution of the Contract. The Supervising Professional has the authority to reject all work and materials which do not conform to the Contract and to decide questions which arise in the execution of the work.

The Supervising Professional shall make all measurements and determinations of quantities. Those measurements and determinations are final and conclusive between the parties.

Section 36 - Supervising Professional's Decisions

The Supervising Professional shall, within a reasonable time after their presentation to the Supervising Professional, make decisions in writing on all claims of the City or the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the contract documents.

Section 37 - Storing Materials and Supplies

Materials and supplies may be stored at the site of the work at locations agreeable to the City unless specific exception is listed elsewhere in these documents. Ample way for foot traffic and drainage must be provided, and gutters must, at all times, be kept free from obstruction. Traffic on streets shall be interfered with as little as possible. The Contractor may not enter or occupy with agents, employees, tools, or material any private property without first obtaining written permission from its owner. A copy of the permission shall be furnished to the Supervising Professional.

Section 38 - Lands for Work

The Contractor shall provide, at its own expense and without liability to the City, any additional land access that may be required for temporary construction facilities or for storage of materials.

Section 39 - Cleaning Up

The Contractor shall, as directed by the Supervising Professional, remove at its own expense from the City's property and from all public and private property all temporary structures, rubbish and waste materials resulting from its operations unless otherwise specifically approved, in writing, by the Supervising Professional.

Section 40 - Salvage

The Supervising Professional may designate for salvage any materials from existing structures or underground services. Materials so designated remain City property and shall be transported or stored at a location as the Supervising Professional may direct.

Section 41 - Night, Saturday or Sunday Work

No night or Sunday work (without prior written City approval) will be permitted except in the case of an emergency and then only to the extent absolutely necessary. The City may allow night work which, in the opinion of the Supervising Professional, can be satisfactorily performed at night. Night work is any work between 8:00 p.m. and 7:00 a.m. No Saturday work will be permitted unless the Contractor gives the Supervising Professional at least 48 hours but not more than 5 days notice of the Contractor's intention to work the upcoming Saturday.

Section 42 - Sales Taxes

Under State law the City is exempt from the assessment of State Sales Tax on its direct purchases. Contractors who acquire materials, equipment, supplies, etc. for incorporation in City projects are not likewise exempt. State Law shall prevail. The Bidder shall familiarize itself with the State Law and prepare its Bid accordingly. No extra payment will be allowed under this Contract for failure of the Contractor to make proper allowance in this bid for taxes it must pay.

Section 43

CONTRACTOR'S DECLARATION

I hereby declare that I have not, during th	e period	, 20, to	, 20
, performed any work, furnished any mate		•	3 '
done anything in addition to the regular ite			
titled, f	or which I shall ask,	demand, sue	for, or claim
compensation or extension of time from			
compensation or extension of time as s			
declare that I have paid all payroll obligation			•
the above period and that all invoices relations this declaration have been paid in full except the second of the		ived more man.	30 days prior to
this declaration have been paid in full exc	epi as listed below.		
There is/is not (Contractor please circle o	ne and strike one as app	ropriate) an item	nized statement
attached regarding a request for additional			
	•		
	D (_	
Contractor	Date		
Ry			
(Signature)			
(Signature)			
Its			
(Title of Office)			
,			

Past due invoices, if any, are listed below.

Section 44

CONTRACTOR'S AFFIDAVIT

The undersigned Contractor,		, represents	${\sf s}$ that on ${\sf _}$,
20 , it was awarded a contract by the C	City of An	n Arbor, Michigan to	_	under
20, it was awarded a contract by the C the terms and conditions of a Contract titl	leď			The Contractor
represents that all work has now been according	complish	ed and the Contract	is comple	te.
•	•		•	
The Contractor warrants and certifies that	all of its i	indebtedness arising	by reaso	of the Contract
has been fully paid or satisfactorily secure		•	•	
for labor and material used in accomplish				
the performance of the Contract, have b				
agrees that, if any claim should hereafter				
upon request to do so by the City of Ann A		onan accamo recpo	rioibility it	ir ir ir ir ir iodiatory
apon roquost to as so by and only or runn?	11001.			
The Contractor, for valuable consideration	n receive	ed does further waiv	e releas	e and relinguish
any and all claims or right of lien which the				
premises for labor and material used in th				
F	-			
This affidavit is freely and voluntarily giver	n with ful	I knowledge of the fa	cts.	
, , , ,		J		
Contractor	Date			
By(Signature)				
(Signature)				
Its				
(Title of Office)				
Subscribed and sworn to before me, on th	nie	day of	20	
Subscribed and sworn to before me, on th		County Michigan	20	
Notary Public ,		_ County, Milonigan		
County, MI				
My commission expires on:				
'				

STANDARD SPECIFICATIONS

All work under this contract shall be performed in accordance with the Public Services Department Standard Specifications in effect at the date of availability of the contract documents stipulated in the Bid. All work under this Contract which is not included in these Standard Specifications, or which is performed using modifications to these Standard Specifications, shall be performed in accordance with the Detailed Specifications included in these contract documents.

Standard Specifications are available online:

http://www.a2gov.org/departments/engineering/Pages/Engineering-and-Contractor-Resources.aspx

DETAILED SPECIFICATIONS

- 1. PROGRESS CLAUSE
- 2. MAINTENANCE OF TRAFFIC
- 3. SPECIAL PROVISIONS FOR:
 - a. BOLLARD, WOOD
 - b. EXTERIOR PLANTINGS
 - c. RELOCATING LIGHT POLES
 - d. LEDGE STONE BANK REINFORCEMENT
 - e. RELOCATING SITE FURNISHINGS
 - f. STRAIGHT CURB, CONCRETE, 18 INCH WIDE
 - g. TOPSOIL
 - h. RELOCATING SITE SIGNAGE
 - i. SEEDED LAWN
 - j. TREE PROTECTION FENCE
 - k. RIPRAP, FIELDSTONE
 - I. RIPRAP, SPECIAL
 - m. CONCRETE SURFACE COATINGS
 - n. COBBLESTONE VENEER
 - o. TIMBER RAIL
 - p. VERTICAL DELINEATORS
 - q. MIGRATORY BIRD PROTECTION
 - r. FEDERAL AVIATION ADMINISTRATION NOTIFICATION FOR STRUCTURE WORK
 - s. EASTERN MASSASAUGA RATTLESNAKE
 - t. TREE REMOVAL AND CLEARING
 - u. TEMPORARY DETECTABLE WARNING SURFACE
 - v. MAINTAINING RIVER TRAFFIC

PROGRESS CLAUSE

WTA: RRB Page 1 of 2 06/28/23

Start Date:

The Owner anticipates that construction of the bridge can begin no earlier than October 02, 2023. In no case, shall any work be commenced prior to receipt of formal notice of award by the Department.

The Contractor shall prepare and submit a complete, detailed, signed Progress Schedule to the Engineer.

Completion Date:

Substantial completion of the bridge with open to traffic shall be May 15, 2024. The Project shall be completed in its entirety including existing timber bridge removal, final site restoration and clean-up on or before June 28, 2024.

General Topics:

Submit a complete, detailed and signed MDOT Form 1130, Progress Schedule, to the Engineer within 7 calendar days of award from the Department and prior to starting work. The Engineer will provide documented approval, comments, or rejection within 7 calendar days of receipt of the Contractor's submittal, resubmittal, or responses. The Contractor must resolve all responses within 7 calendar days of receipt of any Engineer requests or rejections. If the Progress Schedule is not approved within 30 calendar days of contract award, the Engineer may withhold all or part of contract payments until the Progress Schedule is approved. When approved, the Progress Schedule, or updated Progress Schedule, will become part of the contract.

The Progress Schedule shall include, as a minimum, the controlling work items for the completion of the project and the planned dates that these work items will be controlling operations. When specified in the bidding proposal, the date the project is to be opened to traffic as well as the final project completion date shall also be included in the project schedule. If the Bidding Proposal specifies other controlling dates, these shall also be included in the Progress Schedule.

Unless specific pay items are provided in the contract any extra costs incurred by the Contractor due to cold-weather protection and winter grading will not be paid for separately but will be included in the payment of other pay items in the Contract.

After award and prior to the start of work, the Contractor must attend a preconstruction meeting with the Engineer and Owner's Representative. The Engineer will determine the day, time and place for the preconstruction meeting. The meeting will be conducted after project award and may be rescheduled if there are delays in the award of the project. The named subcontractor(s) for Designated and/or Specialty Items, as shown in the Proposal, should attend the preconstruction meeting if such items materially affect the work schedule. The schedule for this meeting will be determined by the Engineer after submittal of MDOT form 1130.

Liquidated Damages shall be assessed in accordance with Section 108.10 of the 2020 Standard Specifications for Construction.

Milestones:

Set up Traffic Control for Traffic Regulator Control as needed on or before October 02, 2023.

The Project shall be substantially complete and the bridge and relocated road approaches open to traffic, on or before May 15, 2024. Final completion of the entire project including existing timber bridge removal, landscaping acceptance and warranty will be on June 28, 2024

Failure on the part of the Contractor to meet each of the above milestones by the date specified shall result in the assessment of Liquidated Damages against the Contractor as provided in Article III – Time of Completion, Part C, page C-2 of the signed contract between the City of Ann Arbor and the contractor.

Damages will be cumulative if multiple milestone dates are missed.

Liquidated Damages will continue to be assessed for each calendar day or portion of a day that this work remains incomplete even if these days extend beyond the normal seasonal shutdown date of November 15, 2024.

Assessment of Liquidated Damages and/or contract adjustments applies to hourly/daily restrictions included in the Special Provision for Maintenance of Traffic.

Work Restrictions:

The work hours described may be modified or changed by the Engineer due to Holidays, Special Events, or Traffic Volumes.

- A. Contractor's operations shall be limited by local municipality work time, noise, and dust ordinance unless approved by the local municipality and the Engineer in writing, as shown below:
 - Monday Friday: 7am-8pm
 - Saturday and Sunday: only with approval from the City of Ann Arbor
 - Exceptions to work outside these hours are made on a case-by-case basis only and require City administration approval.
- B. No work, unless approved by the Engineer, shall be performed during:
 - Indigenous Peoples Day
 - o Monday October 09, 2023, all day
 - Veterans Day
 - o Friday November 10, 2023, all day
 - Thanksgiving Day/Friday after
 - 3:00 pm Wednesday November 22, 2023 7:00 am Monday, November 27, 2023
 - Christmas Eve/Christmas Day
 - 3: 00 pm Friday December 22, 2023 7:00 am Wednesday December 27, 2023
 - New Year's Day
 - 3:00 pm Friday December 29, 2023 7:00 am Tuesday, January 2, 2024
 - Martin Luther King, Jr. Day
 - o Monday January 15, 2024, all day
 - President's Day
 - o Monday February 19, 2024, all day
 - Memorial Day
 - o 3:00 pm Friday May 24, 2024 7:00 am Tuesday, May 28, 2024
 - Juneteenth (observed)
 - o Wednesday June 19, 2024, all day

CITY OF ANN ARBOR PARKS AND RECREATION DEPARTMENT

SPECIAL PROVISION

MAINTENANCE OFTRAFFIC

WTA:BNB Page 1 of 7 06/23/2023

- **a. Description.** The work consists of all labor, materials, and equipment required for maintaining traffic for the Gallup Park bridge replacement in the City of Ann Arbor, Washtenaw County, Michigan.
- **b. Materials.** The materials and equipment shall meet the requirements specified in the sections designated of the MDOT 2020 Standard Specifications for Construction and all Special Provisions contained elsewhere in these Contract Documents.

Provide materials for all devices to temporarily control and maintain traffic meeting the requirements of section 812 of the MDOT 2020 Standard Specifications for Construction, the 2011 MMUTCD, and the applicable MDOT typicals and details included herein.

Use sign sizes shown on the plans, unless otherwise directed by the Engineer. Install all temporary signs on driven posts, which are to remain in the same place for 14 days or more. Install all other temporary signs on portable supports. Install all signs to have a minimum bottom height of 7.0 feet.

Use plastic drums for channelizing devices when implementing any/all lane closures. 42-inch channelizing devices may be used in tight spaces upon the approval of the Engineer.

Furnish paper bills of lading/delivery tickets to the Engineer on the jobsite for all temporary traffic control devices delivered to the various project locations.

- **c. General.** Traffic shall be maintained in accordance with Sections 104.07.C, 104.11, 808, 811, 812, 920, and 922 of the Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction and in accordance with the 2011 Michigan Manual on Uniform Traffic Control Devices (MMUTCD) as amended, except as herein provided. Work shall consist of all labor, materials, and equipment required for maintaining vehicular and pedestrian traffic in accordance with the special provisions for maintaining traffic for the Gallup Park bridge replacement project.
 - 1. The Contractor shall furnish, erect, maintain and, upon completion of the work, remove all traffic control devices and barricade lights within the project and around the perimeter of the project for the safety and protection of through, local and pedestrian traffic. This includes, but is not limited to, advance, regulatory, and warning signs; barricades and channeling devices at intersecting streets on which traffic is to be maintained; barricades at the ends of the work zones and at right-of-way lines of intersecting streets, and the moving of traffic control devices as many times as required

for the multiple construction operations that may be performed.

- The Contractor shall coordinate his operations with all Contractors performing work on this project or other projects within, or adjacent to, the Construction Influence Area (CIA) to avoid conflicts in maintaining traffic, construction signing, and progression of construction activities.
 - A. The Contractor's attention is called to the requirements of cooperation with others as covered in Section 104.08 of the MDOT 2020 Standard Specifications for Construction and the Utility Coordination and Project Coordination Notice to Bidders. The Contractor is to coordinate his operations with all sub- Contractors and all other projects in the vicinity. No additional payment will be made to the Contractor for joint use of the traffic control items. All work activities are subject to local ordinances and restrictions.
 - B. City of Ann Arbor Public Services Area maintenance crews and/or Contract Maintenance Agencies may perform maintenance work within, or adjacent to, the CIA. The City of Ann Arbor Public Services Area and/or Contract Maintenance Agencies will coordinate their operations with the Engineer to minimize interference to the Contractor.
- 3. No stage changes will be allowed without written approval from the Engineer. Work is to be completed in each stage prior to progressing to the next stage.
- 4. Contractor must always maintain emergency vehicle access. The Contractor must submit the plan to provide emergency vehicle access to the Engineer for review and approval.
- 5. Tree removal will be performed by the contractor as part of the project work.
- 6. During all construction, disruption to the Park shall be minimized and no work will be allowed during the dates and events listed herein. The Project takes place within a heavy pedestrian environment. The Contractor is required to work with the City of Ann Arbor to sequence work to minimize disruptions as much as possible. Pedestrian access must be maintained throughout the construction period. All pedestrian access shall be ADA compliant.
- **d. Construction Influence Area (CIA).** The CIA shall include the area within Gallup Park as identified on the plans.

e. Hours of Work.

Work day, hour, and other work restrictions imposed by the City of Ann Arbor
The work hours described may be modified or changed by the Engineer due to Holidays, Special
Events, or Traffic Volumes.

- A. Contractors' operations shall be limited by local municipality work time, noise, and dust ordinance unless approved by the local municipality and the Engineer in writing, as shown below:
 - Monday Friday: 7am-8pm

- Saturday: 7am-8pm; Notice given to City of Ann Arbor no less than 48 hours and no more than 5 days in advance
- Sunday: only with approval from the City of Ann Arbor
- No work may be done on Holidays

No work, unless approved by the Engineer, shall be performed during:

- Indigenous Peoples Day
 - o Monday October 09, 2023, all day
- Veterans Day
 - o Friday November 10, 2023, all day
- Thanksgiving Day/Friday after
 - o 3:00 pm Wednesday November 22, 2023 7:00 am Monday, November 27, 2023
- Christmas Eve/Christmas Day
 - o 3: 00 pm Friday December 22, 2023 7:00 am Wednesday December 27, 2023
- New Year's Day
 - o 3:00 pm Friday December 29, 2023 7:00 am Tuesday, January 2, 2024
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 - o Monday January 15, 2024, all day
- President's Day
 - o Monday February 19, 2024, all day
- Memorial Day
 - o 3:00 pm Friday May 24, 2024 7:00 am Tuesday, May 28, 2024
- Juneteenth (observed)
 - o Wednesday June 19, 2024, all day

f. Traffic Restrictions.

- 1. Failure to comply with any restrictions in Subsection e. Traffic Restrictions Items 2, 4, 5, and 7 will result in the assessment of liquidated damages per subsection 108.10.C.2 of the Standard Specifications for Construction.
- 2. No work will be performed on the first date listed starting at 3 p.m. for all Holidays. Work or lane closures may resume on the second date listed at 7 a.m., or as defined by the Engineer.
- 3. Access for emergency vehicles (fire, ambulance, police) must always be maintained.
- 4. Notify the Engineer at least 24 hours in advance of erection or removal of overlays on existing signs.
- Work requiring lane closures or traffic stoppages will be suspended as determined by the Engineer any time traffic is being unduly delayed by the Contractor's construction activities.
- Restrict access between traveled lanes and work areas to specific locations for construction vehicles. The number of access points and their locations requires the approval of the Engineer. Submit a Work Zone Traffic Control Plan (WZTCP) to the

Engineer, at the pre-construction meeting, in accordance with section 104 of the Standard Specifications for Construction. The Engineer will have 7 calendar days to review the plan for approval or provide comments for plan revisions required to obtain approval. At a minimum, the WZTCP will include the proposed ingress/egress locations for construction equipment and vehicles, traffic control devices that will be utilized to warn the motoring public of ingress/egress locations, and measures that will be taken to ensure compliance with the plan. No work will begin prior to approval of the WZTCP. Additional time required to obtain an approved WZTCP will not be cause for delay or impact claims. All costs associated with obtaining an approved plan, providing and executing all parts of the approved plan including required traffic control devices, or resolving an incomplete or unacceptable plan will be borne by the Contractor.

- 7. The location and duration of equipment and materials stored in the right-of-way, public or private property will be as approved by the Engineer.
- 8. Ensure sign covers are placed over existing regulatory, warning and construction signs that are not applicable during construction.
- Changes or adjustments in the staging plans, temporary signs and maintaining traffic typicals provided may be necessary to fit field conditions as determined by the Engineer.
- g. Stage Construction. The traffic control required by this Special Provision is based on the suggested temporary traffic control plan show on the plans, as detailed in the Progress Clause and herein. An alternate traffic control plan may be used by the Contractor, subject to review and approval by the Engineer. Any proposed alternate plan will be submitted to the Engineer for review and approval at least 21 days prior to the possible implementation. At each new maintenance of traffic phase, and change in detour, the Contractor shall notify the Engineer a minimum of 7 days in advance to allow the issuance of a press release informing the public of the traffic change.

Stage 1

Work: Bridge Construction. Construction of the new bridge will take place offset from the existing bridge.

Traffic Control: Vehicle traffic will be maintained on the existing bridge. Pedestrian traffic will be maintained utilizing a temporary path shown on the plans.

Stage 2a

Work: Non-motorized path and roadway construction. Existing bridge removal and placement of new bridge. This stage can only be in place for 48 consecutive hours. Bridge must remain open for majority of the work.

Traffic Control: Bridge will be closed to vehicle traffic. Pedestrians will be maintained on the temporary path used in Stage 1.

Stage 2b

Work: Non-motorized path construction.

Traffic Control: Vehicle traffic will be maintained on the new bridge.

Pedestrians will be maintained on the new non-motorized path with a section on the temporary path used in Stage 1 and Stage 2a.

h. Traffic Control Devices.

1. General.

- A. Ensure all traffic control devices and their usage conforms to the MMUTCD, specifically part 6, which is available on the Traffic and Safety Support Area web site https://mdotjboss.state.mi.us/stdplan/standardPlansHome.htm
- B. During non-working periods, any work site with uncompleted work will have advance signs (W20-1 "Road Work Ahead") and plastic drums, at specific locations, as directed by the Engineer, at no additional cost to the City.
- C. Drive through the CIA at a minimum at the beginning and end of each work day to ensure all traffic control devices remain properly installed. Routine maintenance includes, but is not limited to, maintaining proper placement of devices, replacing damaged devices and cleaning devices.
- D. All traffic control devices used for Maintaining Traffic, which include but are not limited to temporary signs, channelizing devices, and Type III barricades, will be as shown on attached Special Detail WZD-125-E and meet the "Acceptable" criteria as defined in the most current version of the American Traffic Safety Services Association's (ATSSA's) publication entitled "Quality Guidelines for Temporary Traffic Control Devices and Features" at the time of initial deployment and after each major stage change. All traffic control devices (except arrow boards and PCMS's) used on this project will be NCHRP 350 or MASH (Manual for Assessing Safety Hardware) compliant. Copies of this publication are available from ATSSA at 15 Riverside Parkway, Suite 100, Fredericksburg, VA 22406.
- E. All traffic control devices moved to facilitate the Contractor's operation will be reset by the end of the work day.
- F. Temporary Traffic Control Devices for Pedestrians shall meet the Temporary Pedestrian Alternate Route (TPAR) Detour, Bypass, Ramp, and Walkway Devices as shown on the plans or directed by the Engineer.
- G. At times, when it becomes necessary to temporarily obstruct local traffic (vehicle and nonmotorized) during the performance of the work, the Contractor shall provide traffic regulator control in accordance with Part VI of the current edition of the Michigan Manual of Uniform Traffic Control devices (MMUTCD) as amended.

2. Temporary Signs.

- A. Ensure that all diamond warning signs are 48 inch x 48 inch, unless otherwise n o t e d.
- B. Ensure that all temporary signs are in place prior to the implementation of any lane closures, shoulder closures, or major traffic shifts.

- C. Ensure that all temporary signs are fabricated as per Section 922.02 of the 2020 Standard Specifications for Construction., with legends and symbols flush to the sign face and not extending beyond the signs and borders.
- D. Ensure that temporary warning, regulatory, and guide signs on portable supports that are not required for that operation are removed. Temporary, regulatory, and guide signs on driven supports will be either removed or covered when no longer necessary. Sign covers used to cover temporary signs on driven supports will be paid for as "Sign Cover".
- E. Ensure that no signs are attached to Type III Barricades. Signs used at Type III Barricades are to be mounted above and behind the barricade on their own support(s).
- F. Place, as directed by the Engineer, W20-1 signs (Road Work Ahead) on all crossroads within the CIA where construction activities may be encountered.
- G. Ensure ground driven sign supports for temporary signs are as shown on Special Detail WZD-100-A or are a NCHRP-350 compliant or MASH accepted design.
- H. Ensure all temporary signs are mounted at a 7 foot minimum bottom height unless otherwise stated in the FHWA work zone acceptance letter for that particular sign system.
- I. Ensure all temporary signs are faced with fluorescent prismatic retro-reflective sheeting and are free of wrinkles, tears, scuffs and sheeting failure.
- J. Ensure all temporary signs that will be in place for more than 14 days are mounted on driven posts, unless otherwise approved by the Engineer.

3. Channelizing Devices.

- A. The maximum distance between channelizing devices is 25 feet in shifts and tapers and 50 feet in tangents, and 15 feet at driveways and other locations where closer spacing is deemed necessary, as directed by the Engineer.
- B. Ensure that all channelizing devices on this project have enough ballast to prevent the channelizing device from moving or tipping. If moving or tipping occurs as the result of wind generated by traffic or occurring naturally, place additional ballast at no additional cost to the City, as directed by the Engineer.
- C. An additional quantity of channelizing devices is included in the MOT quantities to be used at the discretion of the Engineer. The use of these is not detailed on the plan sheets.
- D. Ensure that channelizing devices are stored off the traveled way when work operations have ceased for the day or are no longer needed.
- E. Place Type III barricades as shown on the staging plans and as directed by the Engineer. Ensure stripes on barricade rails are oriented as prescribed in the

i. Measurement and Payment. The estimate of quantities for maintaining traffic is based on signing and related traffic control devices for shoulder closure, single lane closure, and the description in this special provision. Payment for these devices will be in accordance with the standard specifications unless otherwise specified.

- 1. Payment for temporary signs will be made on the maximum square foot of sign legends in use at any one time during the project.
- 2. Traffic control devices will be measured for the maximum number of units required by the Engineer at one time on the project.
- 3. Additional compensation will not be made for unused quantities of traffic control, signing and/or pavement marking items.
- 4. Sign covers required to cover entire non-applicable permanent existing signs or temporary construction signs mounted on driven posts shall be per Section 812 of the 2020 Standard Specifications for Construction and paid for as Sign Cover. The unit price bid for Sign Cover includes payment for furnishing, installing, removing, and relocating the covers on permanent existing signs or on temporary construction signs mounted on driven posts as many times as is required by the Engineer during the life of the construct.
- 5. Any additional quantities for traffic control devices not included in the estimate and utilized for the Contractor's convenience must be provided at the expense of the Contractor.

CITY OF ANN ARBOR PARKS AND RECREATION DEPARTMENT

SPECIAL PROVISION FOR BOLLARD, WOOD

SG:KED 1 of 2 06-13-2023

- **a. Description.** The work consists of furnishing, supplying all materials, installing and the completion of all work items associated with the Bollard, Wood as detailed on the plans, in accordance with the 2020 Standard Specifications for Construction, this special provision, and as directed by the Engineer.
- **b. Materials.** All hardware for all site furnishings shall be vandal resistant / tamperproof. The concrete footing and associated materials for installation of footing as shown on the plans and detail for Bollard, Wood shall be MDOT grade S1 (4000 psi).

The Bollard, Wood shall be an 8" \times 8" \times 6'-6" pressure treated timber post. The timber post to be prime grade without splits, cup, warp and other inconsistencies. The top of the post shall have a 1 $\frac{1}{2}$ " bevel on all four sides. Provide a high quality semi-transparent or transparent waterproof wood sealant certified for in-ground pressure treated timber on all exterior surfaces and inside all penetrations and holes.

c. Construction. Coordinate installation with underground utility lines, conduits, irrigation lines/sleeves, concrete paving/pads, pavement jointing, adjacent site amenities/furnishings, required clearance zones and other work affected by the bollard installation. Prior to installation of bollards, contractor shall confirm all installed locations, spacing, orientations, dimensional relationships and special requirements for the bollard in the field with the Owner's Representative prior to proceeding with any work associated with the bollards. Install Bollard, Wood in accordance with the plans, details and per manufacturer's recommendations and instructions. Notify Engineer of any discrepancies for direction on how to proceed.

Should minor changes and deviations from the locations, spacing, orientations, and dimensional relationships established on the plans be required by the Engineer or Owner's Representative, this shall be done by the Contractor at no additional cost.

Contractor to use care in the transport and installation of the bollards to avoid damaging the products and/or finish. Do not place, slide, and/or drag the bollards on the concrete pavement or other hard or abrasive surface. Follow manufacturer's recommendations. Scratches, marks, dents, and defects in the finishes and components shall be repaired per manufacturer recommendations. If in the opinion of the Engineer that the product exhibits defects that require replacement the product shall be replaced at no additional cost.

d. Measurement and Payment: The completed work as described includes all equipment, labor and materials necessary and shall be paid for at the contract unit price for the following pay items. Payment for labor, materials, and equipment associated with any of the identified requirements, provisions, and work indicated by the Special Provisions, the Construction Drawings, and other references to the site furnishings in the Construction Documents not paid for separately and/or not specifically identified as a specific pay item shall be incidental to the site furnishing pay items. This includes but is not limited to the following: submittals, permitting, coordination, testing, as-built plans, manuals, tools, cleaning and other related items.

Pay Item	Pay Unit
Bollard, Wood	Each

Bollard, Wood shall be paid for at the contract unit price on a per unit basis. Contract unit price shall include excavation, supplying, and installing of the **Bollard, Wood** as specified and detailed on the plans. The bollard, finishing, concrete footings, base materials, hardware, and other associated appurtenances which may be required shall be considered included in the pay item and will not be paid for separately. The pay quantity will be determined by field measurement of the units installed as specified.

CITY OF ANN ARBOR PARKS AND RECREATION DEPARTMENT

SPECIAL PROVISION FOR Exterior Plantings

SG:DJA 1 of 20 06-13-2023

a. Description

1.1 SUMMARY

- A. Section Includes:
 - 1. Tree and shrub plantings.
 - 2. Herbaceous perennials and ornamental grasses.
 - 3. Plant procurement.
 - 4. Planting mixture
 - 5. Plant mulch
 - 6. Staking and guying.
 - 7. Slope stabilization.
 - 8. Maintenance.
 - 9. Warranty replacements.
- B. Related Special Provisions:
 - 1. Topsoil (for lawns and planting mixture amendment)
 - 2. Seeded Lawn

1.2 REFERENCES AND REGULATORY REQUIREMENTS

- A. Hortus Third, The Staff of the L.H. Bailey Hortorium. 1976. MacMillan Publishing Co., New York.
- B. ASTM International, as referenced herein as ASTM.
- C. American Standard for Nursery Stock, as referenced herein as ANSI Z60.1-2004.
- D. United State Department of Agriculture (USDA), Plant disease and insect control Phytosanitary and Export Certifications.
- E. United States Composting Council, Seal of Testing Assurance (STA), Procedures for sampling and testing as outlined in the Test Methods for the Examination of Composting and Compost (TMECC) protocols.

1.3 DEFINITIONS

- A. Balled and Burlapped Stock (B&B): Plants dug with firm, natural balls of earth in which they were grown, with a ball size not less than diameter and depth recommended by ANSI Z60.1 for type and size of plant required; wrapped with burlap, tied, rigidly supported, and drum laced with twine with the root flare visible at the surface of the ball as recommended by ANSI Z60.1.
- B. Container-Grown Stock (Cont.): Healthy, vigorous, well-rooted plants grown in a container, with a well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for type and size of plant required.

SG:DJA 2 of 20

C. Fabric Bag-Grown Stock: Healthy, vigorous, well-rooted plants established and grown in-ground in a porous fabric bag with well-established root system reaching sides of fabric bag. Fabric bag size is not less than diameter, depth, and volume required by ANSI Z60.1 for type and size of plant.

- D. Finish Grade: Elevation of finished surface of planting soil.
- E. Mycorrhizal Inoculum: Fungi either introduced or naturally occurring in the soil that greatly increased plant roots growth and ability to absorb nutrients and water.
- F. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant. Some sources classify herbicides separately from pesticides.
- G. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.
- H. Planting Area: Areas to be planted.
- I. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.
- J. Plant; Plants; Plantings, Plant Material: These terms refer to vegetation in general, including trees, shrubs, vines, ground covers, ornamental grasses, annuals, perennials, bulbs, corms, tubers, or herbaceous vegetation.
- K. Root Flare: Also called "trunk flare." The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk.
- L. Root Production Method (RPM): A trademark technology referred to as root production method for a variety of tree and shrub species resulting is a dense fibrous root system for small sized plants.
- M. Single Central Leader: A single central dominant leader branch, free of secondary codominant stems that would compete with the central leader, either naturally occurring or professionally trained in the nursery with no stem deformities or residual woody stubs from original leader.
- N. Specimen Plant: Exceptionally heavy, symmetrical, and tightly knit, growth, superior in form, with properly spaced branching.
- O. Stem Girdling Roots: Roots that encircle the stems (trunks) of trees below the soil surface.
- P. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
- Q. Sheared Evergreen: Any evergreen tree or shrub that has been heavily trimmed or pruned to remove the natural shape of the plant. An evergreen tree grown at a "Christmas "tree farm is typically sheared.

SG:DJA 3 of 20

R. Young Plants: Lining out stock, seedlings generally sold within the wholesale trade for continued cultivation.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.5 ACTION SUBMITTALS

A. Product Data:

- 1. Plant procurement verification:
 - a. Within 4 weeks following the execution of the Agreement between the Owner and Contractor, submit vendor purchase order, invoice, or bill of lading for each plant species showing sizes, quantities, and root treatment.
 - b. Provide digital photos of all plant materials. Photos must depict the entire size and condition of the plant and include a scale rod or other measuring device to show scale. For species where more than 20 plants are required, include a minimum of three photos that show the average plant, the best quality plant, and the worst quality plant to be provided. Label each photograph with the plant name, plant size, and name of the growing nursery.
 - c. The Contractor may request the Landscape Architect to provide nursery visits for the purpose of reviewing and tagging plant materials. The Contractor shall compensate the Landscape Architect for said services.
 - d. Substitutions shall not be permitted without written approval from the Landscape Architect or Owner's Representative.
- 2. Jute mesh
- 3. Soil amendments: Provide information on composition and source of all soil amendments. Include test results for compost and peat.
- 4. Mycorrhizal inoculum.
- 5. Fertilizer.
- 6. Pesticides and Herbicides: Include product label and manufacturer's application instructions specific to the project site.
- 7. Antidesiccants: Include product label and manufacturer's application instructions.
- 8. Staking material and ties.

B. Source Quality Control:

- 1. Samples:
 - a. Organic Mulch: 1 quart by volume in sealed plastic bag labeled with composition of materials by percentage of weight and source of mulch. Each Sample shall be typical of the lot of material to be furnished; provide an accurate representation of color, texture, and organic makeup.
 - b. Staking and/or guying materials.
- 2. Test Report:
 - a. Topsoil: Test reports including fertilization recommendations for lawns and plant materials. Refer to Special Provision for Topsoil.
- 3. Certifications/Licenses:
 - a. Phytosanitary Certification: Plant material Inspection Certificates required by Federal, State, or other governing authority at the time of plant material verification identified above.
 - b. License certificate(s) for pesticide applicator.
- 4. Nursery Requirements:

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 Plants shipped to the site as B&B must originate from a licensed plant nursery with a current Phytosanitary certification... Field collected plants will not be permitted.

- b. Plant digging shall comply with the following requirements:
 - 1) Digging shall not occur more than 4 months in advance of plant installation.
 - 2) Plants dug during the spring digging season must be planted in advance of the fall digging season of that same year.
 - 3) Plants dug during the fall season must be planted during the same season and will not be permitted for spring planting.
 - 4) No plants that have leafed out shall be dug.
 - 5) Plants with root systems that have grown through the original jute wrapping will not be permitted. This includes all plants that have a second jute covering over the root ball.
 - 6) Jute wrapping that is heavily decayed or torn with exposed roots and loose root ball soil will not be permitted.

C. Field Quality Control:

- 1. Project Work Schedule: Within 4 weeks following the issuance of the Notice to Proceed, submit a project work schedule to the Landscape Architect indicating dates for delivery, installation, and Substantial Completion for all landscape work. The Schedule shall be comprehensive and address procurement, delivery, and plan for watering, planting and seeding areas of the site. If the project is phased, the schedule shall reflect a phased installation and shall include support graphics required to identify this phased approach. Refer to 1.10 below for a complete list of schedule requirements.
- 2. Maintenance Schedule: Prior to the issuance of Substantial Completion, submit a detailed typewritten approach and schedule for the warranty maintenance of all landscape activities outlined under 1.11 of this section. Coordinate landscape maintenance with other applicable Sections and combine all maintenance activities into one plan of action. The schedule shall be comprehensive and shall be the basis for monthly payment during the maintenance period.
- 3. Irrigation Plan: Within 4 weeks following the issuance of the Notice to Proceed, submit a detailed typewritten approach and schedule that outlines watering requirements for maintaining the landscape as described herein. Provide an approved temporary irrigation system or hand water from a source approved by the Owner's Representative. Supply all water and equipment at the Contractor's expense from a source approved by the Owner's Representative. Reliance on natural precipitation will only be allowed with provision of recorded data from a rain gauge located within a 2-mile radius of the project site. The schedule shall be comprehensive and shall be the basis for monthly payment during the maintenance period.
- 4. Maintenance Report Forms: Use the approved Maintenance Schedule and Irrigation Plan as the framework for all maintenance activities (plant maintenance, lawn maintenance and watering operations). The Contractor shall provide detailed maintenance report forms for each site visit. The reports shall be completed by the on-site maintenance superintendent performing the work prior to leaving the site and shall be submitted monthly as back-up to each invoice. Office prepared reports will not be permitted and payment for this work will only be made by the Owner when proof of completed specified maintenance

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has been provided. Each report shall include the following:

- a. Date of activity.
- b. Length of time on site (start time and finish time).
- c. Name and signature of the maintenance superintendent.
- d. Number of personnel performing the work.
- e. Site climatic conditions (rain, wind, temperature, etc.)
- f. Detailed description of maintenance activities performed by area.

1.6 INFORMATIONAL SUBMITTALS

A. Qualification Data:

- 1. Include list of at least three similar projects completed in the last 5 years by Installer demonstrating Installer's capabilities and experience. Include project names, addresses, and year completed, and include names and addresses of owners' contact persons.
- 2. Provide resumes of field technician (foreman) responsible for managing the purchase and installation of all materials. Separate resumes shall be provided for the planting, seeding, irrigation and maintenance technicians.
- 3. License certificates for arborist.

1.7 QUALITY ASSURANCE

A. Qualifications:

- The Contractor shall be a company specializing in exterior landscape and maintenance, having a minimum of 5 years' experience in projects of the scope and scale being specified.
- 2. Installer's field technician: The installer shall provide a full-time supervisor on site when work is in progress.
- 3. Maintenance field technician: The maintenance activities for all landscape areas shall be performed by skilled employees of the landscape installer.

 Subcontractors specializing in landscape and turf maintenance will not be permitted unless approved in writing by the Owner's Representative.
- 4. Pesticide applicator: State licensed, commercial.
- 5. Tree and shrub pruning: State licensed Arborist.

B. Substitutions:

- 1. It is the Contractor's responsibility to locate and secure all plant materials and to verify their availability through the timely Action Submittal process identified above. Failure to comply with this requirement shall not be a reason for making substitutions. Furthermore, it may be necessary to purchase specified plants from multiple nurseries and from out-of-state sources providing said sources are within the same hardiness zone as the site.
- 2. Substitutions of plant materials will not be permitted unless authorized in writing by the Landscape Architect. If proof is submitted in writing that a plant specified is not obtainable, the Landscape Architect may assist in identifying alternate sources or substitutions.
- 3. Plants of larger size may be used if approved and if root balls meet ANSI Z60.1 standards for the increased size. Adjustments will be made at no additional cost to the Owner. Approval of smaller size plant materials shall require a corresponding decrease of the contract price subject to owner approval.
- 4. Container plants may be substituted for those designated "B&B" if approved by the Landscape Architect.

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C. Measurements: Measure plants according to ANSI Z60.1. Do not prune to obtain required sizes.

- 1. Trees and Shrubs: Measure with branches and trunks or canes in their normal position. Take height measurements from or near the top of the root flare for field-grown stock and container grown stock. Measure the main body of tree or shrub for height and spread; do not measure branches or roots tip to tip. Take caliper measurements 6 inches above the root flare for trees up to 4-inch caliper size, and 12 inches above the root flare for larger sizes.
- 2. Other Plants: Measure with stems, petioles, and foliage in their normal position.
- 3. Plants pruned to compensate for transplanting shock will not be accepted if overall height and spread does not meet the specified dimensions after pruning.
- D. Plant Material Observation: Landscape Architect may observe plant material either at place of growth or at site before, during or after planting for compliance with requirements for genus, species, variety, cultivar, size, and quality. Landscape Architect retains right to observe trees and shrubs further for size and condition of balls and root systems, pests, disease symptoms, injuries, and latent defects and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from Project site.

1.8 DELIVERY, STORAGE, AND HANDLING

A. General:

- 1. Packaged Materials: Deliver packaged materials in original unopened containers showing weight, analysis, and name of manufacturer. During shipment and storage on site, protect materials from breakage, moisture, heat or other damage.
- 2. Store materials only in locations approved by the Owner.

B. Bulk Materials:

- 1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
- 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
- 3. Accompany each delivery of bulk materials with appropriate certificates.

C. Plant Materials:

- During shipment, do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Do not bend, stack, or bind plants in a manner that damages bark, breaks branches or root systems, deforms root balls or destroys natural shape.
- 2. Transport plants in closed vehicles or with the entire load properly covered to protect from drying winds, heat, freezing or other exposure that may be harmful. Schedule shipping to minimize on-site storage of plants. Closed vehicles shall be adequately ventilated/refrigerated.
- 3. Stock shall not be shipped until the planting preparations have been completed. If planting is delayed more than 24 hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.
 - a. Set balled stock on ground and cover ball with soil, or bark mulch.

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b. Do not remove container-grown stock from containers before time of planting.

- c. Water root systems of plants stored on-site deeply and thoroughly with a fine-mist spray. Water as often as necessary to maintain root systems in a moist, but not overly wet condition.
- 4. Labels: Prior to shipping, each plant or bundle of like variety and size shall be labeled with legible weatherproof tags indicating the correct name and size of plant. Store bulbs, corms, and tubers in a dry place at 60 65 degrees F until planting.
- 5. Handle plants at all times in accordance with the best horticultural practices. Lift B&B materials from the bottom of the ball only; do not roll the plants. Plants handled otherwise will be subject to rejection. Balled and burlapped plants which have cracked or broken balls are not acceptable and shall not be planted. Plants with mechanical damage, deformation or breakage will not be accepted and are to be replaced at the Contractor's expense.

1.9 SCHEDULING

A. Work Schedule:

- Upon authorization to proceed with the work, submit a project work schedule indicating the dates of each of the following items:
 - a. Submittal schedule.
 - b. Tagging of plants in nurseries.
 - c. Delivery of other materials to the site.
 - d. Staking of plant locations on the site.
 - e. Delivery of plant material to the site.
 - f. Planting.
 - g. Substantial Completion of the work.
 - h. Maintenance period.
- 2. Update schedule monthly to reflect progress of the work.

B. Planting Season:

- 1. Materials shall be installed during planting seasons normally recognized in the job locality.
- 2. USDA Hardiness Zone 6:
 - a. B&B and container grown plants, planting season shall be from March 15 through May 15 and from October 1 until the prepared soil becomes frozen.
- 3. If special circumstances warrant installation outside the normal planting season, submit a written request to the Landscape Architect describing conditions and stating the proposed variance. Planting outside the planting season could extend warranty obligations and will be dependent upon the extent of the variance.
- 4. Weather limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.
- 5. Coordination with lawn installation: Plant trees, shrubs, and other plants after finish grades are established but before seeding unless otherwise indicated. When planting trees, shrubs, and other plants after seeding, protect completed areas, and promptly repair damage caused by planting operations.

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1.10 WARRANTY, MAINTENANCE AND ACCEPTANCE

A. Substantial Completion:

1. Following the inspection, the Landscape Architect will issue a punch list identifying all work requiring completion, replacement, or correction.

- 2. The Contractor shall complete all punch list items within 2 weeks of its issuance. All repairs and plant replacements shall occur at no additional cost to the Owner.
- 3. Substantial Completion will be provided for all planting areas complying with the following:
- a. Landscape Architect approval of all specified submittals.
- b. The work shall be 100% complete (including all site preparation, earthwork, plant mixture installation, plantings, lawns, irrigation, and clean-up), and ready for inspection.
- 4. After receiving a Notice of Substantial Completion warrant and maintain all plantings in accordance with this section in a vigorous, well-kept condition until Final Acceptance.

B. Final Acceptance:

- Prior to plant dormancy and the expiration of the warranty and maintenance period, the Landscape Architect or Owner will conduct an inspection of all plantings and lawns, and review all previously submitted maintenance report forms to verify all completed maintenance activities. There shall be clear evidence through factual reporting by the contractor and field observations made by the Owner or Landscape Architect that the specified maintenance has occurred. Following the inspection, the Landscape Architect or Owner's Representative will issue a punch list identifying all work requiring completion, replacement or correction.
- 2. The contractor shall complete all punch list items within 2 weeks of its issuance. All repairs and plant replacements shall occur at no additional cost to the Owner.
- 3. Final Acceptance will be based upon Landscape Architect and/or Owner approval and the work having:
 - a. Been well maintained with all landscape plantings in a healthy growing condition free of disease and insect problems.
 - b. All maintenance items completed and documented by Contractor through maintenance report forms.
- 4. Final Acceptance and the end of the warranty period for the landscape will occur only after all punch list items have been satisfactorily completed and the site is left in the condition specified under Cleanup and Protection.

C. Warranty and Maintenance Period:

- 1. The end of the warranty and maintenance period shall be:
 - a. October 31 one year following fall Substantial Completion.
 - b. June 30 one year following spring Substantial Completion.
- 2. Prior to and during the warranty and maintenance period, replace any plants that are damaged, dead, or, in the opinion of the Landscape Architect, are unhealthy, or have lost more than 25% of their natural shape due to dead branches, excessive pruning or improper maintenance. Rejected plant materials shall be removed from the site immediately after being rejected and legally disposed off-site. Replacement plants shall be installed within 2 weeks following the inspection unless otherwise agreed to in writing by the Owner.
- 3. Only one replacement of any plant is required after Substantial Completion,

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- except for losses due to failure to comply with specified installation and/or maintenance requirements.
- 4. Make replacements in accordance with the original specifications, plant list, and notes. Fully restore areas damaged by replacement operations to their original and specified condition.
- 5. The Contractor will not be held responsible for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents beyond landscape installer's control which result from floods, hailstorms, winds over 100 miles per hour, fires or vandalism, unless Contractor has not completed specified installation in a manner that could have protected the landscaping from these phenomena.
- 6. If, in the opinion of the Landscape Architect, it is advisable to extend the warranty and maintenance period for an additional growing season, the contractor will be notified of such requirement by the Owner. Improper planting and/or failure to perform and document the specified maintenance in accordance with contract requirement shall be the basis for extending the period of establishment for a second growing season. All specified maintenance and warranty requirements will be required during this extended period and all costs shall be the responsibility of the Contractor.

b. Materials

1.1 PLANT MATERIALS

- A. General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in the Plant Schedule shown on Drawings and with the minimum quality conforming to American Standard for Nursery Stock, ANSI Z60.1. Branching on all plants shall be characteristic of the species, well-shaped, full, sound, healthy, vigorous stock of uniform growth and densely foliated when in leaf. All plants shall be free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
 - 1. Collected Stock: Do not use plants harvested from the wild, from native stands, from an established landscape planting, or not grown in a nursery unless otherwise indicated.
 - 2. Plants shall originate from the same USDA Hardiness Zone as project site, or lower (colder).
 - 3. Provide plants of sizes, grades, and ball or container sizes complying with ANSI Z60.1 for types and form of plants required. Where plant height or spread is indicated with a tolerance, the smaller dimension is the minimum acceptable; the larger dimension represents the maximum permissible. The average dimension of all plants must, at least, equal the average of the tolerance figures shown on the drawings. Spread shall meet the minimum dimension specified in all directions and must be considered as pivoting on center of plant.
 - 4. Plants of a larger size may be used if acceptable to the Landscape Architect and at no extra cost to Owner, with a proportionate increase in size of roots or balls.
 - 5. Canes on shrubs shall arise at or just below the root crown. Multi-stem and clump form trees shall have branches that arise at or just below the root crown except when approved by the Landscape Architect.
 - 6. All plants shall have a waterproof legible label securely attached to each plant bearing designation of plant's common and scientific name, including genus,

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- species, and cultivar or variety, when applicable.
- 7. Do not prune plants prior to delivery.
- 8. Stressed or damaged plants or those not conforming to the specifications shall be subject to rejection by the Landscape Architect at any time during the term of the contract.
- B. Root treatments on all plants shall conform to the following requirements:
 - 1. Balled and burlapped ("B&B") plants shall have healthy root systems developed by transplanting or root pruning with a firm, natural ball of earth securely wrapped with burlap, bound with cord and wire basket. Root flare shall be visible before planting. Plants with damaged or broken root balls or multiple layers of burlap will not be accepted.
 - 2. Containers shall be finished landscape grade material having their roots well established in the soil mass. Plants over-established in the container, as evidenced by pot-bound root ends, will not be accepted.
- C. Trees: Trees shall have straight single leaders. Trees with damaged, crooked, or multiple leaders; tight vertical branches where bark is squeezed between two branches or between branch and trunk ("included bark"); crossing trunks; cut-off limbs more than 3/4 inch in diameter; or with stem girdling roots will not be accepted.
 - 1. Trees indicated as specimen shall be exceptionally heavy, symmetrical, and superior in form, branching, and symmetry.
 - 2. Caliper is the trunk diameter taken at a specified distance above the root collar as described in ANSI Z60.1.
 - 3. Branching height is the distance above ground where balanced branching occurs.

1.2 MULCH

- A. Organic Mulch: Well-composted, finely shredded processed hardwood bark, free from foreign material and fragments in excess of 2 inches in any dimension.
 - 1. Dyed mulch or mulch that is predominantly wood chips will not be accepted.

1.3 JUTE MESH

- A. Uniform, open, plain weave fabric of unbleached, single jute yarn having a width of 48 inches, plus or minus 1 inch and durability of 1-2 years. Yarn shall be loosely twisted jute fiber, having an average twist of not less than 1.6 turns per inch, varying in thickness by not more than 1/2 its normal diameter, and averaging 130 pounds per spindle of 14,400 yards. Polymer yarns are not acceptable.
 - 1. Fasteners shall be natural based plastic that is 100% biodegradable from microbial activity in accordance with ASTM D5338 or D6400, formed in a T-shaped with barbed heads and shoulders, minimum six inches long, color green and installed per manufacturer's spacing and installation instructions.

1.4 STAKING AND GUYING

A. Staking:

- Tree support stakes shall be 2-inch x 2 inch hardwood posts free of bark or 3 inch diameter hardwood or cedar posts with bark intact. Posts shall be a minimum of 8 feet long. Metal fence posts are not permitted unless approved in advance by the Landscape Architect.
- 2. Wire stays for tree stakes shall be No. 12 to 14-gauge galvanized wire.

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- Polypropylene strapping will not be permitted.
- 3. Chafing guards shall be fiber-reinforced hose of not less than 1/2 inch inside diameter, color black. Multi-colored hose will not be permitted.

B. Guying:

- 1. Tree support stakes for guying shall be 2 x 4 hardwood posts 30 inches long or metal fence posts 48" long. Guying stakes shall be driven below grade and not visible.
- 2. Cable for guying trees shall be 3/16-inch diameter, five strand, galvanized steel wire. Green polypropylene strapping will not be permitted.
- 3. Cable clamps and turnbuckles shall be galvanized, forged steel. Turnbuckles shall be 3/8-inch eye with 6-inch minimum opening.
- 4. Chafing guards shall be fiber-reinforced hose of not less than 1/2 inch inside diameter, color black. Multi-colored hose will not be permitted.

1.5 WATER

- A. Water for lawns shall be available from on-site or off-site sources.
- B. Water shall be free of wastewater effluent or other hazardous chemicals. On-site sources of water may be available from City hydrant with appropriate metering. Confirm prior to commencing work.

1.6 TOPSOIL

A. Refer to Special Provision for Topsoil.

1.7 PLANTING MIXTURES

- A. General: All planting mixtures shall be well pulverized, blended materials, free of rocks, debris of any type, tree roots, and other extraneous materials that will impede plant growth. When blending off-site amendments (peat, compost, etc.) with topsoil, the topsoil shall be pulverized and screened to remove all non-soil materials greater than ½ inch diameter. On-site sub-soils will not be permitted for use in planting mixtures.
- B. Planting mixture for beds comprising a mix of shrubs, perennials and ornamental grasses shall be 2 parts off-site or on-site topsoil thoroughly blended with 1 part compost or peat.

1.8 SOIL AMENDMENTS

- A. Peat shall be a product having at least 95% organic content consisting of sphagnum peat moss with a pH range of 3.0 4.0 and Von Post decomposition value of H1 H3, or low-lime reed-sedge peat with a pH range of 4.0 to 5.0 and Von Post decomposition value of H4 H6. Product shall be free of sticks, wood or other debris.
- B. Compost shall be a heavily decomposed mature/stabilized, humus-like material derived from the aerobic decomposition of yard clippings or other compostable materials. Manure is not suitable for use. The compost shall have a dark brown or black color, be capable of supporting plant growth without ongoing addition of fertilizers or other soil amendments and shall not have an objectionable odor. The compost shall be free of plastic, glass, metal, and other physical contaminants, as well as viable weed seeds and other plant parts capable of reproducing (except airborne weed species).
 - 1. PH: 5.5 to 8.

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2. Moisture content: 35 to 55 percent by weight. No visible free water or dust is produced when handling it.

- 3. Sieve analysis: 100 percent passing ¾ inch screen.
- 4. Soluble salt content: Less than 5 percent.
- 5. Organic matter content: Minimum 60 percent.
- C. Sand shall be clean, coarse, ungraded, meeting the requirements of ASTM C33 for fine aggregates.

D. PH Adjusters:

- Lime shall be finely ground agricultural grade dolomitic limestone containing not less than 85% calcium and magnesium carbonates conforming to ASTM C602, Class T or O.
- 2. Elemental sulfur shall be granular, biodegradable, horticultural grade material containing at least 90% sulfur, with a minimum of 99% passing through No. 6 sieve and a maximum of 10% passing through No. 40 sieve.

E. Mycorrhizal Inoculum

1. Mycorrhizal fungi in the inoculant shall be available as propagules, i.e., spores, root fragments and hyphae. The inoculant shall contain highly selected strains of low host specificity endo- and ectomycorrhizal fungi combined with other beneficial fungi (Trichoderma), humic acids, biostimulants, beneficial bacteria, soluble sea kelp, and yucca plant extracts, as manufactured by Horticultural Alliance or approved equal.

1.9 FERTILIZER

- A. Fertilizers are required at the time of installation and during the warranty/maintenance period. The fertilization program shall be based on soil testing and formulations and rates of application shall be based on test reports provided by the independent testing laboratory.
- B. The independent testing laboratory shall also prepare a custom formulation and rate for each category of plants to be installed and maintained; i.e., trees, shrubs, perennials, and ornamental grasses.
- C. Fertilizers shall include organic and inorganic, slow release and water-soluble nitrogen and the percentages shall be based on soil types and the time of year being applied. Fertilizers shall not be applied during the hot summer months unless specific to blooming plants or in the late summer when plant growth will not harden off prior to the first killing frost.
- D. The fertilizer to be used to amend the soil before planting shall be granular fertilizer that conforms to applicable state and federal regulations and contains no less than 60% slow-release nitrogen.
- E. Fertilizer to be used during the year warranty maintenance period shall be a complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, not less than 30% of the nitrogen from a slow-release source. Fifty percent of the nitrogen shall be derived from natural organic sources. The formulations shall be as outlined in this Section.

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1.10 PESTICIDES AND HERBICIDES

A. Pesticides and herbicides shall be registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for project conditions and application. Do not use restricted-use pesticides and herbicides unless authorized in writing by authorities having jurisdiction.

- Pre-Emergent Herbicide (Selective and Non-Selective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.
- 2. Post-Emergent Herbicide (Selective and Non-Selective): Effective for controlling weed growth that has already germinated.

1.11 ANTIDESICCANTS

A. Water-soluble emulsion specifically manufactured for agricultural use that will provide a protective film over plant surfaces and be permeable enough to permit transpiration. Use according to manufacturer's written instructions.

c. Construction

1.12 EXAMINATION

A. General:

- 1. Prior to beginning work, examine and verify the acceptability of the project site and notify the Landscape Architect of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected or resolved.
- 2. Verify that no foreign or deleterious material has been deposited in soil within a planting area.
- 3. Where planting occurs in close proximity to other site improvements, provide adequate protection to all features prior to commencing work. Promptly repair any items damaged during planting operations to their original condition.
- 4. Do not mix or place soils and soil amendments in frozen, wet, or muddy conditions.
- 5. Suspend spoil spreading, grading, and tilling operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
- 6. Uniformly moisten excessively dry soil that is not workable, and which is too dusty.
- 7. If plants die or are rejected due to non-conformity to contract requirements, they must be removed from the site immediately and replaced before Substantial Completion.
- B. Utilities: Have all underground utilities located by servicing agencies. In the vicinity of utilities, hand-excavate to minimize possibility of damage.
- C. On-site sources of water will not be available for use by the landscape installer.
- D. Pesticides and Other Chemicals:
 - 1. General: All plants delivered to the site shall be free of disease, pests, eggs, and larvae. Promptly remove all plants that do not conform to this requirement.
 - a. Insecticides should only be used to control pests when present in quantities that will be detrimental to plant vigor.

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b. Applying foliar herbicides to control weeds in plant beds after installation will not be permitted unless approved in advance by the Landscape Architect. Approval will only be granted if plants to be controlled cannot be effectively removed by hand pulling. Foliar herbiciding will only be permitted as part of the weed control program developed by the Contractor in advance of planting.

- c. All chemicals shall be stored and mixed off-site. No chemicals of any type shall remain on site at the end of each workday.
- d. Do not apply over water or dispose of used containers on-site.
- e. Post all pesticide and herbicide applications.

2. Pre-emergent application:

- a. Apply granular chemicals in accordance with Manufacturer's instruction.
- b. Apply in early spring just prior to targeted species breaking dormancy. Do not apply too early in the spring.
- c. Do not apply when weather conditions will prevent an effective application or will result in in-effective control of targeted species.
- d. Spread granular chemical only in areas intended to be treated. Promptly remove all granular material spread over pavement and in areas not intended to be treated.
- 3. Post-emergent application:
 - a. Protect all landscape plantings outside of target areas.
 - b. Mixing, cleaning or disposal of pesticides, herbicides, and other chemicals will not be permitted on site. Notify the Owner at least 24 hours prior to any application.
 - c. Do not spray chemicals when the wind exceeds 5 MPH.
 - d. Repeat procedures until desired effect is achieved.
 - e. Mixing, application, and clean-up procedures shall be in accordance with manufacturer's instructions.

E. Coordination with Other Work:

- The Contractor shall coordinate work with other contractors or trades to determine the appropriate sequence of landscape installation with respect to other work on the site.
- 2. Completed work installed out of construction sequence which is subsequently disturbed by the completion of work by other trades shall be repaired by the landscape installer at no cost to the Owner.
- 3. Maintain grade stakes and layout controls set by others until removal is mutually agreed upon by all parties concerned.

1.13 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities and turf areas and existing plants from damage caused by planting operations.
- B. Install erosion control measures, if necessary, to prevent erosion or displacement of soils and discharge of soil-bearing water run-off or airborne dust to adjacent properties, natural resources and walkways.
- C. Vegetation Removal: Strip and dispose of organic debris and root mat.

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1.14 LAYOUT

A. Accurately lay out each plant location and plant bed edges according to the drawings, using clearly visible painted, labeled stakes or plastic flags. Spray paint continuous lines on bare soil delineating plant bed boundaries. When scaling locations on the drawings, use at least 2 known reference points as layout controls to determine plant locations. Do not proceed with planting operations until locations have been reviewed and approved in writing by the Landscape Architect.

B. Prior to installation, all plant locations and bed edges must be approved by the Landscape Architect, who may field adjust locations at no additional cost to the Owner. Plants installed without layout approval are subject to relocation by the Contractor at their expense.

1.15 PLANT INSTALLATION

- A. General: Complete all plantings, metal edging and mulching prior to fine grading adjacent seed beds.
 - 1. For plant beds, complete rough grading.

B. Planting Pit Excavation:

- 1. For individual plant pits in seeded areas, spread seed bed topsoil to the uniform depth and rough grade prior to layout and planting pit excavation.
- 2. Remove rocks and other unclassified underground obstructions to at least 6 inches below the finished planting depth of the root ball. Trim perimeter of planting pit leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Ensure that root ball will sit on undisturbed base soil to prevent settling. If plant pits are initially dug too deep, add soil to raise it to the correct level and thoroughly tamp the added soil to prevent settling.
- 3. If underground utilities or other surface or subsurface obstructions are encountered that cannot be removed, do not proceed with planting operations until alternate planting locations have been selected and approved by the Landscape Architect.
- 4. Size and configure planting pits in accordance with the planting details. If rotating augers or other mechanical diggers are used, scarify the side walls and bottom of the pit.
- 5. Where poor soil percolation is probable, test drainage by filling planting pits with 12 inches of water. Record the drainage time for each pit and if, in the opinion of the Landscape Architect, the water does not adequately drain off within 24 hours, install drains or raise plant pits as directed.
- 6. Keep excavations covered or otherwise protected after working hours and when unattended by the Installer's personnel.

C. Planting Bed Excavation:

- 1. In locations where plant beds are shown on the drawings and earth moving is not required, other than achieving the specified plant bed subgrades, excavate plant beds to 12" for perennial and ornamental grass bed and 12" to 18" for shrub beds, based upon depth of root ball. Remove all existing vegetation as described under [3.2C] above. Following vegetation removal, provide off-site topsoil and peat/compost. Remove surplus excavated subsoil material that is not part of the specified planting soil to an area designated by the Owner and legally dispose off-site.
- 2. Grade subgrade smooth and uniform. Slope to perimeter of plant bed if

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- underdrains are required to collect accumulated water within the bed.
- 3. Transition from plant bed subgrade to adjacent seed bed subgrade outside the limits of the plant bed to ensure full depth plant bed mixture is provided.
- 4. Where plant beds terminate next to pavement surfaces, subgrade transitions shall be 12 inches wide within the plant bed to protect pavement base material from being undermined.
- 5. Obtain approval from the Landscape Architect for all subgrades prior to placing plant mixtures. Notify the Landscape Architect at least 48 hours in advance of placing plant mixture.
- 6. Keep excavations covered or otherwise protected after working hours and when unattended by the Installer's personnel.

D. Mixing and Placing Planting Mixtures:

- Install planting bed and planting pit mixtures to the specified proportions and depths. On-site mixing of existing topsoil with off-site materials shall result in a homogenous blend of all ingredients. Screen all mixture to remove foreign debris and rocks greater than ½ inch diameter prior to placement.
- 2. Place planting bed mixture in 6 inch lifts and lightly compact to prevent settlement after planting. Settlement that occurs after planting will require plant removal and the addition of additional plant mixture at the Contractor's expense. When placing mixture in raised planters, set finish grade elevations 2 inches low for mulch placement.
- 3. Grade planting areas to a smooth, uniform surface plane. Roll and rake, remove ridges, and fill depressions to meet grade.
- 4. Before planting, obtain Landscape Architect's or Owner Representative's approval of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

E. Fertilizina:

- Prior to or during planting, amend all planting pit and bed mixes by incorporating fertilizer at rates specified by soil test reports as specified under Special Provision for Topsoil. Do not broadcast fertilizer over the surface of the soil or onto any plant root ball.
- 2. For individual plant pits, incorporate fertilizer into back fill during planting operations. For plant beds, pre-mix fertilizer prior to installation.

F. Planting and Backfill:

- 1. Do not plant when the ground is frozen or saturated.
- 2. Balled and burlapped plants: Do not use planting stock if root ball is cracked or broken before or during planting operation. Set the plant in the center of the planting pit with the crown set between 1 inch above adjacent soil for shrubs and 2 inches above adjacent soil for trees. Plant root flares shall not be set below adjacent finish grade. Face plant to give the best appearance or relationship to primary views. Cut away burlap, rope, wire or other wrapping materials from the top one-third of the root ball and remove from pit. If plastic wrap or other non-degradable materials are used in lieu of burlap, completely remove them from the root ball before backfilling. Backfill planting pit approximately two-thirds full, add fertilizer, water and allow planting mixture to settle. After the water has been absorbed, complete backfilling and tamp lightly to grade to prevent future settlement and form a watering basin with plant mixture of the size indicated on Plans.

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3. Container-grown plants: Remove containers and make at least five vertical cuts one-half to one inch deep around the root ball and thoroughly loosen the roots on the outside of the ball. Plant as specified above for balled and burlapped plants, and as modified herein. All container-grown stock shall be planted so that the top of container soil is level with surrounding grade. Do not plant higher to account for mulch, as mulch should not cover plant crown.

1.16 SPECIAL PLANTING CONSIDERATIONS:

A. Mycorrhizal Inoculum:

1. Rototill 2 granular pounds per 1000 square feet into the top 8 inches of soil for plant beds or as recommended by supplier. Incorporate 1 pound per cubic yard of plant pit backfill as backfill is being placed.

B. Sloped Plantings:

When planting on slopes, set the plant so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball. Complete planting as specified under 3.4 F above.

C. Jute Mesh:

1. On sloped plantings requiring jute mesh, immediately following placement of plant mixture, cover the entire bed area before plant pit excavation and installation of plants. Excavate plant pits and insert plants through mesh by separating the fibers or cutting slits into the fabric, taking care not to destroy the integrity of the mesh as a whole. To minimize the disturbance of the mesh when planting, work from long, lightweight ladders or planks laid parallel to the slope.

1.17 MULCHING

- A. Uniformly install mulch on all trees and shrub beds to depth shown on Plans within 48 hours of planting.
- B. Keep mulch out of the crowns of shrubs and perennials, at least 3 inches from all tree trunks, and off sidewalks and roadways.

1.18 PRUNING

- A. After planting, prune trees and shrubs to remove all dead, dying, broken, or crossed limbs flush with the ground or main stem leaving no stubs. Do not prune to shape or to compensate for transplanting shock without prior approval from the Landscape Architect. Retain the natural form of the plant type. Prune using standard professional horticultural and arboricultural practices. Remove trimmings from the site.
- B. Employ workers experienced in this type of work.

1.19 STAKING AND GUYING

- A. Install guying and staking as shown on the details immediately after planting.
- B. Remove and dispose of stakes and guys at the end of the warranty period.

1.20 CLEANUP AND PROTECTION

A. Remove excess and waste material daily. When planting has been completed, clear the site of all debris, stockpiles and materials.

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B. Repair any damage to existing landscape, paving or other such features as a result of work related to this contract to its original condition.

C. Protect landscape work and materials from damage due to landscape operations, operations by other Contractors and trades, and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed.

1.21 MAINTENANCE

- A. Provide all maintenance under the supervision of a skilled employee of the landscape installer. The skilled maintenance supervisor shall be capable of conducting plant diagnostics to identify the presence of disease and insect problems and directing a maintenance crew in the performance of horticultural maintenance practices identified below. Maintenance requirements identified below shall be the basis for information to be included in the Maintenance Schedule and Irrigation Plan and thoroughly documented under the required Maintenance Report Forms to verify the work has been properly performed.
 - 1. Failure to perform and submit factual Maintenance Report Forms could result in non-payment for said services and require the extension of the warranty and maintenance period an additional year at the Contractor's expense.
- B. Provide all equipment, materials, labor, and services to maintain the landscape beginning immediately after each plant is installed and continuing until Final Acceptance and the end of the warranty period. Perform all work under the direct supervision of a technician trained to recognize and treat conditions affecting the establishment and growth of the plants and perform the following:
 - 1. Inspect the entire landscape at least once per week during the growing season and perform needed maintenance promptly.
 - 2. Watering:
 - Water all plants to maintain optimum moisture within the root zone.
 Reoccurring overly dry or wet conditions shall be grounds for rejection of plant material.
 - b. Provide an approved temporary irrigation system or hand water from a source approved by the Owner. Supply all water and equipment at the Contractor's expense from a source approved by the Owner.
 - c. Irrigate or hand water the plant material to maintain optimum moisture within the root zone (minimum once per week).
 - 3. All pruning shall be performed by or under the supervision of a licensed arborist. Prune dead wood and broken limbs as identified, in accordance with 3.7 Pruning. Do not shear any shrubs. Maintain the natural shape of trees and shrubs
 - 4. Maintain stakes and guys taut and in the specified condition. Maintain all plant beds and tree saucers weed free. Edge shrub and perennial beds and tree rings at least monthly during the growing season, keeping all tree rings to a uniform diameter. Hook mulch monthly and add mulch as needed.
 - 5. Deadhead perennials as necessary during maintenance visits to extend blooming periods.
 - 6. In spring prior to the start of the growing season, cut all ornamental grasses and perennials flush with the ground and remove cuttings from the site.
 - 7. Apply treatments as necessary to keep plants and planted areas free of insects, pests, and disease. Use integrated pest management practices whenever

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- possible to minimize the use of pesticides and herbicides. Treatments include utilizing physical and cultural controls.
- 8. All pesticides shall be applied by a licensed pesticide applicator. Apply pesticides and all other chemical products and biological control agents in accordance with the authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner at least 24 hours before each application is performed. No mixing or disposal of chemicals is allowed onsite.
- 9. Collect all litter and debris from plant beds and dispose off-site.
- 10. Fertilization:
 - a. Trees, shrubs, and ornamental grasses: Fertilize once in the fall after the first hard freeze (usually October) but before the ground freezes; 1 pound of 4-1-2 (N-P-K) per 1,000 square feet of ground below the tree canopy or shrub bed.
 - b. Perennials: Fertilize twice, once in the early spring and again 8 weeks later with 1 pound of 5-10-5 (N-P-K) per 100 square feet.
- 11. Remove dead and unacceptable plants as their condition becomes apparent.
- 12. At the end of the warranty period, but prior to Final Inspection, remove all guying, trunk wrap, watering saucers and top dress tree rings and beds 2 inches deep with the specified mulch product.

d. Measurement and Payment

The completed work as described shall be paid for at the contract unit price for the following pay items:

Pay Item	Pay Unit
Exterior Plants	
Amelanchier x grandiflora 'Autumn Brilliance', 2 1/2" cal. B&B	Ea
Betula populifolia 'Whitespire', 8' ht. B&B	Ea
Acer rubrum 'Franksred', 3" cal. B&B	Ea
Nyssa sylvatica, 3" cal. B&B	
Platanus x acerifolia 'Bloodgood', 3" cal. B&B	
Quercus bicolor, 3" cal. B&B	
Aronia melanocarpa 'UCONNAM165', 18" spd. Cont	Ea
Cornus sericea 'Baileyi', 24" spd. Cont	
Carex vulpinoidea, No. 1 Cont	Ea
Iris virginica, No. 1 Cont	Ea
Liatris spicata 'Kobold', No. 1 Cont.	
Penstemon digitalis, No. 1 Cont	
Rudbeckia fulgida sullivantii 'Goldsturm', No. 1 Cont	
Symphyotrichum novae-angliae 'Purple Dome', No. 1 Cont	
Shredded Bark Mulch, 2 inch	CY
Planting Mixture. 12 inch	CY

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The contracted Unit Price for the **Exterior Plants** listed above shall include plant procurement, staking and guying of trees, submittals, installation, slope stabilization, maintenance, including watering the plant material, and warranty as described in this Special Provision and shown on the landscape drawings. **Shredded Bark Mulch** and **Plant Bed Mixture** shall include installation and submittals as described in this Special Provision and shown on the landscape drawings.

CITY OF ANN ARBOR PARKS AND RECREATION DEPARTMENT

SPECIAL PROVISION FOR RELOCATING LIGHT POLES

SG:KED 1 of 2 06-13-2023

- **a. Description.** This work consists of removing, salvaging, storage, and reinstalling light poles. Ensure applicable work is done in accordance with the Michigan Department of Transportation 2020 Standard Specifications for Construction.
- **b. Materials.** Provide necessary materials for removing, loading, transporting, unloading, storage, and installation of the light poles. Items salvaged for reinstallation shall be protected and securely stored by the Contractor until such time as the light poles are reinstalled.

The materials will include all accessories and hardware required for the relocation and installation in accordance with the site plans and per the manufacturer's recommendations at no additional cost. Provide any additional components, parts, and/or other site elements to provide a complete installation of the light poles. Ensure materials for use in installation of the light poles are in accordance with Division 9 of the Michigan Department of Transportation 2020 Standard Specifications for Construction. Ensure light poles are installed per the manufacturer's recommendations.

All exposed hardware shall be vandal/tamperproof. All anchoring bolts, nuts, washers, must be galvanized in accordance with ASTM A153. Ensure all other hardware for installation is galvanized or zinc coated. When requested by the Engineer, the Contractor must furnish certification regarding the compliance of materials incorporated in the work.

c. Construction. Ensure the work of installation is done in accordance with the plans and the Standard Specifications for Construction and installed level, plumb, square and accurately aligned. Notify Engineer of any discrepancies for direction on how to proceed.

Coordinate installation with underground utility lines, conduits, irrigation lines/sleeves, concrete paving/pads, pavement jointing, adjacent site amenities/furnishings, required clearance zones and other work affected by the light poles installation. Prior to installation of light poles, contractor shall confirm all installed locations, spacing, orientations, dimensional relationships, and special requirements for the light poles in the field with the Engineer prior to proceeding with any work associated with the light poles.

Should minor changes and deviations from the locations, spacing, orientations, and dimensional relationships established on the plans be required by the Engineer, this shall be done by the Contractor at no additional cost.

Contractor to use care in the transport and installation of the light poles to avoid damaging the products and/or finish. Do not place, slide, and/or drag the light poles on the concrete pavement or other hard or abrasive surface. Follow manufacturer's recommendations. Scratches, marks, dents, and defects in the finishes and components shall be repaired per manufacturer recommendations. If in the opinion of the Engineer that the product exhibits defects that require replacement the product shall be replaced at no additional cost.

Protect finishes from damage during construction period with temporary protective coverings

approved by Engineer and manufacturer. Remove protective covering at time of Substantial Completion. Restore finishes damaged during installation and construction period so no evidence remains of correction work.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Light Pole, Relocate	Ea

Light Pole, Relocate includes the removal and reinstallation of existing light poles, including excavation, removal of concrete foundation, temporary storage and reinstallation of light poles including excavation, new electrical conduit to lightpoles and new concrete foundations. Reinstallation includes all labor and miscellaneous materials necessary to perform the work. Any repairs to or replacement of light pole materials damaged due to the Contractor's operation will be made at no cost to the contract.

SPECIAL PROVISION FOR Ledge Stone Bank Reinforcement

SG:KED 1 of 4 06-13-2023

- **a. Description.** This work consists of furnishing and installing mortarless natural stone bank reinforcement systems which are made up of sound angular ledge rock as shown on plans. All work associated with furnishing all labor, materials and equipment required for the installation of the ledge stone bank reinforcement system shall be the Contractor's responsibility.
- **b. Materials.** Submit the following items for Engineer review and approval prior to acquisition and construction of the ledge stone bank reinforcement.
 - 1. Manufacturer's certification that the ledge stone bank reinforcement components meet the requirements of this specification and the structure design.
 - 2. Shop drawings for the ledge stone bank reinforcement systems based upon field measurements. Shop drawings shall be prepared, signed, and stamped by a professional engineer registered in the State of Michigan.
 - 3. Natural stone supplier's product data sheets, color and finish options.
 - a. Submit representative digital photos of the stone for review and approval. Photos must depict the full range of colors, sizes, textures, shapes, quality, and overall appearance. Include a scale rod or other measuring devices placed on or next to the stone to show scale. Provide the required number of photos to fully reflect the entire range of conditions.
 - 4. The contractor shall provide documentation of experience in the installation of a minimum of five (5) previously constructed projects of similar size and magnitude where the specific retaining wall systems has been constructed successfully.

Provide materials in accordance with the following requirements:

- 1. Natural stone. Use sound, natural angular ledge rock resistant to weathering. Strategically select and place natural stone units to limit gaps between individual stone units. Place stone units to interlock with neighboring units with integral shear connections, and orient units such that base rests firmly on underlying stone unit(s) with tendency for units to shift back into retained subgrade. Stagger vertical and horizontal seams. Maintain a minimum setback from vertical as shown on the plans. Use only approved units in bank reinforcement construction.
 - A. Physical Requirements.
 - (1) Bulk specific gravity. Greater than 2.5 (ASTM C 127).
 - (2) Compressive strength. Not less than 6,000 psi (ASTM D 7012).

- (3) Water absorption. Not more than 2.0 percent for igneous and metamorphic rock types and 3.0 percent for sedimentary rock types (ASTM C 127).
- (4) Soundness test. Not greater than 5.0 percent loss (Soundness test performed with MsS04 at 5 cycles) (ASTM C 88).
- (5) Accelerated expansion test. Not greater than 15.0 percent breakdown (*Corps of Engineers Testing Procedure CRD C 148*).

B. Rock Selection.

- (1) Submit samples of stone units with a Test Data Certification to the Engineer min. fourteen (14) days prior to construction for approval prior to construction.
- (2) Mined from naturally occurring rock formations and extracted in individual, intact, "plate-like" shapes with following characteristics:
 - (a) Units. Generally cubical, tabular, or rectangular shape. Use units of basically rounded or tetrahedral form only for filling void spaces between units.
 - (b) Top and bottom of stone unit. Relatively level, maintaining angle from horizontal of not greater than 7 degrees when measured from opposite edges in width dimension of individual stone unit. Not less than 50 percent of unit's surface area will be in intimate contact with neighboring stone unit above and below.
 - (c) Individual stone units for retaining walls shall be provided in the following size ranges:
 - i. **Ledge Stone Bank Reinforcement, 12 inch** to be 24" 60" long (exposed face) x 12" tall x 48" minimum depth. A minimum of 50% of the stones shall be comprised of stones within 6" of the longest dimension identified, i.e. 60" long.
 - ii. **Ledge Stone Bank Reinforcement, 24 inch** to be 24" 60" long (exposed face) x 24" tall x 42" to 48" minimum depth. A minimum of 50% of the stones shall be comprised of stones within 6" of the longest dimension identified, i.e. 60" long.
- (3) Use units of intact natural stone that do not exhibit significant cracks, seams, foliation joints, or other defects that interfere with proper placing of units or significantly impair strength and permanence of construction. Minor cracks and chipping resulting from shipping and delivery are not grounds for rejection. The Engineer will determine which units are acceptable.
 - (4) Do not install stone units with weakened or "scabbing" faces.
- 2. Aggregate Base. Provide 21AA aggregate per section 902 of the Standard Specifications for Construction.

- 3. Geotextile Liner. Provide material that meets the requirements of section 910 of the Standard Specifications for Construction for Geotextile Liner, Heavy.
- 4. Heavy Riprap. Provide material per section 813 of the Standard Specifications for Construction and special provision for Riprap, Special.

c. Construction.

- 1. Mock-up: Provide ledge stone bank reinforcement mock-up, 10 feet long, illustrating typical construction. Locate where directed. Mock-up may remain as part of work.
- 2. Delivery, Storage and Handling.
- A. Contractor shall protect all materials from damage due to jobsite conditions and in accordance with manufacturer's recommendations. Damaged materials shall not be incorporated into the work.
- B. Contractor shall prevent excessive mud, wet cement and like materials from coming in contact with the units.
- Contractor must be specialized in natural stone installation and with proven experience. Not less than 5 years of experience in constructing similar projects of this size and complexity.
- 4. Confirm ledge stone bank reinforcement location, alignment, and start/end points with Engineer prior to proceeding with construction activities associated with installing the bank reinforcement.
- 5. Construction of natural stone bank reinforcement:
- A. Excavate to lines and grades as shown on drawings. Bench cut embankment excavation. Over excavation will not be paid for and replacement with compacted fill and/or bank reinforcement components will be included in Ledge Stone Bank Reinforcement. Be careful not to disturb base beyond lines shown. Excavate foundation soil as required to provide ample room for proper placement and compaction of leveling base pad and installation of stone units.
 - B. Place geotextile liner in toe trench and side trench and place riprap within trench.
- C. Place base leveling aggregate and geotextile liner as shown with thickness not less than 12 inches. Compact base material to provide level hard surface on which to place first course of units. Compact with mechanical plate compactors to a minimum of 95 percent of soil's maximum unit weight.
- D. Prior to ledge stone placement, place geotextile liner over the base leveling aggregate behind the stone units and up the excavated slope. Place geotextile liner immediately behind and under the stone units in order to prevent migration of the drainage backfill through the stone units. Compact drainage backfill and soil around each course prior to installing succeeding courses. Backfill in front of the wall with relatively impervious natural soils. Compact soil to provide a barrier to ground water flow through leveling base.

- E. Exercise care when removing stone units from delivery truck onto construction site. Do not allow stone units to free-fall. Significantly cracked, damaged, or disturbed stone units are not acceptable, as determined by the Engineer.
- F. Place first course of natural stone units on riprap at toe trench and on prepared aggregate. Check units for level and alignment. Ensure that units are in full contact with prepared aggregate. Place units side to side for full length of bank reinforcement alignment.
- G. Stack units for subsequent courses staggering vertical seams. Place units directly on underlying units, overlapping, per plans and details, and position to develop positive interlock with neighboring stone units.
- H. Fill or "chink" gaps greater than 6 inches between individual units (on exterior wall face) with like units of appropriate size.
- I. Rest stone units firmly on underlying stone units. Place at minimum angle from vertical (wall batter) as shown on design plans. Place units to shift back as shown on the drawings.
- J. At the end of each day's operation, slope last lift of backfill away from wall units to direct runoff away from wall face. Do not allow surface runoff from adjacent areas to enter wall construction site or pond in reinforced fill areas.
- K. Upon completion of backfilling operation and establishment of final grades, ensure that grading requirements are met. Engineer will notify Contractor of limits on construction activities in proximity of wall.
- **d. Measurement and Payment.** The completed work as described shall be paid for at the contract unit price for the square foot of the face of the wall for the following pay items:

Pay Item	Pay Unit
Ledge Stone Bank Reinforcement, 12 inch	Cvd
Ledge Stone Bank Reinforcement, 24 inch	•

The contracted Unit Price for Ledge Stone Bank Reinforcement, 12 inch and Ledge Stone Bank Reinforcement, 24 inch shall include all labor, materials and equipment necessary to supply and install the stones in the locations and dimensions shown on the plans. Ledge Stone Bank Reinforcement, 12 inch and Ledge Stone Bank Reinforcement, 24 inch will be measured by cubic yard of stone. Pay items include natural limestone units in the sizes and requirements identified and geotextile liner. Submittals, material testing, and shop drawings shall be included in the Unit Price. Aggregate base and riprap are not included in ledge stone pay items: Contractor to price separately.

SPECIAL PROVISION FOR RELOCATING SITE FURNISHINGS

SG:KED 1 of 3 06-13-2023

- **a. Description.** This work consists of removing, salvaging, storage, and reinstalling miscellaneous site furnishings and appurtenances. Ensure applicable work is done in accordance with the Michigan Department of Transportation 2020 Standard Specifications for Construction.
- **b. Materials.** Provide necessary materials for removing, loading, transporting, unloading, storage, and installation of the site furnishings. Items salvaged for reinstallation shall be protected and securely stored by the Contractor until such time as the furnishings are reinstalled.

The materials will include all accessories and hardware required for the relocation and installation in accordance with the site details included on the plans and per the manufacturer's recommendations at no additional cost. Provide any additional components, parts, and/or other site elements to provide a complete installation of the site furnishings. Ensure materials for use in installation of the site furnishings are in accordance with the details included on the plans and Division 9 of the Michigan Department of Transportation 2020 Standard Specifications for Construction. Ensure furnishings are installed per the manufacturer's recommendations.

All exposed hardware shall be vandal/tamperproof. All anchoring bolts, nuts, washers, must be galvanized in accordance with ASTM A153. Ensure all other hardware for installation is galvanized or zinc coated. When requested by the Engineer, the Contractor must furnish certification regarding the compliance of materials incorporated in the work.

c. Construction. Ensure the work of installation is done in accordance with the plans and details and the Standard Specifications for Construction and installed level, plumb, square and accurately aligned. Notify Engineer of any discrepancies for direction on how to proceed.

Coordinate installation with underground utility lines, conduits, irrigation lines/sleeves, concrete paving/pads, pavement jointing, adjacent site amenities/furnishings, required clearance zones and other work affected by the site furnishings installation. Prior to installation of site furnishings, contractor shall confirm all installed locations, spacing, orientations, dimensional relationships, and special requirements for the site furnishings in the field with the Owner's Representative prior to proceeding with any work associated with the site furnishings.

Concrete footings shall be 12 inch diameter and 3'-6" deep. Concrete footings to be installed below the concrete slab shown on the plans.

Should minor changes and deviations from the locations, spacing, orientations, and dimensional relationships established on the plans be required by the Engineer or Owner's Representative, this shall be done by the Contractor at no additional cost.

Contractor to use care in the transport and installation of the site furnishings to avoid damaging the products and/or finish. Do not place, slide, and/or drag the site furnishings on the concrete pavement or other hard or abrasive surface. Follow manufacturer's recommendations.

Scratches, marks, dents, and defects in the finishes and components shall be repaired per manufacturer recommendations. If in the opinion of the Engineer that the product exhibits defects that require replacement the product shall be replaced at no additional cost. Unless otherwise indicated, clean site furnishings by washing thoroughly with clean water and soap, rinsing with clean water, and drying with soft cloths or clean per manufacturer's recommendations. Protect finishes from damage during construction period with temporary protective coverings approved by Engineer and manufacturer. Remove protective covering at time of Substantial Completion. Restore finishes damaged during installation and construction period so no evidence remains of correction work. Return items that cannot be refinished in the field to the manufacturer and provide new units at no additional cost.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Bench, Relocate	Ea
Workout Equipment, Relocate	
Water Fountain, Relocate	
Bike Repair Station, Relocate	
Concrete Wheel Stop, Relocate	

Bench, Relocate includes the removal and reinstallation of existing park bench, including excavation, removal of concrete foundation, removal of concrete foundation from bench support post, temporary storage and reinstallation of bench including excavation and two (2) new concrete footings. Reinstallation includes all labor and miscellaneous materials necessary to perform the work. Any repairs to or replacement of bench materials damaged due to the Contractor's operation will be made at no cost to the contract.

Workout Equipment, Relocate includes the removal and reinstallation of steel pipe workout equipment including excavation, removal of existing concrete foundations, removal of concrete foundations from workout equipment support post, temporary storage and reinstallation of work out equipment including excavation and four (4) new concrete footings. Reinstallation includes all labor and miscellaneous materials necessary to perform the work. Any repairs to or replacement of workout equipment materials damaged due to the Contractor's operation will be made at no cost to the contract.

Water Fountain, Relocate includes the removal and reinstallation of existing drinking water fountain, including excavation, removal of concrete support slab, temporary storage of fountain and reinstallation of water fountain at the location indicated on the plans. Reinstallation includes new concrete support slab, excavation, trenching, piping, backfilling, miscellaneous materials and hardware as necessary to perform the work. Any repairs to or replacement of water fountain materials damaged due to the Contractor's operation will be made at no cost to the contract.

Bike Repair Station, Relocate includes the removal and reinstallation of existing bike repair station including concrete support slab and reinstallation of repair station at location indicated on the plans. Reinstallation includes surface mounting of bike repair station on new concrete slab, and miscellaneous mounting hardware necessary. Reinstallation includes all labor and miscellaneous materials necessary to perform the work. Any repairs to or replacement of bike repair station materials damaged due to the Contractor's operation will be made at no cost to

the contract.

Concrete Wheel Stop, Relocate includes the removal and reinstallation of existing concrete wheel stops, removal of existing wheel stop anchor pins, reinstallation of existing wheel stops where indicated on the plans. Reinstallation includes new anchor pins of diameter, length and material matching existing. Reinstallation includes all labor and miscellaneous materials necessary to perform the work. Materials damaged due to the Contractor's operation will be made at no cost to the contract.

SPECIAL PROVISION FOR Straight Curb, Concrete, 18 inch wide

SG:KED 1 of 2 06-13-2023

- **a. Description.** This work consists of constructing concrete curbs as defined on the plans. Concrete curbs shall be constructed in accordance with details shown on the plans and shall conform to the requirements of Section 802 of the 2020 MDOT Standard Specifications for construction except as modified herein.
- **b. Materials.** Concrete Curb materials shall meet the requirements of Section 802 of the 2020 Michigan Department of Transportation Standard Specifications for Construction.
 - 1. Curing Compound. Curing compound shall be Type 1, clear, conforming to ASTM C-309.
 - 2. Joint Sealant to be a 2-component, premium grade, polyurethane based elastomeric sealant in a non-sag consistency. Color to be submitted for Engineer review and approval. Joint sealant to be Sikaflex 2cNS, Sonneborn NP2 or equal as approved by the Engineer.
 - 3. Submit the following documents to the Engineer for review and approval prior to proceeding with construction of sidewalks:
 - A. Concrete Mix Design
 - B. Joint Sealant and color samples

c. Construction.

- 1. **Straight Curb, Conc, 18 inch wide** pay item includes excavating, backfilling, compacting and grading as shown on plans and details. Dispose of excess and unsuitable material at NO additional cost. Excavation and general site fill shall be included. Provide aggregate base, material per plans and details and in accordance with Division 9 of the 2020 Michigan Department of Transportation Standard Specifications for Construction.
- 2. Slip forming of concrete curbs will NOT be permitted. Concrete curbs shall be constructed using conventional form work.
- 3. Control joints and sealed expansion joints to align with adjacent pavement. Provide sealed expansion joints in curbs at a maximum of 120 feet. Provide 1" sealed expansion joints at the back of all curbs that are adjacent to pavement or other fixed site features.
- 4. Provide sealed expansion joints where proposed curbs meet existing curbs. If sawcut of an existing curb is within 3 feet of an existing joint expand removal limits and sawcut at joint. Clean consistent sawcut to be provided at interface with existing curbs. Raveled, broken and irregular sawcut edge(s) shall be re-sawcut prior to proceeding with installation of new curbs at no additional cost. Additional pavement replacement that is required as the result of additional saw cuts will be provided at no additional cost.

- 5. All exposed portions of all curbs shall have a medium broom finish without imperfections, chips, marks, and holes. Broom finish to be provided longitudinal (parallel) with the length of the curb.
- 6. Restore area disturbed beyond actual sidewalk limits to pre-construction conditions or as shown on plans. No separate payment will be made for such restoration but is considered part of this work item.
- **d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price for the following pay items:

Pay Item	Pay Unit
Straight Curb, Conc, 18 inch wide	Foot

Straight Curb, Conc, 18 inch wide will be measured by the foot. The contract unit price will be payment in full for furnishing all materials, labor and equipment necessary to construct the curb, as shown on the Site Layout Plan and Site Details on the drawings. Sawcutting, earth excavation, grading, embankment, compaction, control joints, sealed expansion joints, sealant, reinforcement, tie bars, finishing, aggregate base, and other items which may be required shall be considered included in the construction and will not be paid for separately. Removal of the existing curb, pavement, and sidewalk will be paid separately. Curb transitions are included in these pay items.

SPECIAL PROVISION FOR Topsoil

SG:DJA 1 of 3 06-13-2023

a. Description

1.1 SUMMARY

- A. This section specifies all soil materials designated as "Topsoil" on the drawings or in the special provisions. Supply topsoil for landscape work (seeding and planting) from on-site sources or off-site sources.
- B. Related Special Provisions:
 - 1. Seeded Lawn
 - 2. Exterior Planting

1.2 REFERENCES

- A. ASTM International, as referenced herein as ASTM.
- B. US Department of Agriculture (USDA) Handbook No. 60 Diagnosis and Improvement of Saline and Alkali Soils.

1.3 ACTION SUBMITTALS

- A. Source Quality Control:
 - 1. Material Test Reports: Conduct Topsoil testing for on-site stockpiled topsoil or from off-site sources.
 - 2. Sample: Provide 1-quart samples for each topsoil test unit (including source).
 - 3. Conduct all topsoil sampling and testing prior to delivery from off-site sources.

1.4 INFORMATIONAL SUBMITTALS

- A. Field Quality Control:
 - 1. Obtain samples, test materials, and submit field test reports as described under Articles 2.1 and 3.1 below.

1.5 QUALITY ASSURANCE

- A. Qualifications:
 - Soil-Testing Laboratory Qualifications: The contractor shall engage an independent laboratory or university laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.

b. Products and Materials

1.1 MATERIALS

A. Topsoil:

- 1. Topsoil for landscape work shall be a fertile, friable, sandy loam or loam surface soil without admixture of subsoil screened to be free of stones, stumps, root, trash, debris, and other materials deleterious to plant growth.
- 2. Particle Size Distribution of Topsoil:

Sieve Designation	Percent Passing		
1 inch screen	100		
1/4-inch screen	97 - 100		
No. 10 U.S.S. mesh	95 - 100		
sieve			
No. 140 U.S.S.	15 - 35		

- 3. The pH range shall be 6.5 to 8.4. Topsoil that does not meet this pH range shall not be approved by the Architect.
- 4. Organic content shall not be less than 4 percent and not greater than 20%.
- 5. Clay content determined by Bouyoucos Hydrometer Test: between 5 percent and 15 percent.
- 6. Base percentages on dry weight of the sample.

1.2 SOURCE QUALITY CONTROL:

A. Laboratory Test Reports:

- 1. Conduct topsoil testing for each soil test unit as follows:
 - a. Existing stockpiled or off-site location(s): 1 sample per acre of site to be excavated.
 - b. Plant mixture: Plant mixture shall be tested twice. First test topsoil as indicated above. Second test plant mixture after integrating mixture ingredients as identified under Special Provision for Exterior Planting.
- 2. Submit all test reports for approval. Topsoil units that do not meet the soil requirements specified under this section will not be permitted for use as Topsoil.
- 3. Fertility: For each unamended soil type, test topsoil for organic materials, pH, phosphate, potash content, calcium, magnesium, zinc, iron, and manganese.
- 4. Physical Properties: Determine percent sand, silt and clay and textural classification (USDA) by hydrometer method. Identify all foreign materials such as rock, roots, and vegetation.
- 5. Supplemental Testing: Report presence of problem salts.
- 6. Recommendations: Based on the test results, the independent testing laboratory shall state recommendations for soil treatments and soil amendments to be incorporated prior to seeding and planting. List recommendations in weight per 1000 square feet for lawn area and cubic yard of plant mixture. Recommendations shall include nitrogen, phosphorus, and potash nutrients and all soil amendments required for the long-term growth of the specified plants, native seeding and turf.

c. Construction

1.1 FIELD QUALITY CONTROL

A. Sampling: Each soil test unit shall be a composite of two to three subsamples taken the full depth of proposed source for each acre of surface area. Topsoil test reports shall be accompanied with each sample unit for review and approval by the Landscape Architect or Owner's Representative.

- B. Testing methods and written recommendations when not referenced elsewhere, shall comply with USDA's Handbook No. 60. Nutrient data to be given in parts per million (ppm) dry soil.
- C. Topsoil shall be as defined in ASTM D5268.
- D. Soil pH shall be tested in accordance with ASTM D4972.
- E. Test for organic material by using ASTM D2974.

d. Measurement and Payment

1.1 The completed work as described shall be paid for at the contract unit price for the following pay items:

Pay Item	Pay Unit
Topsoil	CY

The contracted Unit Price for **Topsoil** shall include submittals, material testing, and placement of topsoil.

SPECIAL PROVISION FOR RELOCATING SITE SIGNAGE

SG:KED 1 of 2 06-13-2023

- **a. Description.** This work consists of removing, salvaging, storage, and reinstalling miscellaneous site signs and appurtenances. Ensure applicable work is done in accordance with the Michigan Department of Transportation 2020 Standard Specifications for Construction.
- **b. Materials.** Provide necessary materials for removing, loading, transporting, unloading, storage, and installation of the site signs. Items salvaged for reinstallation shall be protected and securely stored by the Contractor until such time as the signs are reinstalled.

Provide all materials per MDOT Standard Specifications Section 810 and Division 9 for permanent traffic signs and supports.

Backfill excavated areas with granular material or native soils. Restore disturbed grass areas in kind including topsoil, seed, and mulch as shown on the landscape drawings or as directed by the Owner's Representative.

c. Construction. Ensure the work of installation is done in accordance with section 810 of the Standard Specifications for Construction. Site signs shall be installed in locations shown on the plans and as directed by the Owner's Representative. Repair any damage to the existing signs to the satisfaction of the Owner's Representative or replace at no additional cost to the owner.

Items identified for relocation and reinstallation shall be protected in place and/or safely and securely stored by the Contractor as directed and coordinated with the Owner's Representative until the item can be relocated and/or reinstalled. Provide all necessary hardware and materials necessary to relocate and reinstall the site signs. Repair and/or replace any components, pieces, hardware, or other materials that are missing or were damaged during removal. Provide any additional components, parts, hardware, and/or other site elements to provide a complete and operating site element.

Backfill and restore all disturbed areas according to the standard specifications and as directed by the Engineer.

Any materials and/or portions of materials identified by the Owner's Representative that do not need to be salvaged shall become the property of the contractor and shall be disposed of by legal means off-site as part of the respective pay item identified herein at no additional cost.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Regulatory Sign, Relocate	Ea

Border to Border Trail Marker, Relocate	. Ea	
Memorial Stone Sign, Relocate	.Ea	

Regulatory Sign, Relocate shall be paid for at the contract unit price per each unit basis. Contractor shall remove signs, post and footing, load, transport, store the signs in a protected location away from construction activities and reinstall the signs to the new locations noted on the plans and as identified by the Owner's Representative. Should changes and deviations from the locations and orientations established on the plans be required by the Engineer, this shall be done by the Contractor at no additional cost. Due care shall be taken to ensure the signs are not damaged during relocation, storage and construction activities and if damaged or lost shall be replaced at no additional cost. Removal and reinstallation include posts, post holes, footings and other associated hardware. Traffic signs shall be reinstalled as shown on plans/details and as directed by the Owner's Representative. Confirm traffic signs to be reinstalled with City of Ann Arbor and the Engineer. Signs and associated posts, footings and other associated hardware not requiring reinstallation shall be disposed of legally off-site at no additional cost. Backfill with on-site soil materials (if approved by the Engineer), General Site Fill, Topsoil, or Aggregate Base, 21AA for the final site improvements noted on the plans. The cost and installation of the backfill material is included as part of Regulatory Sign, Relocate.

Border to Border Trail Marker, Relocate shall be paid for at the contract unit price per each unit basis. Contractor shall remove signs, post and footing, load, transport, store the signs in a protected location away from construction activities and reinstall the signs to the new locations noted on the plans and as identified by the Owner's Representative. Should changes and deviations from the locations and orientations established on the plans be required by the Engineer or Owner's Representative, this shall be done by the Contractor at no additional cost. Due care shall be taken to ensure the signs are not damaged during relocation, storage and construction activities and if damaged or lost shall be replaced at no additional cost. Removal and reinstallation include posts, post holes, footings and other associated hardware. Traffic signs shall be reinstalled as shown on plans/details and as directed by the Owner's Representative. Confirm traffic signs to be reinstalled with City of Ann Arbor and the Engineer. Signs and associated posts, footings and other associated hardware identified by the Engineer as not requiring reinstallation shall be disposed of legally off-site at no additional cost. Backfill with on-site soil materials (if approved by the Engineer), General Site Fill, Topsoil, or Aggregate Base, 21AA for the final site improvements noted on the plans. The cost and installation of the backfill material is included as part of Border to Border Trail Marker, Relocate.

Memorial Stone Sign, Relocate shall be paid for at the contract unit price per each unit basis. Contractor shall remove stone, load, transport, and store the stone in a protected location away from construction activities and reinstall the stone to the new location noted on the plans and as identified by the Owner's Representative. Should changes and deviations from the location and orientation established on the plans be required by the Owner's Representative, this shall be done by the Contractor at no additional cost. Due care shall be taken to ensure the stone is not damaged during relocation, storage and construction activities and if damaged or lost shall be replaced at no additional cost. Removal and reinstallation include stone, memorial plaque, and other associated hardware. Memorial Stone Sign shall be reinstalled as shown on plans and as directed by the Owner's Representative. The cost and installation of the backfill material is included as part of **Memorial Stone Sign, Relocate**.

SPECIAL PROVISION FOR Seeded Lawn

SG:DJA 1 of 13 06-13-2023

a. Description

1.1 SUMMARY

- A. This section specifies all materials designated as "Lawn" on the drawings or in the special provisions. Section includes: Hydroseeding, Maintenance and Warranty.
- B. Related Special Provisions:
 - 1. Topsoil
 - 2. Exterior Plantings

1.2 REFERENCES AND REGULATORY REQUIREMENTS

- A. United States department of Agriculture (USDA), Federal Seed Act labeling and purity standards and miscellaneous requirements.
- B. State Seed Laws where applicable.
- C. Association of Official Seed Analysts (AOSA): "Rules for Testing Seed".

1.3 DEFINITIONS

- A. Finish Grade: Elevation of finished surface of planting soil.
- B. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
- C. Pests: Living organisms that occur where they are not desired or that cause damage to grasses, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.
- D. Topsoil: Imported or on-site stockpiled topsoil that has been modified with soil amendments and fertilizers to produce a soil mixture best for lawn growth.
- E. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before topsoil is placed.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.5 ACTION SUBMITTALS

- A. Product Data:
 - 1. Fertilizers from manufacturer.
 - 2. Mycorrhizal inoculum.

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3. Pesticides and herbicides: Product label, manufacturer's product data sheet, application instructions and application equipment.

4. Lawn maintenance equipment.

B. Source Quality Control:

- 1. Test Report:
 - a. Topsoil: Test reports including soil amendments and fertilization rates for each seed mix. (Refer to Special Provision for Topsoil.)
- 2. Field Quality Control: Project Work Schedule: Within 4 weeks following the issuance of the Notice to Proceed, submit a project work schedule to the Landscape Architect indicating dates for delivery, installation, and Substantial Completion for all landscape work. The Schedule shall be comprehensive and address procurement, delivery, and installations of irrigation, hand watering planting and lawn areas of the site. Maintenance Schedule: Within 4 weeks following the issuance of the Notice to Proceed, submit a detailed typewritten approach and schedule for the warranty maintenance of all landscape activities outlined. Coordinate landscape maintenance with Special Provision for Exterior Plantings) and combine all maintenance activities into one plan of action. The Irrigation Plan needs to be prepared in conjunction with the Maintenance Schedule identified above. Manual watering will be required.
- 3. Irrigation and Hand Watering Plan: Prior to the issuance of Substantial Completion, submit a detailed typewritten approach and schedule that outlines watering requirements for maintaining the landscape as described herein. The Irrigation/Hand Watering Plan shall be submitted in conjunction with the Maintenance Schedule. The plan shall address frequencies and durations that will be established to provide the correct watering rates for plants and lawns and inspection protocols. In locations where no automatic irrigation system has been installed, describe means, methods and frequencies for hand watering. An approved temporary irrigation system may also be used, or hand water from a source approved by the Owner's Representative. Supply all water and equipment at the Contractor's expense from a source approved by the Owner's Representative. Reliance on natural precipitation will only be allowed with provision of recorded data from a rain gauge located within a 2-mile radius of the project site. The schedule shall be comprehensive.
- 4. Maintenance Report Forms: Use the approved Maintenance Schedule and Irrigation Plan as the framework for all maintenance activities. The Contractor shall provide detailed maintenance report forms for each site visit. The reports shall be completed by the on-site maintenance superintendent performing the work prior to leaving the site and shall be submitted monthly as back-up to each invoice. Each report shall include the following:
 - a. Date of activity.
 - b. Length of time on site (start time and finish time).
 - c. Name and signature of the maintenance superintendent.
 - d. Number of personnel performing the work.
 - e. Site climatic conditions (rain, wind, temperature, etc.)
 - f. Detailed description of maintenance activities performed by area.

1.6 INFORMATIONAL SUBMITTALS

A. Qualification Data:

1. Include list of at least three similar projects completed in the last 5 years by Installer demonstrating Installer's capabilities and experience. Include project

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- names, addresses, and year completed, and include names and addresses of owners' contact persons.
- 2. Provide resumes of field technician (foreman) responsible for managing the purchase and installation of all materials. Separate resumes shall be provided for the planting and maintenance technicians.
- 3. License certificates for pesticide applicator.

1.7 QUALITY ASSURANCE

A. Qualifications:

- 1. The Contractor shall be a company specializing in seeding exterior landscape installations and maintenance, having a minimum 5 years' experience in projects of the scope and scale being specified.
- 2. Installer's field technician: The installer shall provide a full-time supervisor on site when work is in progress.
- 3. Maintenance field technician: The maintenance activities for all turf areas shall be performed by skilled employees of the landscape installer. Subcontractors specializing in landscape and turf maintenance will not be permitted unless approved in writing by the Owner's Representative.
- 4. Pesticide applicator: State licensed, commercial.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable. During shipment and storage on site, protect materials from breakage, moisture, heat or other damage.

B. Bulk Materials:

- 1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
- 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
- 3. Accompany each delivery of bulk materials with appropriate certificates.

1.9 SCHEDULING

A. Work Schedule:

- 1. Upon authorization to proceed with the work, submit a project work schedule indicating the dates of each of the following items:
 - a. Submittal schedule.
 - b. Delivery of materials to the site.
 - c. Layout of seed bed locations on the site.
 - d. Installation including; topsoil placement, fine grading and seeding
 - e. Substantial Completion of the work.
- 2. Update schedule monthly to reflect progress of the work.

B. Seasonal Limitations:

1. Seed mixes shall be installed during planting seasons normally recognized in the job locality.

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2. Cool Season Grasses: Install during the spring and fall only when soil temperatures are between 50 and 65 degrees Fahrenheit and air temperatures is 60 to 75 degrees Fahrenheit.

- 3. Approximate spring installation: Between April 1 and May 15.
 Approximate fall installation: Between August 15 and September 30 but no later than 60 days before the first average annual frost date
- 4. If special circumstances warrant installation outside the normal installation season, submit a written request to the Owner's Representative describing conditions and stating the proposed variance. Seeding outside the specified seasons could extend warranty obligations and will be dependent upon the extent of the variance.
- 5. Weather limitations: Proceed with seeding only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.
- 6. Coordination with Plantings: Plant trees, shrubs, and other plants after finish grades but prior to lawn installation unless otherwise indicated. When planting trees, shrubs, and other plants after lawn installation, protect completed areas, and promptly repair damage caused by planting operations.

1.10 WARRANTY, MAINTENANCE AND ACCEPTANCE

A. Substantial Completion:

- The Substantial Completion inspection for the landscape shall occur in phases based upon the phasing plan approved at the beginning of the work by the Owners Representative. Following the inspection, the Landscape Architect or Owner's Representative will issue a punch list identifying all work requiring completion, replacement or correction.
- 2. The Contractor shall complete all punch list items within 2 weeks of its issuance. All repairs shall occur at no additional cost to the Owner.
- 3. Substantial Completion will be provided for all lawn areas complying with the following:

Approval of all specified submittals.

- a. The work shall be 100% complete (including all site preparation, earthwork, topsoiling, seeding, plantings, irrigation/hand watering and clean-up, and ready for inspection.
- 4. After receiving a Notice of Substantial Completion warrant and maintain all lawn areas in a vigorous, well-kept condition until Final Acceptance.

B. Final Acceptance:

- 1. Approximately two weeks prior to the expiration of the warranty and maintenance period (or sooner if plantings are included in the inspection), Owner's Representative will conduct an inspection of all lawn areas, plantings, irrigation system and review all previously submitted maintenance report forms to verify all completed maintenance activities. There shall be thorough documentation previously submitted by the contractor and field observations made by the Owner's Representative that the specified maintenance has occurred. Following the inspection, the Owner's Representative or Landscape Architect will issue a punch list identifying all work requiring completion, replacement or correction.
- 2. The Contractor shall complete all punch list items within 2 weeks of its issuance. All repairs shall occur at no additional cost to the Owner.

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- 3. Final Acceptance will be based upon Landscape Architect or Owner Representative's approval and the work having:
 - a. Uniform finished grades conforming to the drawings and free of erosion.
 - b. All maintenance items completed and documented by Contractor through maintenance report forms.
 - c. Satisfactory Seeded Lawn: At end of warranty and maintenance period, a healthy, uniform well-rooted, even-colored, close stand of grass has been established, free of weeds, disease and insect problems, and surface irregularities, with 100% coverage of the specified species.
- 4. Areas which do not meet the contract requirements shall be regraded as needed and seeded. Use specified materials and procedures to reestablish lawn that does not comply with requirements and continue maintenance at no cost to the Owner until lawn is satisfactory.
- 5. Final Acceptance and the end of the warranty period for the lawns will occur only after all punch list items have been satisfactorily completed and the site is left in the condition specified under Cleanup and Protection.
- C. Warranty and Maintenance Period:
 - 1. The end of the warranty and maintenance period shall be:
 - a. 60 days from date of completion of Substantial Completion punch list but no less than 3 maintenance mowings.
 - b. When the initial warranty and maintenance period has not elapsed before end of growing season or if lawns are not fully established, continue maintenance during next growing season until all maintenance and warranty obligations have been met.
 - 2. The Contractor will not be held responsible for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents beyond landscape installer's control which result from floods, hailstorms, winds over 100 miles per hour, fires or vandalism, unless Contractor has not completed specified installation in a manner that could have protected the landscaping from these phenomena.
 - if, in the opinion of the Landscape Architect, it is advisable to extend the warranty and maintenance period for an additional growing season, the contractor will be notified of such requirement by the Owner. Improper execution of the installation and/or failure to perform and document the specified maintenance in accordance with contract requirement shall be the basis for extending the period of establishment for a second growing season. All specified maintenance and warranty requirements will be required during this extended period and all costs shall be the responsibility of the Contractor.

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b. Materials

- 1.1 SEED
- 1.2 Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Rules for Testing Seeds" for purity and germination tolerances.
- 1.3 Other varieties than those specified may be submitted for approval to the Landscape Architect, but they must be newer, more improved cultivars than what is listed.
- 1.4 Seed Species:
- 1.5 Quality: Seed of grass species as listed below for solar exposure, with not less than 90 percent germination, not less than 98 percent pure seed, and not more than 0.3 percent weed seed:
- 1.6 Sun and Partial Shade Blend: Proportioned by weight as follows:
- 1.7 60 percent Kentucky bluegrass (Poa pratensis), a minimum of two improved turf type varieties.
- 1.8 30 percent fine fescue (Festuca), a minimum of two varieties; chewing and creeping red.10 percent perennial ryegrass (Lolium perenne).
- 1.9 Install at a rate of 4 pounds Pure Live Seed (PLS) per 1000 square feet of bed

1.10 EQUIPMENT

A. Tiller:

- Equipment used for subsoiling or ripping compacted subsoils on slopes up to 2:1
 (H:V): A minimum D-7 size tractor with a mounted ripper consisting of 3 to 5 tines spaced a maximum 24 inches apart. Tines shall be equipped with 12-inchwide winged ripper points and shall be capable of penetrating subsoils up to 24 inches deep in one pass.
- 2. Equipment used for subsoiling or ripping compacted subsoils on slopes up to 4:1 (H:V): A tractor mounted disk harrow consisting of 6 12 offset disks weighing a minimum 1,800 pounds each. The harrow shall be capable of penetrating subsoils up to 18 inches deep in one pass.
- B. Fine Grading: Hand rake, tractor mounted York rake or other similar equipment.
- 1.11 Hydroseeder: A truck-mounted, hydraulically driven variable speed agitation seeder that effectively shoots an aqueous mixture of seed, fertilizer, and mulch over broad areas through a discharge boom and hydraulic hose. The minimum tank capacity shall be 1,000 gallons.
- 1.12 WATER
 - A. Water for lawns shall be available from on-site or off-site sources.
 - B. Water shall be free of wastewater effluent or other hazardous chemicals.
- 1.13 TOPSOIL
 - A. Refer to Special Provision for Topsoil.
- 1.14 SOIL AMENDMENTS
 - A. Peat shall be a product having at least 95% organic content consisting of sphagnum

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- peat moss with a pH range of 3.0 4.0 and Von Post decomposition value of H1 H3, or low-lime reed-sedge peat with a pH range of 4.0 to 5.0 and Von Post decomposition value of H4 H6. Product shall be free of sticks, wood or other debris.
- B. Compost shall be a heavily decomposed mature/stabilized, humus-like material derived from the aerobic decomposition of yard clippings or other compostable materials. Manure is not suitable for use. The compost shall have a dark brown or black color, be capable of supporting plant growth without ongoing addition of fertilizers or other soil amendments and shall not have an objectionable odor. The compost shall be free of plastic, glass, metal and other physical contaminants, as well as viable weed seeds and other plant parts capable of reproducing (except airborne weed species). Composting facility shall be tested in accordance with the United States Composting Council, Seal of Testing Assurance (STA) following procedures as outlined in the Test Methods for the Examination of Composting and Compost protocols (TMECC).
 - 1. PH: 5.5 to 8.
 - 2. Moisture content: 35 to 55 percent by weight. No visible free water or dust is produced when handling it.
 - 3. Sieve analysis: 100 percent passing ³/₄ inch screen.
 - 4. Soluble salt content: Less than 5 percent.
 - 5. Organic matter content: Minimum 60 percent.
- C. Sand shall be clean, coarse, ungraded, meeting the requirements of ASTM C33 for fine aggregates.
- D. pH Adjusters:
 - Lime shall be finely ground agricultural grade dolomitic limestone containing not less than 85% calcium and magnesium carbonates conforming to ASTM C602, Class T or O.
 - 2. Elemental sulfur shall be granular, biodegradable, horticultural grade material containing at least 90% sulfur, with a minimum of 99% passing through No. 6 sieve and a maximum of 10% passing through No. 40 sieve.

E. Mycorrhizal Inoculum:

1. Mycorrhizal fungi in the inoculant shall be available as propagules, i.e., spores, root fragments and hyphae. The inoculant shall contain highly selected strains of low host specificity endo- and ectomycorrhizal fungi combined with other beneficial fungi (Trichoderma), humic acids, biostimulants, beneficial bacteria, soluble sea kelp, and yucca plant extracts, as manufactured by Horticultural Alliance or approved equal. The selection of inoculants shall be based upon fungal partners that are compatible with the specified turf grasses.

1.15 FERTILIZER

- A. Fertilizer shall be a complete fertilizer of neutral character, consisting of fast and slow-release nitrogen and shall be applied at the rates and formulations that release nutrients when new plants can effectively draw them from the soil.
 - 1. The percentages of slow release and fast release nitrogen shall be adjusted based on the time of year fertilizers are being applied.
 - 2. For fall seeding, the percentage of slow-release nitrogen shall be higher than spring seeding since a high percentage of fast-release nitrogen will be mostly lost by runoff or infiltration before plant uptake.
- B. Composition: The percentages by weight shall be determined per recommendations of the soil testing reports for lawns.

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1.16 PESTICIDES

A. General: Pesticide and herbicides shall be registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides and herbicides unless authorized in writing by authorities having jurisdiction.

- B. Pre-Emergent Herbicide (Selective and Nonselective): Effective for controlling the germination or growth of weeds within seeded areas at the soil level.
- C. Post-Emergent Herbicide (Selective and Nonselective): Effective for controlling weed growth that has already germinated.

c. Construction

1.1 EXAMINATION

A. General:

- 1. The Contractor shall establish a quantifiable system to be employed in the field for measuring areas, weighing products, and calibrating equipment on a daily basis to ensure all products are installed at the specified rates of application.
- Prior to beginning work, examine and verify the acceptability of the project site and notify the Owner's Representative of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected or resolved
- 3. Identify areas of subsoil compaction prior to placement of topsoil.
- 4. Verify that no foreign or deleterious material has been deposited in soil within a planting area.
- 5. Where lawn installation occurs in close proximity to other site improvements, provide adequate protection to all features prior to commencing work. Promptly repair any items damaged during installation operations to their original condition.
- 6. Do not mix or place soils and soil amendments in frozen, wet, or muddy conditions.
- 7. Suspend spoil spreading, grading, and tilling operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
- 8. Uniformly moisten excessively dry soil that is not workable, and which is too dusty.
- 9. If lawn areas die or are rejected due to non-conformity to contract requirements, they must be removed from the site immediately and replaced before Substantial Completion.
- B. Utilities: Have all underground utilities located by servicing agencies. In the vicinity of utilities, hand-excavate to minimize possibility of damage.

C. Coordination with Other Work:

- The Contractor shall coordinate work with other contractors or trades to determine the appropriate sequence of landscape installation with respect to other work on the site.
- 2. Completed work installed out of construction sequence which is subsequently disturbed by the completion of work by other trades shall be repaired by the landscape installer at no cost to the Owner.

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3. Maintain grade stakes and layout controls set by others until removal is mutually agreed upon by all parties concerned.

1.2 SUBGRADE PREPARATION

- A. Protect structures, utilities, sidewalks, pavements and other facilities, trees, shrubs, and plantings from damage caused by lawn installation operations.
- B. Install erosion control measures, if necessary, to prevent erosion or displacement of soils and discharge of soil-bearing water run-off or airborne dust to adjacent properties, natural resources, and walkways.
- C. Vegetation Removal: Strip and dispose of organic debris and root mat.
- D. Maintain subgrades in areas to be topsoiled in a uniform condition so as to prevent future depressions. Prior to placing topsoil:
 - Till all subsoils to a minimum depth of 18-inches with approved equipment to remove all compacted subsoils. Tilling shall be complete, breaking and fracturing thoroughly. If necessary, perform tilling in two directions, one perpendicular to the other.
 - 2. Upon completion of tilling, the subsoils will require light compaction and leveling to prevent ponding of water and settlement after topsoil placement. As a final operation, a lightweight tracked dozer shall be employed that will remove surface irregularities and prevent excessive settlement. During this procedure, the surface of the subsoil on slopes greater that 4:1 (H:V) shall be imprinted with tracks from the dozer. Imprinting shall be perpendicular to the slope and shall be approximately one-inch deep.
 - 3. Do not proceed with topsoil placement until subgrade tilling and imprinting is completed to the satisfaction of the Landscape Architect.
 - 4. Repair disturbances to previously graded areas and remove surplus subgrade material associated with any landscape construction.
- E. If the prepared subgrade is eroded or compacted by rainfall prior to topsoil placement, rework the surface as specified.
- F. In locations where existing topsoil has not been removed, till entire area in accordance with paragraph [E] above.

1.3 PLACING TOPSOIL, SOIL AMENDMENTS AND FERTILIZER

- A. Provide, fertilize and amend topsoil in accordance with testing laboratory recommendations specified under Section 329113 "Soil Preparation (Topsoil)".
- B. Uniformly distribute topsoil on lawn areas so that after light compaction and finish grading, a uniform depth of 4-inches is achieved. Placement shall include spreading, cultivating, lightly compacting, dragging and grading to the conditions specified below.
- C. Topsoil, when placed, shall be dry enough so as not to puddle or bond. Do not place topsoil when the subgrade is frozen, excessively wet, extremely dry or in a condition otherwise detrimental to proper grading or lawn operation.
- D. Following topsoil placement but prior to finish grading, broadcast all soil amendments and fertilizer and rototill into the topsoil. The coverage areas for soil amendments and fertilizer shall be carefully calculated by the installer and fully blended into the entire topsoil profile. Do not incorporate soil amendments and fertilizer more than 5 days in advance of seeding.

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E. Mycorrhizal Inoculum:

1. Rototill 2 granular pound per 1,000 square feet of seed bed into the top four to six inches of topsoil or as recommended by supplier.

1.4 PRE-INSTALLATION PREPARATION

A. Finish Grading:

- Immediately before lawn installation scarify, loosen, float, and drag topsoil as necessary to bring it to the proper condition. Remove all foreign matter larger than 1" in diameter. There shall be no visible plants, roots, debris or any foreign material present prior to installation.
- 2. Finished grades shall slope to drain, be free of depressions or other irregularities, lightly compacted to prevent settlement, and shall be uniform in slope between grading controls and the elevations indicated. Finished grade for seeded lawn areas shall meet existing grades at contract limits and be ½" below top of curbs, walk paving, and metal edging if used.
- B. Before lawn installation obtain Landscape Architect's or Owner Representative's acceptance of finish grading. Restore seed bed areas if eroded or otherwise disturbed after finish grading.

1.5 HYDROSEEDING

- A. Protect adjacent and adjoining areas from hydroseeding overspray.
- B. Moisten prepared area before seeding if soil is dry. Water thoroughly and allow surface to partially dry before seeding. Do not create muddy soil.
- C. Pay close attention to weather conditions. Ensure each area being seeded is fully completed in advance of weather conditions such as heavy rains and strong winds that will result in damage to the unfinished work.

D. Hydroseeding:

- 1. Fertilizer and soil amendments shall be applied as specified under 3.3 above and shall not be included within the slurry.
- 2. Apply seed on the previously prepared bed at the rates specified under 2.1 of this section.
- 3. Water used shall be obtained from fresh water source and shall be free from injurious chemicals and other toxic substances at all times. Identify to the Owner all sources of water at least two weeks prior to use. The Owner, at his/her discretion, may take samples of the water at the source or from the tank at any time and have a laboratory test the samples for chemical and saline content.
- 4. Mixtures shall be constantly agitated from the time they are combined until they are finally applied to the seed bed. Once combined, mixtures shall be used within 8 hours.
- 5. Apply slurry uniformity and at the prescribed rate, avoiding misses and overlapping areas, gauging quantities of mixtures to measured application areas. Checks on the rate and uniformity of application may be made by the Owner's Representative or Landscape Architect observing the degree of wetting, or by distributing test sheets and observing the quantity of seed deposited thereon.
- 6. Direct application nozzle sufficiently upward so that the mixture falls to the ground in a uniform shower. Never direct spray toward the ground in a manner that produces erosion or runoff. Discontinue application during periods of high wind that affects the ability to properly apply the seed at a uniform cover.

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7. Maintain soil moisture in accordance with 1.7 below.

1.6 TURF RENOVATION

A. All preparation work shall be conducted in accordance with 1.1 through 1.4 above. Following surface preparation, lawn installation shall be completed in accordance with the applicable lawn installation methods specified above. Blend newly seeded areas into adjacent existing lawns.

- B. Renovate existing lawns where indicated. In areas where diseased or contaminated lawns are identified, remove existing topsoil and dispose off site.
- C. Renovate lawns damaged by Contractor's operations, such as storage of materials, haul roads or other areas outside the limits of work.
- D. Renovate lawns where topsoil containing foreign materials, such as oil drippings, fuel spills, stones, gravel, and other construction materials resulting from Contractor's operations has occurred. Remove existing topsoil and dispose off-site.
- E. Mow, dethatch, core aerate, and rake existing turf as needed.
- F. Maintain soil moisture in accordance with 1.17 below.

1.7 WATERING

A. Watering Procedures:

- Immediately following lawn installation water all bed areas thoroughly and immediately with a fine mist until soil is soaked to a depth of at least 2-inches or as indicated above. Puddling water or allowing the seedbed to dry is unacceptable.
- 2. For seeded areas, maintain soil in a moist condition (in hot dry weather irrigation or hand watering may be required 2-4 times per day) until seeds have sprouted and reached a height of 1-inch. Water thereafter a minimum of once every 2-3 days unless natural rainfall has provided equivalent watering. Provide irrigation to moisten soil to a depth of 4" to encourage deeper rooting.
- 3. Watering at accelerated rates that dislodge seed and mulch materials, or cause erosion shall be immediately repaired at no cost to the Owner.

1.8 MAINTENANCE

- A. General: Maintain and establish lawn areas by watering, fertilizing, pest and weed control, litter removal, mowing, trimming, repairs, and performing other operations as required to establish healthy, viable lawn. Maintenance shall also include grade repair, seeding and all associated soil amendments and fertilizers.
- B. Provide all maintenance under the supervision of a skilled employee of the lawn installer. The skilled maintenance supervisor shall be capable of operating the automatic irrigation system controller, conducting turf diagnostics to identify the presence of disease, insect and fertility problems, and directing a maintenance crew in the performance of horticultural maintenance practices identified below. Maintenance requirements identified below shall be the basis for information to be included in the Maintenance Schedule and Irrigation Plan identified in this section [and thoroughly documented under the required Maintenance Report Forms to verify the work has been properly performed.

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1. Failure to perform and submit factual Maintenance Report Forms could result in non-payment for said services and require the extension of the warranty and maintenance period an additional year at the Contractor's expense.

- C. Provide all equipment, materials, labor, and services to maintain the landscape beginning immediately after each area is installed and continuing until Final Acceptance and the end of the warranty period. During this period, perform the following:
 - 1. Inspect the entire landscape at least once per week during the growing season and perform needed maintenance promptly.
 - 2. Prior to each mowing, collect all debris, litter and miscellaneous materials accumulating on the site and remove from the site.
 - 3. Irrigation: Irrigate or hand water all turf areas to maintain optimum moisture within the root zone as specified above. When using a temporary sprinkler system, the lawn installer responsible for maintenance shall bear full responsibility to set each zone to the correct frequency and duration.
 - 4. Mow all lawns weekly during the growing season and as described below. Mowing frequencies shall be adjusted based on cutting requirements and may require more frequent visits during high growth periods. Use mulching mower only with sharpened blades and alternate direction of each mowing session to prevent rutting.
 - 5. Fertilize as described below.
 - 6. Apply treatments as required to keep turf and soil free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards. Apply herbicides and pesticides as described below.
 - 7. Remove leaves bi-monthly during the fall as they accumulate on the lawns. Bag and dispose off-site. Do not mow in advance of leaf removal.
 - 8. Repair bare, eroded or settled areas and restore to provide a uniformly smooth lawn with the specified grasses. Provide the same materials and installation procedures as those used in the original installation.
 - 9. Reclaim/replace soil materials and turf damaged or lost in areas of subsidence. Roll, regrade, and replant bare or eroded areas to produce a uniformly smooth lawn.
- D. Mowings: Mow turf as soon as the top growth is tall enough to cut. Remove no more than one-third of grass-leaf growth in initial or subsequent mowings. At the time of each mowing, adjust mowing equipment to meet this requirement. Do not delay mowing until grass blades bend over and become matted. Do not mow when the grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:
 - 1. Mow to a height of 2-1/2 to 3-inches.
 - 2. Mowing heights may increase during the hot summer months based on regional conditions.
 - Collect all grass clippings if mowings are not sufficiently timed to allow for composting into the existing lawn and accumulations of clippings can be observed on the surface of the grass. Collection and off-site disposal shall be performed at no additional cost to the Owner.

1.9 POST-INSTALLATION FERTILIZATION

A. Apply fertilizers at the time of season, rate of application and grade of N-P-K that

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maximizes the health of the lawn and minimizes the potential run-off of fertilizers to adjacent waterways and groundwater. Avoid the use of phosphorus unless site soils are deficient of this nutrient.

B. Test site topsoil in early-spring and base actual rates on testing recommendations.

1.10 PESTICIDE APPLICATION

- A. Apply pesticides, and other chemical products and biological control agents according to requirements of authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.
- B. Post-Emergent Herbicides (Selective and Nonselective): Apply only as necessary to treat already-germinated weeds and according to manufacturer's written recommendations.
- C. For broadleaf herbicide: Apply during September.
- D. Apply, only as necessary, pre-emergent herbicide during early spring to prevent crabgrass and other annual weeds.

1.11 CLEANUP AND PROTECTION

- A. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.
- C. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.
- D. Remove non-degradable erosion-control measures after grass establishment period.

d. Measurement and Payment

The completed work as described shall be paid for at the contract unit price for the following pay items:

Pay Item	Pay Unit
Seeded Lawn	SY

The contracted Unit Price for **Seeded Lawn** shall include hydroseeding, maintenance including watering the seeded area, submittals and warranty.

SPECIAL PROVISION FOR TREE PROTECTION FENCE

SG:KED 1 of 1 06-13-2023

- **a. Description.** This Work shall consist of furnishing, erecting, maintaining and removing protective fence placed around identified trees, as noted on the plans, and as directed by the Owner's Representative.
- **b. Materials.** The fencing shall be a bright orange heavy duty HDPE, ultraviolet light stabilized material, 3200 PSI tensile yield, 370 lbs. per foot tensile strength, 50-60% mesh openings, and shall be at least 5 feet high around trees. Installation shall be according to the plans, details and the Engineer's recommendations as to staking and securing the fencing. Multiple trees may be grouped together behind the protective fencing as approved by the Owner's Representative.
 - **c. Construction.** Install tree protection fence as shown on plans and details and as directed by Engineer.
- **d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price for the following pay items:

Pay Item	Pay Unit
Tree Protection Fence	Foo

Tree Protection Fence shall be paid for at the contract unit price per foot installed on site. The contract unit price will be payment in full for furnishing all materials, labor and equipment necessary to install the **Tree Protection Fence**. No additional compensation will be given to replace fencing which has been damaged or stolen and which must be replaced when directed by the Engineer. Removal and disposal of the fence off-site legally shall be provided when directed by the Owner's Representative at the completion of construction at no additional cost.

SPECIAL PROVISION FOR RIPRAP, FIELDSTONE

WTA:RRB 1 of 1 04-14-2023

- **a. Description.** This work consists of diverting stream flow, preparing channel grades, installing geotextile liner and furnishing and placing fieldstone riprap on channel bottoms and side slopes, under and adjacent to the structure. Ensure all work is done in accordance with the plans and the standard specifications.
- **b. Materials.** Use stone for riprap that is washed, uncrushed, rounded fieldstone. Individual stones must have a minimum diameter of 8 inches. The fieldstone shall match closely to the fieldstone/cobblestone veneer used at the abutments and return walls. Acceptance will be based on visual inspection of riprap by the Engineer.

Geotextile liner must meet the requirements of section 910 of the Standard Specifications for Construction. Furnish Test Data Certification from the geotextile manufacturer for the specific product intended for use prior to installation.

c. Construction. Clear areas where riprap is to be installed of brush, trees, stumps and debris. Shape and compact all grades to the required cross section, including excavation for toe and header plan details. Place geotextile liner on the prepared grades in accordance with the *Soil Erosion and Sedimentation Control Manual.* Place riprap in accordance with subsection 813.03 of the Standard Specifications for Construction on prepared grades to the elevations, thickness and lateral limits as shown on the plans. The riprap installation must not damage the geotextile liner. Ensure damaged geotextile liner is repaired or removed and replaced as directed by the Engineer at no additional cost to the contract.

Placement of riprap with a clam bucket or other approved method will be required to assure that there is no damage to structure footings and no material loss around or under structure foundations. Ensure any structure damage is repaired by the Contractor as directed by the Engineer, at no cost to the contract.

Start placement of riprap at the toe and proceed up the slope, with each stone firmly embedded into the slope and against the adjoining stones. Construct the riprap to minimize voids. If placed riprap contains large voids, the Engineer may direct the Contractor to place additional stones of smaller sizes to fill the voids. The finished surface of the riprap must present a tight, even surface.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Riprap, Fieldstone	Ton

Riprap, Fieldstone includes diverting stream flow, clearing and preparing grades, excavation and disposal of surplus materials, furnishing and placing geotextile liner, and placing the stone, including headers, in accordance with this special provision.

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR RIPRAP, SPECIAL

HYD:EJC 1 of 2 APPR:RWS:DMG:07-30-20

- **a. Description.** This work consists of diverting stream flow, preparing channel grades, installing geotextile liner and furnishing and placing well-graded riprap on channel bottoms and side slopes. Complete all work in accordance with the plans and the standard specifications.
- **b. Materials.** Use stone for riprap that is quarried aggregate or waste mine rock, free from shale, spoil and organic material, as well as seams, cracks, or other structural defects. Ensure the stone is hard, angular, durable and resistant to weathering and water action, having 2.5 minimum bulk dry specific gravity and 2.5 percent maximum 24 hour soak absorption in accordance with *ASTM D6473*. The weight loss in 5 cycles by use of sulfate soundness testing must not exceed 10 percent in accordance with *ASTM D5240/D5240M*. The ratio of the greatest (axis A) to least (axis C) dimension must not exceed 3:1 for any individual stone, as depicted in Figure 1 below.

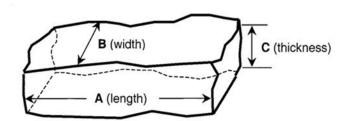


Figure 1: Riprap shape depicting A, B and C axis

Ensure the gradation meets the requirements specified in Table 1 herein. The basis of acceptance of the riprap will be Test Data Certification. However, acceptance of the riprap gradation will be based on visual inspection by the Engineer.

Ensure geotextile liner and geotextile liner, heavy meet the requirements of section 910 of the Standard Specifications for Construction. Place geotextile liner for Class I riprap gradation and geotextile liner, heavy for Class II and Class III riprap gradations.

c. Construction. Place riprap in accordance with subsection 813.03 of the Standard Specifications for Construction, on prepared grades to the elevations, thickness, and lateral limits as shown on the plans. Clear areas to be protected by riprap of brush, trees, stumps and debris. Shape and compact all grades to the required cross section, including excavation for toe and header plan details. Place geotextile liner and geotextile liner, heavy on prepared grades in accordance with the *Soil Erosion and Sedimentation Control Manual*. Ensure the riprap installation does not damage the geotextile liner. Ensure damaged geotextile liner is repaired or removed and replaced as directed by the Engineer.

Careful placement of riprap with a clam bucket or other approved method is required to assure that there is no damage to structure footings and no material loss around or under structure

HYD:EJC 2 of 2

foundations. Repair any structure damage caused by the Contractor operations as directed by the Engineer, at no cost to the contract.

On slopes, placement of riprap stone must start at the toe and proceed up the slope, with each stone firmly embedded into the slope and against adjoining stones. Construct the riprap to minimize voids by select placement of optimum stone sizes from the gradation specified. If placed riprap contains large voids, the Engineer will direct the Contractor to place additional stones of the appropriate gradation sizes to fill the voids. The finished surface of the riprap must present a tight, even surface.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Riprap, Spec, Class __ includes diverting stream flow, clearing and preparing grades, excavation and disposal of surplus materials, furnishing and placing geotextile liner, geotextile liner, heavy and placing the riprap stone, including headers, in accordance with this special provision.

Table 1: Gradation Requirements for Riprap-Special, Individual Stones

	Class I	Class II	Class III	
Median Particle Width (inches) (a)	8	16	24	
D (inches) (a)	Percent Passing		Particle Weight Limit (pounds)	
48			100	9000
30			85	2200
24		100	50	1100
20		85		640
16		50		330
12	100		15	140
10	85			80
8	50	15		40
4	15			5
a. Corresponds to the intermediate axis (B) in Figure 1.				

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR CONCRETE SURFACE COATINGS

STR:JAB 1 of 3 APPR:SCK:RL:03-31-21

- **a. Description.** This work consists of furnishing and applying an acrylic based concrete surface coating to concrete structures, including but not limited to barriers, median barriers, sound walls, screen walls, retaining walls, fascias, wing walls, piers and substructure locations as specified on the plans. Ensure all work and materials are in accordance with the standard specifications, except as modified herein.
- **b. Materials.** Select the acrylic based concrete surface coating from the products listed herein.

The color(s) to be used for the concrete surface coatings and the location(s) of the specific colors are on the plan sheets. Ensure the color of the first coat is in contrast with both the bare concrete and the finish coat. On any single structure, use the same product for all areas to be coated with a specified color. Do not mix colors or products from more than one source.

Submit color samples to the Engineer for review and approval. If required by the Engineer, complete a test section to demonstrate the final color prior to application of the coating to the structure.

<u>Company</u>	Proc	<u>luct</u>

Benjamin Moore Super Spec Masonry 100% Acrylic Elastomeric Coating Flat 056

Carboline Company Carbocrylic 3350

ChemMasters Colorcoat
ChemMasters Colorlastic
Conspec Permacoat
ICI Dulux Paints Decra-Flex 300

O'Leary Paint Company O'Leary 1375 Elastomeric

PPG Idustries, Inc. Perma-Crete Pitt-Flex Elastomeric Coating 4-110 Sherwin-Williams Concrete Texture Coating Smooth B97-160 Series

Sika Corporation Elastocolor

Sika Corporation Sikagard 550W Elastic Sonneborn Super Color Coat Tamms Industries Thoro Thoro Thoro Thorolastic

c. Construction.

1. Surface Preparation. Cure new concrete a minimum of 28 days before coating. Following the curing period, and prior to coating, test for moisture content in the concrete as described below.

Ensure all concrete to be coated is tested for the presence of moisture after surface preparation has been completed and prior to application of the coating. Ensure testing is in accordance with *ASTM D4263*. Tape an 18 inch by 18 inch sheet (4 mil) of transparent polyethylene to the concrete surface to be coated. Ensure all edges are sealed with tape that will stick to the concrete substrate and not allow the infiltration of air. Leave the plastic sheet in place a minimum of 16 hours to detect the presence of moisture in the concrete. Ensure there is no moisture visible on the polyethylene sheet after the minimum period of time has elapsed for coating work to begin. Ensure this is verified by the Engineer before application of the coating begins. This test may not be reliable in cooler conditions. Ensure alternate methods to detect moisture are approved by the Engineer. Perform this test a minimum of once every 100 feet on barriers, walls etc., and a minimum of once on columns, piers, etc. Prepare the surface, including removing fins and projections and filling surface voids and cracks (if required), in accordance with manufacturer's recommendations, except as modified by this special provision.

Ensure the surface to be coated is dry and free from all contamination including, but not limited to: dirt, form release agents, oil, grease, laitance, loose material and curing compounds. Clean the surface by low-pressure water cleaning, steam cleaning, or abrasive blasting (followed by oil-free moisture-free compressed air cleaning) or by combination to achieve an acceptable cleaned surface. When low-pressure water cleaning or steam cleaning is used, ensure the concrete surface profile (CSP) is CSP 1 in accordance with the *International Concrete Repair Institute Guideline for Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays* (Guideline No. 310.2R-2013). When abrasive blasting is used, ensure the concrete surface profile is CSP 2 to CSP 4. Low-pressure water or steam cleaning primarily removes water soluble contaminants. Aged concrete with contaminants such as hardened curing compound may require light abrasive blasting to completely remove the contaminant. Since many curing compounds contain wax, remove even well adhered residue prior to coating to ensure a good bond between the surface coating and the concrete.

Verify that the compressed air used for any work is free of oil and moisture contamination in accordance with *ASTM D4285*. Use either an absorbent or a nonabsorbent white collector positioned within 24 inches of the air-discharge point, centered in the air stream. Allow air to discharge onto the collector for a minimum of 1 minute. Visually examine the collector for the presence of oil and/or water. Conduct the test at least one time per shift for each compressor system in operation in the presence of the Engineer. If air contamination is evident, make adjustments to achieve clean, dry air. Examine the work performed since the last acceptable test for evidence of defects or contamination due to contaminated compressed air. Repair contaminated work at no additional cost to the contract.

When low pressure water cleaning or steam cleaning is used, the power washer must deliver 3000 - 4500 pounds per square inch (psi) and utilize a 15 degree or smaller nozzle tip held perpendicular to the surface being cleaned. When using light abrasive blasting to remove contaminants on new construction, be careful not to remove excessive concrete material.

2. Visual Inspection. Check surface cleanliness by lightly rubbing with a dark cloth or by pressing translucent adhesive tape onto the concrete surface in the presence of the Engineer. An acceptable level of residual dust can be agreed upon by the Engineer and the Contractor. Perform a water drop test in the presence of the Engineer prior to coating the concrete surface to detect for the presence of any hydrophobic contaminants. Hydrophobic contaminants

STR:JAB 3 of 3

include materials such as form release agents, curing compounds, oil, grease, wax, and resins. If contaminants are detected, as evidenced by a lack of rapid absorption of the water drop into the concrete, remove the contaminants, and perform the tests again until no contaminants are detected.

- 3. Application. Apply two coats (do not dilute) of the acrylic based concrete surface coating. Apply each coat to provide the minimum wet film thickness as recommended by the manufacturer. A primer is not required unless stated as required in the manufacturer's product data sheet. Temperature limitations of the air, coating material and concrete for application will follow manufacturer's recommendations but must not be outside the temperature range of 45 to 90 degrees Fahrenheit (F) and ensure the temperature of the air, coating material and concrete is at least 5 degrees F above the dew point and rising. Do not apply the concrete surface coating at a relative humidity greater than 90 percent or if rain is forecasted within the specified rain resistance period.
- **d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Conc Surface Coating	Square Yard

Conc Surface Coating includes preparing the substrate concrete surface, conducting the visual inspection and applying the primer (if required) and two top coats of surface coating. No additional payment will be made for the test section.

SPECIAL PROVISION FOR COBBLESTONE VENEER

WTA:RRB 1 of 2 04-14-23

- **a. Description.** This work consists of furnishing and installing cobblestone stone veneer at bridge railings and decorative piers in accordance with the contract plans, and as specified herein.
- **b. Materials.** Furnish materials similar to "ThinStone™ by Connecticut Stone; Fieldstone Cobbles (Boulder Collection) by Halquist Stone, or other, Owner approved equal. The stone veneer is to be an average of 1 ½ inches in thickness. The natural finish face shall be exposed, and the cut face shall backed to the prepared reinforced concrete finish. Corner veneer shall be cut from full stone and shall have a minimum of a 2-inch leg along one face and greater than two inches along the other face.

The decorative stone caps for the top of piers and walls shall be 3-inch-thick solid Indiana limestone, cut to size as indicated in the plans. The cap at the piers shall be one solid piece. The caps at the walls shall be sized to minimize the number of head joints along the wall. The top surfaces shall be a split face finish and the bottoms shall be ground smooth for bonding to the top of the concrete pillar. The overhang of the caps shall extend a minimum of 1-inch beyond the veneer finish.

Mortar used for finish joints shall be provided by the stone manufacturer/supplier and is to be compatible with the stone veneer and cap installation. Mortar color is to be approved by the Owner.

c. Construction. Prior to starting any stone veneer work, the Contractor is to supply a 2-foot x 2-foot sample board of the approved stone veneer with mortar for final review and approval. Color samples shall be provided prior to any work Construct concrete bridge railings and piers in accordance with subsection 711.03 of the Standard Specifications for Construction, as shown on the plans. The concrete shall be cured to its 28-day strength before any veneer work commences. Stone veneer manufacturer's approved installation shall be followed during the veneer installation. A scratch coat of an approved mortar shall be applied to the concrete surface; followed by application of the stone veneer to the scratch coat. Corner units shall be installed first followed by the flat cut stones, laid out in such a pattern to avoid any cut veneer pieces. Mortar joints shall be filled concurrently with placement of the veneers. Once the veneer has cured per manufacturer's recommendations, the stone caps shall be placed in a bed joint of mortar compatible with the limestone material. All mortar shall be fully cured, after which, a transparent sealer, as recommended and supplied by the stone manufacturer shall be applied to all veneer and cap exposed surfaces.

The stone caps shall laid in a full bed joint of mortar over the top of concrete and shall be centered over the concrete element. Any head joints shall be filled with mortar prior to placing the adjacent stone cap. All joints at the caps shall be concave in finish.

d. Measurement and Payment. The completed work, as described, will be measured and

paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Cobblestone Veneer	Square Foot
Stone Cap	Square Foot

Cobblestone Veneer will be measured based on plan quantities. **Cobblestone Veneer** includes providing and placing scratch mortar coat over cured concrete, placing stone veneer, including prefabricated cut corners, mortar joints, and sealant.

Stone Cap will be measured based on plan quantities. **Stone Cap** includes providing and placing limestone caps and finishing the mortar joints.

Reinforced concrete, of the grade specified for the walls and piers will be paid for separately as specified in subsection 706.04 of the MDOT 2020 Standard Specifications for Construction.

CITY OF ANN ARBOR PARKS AND RECREATION DEPARTMENT

SPECIAL PROVISION FOR TIMBER RAIL

WTA:RRB 1 of 2 06-14-23

- **a. Description.** This work consists of furnishing and placing a pedestrian timber rail along both bridge fascia, including the pedestrian overlooks to the horizontal limits shown in the plans. This work also consists of furnishing and placing a vehicular timber rail adjacent to the roadway as shown on the plans. The work shall be complete with all timber posts, laminated rails where shown, rough sawn timber where shown, wire mesh, and all hardware necessary to effect a finished installation. Complete this work in accordance with section 912 of the Standard Specifications for Construction, this special provision, plan details, and as directed by the Engineer.
- **b. Materials.** Furnish materials that meet the requirements indicated below and as specified in section 912 of the Standard Specifications for Construction.
 - Glue Laminated Timber: They shall be sized as shown on the contract plans and shall be Southern Yellow Pine 24F-V3, using a waterproof phenolic adhesive between ply's. The glu-lam rail shall be machined incised. It shall be pressure treated as specified elsewhere in these specifications. The member shall bear the ANSI 117/APA-EWS certification. The railing lengths shall be precut prior to pressure treatment. All drilled holes shall be done in the shop prior to treatment. The laminated timber rails shall be cut to lengths that allow splicing to occur at a timber post.
 - Sawn Lumber: All sawn lumber shall be Southern Yellow Pine, #1 or better. It shall
 be pressure treated as specified elsewhere in these specifications. All dimensioned
 cuts and holes in timber material shall be made prior to pressure treatment. Treat all
 field cuts and holes with copper naphthenate in accordance with AWPA specification
 M4.
 - Pressure Treatment: The pressure treatment shall consist of pentachlorophenol in a light solvent. Glu-lam members shall be treated to a minimum retention of 0.4PCF per AWPA specification C28. Sawn lumber shall be treated to a minimum of 0.4 PCF per AWPA specification C2.
 - Hardware to attach the timber components shall meet the requirements of subsection 908.10 of the MDOT Standard Specifications for Construction. Ensure all hardware used for attaching timber elements, are hot-dip zinc coated (galvanized) in accordance with AASHTO M232M/M232.

Select zinc-rich paint for repair of damaged galvanized surfaces from the MDOT Qualified Products List (915). Use a zinc-rich paint closely matching the color of the surface to be repaired.

c. Construction. Chamfer exposed edges of the rails as directed by the Engineer or detailed on the plans. Ensure materials, labor, and equipment used for attaching timber elements are in accordance with section 709 of the Standard Specifications for Construction, with the following modifications:

- 1. Ensure top height of timber rail is as specified on the plans or as directed by the Engineer.
- 2. Use lag bolts with washers for securing the timber vehicular rail to wood guardrail posts.
- 3. Use threaded carriage bolts with nuts and washers for securing the timber rail elements to timber posts at the pedestrian rails,
- 4. For the 8x8 posts at the vehicular rail, use a moment post base sleeve, such as Simpson Strong Tie MPB88Z or approved equal, hot dipped galvanized, as detailed in the contract plans.
- 5. For the 6x6 posts at the pedestrian rail, use a moment post base sleeve, such as Simpson Strong Tie MPB66Z or approved equal, hot dipped galvanized, as detailed in the contract plans.
- 6. Countersink the heads of all bolts or use carriage bolts as detailed in the plans. Bolt heads must not protrude beyond the timber surface or provide a smooth, non-snag finish.

The method of fastening may be altered if approved by the Engineer.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Uni
Timber Rail, Pedestrian	Foo
Timber Rail. Vehicular	

Timber Rail of the type specified includes furnishing and installing a timber rail, including all hardware, as specified in this special provision, and shown on the plans. This pay item will be measured along the longitudinal center line of each timber spanning the posts, in feet of acceptable materials placed within the elevations and lateral limits shown on the plans or as directed by the Engineer.

CITY OF ANN ARBOR PARKS AND RECREATION DEPARTMENT

SPECIAL PROVISION FOR VERTICAL DELINEATORS

SG:DA 1 of 2 7/11/23

Description

This work shall consist of fabricating, shipping and installing permanent signs, vertical delineators, and plastic curb. Work shall be in accordance with Sections 810 and 919 of MDOT 2020 Standard Specifications

Materials

Signs are to be fabricated in accordance with Section 919.02 Traffic Signs of the Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction and the 2011 Michigan Manual of Uniform Traffic Control Devices (MMUTCD). The plans indicate the signs to be fabricated.

Materials for traffic signs include steel posts and hardware needs to install signs.

R1-6 base shall be manufactured by Qwick Kurb, Inc, model number L60 in yellow color. End sections shall be model number L61. The assembly shall include L65 reflective arcs, a reboundable flex boot with bolt in construction, with a 224 sq. in. reflective crosswalk marker panel MDOT sign R1-6. All pavement mounting hardware shall be stainless steel meeting the dimensional and strength capacity of the manufacturer's recommendation.

City Post shall be manufactured by Pexco. Model shall be 36-inch white or yellow City Post Surface Mount Model SM, 3" OF Flexible, Embedded Anchor Cup 2-inch diameter, 4-inch deep, Model P/N 800BASE213. Sheeting color for posts shall be white on the white posts and yellow on the yellow posts AR1000.

Construction

Signs shall be installed per manufacturer's specifications at locations determined by the Engineer.

Measurement and Payment

The completed work will be measured and paid for the following pay items:

Contract Item (Pay Item)	<u>Pay Unit</u>
City Posts, 3-inch, (color)	Each
Quick Curb	Foot
Quick Curb. End Unit	Each

CITY OF ANN ARBOR PARKS AND RECREATION DEPARTMENT

SPECIAL PROVISION FOR VERTICAL DELINEATORS

SG:DA 2 of 2 7/11/23

The approved price for this item shall include all labor, material, and equipment costs required to complete the work.

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR MIGRATORY BIRD PROTECTION

ENV:JDG 1 of 3 APPR:DMG:HLZ:03-24-20 FHWA:APPR:03-30-20

- a. Description. Contractors are advised that bridges and large culverts similar to those in this project are often attractive places for nesting birds such as swallows and phoebes. Burrow nesting species (swallows and the Belted Kingfisher) may also take advantage of banks created during earth-moving or soil storage, making it necessary to prevent excavation of new nesting burrows. Taking of migratory birds or nests with eggs and chicks without a federal permit is prohibited by the Migratory Bird Treaty Act (16 U.S.C. 703-712). This federal law protects migratory birds, their nests and young, and provides enforcement authority to the U.S. Fish and Wildlife Service and contains severe penalties for violations. Adherence of the Department to these provisions by the FHWA is required under federal law. This special provision addresses the actions required of the Contractor to protect the above mentioned bird species as required by the Migratory Bird Treaty Act.
 - **b.** Materials. None specified.
 - **c.** Construction. Adhere to the following requirements:
 - 1. Bridge Work April 15 to August 15.
 - A. Bridge work done entirely on the deck. No special action is necessary by the Contractor provided that the work is done entirely on the deck. It is presumed that the Contractor will not require access to areas where birds are nesting and contract work will not result in the disturbance of nesting adults, or to their eggs or chicks due to vibrations from equipment or other construction activity.
 - B. Work done entirely on the deck that would result in perforation of the deck or create strong vibrations. Activities that would potentially dislodge nests beneath the deck will require that the Contractor use exclusionary devices to deter birds from nesting beneath the bridge deck prior to start of work. If birds are present, the Contractor must determine the status of the migratory birds, their nests, and chicks and must take all actions to comply with the requirements of the Migratory Bird Treaty Act.
 - C. Bridge work requiring activity above and below the deck. This is the anticipated active nesting period of most migratory birds; though later dates may apply in the Upper Peninsula. Prior to commencing work within this time frame, or continuing work which will carry over into this time frame the following year, the Contractor must determine the status of the migratory birds, their nests, and chicks and must take all actions to comply with the requirements of the Migratory Bird Treaty Act

ENV:JDG 2 of 3

2. Bridge Work – August 16 to April 14. During this time, birds are normally not nesting; therefore, no special actions by the Contractor are necessary after an inspection is conducted to determine if birds are present.

THE FOLLOWING DISCUSSION PRESENTS MINIMUM REQUIREMENTS AND IS NOT TO BE CONSTRUED AS A COMPLETE LIST OF POSSIBLE ACTIONS REQUIRED TO COMPLY WITH THE ACT.

d. Status of Birds and Nests - Bridges.

- 1. If existing nests are not occupied or no new nests have been built. Install barriers (deterrents) before the nesting season to prevent nest establishment or reuse. Use netting, canvas, plastic sheeting or burlap. Different techniques may be employed, depending on the design of the bridge, providing that reasonable access is maintained for traffic under the bridge, if needed. Netting can be "diapered" around all ledges and overhangs to ensure access to any potential nesting site is obstructed. Other bridge designs may lend themselves to hanging netting, canvas or burlap over the side of a bridge. Some devices, such as a wooden beam can be employed to secure the bottom edge of the netting, canvas, plastic sheeting or burlap close to the water or ground surface. Ensure all gaps are sealed against entry by birds. Reposition any protective devices that become displaced within 8 hours.
- 2. If birds penetrate the barrier and/or nest building has commenced. If birds slip past the installed deterrents, the Contractor must determine how birds are entering the underside of the bridge and adjust or repair the barrier to prevent further access. If nest building or repair of existing nests has begun, but no eggs or chicks are present in the nests based upon visual inspection of the nest cup, the Contractor must knock down or hose down nests with water or by other means.
- 3. If nests with eggs and chicks are accidentally knocked down. Make every effort not to cause a take of eggs or chicks. Taking of migratory birds or nests with eggs or chicks is prohibited by law without a federal permit. If exclusionary devices have not been erected or have not been maintained allowing for the completion and use of nest sites, no work can be conducted until cleared by Department staff. If eggs or chicks are accidentally dislodged due to work being performed on the bridge deck (as detailed in subsection c.1), deliver retrieved eggs and chicks to a licensed wildlife rehabilitation facility willing and able to accept them. Contact information can be found on the MDNR website. If this occurs, immediately contact the Environmental Section at (517) 335-2633.
- 4. Nests with eggs or chicks are present prior to the start of contract work. If active nests with eggs or chicks are found that would be affected by construction activities, delay work until an evaluation of nesting status is made or the birds fledge from the nest and leave the immediate area.

e. Earthwork.

1. Earthwork - April 15 to August 15. If there are existing earthen banks, conduct an inspection to determine if nest burrows or birds are present. If banks are created in sand or gravel or in soil storage piles during construction several species of birds may begin to excavate burrows to be used for nesting. Banks with a vertical face greater than 4 feet are attractive to these species. Inspect the banks and report possible nesting activity to Department staff. If burrow excavation has just begun and observation shows that no eggs

or chicks are present, grade the banks to a natural angle of repose. If the bank needs to be maintained in its existing condition, drape plastic sheeting or other materials over the area to prohibit entry by the birds. If burrows are too deep to determine if eggs or chicks are present by visual inspection, stop work that would affect the stability and/or destruction of the bank and contact the Environmental Section for further direction at (517) 335-2633.

- 2. Earthwork August 16 to April 14. During this time, birds are normally not nesting; therefore, no special actions by the Contractor are necessary after an inspection is conducted to determine if birds are present.
- **f. Measurement and Payment.** All costs for determining the need for, the placing of deterrents, and applying of all special actions including, but not limited to, removing nests, retrieving dislodged eggs and chicks and delivering them to a licensed wildlife rehabilitation center, including costs of rehabilitation, and any and all costs associated with conducting work in compliance with the Migratory Bird Treaty Act as stated herein will not be paid for separately but will be considered to have been included with other items of work in the contract.

In addition, the Contractor is liable to the Department for any penalties imposed for violations to the Migratory Bird Treaty Act due to the Contractor's failure to comply with this special provision. Penalties range from fines for each incident up to potential loss of federal funding. According to the Act, a person, association, partnership or corporation which violates the Act, or its regulations is guilty of a misdemeanor and subject to a fine of up to \$500, jail up to 6 months or both. Anyone who knowingly takes a migratory bird and intends to, offers to, or sells or barters the bird is guilty of a felony, with fines up to \$2000, jail up to 2 years or both.

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR

FEDERAL AVIATION ADMINISTRATION NOTIFICATION FOR STRUCTURE WORK

BRG:BMW 1 of 1 APPR:JAB:JD:04-02-20 FHWA:APPR:04-03-20

a. Description. This work consists of obtaining any necessary permits and notifying the Federal Aviation Administration (FAA) and/or local airport zoning authority if any permanent structures or temporary structures (temporary scaffolding, forms, poles, crane booms, etc.) exceed the requirements listed in this special provision, no matter the duration.

A copy of any permits (FAA, Michigan Tall Structure and local or municipal airport zoning) obtained by the Department are included in the contract.

- **b.** Materials. None specified.
- **c. Construction.** The Contractor is required to provide notice to the FAA, and acquire any necessary permits, if the proposed construction or alteration of permanent or temporary structures meets any of the following criteria:
 - 1. Anything over 200 feet above ground level (AGL) at the project site, including temporary construction and/or equipment.
 - 2. Any changes or variations that exceed the heights or locations set forth in the permits, if permits are included in the contract.
 - 3. Any changes or variations that exceed the height set forth on the contract plans, if permits are not included in the contract.

Schedule operations to allow for the maximum 45 day FAA review period. Extensions of time will not be granted for failure to submit the FAA notifications 45 days prior to commencement of construction activities subject to notification requirements.

d. Measurement and Payment. This work will not be paid for separately, but will be included in costs for other pay items in the contract. Payment for any/all FAA required safety equipment, obstruction lighting, flags, nighttime crane procedures, etc. will also be considered to be included in the costs for other pay items in the contract.

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR EASTERN MASSASAUGA RATTLESNAKE

ENV:JDG 1 of 2 APPR:DWS:MJO:03-18-20 FHWA:APPR:03-18-20

a. Description. Contractors are advised that the project area has a known population of the Eastern Massasauga Rattlesnake or is within its known range. This species is listed as federally threatened under the U. S. Endangered Species Act of 1973 (Act). Taking (killing, harming, or disturbing in any manner) of Eastern Massasauga Rattlesnake without a federal permit from the U.S. Fish and Wildlife Service is prohibited under federal law. The Act provides enforcement authority to the U.S. Fish and Wildlife Service and contains severe penalties for violations. The Contractor is liable to the Department for any penalties imposed for violations to the Act due to the Contractor's failure to comply with this special provision. Fines and penalties range up to \$50,000 and 1 year in prison. Violation of any requirement listed below can lead to an immediate work stoppage in Eastern Massasauga Rattlesnake habitat. FHWA is required under federal law to assure MDOT is compliant with these provisions or risk losing federal funding for the project. This special provision addresses education, notification and intentional take requirements of the Contractor and their workers to protect the Eastern Massasauga Rattlesnake as required under the Act.

- b. Materials. None specified.
- **c. Construction.** Adhere to the following requirements:
- 1. Prior to construction, all Contractor staff working onsite must read the attached fact sheet (2 of 2). The purpose of the fact sheet is to provide the Contractor easy identification tips, notification that a venomous snake may be onsite, and raise awareness regarding its protected legal status.
- 2. Immediately report any possible Eastern Massasauga Rattlesnake sightings to the Engineer.
 - 3. Intentionally 'take' is prohibited.
- **d. Measurement and Payment.** All costs associated with complying with this special provision will not be paid for separately but will be considered to have been included in other pay items in the contract.

ENV:JDG 2 of 2

Eastern Massasauga Rattlesnake (Sistrurus catenatus)

Protected as federally threatened





Photos courtesy of the Michigan Department of Natural Resources and Michigan State University

This species is suspected to occur at or near the work site. Please have staff read the following information.

What Does an Eastern Massasauga Rattlesnake Look Like?

The eastern massasauga rattlesnake is a thick-bodied and short venomous snake. Adults typically measure 18 to 30 inches long. This species is gray to grayish-brown with dark blotches bordered by white down the middle of its back. The head is thick and triangular and has an obvious neck. Like many venomous snakes, the massasauga has vertical slitted pupils like a cat and heat sensing pits below the eyes. A rattle is present on the tail that "buzzes" as a warning signal, although they may strike without rattling. This is the only rattlesnake in Michigan.

Where Does It Live?

These snakes prefer wet areas, such as marshes, wet prairies, wet woods, and along rivers and lakes. They also use adjacent upland during parts of the year, especially in the summer. They hibernate during the winter in crayfish burrows, under logs and tree roots, and in small mammal burrows.

What Should You Do If You See a Massasauga Rattlesnake?

Massasaugas are shy and try to avoid confrontation but that does not mean they won't bite to protect themselves. Never try to handle, chase, provoke, or threaten a snake. When in potential snake habitat, wear thick boots that cover your ankles, long pants, and do not reach into thickets or under logs. If you hear the buzzing of a rattle stay calm and back away from the sound slowly. The snake will leave if you give it space.

If an eastern massasauga rattlesnake is found at a Michigan Department of Transportation (MDOT) project, the construction engineer should be contacted immediately. The construction engineer should then contact the MDOT ecologist at 517-335-2633.

How is the Massasauga Protected Under the Law?

The eastern massasauga rattlesnake is protected under federal law by the Endangered Species Act. This status prohibits harming or harassing the species along with policies to protect the species habitat.

For More Information:

60-Second Snakes: The Eastern Massasauga Rattlesnake www.youtube.com/watch?v=-PFnXe_e02w

Photos

http://animaldiversity.org/site/accounts/pictures/Sistrurus_catenatus.html

General Information

http://mnfi.anr.msu.edu/emr

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR TREE REMOVAL AND CLEARING

ENV:JDG 1 of 2 APPR:DMG:MJO:03-17-22 FHWA:APPR:03-22-22

a. Description. This work consists of all tree removals or clearing vegetation greater than 3 inches in diameter required for the project in accordance with sections 201 and 202 of the Standard Specifications for Construction.

- 1. Due to the existence of federally protected species, complete all tree removals required for the project between October 1 and March 31 for those projects located in the counties shown on the map included in this special provision as having both Indiana bats (IB) and northern long-eared bats (NLEB).
- 2. In the counties shown on the map included in the special provision as having NLEB only, tree removal can be done at any time during the year.
- **b.** Materials. None specified.
- **c. Construction.** Conduct the work in accordance with sections 201 and 202 of the Standard Specifications for Construction.
- **d. Measurement and Payment.** Clearing or tree removal will be paid for in accordance with subsections 201.04 and 202.04 of the Standard Specifications for Construction and applicable special provisions.

If the project is in a county shown on the map as having NLEB bats only, payment will be in accordance with subsections 201.04 and 202.04 of the Standard Specifications for Construction.

If the project is in a county shown on the map as having both IB and NLEB the work must be conducted between October 1 and March 31. If the work is not completed within this timeframe, and additional environmental evaluation is required, the Contractor may face penalties from paying any additional costs and being assessed liquidated damages up to being held in default of the contract.



CITY OF ANN ARBOR

SPECIAL PROVISION FOR TEMPORARY DETECTABLE WARNING SURFACE

AA:JKA 1 of 2 10/10/22 WT:CGT

- **a. Description.-** This work shall consist of furnishing and installing temporary detectable warning units in compliance to the Americans with Disability Act (ADA). All work shall be in accordance with Section 812 of the MDOT 2020 Standard Specifications for Construction, MDOT Standard Detail R-28 Series as indicated on the plans, and as modified herein.
- **b. Related Documents.-** Americans with Disabilities Act (ADA) Title 49 CFR Transportation, Part 37.9 Standards for Accessible Transportation Facilities, Appendix A, Section 4.29.2 Detectable Warnings on Walking Surfaces
- **c. Submittals.-** Submit manufacturer's literature describing products, installation procedures and maintenance instructions. Provide temporary detectable surface applications and accessories as produced by a single manufacturer.

Samples for Verification Purposes: Submit two (2) tile samples minimum 6" x 8" of the kind proposed for use. Samples shall be properly labeled and shall contain the following information: Name of Project; Submitted by; Date of Submittal; Manufacture's Name; Catalog No.; and Date of Fabrication.

Material Test Reports: Submit current test reports from a qualified, independent, testing laboratory indicating that materials proposed for use are in compliance with requirements and meet the properties indicated. The required tests listed elsewhere in this Special Provision shall be performed by a certified and qualified independent testing laboratory on a cast-in-place tactile warning system. All test reports submitted shall be certified by the testing laboratory and shall clearly state that all tests were completed within 5 years of the date of the submittal. The manufacturer shall certify in writing that the materials provided to the project are manufactured with the same materials and manufacturing procedures as those used in the materials on which the test were performed.

- **c. Criteria.-** The temporary detectable warning surfaces shall meet the following material properties, dimensions, and tolerances using the most current test methods:
 - Water Absorption: Not to exceed 0.35% when tested in accordance with ASTM-D570
 - 2. Slip Resistance: 0.80 minimum combined wet/ dry static coefficient of friction on top domes and field area, when tested in accordance with ASTM C1028.
 - 3. Compressive Strength: 18,000 psi minimum, when tested in accordance with ASTM D695.

WT:CGT

- Chemical Stain Resistance: No reaction to 1% hydrochloric acid, urine, chewing gum, soap solution, motor oil, bleach, calcium chloride, when tested in accordance with ASTM D543 or D1308.
- 5. Wear Depth: 300 minimum, when tested in accordance with ASTM C501.
- 6. Flame Spread: 25 maximum, when tested in accordance with ASTM E84.
- 7. Gardner Impact: 50 in.-lbs. minimum, when tested in accordance with Geometry "GE" of ASTM D5420.
- 8. Salt and Spray Performance of Tile and Adhesive System when tested to ASTM-B117 not to show any deterioration or other defects after 100 hours of exposure
- **b. Materials.-** The following are acceptable products for Temporary Detectable Warning Surfaces. If at any time, the surface shows damage, it must be replaced at the Contractor's expense.
 - RediMat by Detectable Warning Systems
 - Self-Adhesive Truncated Domes Mats for Asphalt or Concrete by ADA Sign Depot
- **d. Construction Methods.-** Installer's Qualifications: Engage an experienced Installer who has successfully completed tile installations similar in material, design, and extent to that indicated for this Project.

The contractor shall follow manufacturer specifications for installation.

e. Measurement and Payment.- The completed work as measured for the following pay items will be paid for at the contract unit prices for the following contract items (pay items):

Contract Item (Pav Item)

Pav Unit

Temporary Detectable Warning SurfaceSquare Foot

The unit price for this item shall include all labor, material, and equipment costs required to complete the work.

CITY OF ANN ARBOR PARKS AND RECREATION DEPARTMENT

SPECIAL PROVISION FOR MAINTAINING RIVER TRAFFIC

WTA:RRB 1 of 1 08-11-23

a. Description. This work shall consist of maintaining recreational river traffic through the proposed construction zone unless given written approval by City in advance. At all times during construction, at least one span shall remain open and unobstructed to boat traffic unless there is a need to close the river to traffic for safety, such as setting beams, demolition of the existing bridge or other safety related work items that preclude river traffic from proceeding through the construction influence area (CIA). Written approval for complete river closure shall be obtained by the contractor from the city, a minimum of 5 days before the specific work begins.

The Contractor shall be responsible for providing necessary signs, arrowboards, floats and other items to adequately route traffic through the area. All signs shall be Type I material with a Type A face, all meeting the requirements of Section 8.26 of the 2020 MDOT Standard Specifications.

All floats or buoys shall have a minimum of 36 inches exposed above the water surface. Buoys shall be similar to Model 1147-R by Roylan Manufacturing Co., or equal. They shall have appropriate signage and taping on them, all in reflectorized material. The Standard Inland Waterway symbol for restricted area shall be placed on each buoy, orange in color, with the wording "KEEP OUT" imprinted on each buoy. All floats and buoys shall be adequately anchored and tied off to each other to prevent them from drifting. Signs shall be securely fastened to the bridge, barges, driven signposts other appurtenances. The Contractor shall be responsible for ensuring the buoys are placed to route traffic to one side or the other of the river or to close the river to through traffic during beam placement or other items of work that may require river closure for safety.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Maintaining River Traffic	Lump Sum

The first 30% of Maintaining River Traffic will be paid for at time of initial installation, the second 40% at time of prestressed beam placement and the final 30% at completion of the project, once all buoys, floats and temporary signs have been removed.

APPENDIX

Michigan Department Of Transportation CP-347 (04/10)

MICHIGAN DEPARTMENT OF TRANSPORTATION CERTIFIED PAYROLL

COMPLETION OF CERTIFIED PAYROLL FORM FULFILLS THE MINIMUM MDOT PREVAILING WAGE REQUIREMENTS

(1) NAME OF C	ONTRACTOR / SI	JBCONTRACTOR (CIRCLE ONE)			(2) AE	DRES	S														
(3) PAYROLL NO. (4) FOR WEEK ENDING						(5) PROJECT AND LOCATION (6) CONTRACT ID																
(a)		(b)	(c)			(d) DA	Y ANE	DATE	<u> </u>	1	(e)	(f)	(g)	(h) GROSS	(i)			(j) DED	DUCTIONS			(k)
EMPLOYEE	INFORMATION	WORK CLASSIFICATION	Hour Type		HOUR	≳S WOF	RKED (ON PRO	DJECT		TOTAL HOURS ON PROJECT	PROJECT RATE OF PAY	PROJECT RATE OF FRINGE PAY	PROJECT EARNED	TOTAL WEEKLY HOURS WORKED ALL JOBS	FICA	FEDERAL	STATE		OTHER	TOTAL DEDUCT	TOTAL WEEKLY WAGES PAID FOR ALL JOBS
NAME:											0			\$0.00							\$0.00	\$0.00
ETH/GEN:	ID #:	GROUP/CLASS #:	s								0											
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ETH/GEN:	ID #:	GROUP/CLASS #:	s								0											

Date	
1	
(Name of Signatory Party)	(Title)
do hereby state:	
(1) That I pay or supervise the payment of the pa	ersons employed by
.,,	on the
(Contractor or Subco	
	; that during the payroll period commencing on the
(Building or Work)	
	nding the, day of,,
all persons employed on said project have been pai been or will be made either directly or indirectly to or o	d the full weekly wages earned, that no rebates have on behalf of said
	from the full
(Contractor or Sub-	contractor)
from the full wages earned by any person, other than	eductions have been made either directly or indirectly permissible deductions as defined in Regulations, Part abor under the Copeland Act, as amended (48 Stat. 948, 3145), and described below:
correct and complete; that the wage rates for laborers	act required to be submitted for the above period are sor mechanics contained therein are not less than the termination incorporated into the contract; that the chanic conform with the work he performed.
apprenticeship program registered with a State a	above period are duly registered in a bona fide pprenticeship agency recognized by the Bureau of int of Labor, or if no such recognized agency exists in a ip and Training, United States Department of Labor.
(4) That: (a) WHERE FRINGE BENEFITS ARE PAID) TO APPROVED PLANS, FUNDS, OR PROGRAMS
the above referenced payroll,	wage rates paid to each laborer or mechanic listed in payments of fringe benefits as listed in the contract to appropriate programs for the benefit of such section 4(c) below.

(b) WHERE FRI	IGE BENEFITS ARE PAID IN CASH
 -	Each laborer or mechanic listed in the above referenced payroll I

 Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION
REMARKS:	
NAME AND TITLE	SIGNATURE
TRAVIL AND THE	JONATORE

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

"General Decision Number: MI20230074 07/21/2023

Superseded General Decision Number: MI20220074

State: Michigan

Construction Type: Heavy

County: Washtenaw County in Michigan.

Heavy, Includes Water, Sewer Lines and Excavation (Excludes Hazardous Waste Removal; Coal, Oil, Gas, Duct and other similar Pipeline Construction)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an |. The contractor must pay option is exercised) on or after January 30, 2022:

- I. Executive Order 14026 generally applies to the contract.
- all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.

If the contract was awarded on . or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:

- Executive Order 13658 generally applies to the contract.
- . The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

CARP0687-006 06/01/2021

	Rates	Fringes
CARPENTER, Includes Form Work	.\$ 35.16	29.22
* ELEC0252-009 06/01/2023		
	Rates	Fringes
ELECTRICIAN	.\$ 51.73	29%+13.00
ENGI0325-019 09/01/2022		

POWER EQUIPMENT OPERATORS: Underground Construction (Including Sewer)

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1\$	39.38	24.85
GROUP 2\$	34.65	24.85
GROUP 3\$	33.92	24.85
GROUP 4\$	33.35	24.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backhoe/ Excavator, Boring Machine, Bulldozer, Crane, Grader/ Blade, Loader, Roller, Scraper, Trencher (over 8 ft. digging capacity)

GROUP 2: Trencher (8-ft digging capacity and smaller)

GROUP 3: Boom Truck (non-swinging, non- powered type boom)

GROUP 4: Broom/ Sweeper, Fork Truck, Tractor, Bobcat/ Skid Steer /Skid Loader

ENGI0326-008 06/01/2022

EXCLUDES UNDERGROUND CONSTRUCTION

	Ra	tes	Fringes
OPERATOR:	Power Equipment		
GROUP	1\$ 4	6.44	24.95
GROUP	2\$ 4	4.94	24.95
GROUP	3\$ 4	3.44	24.95
GROUP	4\$ 4	3.14	24.95
GROUP	5\$ 4	2.32	24.95
GROUP	6\$ 4	1.46	24.95
GROUP	7\$ 4	0.49	24.95
GROUP	8\$ 3	8.78	24.95
GROUP	9\$ 3	0.44	24.95

FOOTNOTES: Tower cranes: to be paid the crane operator rate determined by the combined length of the mast and the boom.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1:	Crane	with	boom	&	jib	or	leads	400'	or	longer
GROUP 2:	Crane	with	boom	&	jib	or	leads	300'	or	longer
GROUP 3:	Crane	with	boom	&	jib	or	leads	220'	or	longer
GROUP 4:	Crane	with	boom	&	jib	or	leads	140'	or	longer
GROUP 5:	Crane	with	boom	&	jib	or	leads	120'	or	longer
GROUP 6:	GROUP 6: Regular crane operator									
GROUP 7: Backhoe/Excavator, Bobcat/Skid Loader, Boring Machine, Broom/Sweeper, Bulldozer, Grader/Blade, Loader, Roller, Scraper, Tractor, Trencher										
GROUP 8:	GROUP 8: Forklift									
GROUP 9:	0iler									
* IRON00)25 - 006						Rates			Fringes
							naces			11211863
IRONWORK Rei Str	ER nforcin uctura	ng	· • • • •			\$	34.85	5		40.42
* LAB003	34-009	06/01								
EXCLUDES	OPEN (CUT CO	ONSTRU	JCT	ΓΙΟN					
							Rates			Fringes
	e Labor DUP 1									9.10 9.10
LANDSCAPE LABORER CLASSIFICATIONS										
equipm		erator								gas and diesel and skidsteer
	al move									operator, er installer

tender

LABO0334-018 09/01/2022

SCOPE OF WORK:

OPEN CUT CONSTRUCTION: Excavation of earth and sewer, utilities, and improvements, including underground piping/conduit (including inspection, cleaning, restoration, and relining)

	Rates	Fringes
LABORER (1) Common or General	\$ 25.20	12.95
Cement/Concrete	\$ 22.11	12.95

<pre>(4) Grade Checker\$ (5) Pipelayer\$ (524.20) Pipelayer\$ (7) Landscape\$</pre>	22.90 25.65 19.59	12.95 12.75 12.95 12.95
LAB00499-020 08/01/2022		
EXCLUDES OPEN CUT CONSTRUCTION		
	Rates	Fringes
	Naces	TT INGCS
ABORER GROUP 1\$ GROUP 2\$ GROUP 3\$	31.21	14.70 14.70 14.70
LABORER CLASSIFICATIONS		
GROUP 1: Common or General; Grade	Checker	
GROUP 2: Mason Tender - Cement/Con	crete	
GROUP 3: Pipelayer		
PAIN0022-005 07/01/2008		
	Rates	Fringes
PAINTER		2865
Brush & Roller\$ Spray\$		
PLAS0514-002 06/01/2018		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER\$	31.47	13.81
PLUM0190-010 06/01/2021		
	Rates	Fringes
PLUMBER\$	44.31	23.70
TEAM0007-006 06/01/2020		
	Rates	Fringes
	Naces	11 Inges
TRUCK DRIVER Dump Truck under 8 cu. yds.; Tractor Haul Truck\$ Dump Truck, 8 cu. yds. and	27.90	.50 + a+b
over\$ Lowboy/Semi-Trailer Truck\$.50 + a+b .50 + a+b
FOOTNOTE: a. \$470.70 per week. b. \$68.70 daily.		
SUMI2010-072 11/09/2010		
	Rates	Fringes

TRUCK DRIVER: Off the Road

Truck\$	20.82	3.69

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division

U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISIO"

ADDENDUM No. 1

ITB No. 4736

GALLUP PARK VEHICLE AND PEDESTRIAN BRIDGE

Bids Due: Friday, August 25, 2023 11:00AM (Local Time)

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. **This Addendum includes eighty four (84) pages.**

Bidder is to acknowledge receipt of this Addendum No. 1, including all attachments (if any) in its Bid by so indicating on page ITB-1 of the Invitation to Bid Form. Bids submitted without acknowledgment of receipt of this addendum may be considered nonconforming.

The following forms provided within the ITB document must be included in submitted bids:

- City of Ann Arbor Prevailing Wage Declaration of Compliance
- City of Ann Arbor Living Wage Ordinance Declaration of Compliance
- Vendor Conflict of Interest Disclosure Form
- City of Ann Arbor Non-Discrimination Ordinance Declaration of Compliance

Bids that fail to provide these forms listed above upon bid opening may be rejected as non-responsive and mayl not be considered for award.

I. CORRECTIONS/ADDITIONS/DELETIONS

Changes to the Bid document which are outlined below are referenced to a page or Section in which they appear conspicuously. The Bidder is to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

Section/Page(s)	<u>Change</u>
BF-1	As provided in ITB No. 4736 Bid Document: Bid Form, Section 1 – Schedule of Prices as Page BF-1
	As updated herein: Bid Form, Section 1 – To include the following additional pay items:
	Item No. 2080042; Erosion Control, Turbidity Curtain, Deep XXX Ft Item No. 7040007; Cofferdam, 1 LSUM Item No. 8127051; Maintaining River Traffic Item No. 8240001; Contractor Staking, 1 LSUM

Comment: The intent with this change is to add in the additional pay items to agree with the contract plans.

ARPA CONTRACT ADDENDUM

Signatures were removed from the ARPA Contract Addendum on page "ARPA Addendum-12"

DETAILED SPECIFICATIONS

Added "Special Provision for Maintaining River Traffic"

Added "Special Provision for Temporary Detectable Warning Surface"

Comment: To clarify requirements for maintaining river traffic during construction and to clarify the pay item "Temporary Detectable Warning Surface.

PROJECT PLANS

Sheet 28 of 55: Added the following pay items:

Cofferdam; 1 LSUM

• Erosion Control, Turbidity Curtain, Deep; 380 Ft

Contractor Staking; 1 LSUM

Sheet 32 of 55: Added notes that clarify:

Galvanizing the CIP Piles at center pier

• CIP Pile Points per MDOT BDG 8.21.03

Contractor utilizing soft digging techniques for utilities.

II. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the ITB. Bidders are directed to take note in their review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

Question 1: Will the geotechnical report be provided to bidders? Yes, the geotechnical report is included in Addendum #1. Answer 1:

Question 2: What is the area of impact of construction that was submitted with the EGLE permit?

Answer 2: 7,300 square feet. The EGLE Joint Permit application is included in Addendum #1.

Question 3: Will the existing bridge plans be made available to bidders?

Answer 3: Yes, the original plans for the existing timber vehicle bridge are included in

Addendum #1.

Does the existing timber bridge contain asbestos, lead, or creosote? Question 4:

No, it does not contain any of the items listed above. Answer 4:

Question 5: Will the chain link fence on the existing timber bridge be salvaged and retained?

Answer 5: No, the City does not desire to keep the existing chain link fence. Question 6: Are there any known issues related to migratory birds? Answer 6: None per the preapplication letter or related information.

Question 7: Are there any special safety requirements for the contractor to be aware of?

Answer 7: A site specific safety plan will be submitted to review prior to commencing work. Specifications include provisions for specific safety submittals.

Question 8: What is the intent of pre-boring the piles?

Answer 8: Preboring of piles is required at those locations where proximity of piles to existing utilities is felt to be critical. Preboring below the inverts will be required at those areas.

Question 9: No item on the bid form for cofferdams exists. How are we expected to price this? Will this be added to the bid form as an addendum?

Answer 9: The pay item, "Cofferdam" has been added to the bid form as part of Addendum #1. This pay item has also been added to the Misc. Quantities box on Sheet 28 of 55.

Question 10: No item on the bid form for a turbidity curtain exists. How are we expected to price this? Will this be added to the bid form as an addendum?

Answer 10: The pay item, "Turbidity Curtain, Deep" has been added to the bid form as part of Addendum #1. This pay item has also been added to the Misc. Quantities box on Sheet 28 of 55.

Question 11: There is a bid item "Pile, Galv" which is a lump sum item, but the piles to receive this treatment and the limits on each pile are not defined. Can the locations and limits of the galvanizing of the piles be clarified?

Answer 11: The galvanized piles are to be the 16-inch diameter piles at the pier only. The limits of galvanizing are to be from pile cut-off elevation to bottom of river (+/- El 739.0)

Question 12: What item are we to include the costs for the ice breaker shown on plan sheet 32? Answer 12: The cost for the angle called for in the detail as well as its installation is to be included in the cost of "Piles, CIP Conc, Furn and Driven, 16 inch.

Question 13: Can an excel version of the Schedule of Prices (Bid Form, Section 1) be provided, this will be helpful when we are writing in our bid prices.

Answer 13: Yes, an excel file of the Schedule of Prices can be requested by emailing Hillary Hanzel at hhanzel@a2gov.org. However, the City takes no responsibility for the accuracy of this file and it shall be used at the bidders' discretion. Bidders are responsible for the accuracy of the bid form that they submit.

Question 14: There was no special provision provided in the documents for following items, can a special provision be provided for these? Temporary Detectable Warning Surface and Timber Walkway.

Answer 14: A special provision has been added to Addendum #1 for the pay item 8127010 _ Temporary Detectable Warning Surface. For the timber walkway, Sheet 51 of
55 provides information necessary for this pay item. Since MDOT pay item
numbers are used, and there is no standard pay item number for Timber
Walkway, a "7000" number was used.

- Question 15: Will a copy of the EGLE permit be available via addendum or issued prior to the deadline?
- Answer 15: The EGLE permit is in the review process and will be available prior to award by the City. The City has already performed a mussel survey and relocation and anticipates receiving the permit prior to award.
- Question 16: Does the EGLE permit any work within the water way to stage construction equipment to reach the pier?
- Answer 16: The EGLE permit is in the review process and will be available prior to award by the city.
- Question 17: There is typically disturbance to river bottom when driving pile bents. Will there be any allowance for a cofferdam to install the new piles? Will there be any allowance for the removal of the existing pile bents?
- Answer 17: Cofferdams have been shown at the abutments with turbidity curtains at all three substructure units. The removal of existing timber pile bents are included in the pay item "Structure, Rem".
- Question 18: There was no detail for a pile point for the CIP piles, is there a particular pile point desired for these piles?
- Answer 18: Pile point for CIP piles are to be per MDOT BDG 8.21.03
- Question 19: There appears to be 2-12" sewer lines and 1 underground electric line in the location of the cofferdams. Is there any information available related to the depth of these lines so we can consider this in our bid?
- Answer 19: Information (via the subsurface utility engineering "SUE" investigation) will be provided as part of Addendum #1.
- Question 20: Is the contractor responsible for quality control and surveying, or will this be provided by the owner?
- Answer 20: Contractor is responsible for quality control per the specifications. City will provide third-party testing services. A pay item has been added to the bid form for contractor staking (MDOT Pay Item No. 8240001).
- Question 21: The unit of measurement for pay item "2010045 Masonry & Conc Structure, Rem" for the removal of the existing cobblestone & timber fence/wall differs where the plans which call for 44 FT of removal and the bid form which calls for 44 CYD of removal. Which is correct?
- Answer 21: The bid form showing 44 CYD of removal is correct.
- Question 22: Will the sign-in sheet and agenda from the pre-bid meeting be made available? Answer 22: The pre-bid meeting sign-in sheet and agenda are included in Addendum #1.

Bidders are responsible for any conclusions that they may draw from the information contained in the Addendum.

OF ANY PARTY

CITY OF ANN ARBOR PARKS AND RECREATION SERVICES

ITB #4736 GALLUP PARK VEHICLE AND PEDESTRIAN BRIDGE
PRE-BID MEETING
AUGUST 10, 2023 @ 1:00 OM

AGENDA

I. Introductions

- a. Hillary Hanzel, City of Ann Arbor Parks & Recreation Project Manager
- b. Bob Breen, Wade Trim, Design Engineers and Construction Oversight
- c. Deb Axelrood, SmithGroup, Site Design
- d. Joe Anderson, Gallup Park Canoe Livery Manager
- e. Jason Nealis, City of Ann Arbor Park Operations Supervisors
- f. Doug Forsyth, City of Ann Arbor Safety Manager
- g. Sign-In Sheet

II. <u>Administrative</u>

- a. **Bid submittal** Include all required bonds and forms, including responses to Responsible Contractor Policy questions.
- b. Will award to lowest responsible bidder.
- c. There is a bid alternate for rip rap.
- d. Project has federal funds from the American Rescue Plan Act (ARPA). It does not require Davis Bacon but contractors must follow the City's Prevailing Wage Policy.
- e. **Prevailing Wage –** Contractors will be required to submit weekly certified payrolls and wage rate interviews will be conducted at least twice throughout the project. Wage determination that will be used on the project is included in the ITB.

III. Schedule

- a. Email questions are due on or before Friday, August 11, 2023 3:00pm
 - i. Scope of Work/ITB Content questions shall be e-mailed to Bob Breen and Hillary Hanzel
 - ii. Bid Process and Compliance questions shall be e-mailed to Colin Spencer, Purchasing Manager
- a. Addendum, week of August 14th
- b. Bids due, Friday, August 25, 2023 11:00AM (Local Time)
- c. Selected Contractor notification by **September 6, 2023**
- d. City Council Award, anticipated October 2, 2023
- e. Construction Notice to Proceed anticipated mid-October, 2023
- f. Substantial Completion by **May 15, 2024** (bridge and relocated road approaches open to traffic)
- g. Final Completion by **June 28, 2024** (including existing bridge removal)



Page 1 R. Breen

08-07-2023

CITY OF ANN ARBOR PARKS AND RECREATION SERVICES



ITB #4736 GALLUP PARK VEHICLE AND PEDESTRIAN BRIDGE PRE-BID MEETING AUGUST 10, 2023 @ 1:00 OM

IV. Project Description

- a. Construction of a new pre-stressed concrete bridge adjacent to existing bridge.
- b. Removal of existing wooden vehicle bridge once new bridge is constructed.
- c. Maintenance of Traffic MOT Plans are included and show that both vehicle and pedestrian traffic is to be maintained on the existing bridge until the new bridge is constructed. River traffic is also expected to be maintained during construction, with a possible exception for short closures.
- d. Site Access Staging areas are shown on MOT plans.
 - i. All equipment in through the main park entrance off Fuller Rd.
- e. Temporary trail detour route
- f. Memorial grove minimize tree impacts
- g. Permits
 - MDEQ Joint Permit City has applied and anticipates receiving it in the next 30 days.
 - ii. City SESC Permit No Fee
- h. Hours of work: 7:00 a.m. to 8:00 p.m. Monday thru Friday. Saturday work requires written approval in advance.
- i. Geotech report and SUE report will be made available to the awarded contractor.
- j. Liquidated Damages \$500/calendar day.

V. Questions

VI. Site Visit

Contact Information:

Hillary Hanzel, Park Planner & Landscape Architect The City of Ann Arbor Parks and Recreation Services

Phone: (734) 794-6230 ext. 42548

E-mail: hhanzel@a2gov.org



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ITB #4736

Project:

Gallup Park Vehicle & Pedestrian Bridge

Job No.:

ANN2040-02T

Note: Please Print

Purpose: Pre-Bid Meeting

Date/Time: 08/10/2023 - 1:00 PM

al Name/Title	Company	Address	E-Mail	Telephone
BOB BEEG, PM	WADE TRIM	25251 NORTHLINE, 48180	r breen ewadetrim. com	734-947-26
Hillam Hanzel	City of AZ	•	hhanzel @ AZGOV. ORG	
	FH Paschen		Hoassinger@fhpaschenium	313-410-2
Azız Atiyen	PH Paschen		active he fupuscion	
Anthony Hudson	FH Paschen		ahudsone-fhpaschen.com	313-909-087
Zach Deur Pl			zachdeur @anlaan.com	616-498-80
Jim Werner Asst. PM			Jim Cadavis construction. us	
Jason Nealis	City of A2		inealise azgov.org	
DOUG FOXFMH	CITYOF AZ		Atorsoth@aZgov. 019	
Ben Edwards			bedwardsecahull.com	810-358-07
DES AVELROOD		-	DED INDIRITY CONTHOPO	URLON 134
LEVIN AMDRES	y Elonteachies		Knoderson 2-Contractor	586-625-86

