Oakton College District 535

Procurement Department, Room 1240 1600 E. Golf Rd., Des Plaines, IL 60016 847-635-1635 Invitation to Bid # 0331-23-09 Addendum#2 Issue Date: March 31, 2023

Mandatory Pre-Bid Date: 11:00 AM on Wednesday, April 10, 2023

Bids will be received in the Procurement Office at the above address until 11:00 AM on Friday, April 28, 2023

Bids will be publicly opened at this time. Late bids will not be accepted.

Landscaping at Various Sites

The College is accepting bids for the renovation of the landscape at both their Des Plaines and Skokie Campuses.

This bid consists of 3 documents:

- 1) Landscaping Bid Business Specifications (this document)
- 2) OCC Landscaping Specification Plans
- 3) OCC Landscaping drawings

A mandatory pre-bid meeting will be held on Monday, April 10, 2023, starting at 11:00 am at the College's Des Plaines campus, 1600 E. Golf Road, Suite 1240. Only contractors who attend the pre-bid meeting will be allowed to submit a bid.

Any questions regarding this bid must be submitted in writing via email by 11:00 am on April 14, 2023. All questions will be answered through an addendum and must be submitted to the following individuals:

Joe Scifo, Director of Facilities, jscifo@oakton.edu Rich Schwass, Construction Manager at <u>rschwass@oakton.edu</u> Jason Cooper, Environmental Consulting & Technology, Inc. (ECT) at jacooper@ectinc.com Trinh Than, Purchasing Manager at <u>tthan@oakton.edu</u>

Oakton College District 535 is exempt from all Federal, State, and Municipal Taxes.

I have examined the specifications and instructions included herein and agree, provided I am awarded a contract within 60 days of the bid due date, to provide the specified items for the sum shown in accordance with the terms stated herein. All deviations from the specifications and terms are in writing and attached hereto. I offer the following discount terms

Company Name:	Date:	
Address:	City/St/Zip:	
Name:	Title:	
Phone #:	Fax #:	
Signature:	E-mail:	



ADDENDUM NO. 02

LANDSCAPING AT VARIOUS SITES Oakton College District 535 Invitation to Bid # 0331-23-09 Addendum Issue Date: April 21, 2023

For which Bids have been scheduled to be opened at the Procurement office at 1600 E. Golf Rd., Des Plaines, IL 60016 at 11:00AM on Friday, April 28, 2023.

PROPOSER WILL ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE BID FORMS.

ITEM NO. DESCRIPTION OF CHANGE/CLARIFICATION

BID FORMS

- 1. An updated Schedule of Quantities is provided which include:
 - a. Item #9 "Remove concrete paving and base" is changed to 3200 square feet.
 - b. Item #137 "Warranty/Maintenance of Plant Material" is added.

TECHNICAL SPECIFICATIONS

- 1. Specification 057316 "Cable Guardrail"
 - a. Section 2.1.A is updated to change the contact email for the acceptable manufacturer to <u>james.andrews@stainlesscablerailing.com</u>.

DRAWING SHEETS

- 1. C1.10 "Removal and Site Prep"
 - An area at the south end of the existing courtyard is changed from "Remove and Dispose of Shrubs and Perennials" to "Remove and Dispose of Concrete Paving and Base"
- 2. Sheet L2.00 "Plant Schedules"
 - a. A note is added which reads, "See specification 329300 "exterior plantings" for material supply, installation, and warranty maintenance provisions which include:
 - i. Warranty maintenance period:
 - 1. Warranty period for trees and shrubs: 1 year from date of substantial completion.
 - Warranty period for sodding covered under this section:
 1 year from date of substantial completion.

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- 3. Warranty period for herbaceous plants: 2 years from date of substantial completion.
- 4. Warranty period for native seeding: 2 years from date of substantial completion."



SECTION 05 73 16 CABLE RAILINGS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Steel railings with cable infill and stainless steel toprail.

1.2 REFERENCES

- A. American National Standards Institute (ANSI):
 - 1. ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities.
- B. American Welding Society (AWS):
 - 1. AWS Specifications for Welding Rods and Bare Electrodes.
- C. ASTM International (ASTM):
 - 1. ASTM A36 Carbon Structural Steel.
 - 2. ASTM A47 Specification for Ferritic Malleable Iron Castings.
 - 3. ASTM A48 Specification for Gray Iron Castings.
 - 4. ASTM A53 Pipe, Steel, Black and Hot Dipped, Zinc Coated Welded and Seamless.
 - 5. ASTM A269 Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service.
 - 6. ASTM A276 Specification for Stainless and Heat-Resisting Steel Bars and Shapes.
 - 7. ASTM A312 Specification for Seamless and Welded Austenitic Stainless Steel Pipe.
 - 8. ASTM A500 Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
 - 9. ASTM A512 Specification for Cold-Drawn Buttweld Carbon Steel Mechanical Tubing.
 - 10. ASTM A525 Specification for General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
 - 11. ASTM A526 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Commercial Quality.
 - 12. ASTM A666 Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
 - 13. ASTM A1264-1 Safety Requirements for Workplace Floor and Wall Openings, Stairs and Railing Systems
 - 14. ASTM B221 Specification for Aluminum-Alloy Bars, Rods, Wires, Shapes and Tubes.
 - 15. ASTM E84 Test Method for Surface Burning Characteristics of Building Materials.
 - 16. ASTM E894 Standard Test Methods for Anchorage of Permanent Metal Railing Systems and Rails for Buildings.
 - 17. ASTM E935 Standard Test Methods for Performance of Permanent Metal Railing Systems and Rails for Buildings.

- 18. ASTM E985 Specification for Permanent Metal Railing Systems and Rails for Buildings.
- D. International Code Council (ICC):
 - 1. International Building Code (IBC).
- 1.3 DEFINITIONS
 - A. Refer to definitions in ASTM E985 for railing-related terms that apply to this Section.

1.4 PERFORMANCE REQUIREMENTS

- A. General: Handrails and railings shall withstand structural loading as determined by allowable design working stresses of materials.
- B. Structural Performance: Provide handrails and railings capable of withstanding the following structural loads without exceeding allowable design working stress of materials for handrails, railings, anchors, and connections.
 - 1. Components and installation shall be in accordance with state and local code authorities.
 - 2. Components and installation shall follow current ADA and ICC/ANSI A117.1 guidelines.
 - 3. Top Rail: Shall withstand the following loads.
 - a. Concentrated load of 200 lb (0.89 kN) applied at any point and in any direction.
 - b. Uniform load of 50 lb/ft. (0.07 kN-m) applied horizontally and concurrently with uniform load of 100 lb/ft. (0.14 kN-m) applied vertically downward.
 - c. Concentrated and uniform loads above need not be assumed to act concurrently.
 - 4. Handrails Not Serving as Top Rails: Shall withstanding the following loads.
 - a. Concentrated load of 200 lb (0.89 kN) applied at any point and in any direction.
 - b. Uniform load of 50 lb/ft. (0.07 kN-m) applied in any direction.
 - c. Concentrated and uniform loads above need not be assumed to act concurrently.
 - 5. Guard Infill Area: Shall withstand the following loads.
 - a. Concentrated horizontal load of 200 lb (0.89 kN) applied to 1 square foot (0.09 m2) at any point in system, including panels, intermediate rails, balusters, or other elements composing infill area. Loads need not be assumed to act concurrently with loads on top rails in determining stress on guard.
- C. Thermal Movements: Handrails and railings shall allow for movements resulting from 120 deg F (49 deg C) changes in ambient and 180 deg F (82 deg C) surface temperatures. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
- D. Corrosion Resistance: Separate incompatible materials to prevent galvanic corrosion.

1.5 SUBMITTALS

- A. Product Data: Submit manufacturer's data sheets on each product to be used, including, but not limited to, the following:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
 - 4. Grout, anchoring cements and paint products.
- B. Shop Drawings: Submit shop drawings showing fabrication and installation of handrails and railings. Include plans, elevations, sections, details, and attachments to other work.
 - 1. Provide setting diagrams for installation of anchors, location of pockets, weld plates for attachment of rails to structure, and blocking for attachment of wall rail.
 - 2. Indicate all required field measurements to be held.
 - 3. Indicate materials, sizes, styles, fabrication, anchorage and installation details for railing system and infill.
- C. Certifications:
 - 1. Furnish certification that all components and fittings are furnished by the same manufacturer or approved by the primary component manufacturer.
 - 2. Furnish certification that components were installed in accordance to the manufacturer's engineering data to meet the specified design loads.
- D. Samples:
 - 1. Post and rail sections, minimum 4 inch (100 mm) long piece of each type.
 - 2. Infill Cable: Minimum 8 inch (200 mm) long piece with end fittings.
 - 3. Verification Samples: For each type of exposed finish required, prepared on components indicated below and of same thickness and metal indicated for the work. If finishes involve normal color and texture variations, include sample sets showing the full range of variations expected.
 - a. 6 inches (152 mm) long sections of each different linear railing member, including handrails and top rails.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer shall be a firm engaged in the manufacture of aluminum handrails and railings of types and sizes required, and whose products have been in satisfactory use in similar service for a minimum of 5 years.
- B. Regulatory Requirements: Comply with applicable requirements of the laws, codes, ordinances, and regulations of Federal, State, and local authorities having jurisdiction. Obtain necessary approvals from such authorities.
- C. Installer Qualifications: Minimum 2 years experience installing similar systems.
- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Install one complete railing including infill panel at location selected by Engineer.
 - 2. Obtain Engineer's approval prior to installing additional railings.
 - 3. Refinish mock-up area as required to produce acceptable work.

- 4. Approved sample may remain as part of completed work.
- E. Pre-Installation Meeting:
 - 1. Prior to the beginning of work, conduct a pre-job conference at the job site.
 - 2. Provide seven calendar days advance written notice ensuring the attendance by competent authorized representatives of the fabricator, building owner's representative, architect and subcontractors whose work interfaces with the work of this section.
 - 3. Review the specifications to determine any potential problems, changes, scheduling, unique job site conditions, installation requirements and procedures and any other information pertinent to the installation.
 - 4. Record the results of the conference and furnish copies to all participants.
- 1.7 DELIVERY, STORAGE, AND HANDLING
 - A. Store products in manufacturer's unopened packaging until ready for installation.
- 1.8 PROJECT CONDITIONS
 - A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.9 WARRANTY

- A. Special Warranty: Provide manufacturer's standard form outlining the terms and conditions of their standard Limited Warranty:
 - 1. Cable and Connectors: 10 year limited warranty against defects in materials and workmanship.
 - 2. Paint Finish on Steel Components: 10 year limited warranty against cracking, flaking, blister, and peeling.
- B. Additional Owner Rights: The warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

1.10 EXTRA MATERIALS

A. Provide one approximately 3 ounce (85 grams) can, of touch-up paint per 100 feet (30.5 m) of each color of railing as applicable.

PART 2 PRODUCTS

- 2.1 MANUFACTURERS
 - A. Acceptable Manufacturer: Stainless Cable & Railing Inc., which is located at: 4055
 S. Grant St.; Washougal, WA 98671; Toll Free Tel: 888-686-7245 (RAIL); Fax: 888-686-7245; Email: james.andrews@stainlesscablerailing.com

2.2 STEEL RAILINGS WITH CABLE INFILL

- A. Steel Railings with Cable Infill.
 - 1. Mounting: Top (Deck) Mounted Posts.

- 2. Rail Height: 42 inches (1067 mm).
- 3. Cable Railing System: Horizontal.
- 4. Posts: Flat Stock
- 5. Top Rail Type: Stainless Steel Round.
- B. Steel Components: Provide manufacturer's standard components as follows:
 - 1. Material: Carbon steel for posts and base plate
 - 2. Material: Stainless Steel: Type 316.
 - 3. Cable Grommets:
 - a. Material: Ultraviolet-resistant Delrin or equivalent.
 - b. Prevent abrasion of intermediate posts, end posts, and cable braces bored for cables.
 - c. Color: Black.
- C. Steel Material:
 - 1. Pipe: ASTM A53.
 - 2. Tubing: ASTM A500.
 - 3. Tubing: ASTM A501.
 - 4. Tubing: ASTM A512.
 - 5. Bars and Shapes: ASTM A36.
 - 6. Castings: Malleable Iron ASTM A47 or A48.
 - 7. Castings: Ductile Iron ASTM A47 or A48.
 - 8. Castings: Grey Iron ASTM A47 or A48.
- D. Steel Finish: NAAMM/NOMMA Metal Finishes Manual.
 - 1. Surface Preparation: Remove mill scale, rust and dirt following SSPC SP2 for hand cleaning.
 - 2. Surface Preparation: Remove mill scale, rust and dirt following SSPC SP3 for power tool cleaning.
 - 3. Hot Dipped Galvanizing: Sheet products shall be galvanized in accordance with ASTM A525 and ASTM A526.
 - a. Touch up for Galvanized Surfaces: Use paint primer FS-TT-P-645.
 - 4. Zinc Rich Primer: Minimum one coat of rust-inhibitive primer FS-TT-P-641 Zinc Dust-Zinc Oxide Primer Coating (for Galvanized Surfaces).
 - 5. Primer: Minimum one coat of rust-inhibitive primer FS-TT-P-645 Alkyd Type, Zinc Chromate, Paint Primer.
 - 6. Painted finish shall be as selected by Landscape Architect from manufacturers standard colors.
- E. Stainless Steel Finish: NAAMM/NOMMA Metal Finishes Manual.1. Stainless Steel: No. 4 satin finish.

2.3 CABLE RAILING COMPONENTS

- A. Cables:
 - 1. Material: 1 x 19, Type 316 stainless steel strand, left-hand lay, per dimensional properties contained in MIL-DTL-87161.
 - 2. Finish: Mill.
 - 3. Diameter: 1/8 inch (3 mm), minimum breaking strength of 1,780 pounds.
 - 4. Diameter: 3/16 inch (5 mm), minimum breaking strength of 4000 pounds.
 - 5. Diameter: 1/4 inch (6 mm), minimum breaking strength of 6,900 pounds.
 - 6. Diameter: 5/16 inch (8 mm), minimum breaking strength of 10,600 pounds.

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- 7. Diameter: 3/8 inch (10 mm), minimum breaking strength of 14,800 pounds.
- 8. Spacing: As indicated on Drawings.
- 9. Cable Hardware Components:
 - a. Material: Stainless steel, ASTM A276 and A479, SAE/AMS QQ-S-763, Type 316.
 - b. Include washers, nuts, end caps and any accessory items as recommended by manufacturer for installation conditions or as shown on Drawings.
 - c. Type: Use swageless hardware wherever practical.
 - d. Type: Use hardware substantially concealed inside end posts wherever practical.
 - e. Type: Use most economical combinations of fittings practical.
 - f. Type: Use fittings as indicated on Drawings.
 - g. Factory Assembly: Factory Threaded Tensioner/Factory. Threaded Terminal/Acorn Nut, Hex Nut, & Stainless Washer or Cable Quick Nut & Cover.
 - h. Field Assembly: Field Threaded Tensioner/Field. Threaded Terminal/Acorn Nut, Hex Nut, & Stainless Washer or Cable Quick Nut & Cover.
 - i. Cable Quick Lock Swageless Assembly Type 1: Field Threaded Tensioner/Cable Quick Lock Swageless Receiver/Cable Quick Nut Connector/Cable Quick Nut & Cover.
 - j. Cable Quick Lock Swageless Assembly Type 2: Cable Quick Lock Swageless Receiver/Terminal Hex Bolt/Cable Quick Receiver & Stud.
 - k. Low Profile Assembly: Cable Quick Terminal/Terminal Hex Bolt/Cable Quick Receiver & Stud.
 - I. Fine-Line Ball Assembly: Fine-Line Ball Turnbuckle/Swage Ball End.
 - m. Fine-Line Button Assembly: Fine-Line Button Turnbuckle/Swage Ball End.
 - n. Fine-Line Lag Assembly: Fine-Line Lag Turnbuckle/Swage Lag End.
 - o. Fine-Line Jaw-Wood Assembly: Fine-Line Jaw Turnbuckle/Fixed Jaw Clevis.
 - p. Fine-Line Jaw-Metal Assembly: Fine-Line Jaw Turnbuckle/Fixed Jaw Clevis/Threaded Eye.
 - q. Fine-Line Jaw-Eye Assembly: Fine-Line Jaw Turnbuckle/Fixed Jaw Clevis/Surface Mount Eye.
 - r. Fine-Line Drill & Tap Assembly: Fine-Line Jaw Turnbuckle/Swage Stud.
 - s. Classic Ball Assembly: Classic Ball Turnbuckle/Swage Ball End.
 - t. Classic Button Assembly: Classic Button Turnbuckle/Swage Button End.
 - u. Classic Jaw Assembly: Classic Jaw Turnbuckle/Swage Jaw End.
 - v. Surface Mount Toggle Assembly: Surface Mount Toggle Turnbuckle/Surface Mount Toggle End
 - w. European Jaw Assembly: European Jaw Turnbuckle/European Jaw End
- B. Handrail Brackets
 - 1. Stainless Steel; cast
- C. Fasteners:
 - 1. Handrail Anchors: Select fasteners of type, grade and class required to produce connections suitable for anchoring handrails and railings to other types of construction indicated and capable of withstanding design loads.

- 2. Handrail and Railing Component Anchors: Use fasteners fabricated from same basic metal, unless otherwise indicated. Do not use metals that are corrosive or incompatible with materials joined.
 - a. Provide concealed fasteners for interconnecting railing components and for attaching them to other work, unless exposed fasteners are unavoidable or are standard fastening method for handrail and railing indicated.
 - b. Provide Phillips flat-head machine screws for exposed fasteners, unless otherwise indicated.
- 3. Cast-in-Place and Post Installed Anchors: Provide anchors of type indicated below, fabricated from corrosion-resistant materials with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry and equal to four items the load imposed when installed in concrete, as determined by testing per ASTM E488 conducted by a qualified independent testing agency.
 - a. Cast-in-place anchors.
 - b. Chemical anchors.
 - c. Expansion anchors.
- D. Grout and Anchoring Cement:
 - 1. Non-Shrink, Non-Metallic Grout: Provide premixed, factory-packaged, nonstaining, non-corrosive, non-gaseous grout complying with ASTM C1107. Provide grout specifically recommended by manufacturer for interior and exterior applications.
 - 2. Interior Anchoring Cement: Provide factory-packaged, non-shrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water at project site to create pourable anchoring, patching and grouting compound. Use for interior applications only.

2.4 FABRICATION

- A. Fabricate handrails and railings by connecting members with railing manufacturer's standard concealed mechanical fasteners and fittings, unless otherwise indicated. Fabricate members and fittings to produce flush, smooth, rigid, hairline joints.
- B. Provide manufacturer's standard wall brackets, flanges, miscellaneous fittings, and anchors to connect handrail and railing members to other construction.
- C. Provide inserts and other anchorage devices to connect handrails and railings to concrete or masonry. Fabricate anchorage devices capable of withstanding loads imposed by handrails and railings. Coordinate anchorage devices with supporting structure.
- D. Shear and punch metals cleanly and accurately. Remove burrs from exposed cut edges.
- E. Cut, reinforce, drill, and tap components as indicated on the Drawings to receive finish hardware, screws, and similar items.
- F. Close exposed ends of railing members with prefabricated end fittings.
- G. Provide mounted handrail wall returns at wall ends unless otherwise indicated. Close ends of returns, unless clearance between end of railing and wall is 1/4 inch

(6 mm) or less.

PART 3 EXECUTION

- 3.1 EXAMINATION
 - A. Verification of Conditions: Examine areas and conditions under which the work is to be installed, and notify the Contractor in writing, with a copy to the Owner and the Architect, of any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected.
 - 1. Examine substrates to receive anchors verifying that locations of concealed reinforcements have been clearly marked for the Installer. Locate reinforcements and mark locations if not already done.
 - 2. Beginning of the work shall indicate acceptance of the areas and conditions as satisfactory by the Installer.

3.2 PREPARATION

A. Coordinate setting drawings, diagrams, templates, instructions, and directions for installing anchors, such as sleeves, concrete inserts, anchor bolts, and miscellaneous items having integral anchors that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to the Project site.

3.3 INSTALLATION

- A. General: Install components in accordance with manufacturer's instructions and in proper relationship with adjacent construction.
 - 1. Fitting: Fit exposed connections together to form tight, hairline joints.
 - 2. Cutting and Placement: Set handrails and railings accurately in location, alignment, and elevation measured from established lines and levels and free from rack.
 - a. Do not weld, cut, or abrade coated or finished surfaces of railing components that are intended for field connection by mechanical or other means without further cutting or fitting.
 - b. Align rails so variations from level or parallel alignment do not exceed 1/4 inch in 12 feet (1.6 mm per m).
 - c. Provide manufacturer's proprietary system to evacuate entrapped water in hollow sections of railing members that are exposed to exterior or to moisture from condensation or other sources, in order to prevent water from entering the concrete slab. In lieu of the manufacturer's proprietary system, if acceptable to the Architect, provide another means to evacuate the entrapped water, i.e., a weep hole and epoxy fill system ("drill-and-fill").
 - d. Anchor posts in concrete with pipe sleeves preset and anchored into concrete. After posts have been inserted into sleeves, solidly fill annular space between post and sleeve with non-metallic, non-shrink grout, mixed and placed to comply with anchoring material manufacturer's directions.
 - e. Anchor posts in concrete by forming or core drilling holes not less than 5 inches (127 mm) deep and 3/4 inch (19 mm) greater than outside diameter of post. Clean holes of loose material, insert posts, and fill

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annular space between post and concrete with non-metallic, non-shrink grout, mixed and placed to comply with anchoring material manufacturer's directions.

- f. Leave anchorage joint exposed, wipe off surplus anchoring material, and leave 1/8 inch (3 mm) buildup, sloped away from post.
- g. Corrosion Protection: Coat concealed surfaces of aluminum that will be in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.
- h. Adjusting: Adjust handrails and railings before anchoring to ensure alignment at abutting joint's space posts at interval indicated, but not less than required to achieve structural loads.
- i. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing handrails and railings and for properly transferring loads to in-place construction.
- B. Non-Welded Railings Connections: Use mechanical joints for permanently connecting railing components. Use wood blocks and padding to prevent damage to railing members and fittings.
- C. Metal Interaction:
 - 1. When aluminum components come into contact with dissimilar metals, surfaces shall be kept from interacting through painting the dissimilar metal with a heavy coat of a proper primer. The use of plastic grommets and/or PVC sleeves is encouraged to prevent contact between stainless steel cables and aluminum hole edges.
 - 2. When aluminum components come into contact with cement or lime mortar, exposed aluminum surfaces shall be painted with water-white methacrylate lacquer.

3.4 ADJUSTING AND CLEANING

- A. Touch-Up Painting: Immediately after erection, and abraded areas of shop paint, and appoint exposed areas with same material.
- B. Passivation: Immediately after erection, spray passivation solution on stainless steel frame pieces and cables to restore protective layer. Use Rust Rescue in marine environments for additional protection.
- C. Cleaning: Restore finishes damaged during installation and construction period so no evidence remains of correction work. Return items that cannot be refinished in field to shop; make required alterations and refinish entire unit or provide new units.

3.5 PROTECTION

- A. Provide final protection and maintain conditions in a manner acceptable to the Installer that shall ensure that the aluminum handrails and railings shall be without damage at time of Substantial Completion.
- B. Protect finishes of handrails and railings from damage during construction period with temporary protective coverings approved by railing manufacturer. Remove protective coverings at the time of Substantial Completion.
- C. Protect stainless steel from corrosion and staining by applying passivation solution

following installation and periodically thereafter. Use Rust Rescue in addition to passivator in marine environments.

D. Protect wood products from fading, checking, splitting, etc. with proper end grain sealant and oil treatment.

END OF SECTION

	Oakton Community College, Landscaping at Vario	us Site	s		
	Schedule of Quantities				
	Description	Qty. ¹	Unit	Unit Price ²	Extension
	A Demolition & Site Prop (C1)				
1		1	15		
י ר	Nobilization	125			
2		125			
<u>з</u>	Free pruning for trees to remain	221			
4 5	Excavate and remove existing CCDD soli	331			
5		40			
0		0692			
/	Remove Fungrass	9083			
8		13/86	SF		
9		3200	SF		
10	Remove Gravel Surfacing and Base	833	SF		
11	Remove Detectable files and base	0/5	SF		
12	Remove Asphalt Paving	3013	5F		
13	Remove Masonry Wall above concrete foundation	116			
14	Remove Concrete Retaining Wall & Guardrail (at Door #5)	66			
15	Remove Concrete Retaining Wall (at Pond)	107			
16	Remove wall mounted handrail / patch masonry	1	LS		
17	Remove bench, footings, and stone paving	4	EA		
18	Remove existing pipe guardrail	100	LF		
19	Remove and dispose of Fence and Footings	967	LF		
20	Remove and dispose of Rip Rap at Skokie Parking Lot	7147	SF		
21	Concrete Wall Repair (at Door #5)	1	LS		
22	Relocate Existing Sculpture	1	LS		
23	Remove area drain by Door #5 and abandon sewer in place	1	LS		
	D. Frankrik Children (Ch)	_			
24	B. Erosion Contori - SWPPP (C2)	1	1.0		
24	Outlet Protection - Straw Bales	1			
25	Erosion Control Blanket	806	SY		
26	C. Landscape Plan (L1, L2)	100			
26		106			
27		207			
28	Gabion Basket Seatwall Planter	2	EA		
29	Bench	/	EA		
30	Asphalt patch/repair	111	SY		
31					
32	Curb Ramp - Type A	1	EA		
33	Curb Ramp - Type B	2	EA		
34	Concrete Paving (5 inch) w/ thickened curb edge	1621	SF		
35	Concrete Paving (8 inch) w/ Base, reinforced	1410	SF		
36	Concrete Paving (5 inch) w/ Base	1039	SF		
37	Detectable Warning Tile (2x2 Ductile Iron)	336	LF		
38	Acid wash and seal existing concrete	1	LS		
39	Repair/Reset Existing Unit Pavers	1	LS		
40	Brussels Block Paving	586	SF		
41	Masonry Wall Repair: Brick Veneer	1	LS		
42	Cast Stone Wall Cap	128	LF		
43	Relocate bike rack	1	LS		
44	Uncover and repair 8"/10" outlet pipe	3	EA		

45	Lower rim of sanitary manhole	1	LS	
46	Wire Mesh Fence (6' height)		LF	
47	New Area Drain by Door #5, 16.6' of PVC Sewer, Splashpad	1	LS	
48	Bioretention Soil Mix	444	CY	
49	Topsoil Import and Placement	269	CY	
50	Topsoil backfill amendment for shrub/perennial planting (compost @ 10	146	CY	
51	Topsoil backfill amendment for shrub/perennial planting (sand @ 5 cy/1,000sf)	73	CY	
52	Turfgrass Sod	856	SY	
53	Acer x freemanii 'Autumn Blaze'	9	EA	
54	Celtis occidentalis 'Prairie Pride'	3	EA	
55	Quercus alba	2	EA	
56	Quercus bicolor	1	EA	
57	Quercus macrocarpa	2	EA	
58	Quercus rubra	6	EA	
59	Tilia americana 'Redmond'	8	EA	
60	Amelanchier laevis	3	EA	
61	Amelanchier x grandifolia 'Autumn Brilliance'	2	EA	
62	Carpinus caroliniana	1	EA	
63	Cercis canadensis	2	EA	
64	Chionanthus virginicus	1	EA	
65	Cornus florida	3	EA	
66	Crataegus crus-galli var inermis	3	EA	
67	Hammamelis x intermedia 'Arnold's Promise	3	EA	
68	Viburnum prunifolium	9	EA	
69	Aesculus parviflora	3	EA	
70	Aronia melanocarpa 'Elata'	19	EA	
71	Cephalanthus occidentalis 'SMCOSS' SUGAR SHACK	62	EA	
72	Diervilla lonicera 'Copper'	104	EA	
73	Hamamelis vernalis	5	EA	
74	Hydrangea paniculata 'Jane' LITTLE LIME	16	EA	
75	Hydrangea quercifolia 'Flemygea' SNOW QUEEN	18	EA	
76	Itea virginica 'Henry's Garnet'	19	EA	
77	Potentilla fruticosa 'Uman' MANGO TANGO (D. fruticosa)	32	EA	
78	Rhus typhina 'Bailtiger' TIGER EYES	106	EA	
79	Ribes alpinum 'Green Mound'	29	EA	
80	Stephanandra incisa 'Crispa'	35	EA	
81	Vibernum acerifolium	22	EA	
82	Viburnum dentatum 'Ralph Senior' AUTUMN JAZZ	7	EA	
83	Viburnum x rhytidophylloides 'Allegheny'	13	EA	
84	Juniperus conferta 'Blue Pacific'	2	EA	
85	Taxus x media 'Wardii'	33	EA	
86	Ilex x meserveae 'Blue Girl', and 'Blue Boy'	5	EA	
87	Parthenocissus quinquefolia	154	EA	
88	Achillea x 'Walther Funcke'	125	EA	
89	Agastache foeniculum 'Blue Fortune'	50	EA	
90	Allium angulosum 'Summer Beauty' (Allium lusitanicum)	13	EA	
91	Amsonia hubrichtii	59	EA	
92	Anemone canadensis	30	EA	
93	Aquilegia canadensis	26	EA	
94	Aralia cordata 'Sun King'	5	EA	
95	Aralia racemosa	15	EA	
96	Artemisia ludoviciana 'Silver King'	3	EA	
97	Asarum canadense	207	EA	
98	Asclepias incarnata	12	EA	
99	Asclepias tuberosa	11	EA	

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100	Aster divaricatus (Eurybia divaricata)	49	EA		
101	Aster macrophyllus (Eurybia macrophylla)	110	EA		
102	Aster novea-angliae (Symphyotrichum novae-angliae)	9	EA		
103	Baptisia x 'Purple Smoke'	14	EA		
104	Echinacea pallida	207	EA		
105	Echinacea purpurea 'Magnus'	72	EA		
106	Geranium macrorrhizum 'Bevan's Variety'	474	FA		
107	Geranium maculatum	82	FA		
108	Hemerocallis 'Happy Returns'	116	FA		
109	Heuchera villosa	168	FA		
110	Hosta 'May'	38	FA		
111	Hosta 'Royal Standard'	289	FA		
112	Hosta tardiana 'lune'	553	FΔ		
112	Lavandula angustifolia 'Hidcote'	21	ΕΛ		
114	Avandula angustitolia i nucote	161	ΕΔ		
115		227			
115	Pachysandra procumbens Panstaman diaitalis 'Huskar Bad'	15			
110		201			
117	Polygonatum odoratum var. plurifiorum variegatum	281	EA		
118	Rudbeckia fulgida var. sullivantii 'Goldsturm'	519	EA		
119		13	EA		
120	Solidago rugosa 'Fireworks'	3	EA		
121	Stachys byzantina	88	EA		
122	Stachys officinalis 'hummelo'	162	EA		
123	Stachys officinalis 'Rosea'	162	EA		
124	Calamagrostis x acutifolra 'Karl Foerster'	298	EA		
125	Carex pensylvanica	490	EA		
126	Deschampsia cespitosa 'Goldtau'	82	EA		
127	Panicum virgatum	224	EA		
128	Schizachyrium scoparium	2	EA		
129	Sesleria autumnalis	161	EA		
130	Sporobolus heterolepis	311	EA		
131	Sporobolus heterolepis 'Tara'	185	EA		
132	Narcissus 'Lemon Drops'	4487	EA		
133	Dryopteris marginalis	49	EA		
134	Bedding Mulch	71	CY		
135	Native Prairie Seeding	7147	SF		
136	Granite Boulders	64	SF		
137	Warranty/Maintenance of Plant Material	1	LS		
	D. Irrigation Plan (L3)				
138	Irrigation System - Des Plaines	1	LS		
139	Irrigation System - Skokie	1	LS		
	1 This is a lump sum contract . Quantities are provided for bidder's convenenience only. All quantities should be verified by bidders and modified on the bid form or	SUB-TOTAL			
2 This is a lump sum contract. Unit Prices shall be provided for the purpose of					
	establishing costs in the event that the Owner decides to modify the contract				
	during construciton. Unit prices shall include the cost for materials, labor,	TOTAL LUMP SUM			
	overhead, and profit.				
	3 The price extensions shall be determined by multiplying the unit price by the quantity for each item. The sub-total price shall equal the sum of the suite of the				
	quantity for each item. The sub-total price shall equal the sum of the extended prices. Differences between the sub-total and the sum of the extended prices may				
	be cause for rejection of the bid.				
		1			

 $\frac{\text{CONCRETE WALL REPAIR: CUT OUT DAMAGED CORNER, INSTALL}{\text{REINFORCING PINS, AND PATCH WALL PER ACI 301} \\ \frac{\text{CONCRETE WALL REPAIR: REPAIR ALL FRACTURES IN CONCRETE}}{\text{WALL FACE BETWEEN} \frac{1}{8} \text{AND} \frac{1}{2} \text{ INCH WITH CAULK SEALANT. COLOR} \\ \text{TO MATCH ADJACENT CONCRETE} \\ \end{array}$

A PLANT PROTECTION FENCE, TYP.

LOCATE AND REMOVE EXISTING AREA DRAIN. ABANDON DOWNSTREAM PIPING IN PLACE. REFER TO L1.10 FOR INSTALLATION OF NEW AREA DRAIN

COMPLETELY REMOVE ALL WOODY AND HERBACEOUS VEGETATION FROM THIS AREA EXCEPT FOR TREES IDENTIFIED TO REMAIN

F REMOVE AND DISPOSE OF BRICK WALL ABOVE POURED CONCRETE L2.04 FOUNDATION WALL. PROTECT AND PRESERVE CONCRETE FOUNDATION WALL. REFER TO LANDSCAPE PLANS FOR TREATMENT

> CONCRETE WALL REPAIR: CUT OUT DAMAGED CORNER, INSTALL REINFORCING PINS, AND PATCH WALL PER ACI 301

> > REMOVE AND DISPOSE OF CONCRETE PAVING AND BASE

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V220627 OAKTON VARIOUS LANDSCAPES\08_CAD\T02_CD\C1_REMOVA

ORBS					
Total	Symbol	Scientific Name	Size	Common Name	Spacing
<mark>1</mark> 25	AC WF	Achillea x 'Walther Funcke'	#1 POT	Walther Funcke Yarrow	18" O.C.
<mark>50</mark>	AG BF	Agastache foeniculum 'Blue Fortune'	#1 POT	Anise Hyssop	24" O.C.
15	AL SB	Allium angulosum 'Summer Beauty' (Allium lusitanicum)	#1 POT	Summer Beauty Ornamental Chive	18" O.C.
<mark>5</mark> 9	AM HU	Amsonia hubrichtii	#1 POT	Blue Star	24" O.C.
30	AN CA	Anemone canadensis	#1 POT	Meadow Anemone	24" O.C.
26	AQ CA	Aquilegia canadensis	#1 POT	Columbine	18" O.C.
5	AR CO	Aralia cordata 'Sun King'	#1 POT	Golden Japanese Spikenard	36" O.C.
15	AR RA	Aralia racemosa	#1 POT.	American Spikenard	36" O.C.
3	AR LU	Artemisia ludoviciana 'Silver King'	#1 POT	White Sage	18" O.C.
207	AS CA	Asarum canadense	#1 POT	Wild Ginger	12" O.C.
12	AS IN	Asclepias incarnata	#1 POT	Swamp Milkweed	24" O.C.
11	AS TU	Asclepias tuberosa	#1 POT	Butterfly Weed	18" O.C.
49	AS DI	Aster divaricatus (Eurybia divaricata)	#1 POT	White Wood Aster	18" O.C.
110	AS MA	Aster macrophyllus (Eurybia macrophylla)	#1 POT	Large Leaf Aster	24" O.C.
9	AS NE	Aster novea-angliae (Symphyotrichum novae-angliae)	#1 POT	New England Aster	30" O.C.
14	BAPS	Baptisia x 'Purple Smoke'	#1 POT	Purple Smoke False Indigo	24" O.C.
207	FC PA	Echinacea pallida	#1 POT	Pale Purple Coneflower	24" O.C.
72	EC MA	Echinacea purpurea 'Magnus'	#1 POT	Purple Coneflower	18" O.C.
129	GEBV	Geranium macrorrhizum 'Bevan's Variety'	#1 POT	Bevan's Variety Bigroot Geranium	18" O C
87	GE MA	Geranium maculatum	#1 POT	Wild Geranium	24" O C
116		Hemerocallis 'Hanny Returns'	#1 POT	Happy Returns Day Lilly	24" 0 C
110		Heuchera villosa	#1 POT	Hairy alumroot	18" 0 C
20		Hosta 'May'	#1 POT	May Hosta	18" 0 C
00 200		Hosta 'Poval Standard'		Poval Standard Hosta	24" O C
289		Hosta tardiana ' luna'		lupo Hosto	24 0.0.
556					10" 0.0
21					10 0.0.
169	MOPU	ivionarda punctata		Dotted Beedaim	18 0.0.
337	PAPR	Pachysandra procumbens	#1 POT	Allegheny spurge	12" O.C.
15	PE DI	Penstemon digitalis 'Husker Red'	#1 POT	Foxglove Beard Tongue	18" O.C.
281	POOD	Polygonatum odoratum var. pluriflorum 'Variegatum'	#1 POT	Variegated Solomon's seal	24" O.C.
519	RU GO	Rudbeckia fulgida var. sullivantii 'Goldsturm'	#1 POT	Goldsturm Coneflower	18" O.C.
13	RUSU	Rudbeckia subtomentosa 'Henry Eilers'	#1 POT	Sweet Coneflower	18" O.C.
3	SO FW	Solidago rugosa 'Fireworks'	#1 POT	Fireworks Goldenrod	30" O.C.
88	ST BY	Stachys byzantina	#1 POT	Lamb's ears	12" O.C.
162	ST HM	Stachys officinalis 'hummelo'	#1 POT	Hummelo Betony	18" O.C.
162	ST RO	Stachys officinalis 'Rosea'	#1 POT	Rosea Betony	18" O.C.
rasses &	Sedges - Sir	ngle Species			
391	CA AC	Calamagrostis x acutifolra 'Karl Foerster'	#1 POT	Karl Foerster Feather Reed Grass	24" O.C.
505	CA PE	Carex pensylvanica	#1 POT	Penn Sedge	18" O.C.
82	DE CE	Deschampsia cespitosa 'Goldtau'	#1 POT	Goldtau Tufted Hair Grass	24" O.C.
224	PA VI	Panicum virgatum	#1 POT	Switch Grass	36" O.C.
2	SC SC	Schizachyrium scoparium	#1 POT	Little Bluestem	24" O.C.
169	SE AU	Sesleria autumnalis	#1 POT	Autumn Moor Grass	18" O.C.
311	SP HE	Sporobolus heterolepis	#1 POT	Prairie Dropseed	24" O.C.
185	SP TA	Sporobolus heterolepis 'Tara'	#1 POT	Tara Prairie Dropseed	18" O.C.
ulbs					
4495	NA LD	Narcissus 'Lemon Drops'		Lemon Drops Daffodil	6" O.C.
erns - Sing	gle Species				
10		Drvopteris marginalis	#1 POT	Leatherwood Fern	18" O C

Total	Symbol	Scientific Name	Size	Common Name	Spacing
0		Acer y freemanii 'Autumn Blazo'	2.5" C AI		
ञ २		Celtis occidentalis 'Prairie Pride'	2.5 CAL.	Prairie Pride Hackborn	ΝΔ
			2.5 CAL.		ΝΔ
Z			2.5 CAL.		
ו ר			2.5 CAL.		
2			2.5 CAL.		
0			2.5 CAL.	Red Oak	
			2.5" CAL.	American Basswood	NA
Total	Symbol	Scientific Name		Common Name	Spacing
3	AM LA	Amelanchier laevis	6' HT.	Allegheny Serviceberry	NA
2	AM GR	Amelanchier x grandifolia 'Autumn Brilliance'	8' HT.	Apple Serviceberry	NA
1	CACA	Carpinus caroliniana	8' HT.	Blue Beech	NA
2	CE CA	Cercis canadensis	6' HT.	Redbud	NA
1	CH VI	Chionanthus virginicus	5' HT.	White Fringetree	NA
3	CO FL	Cornus florida	6' HT.	Flowering Dogwood	NA
3	CR CR	Crataegus crus-galli var inermis	6' HT.	Cockspur Hawthorn	NA
3	HA XI	Hammamelis x intermedia 'Arnold's Promise	6' HT.	Arnold's Promise Hybrid Witchazel	NA
9	VI PR	Viburnum prunifolium	6' HT.	Blackhaw Viburnum	NA
ECIDUOU	IS SHRUB	S			
Total	Symbol	Scientific Name		Common Name	Spacing
3	AE PA	Aesculus parviflora	#5 POT	Bottlebrush Buckeye	5' O.C.
19	AR ME	Aronia melanocarpa 'Elata'	#3 POT	Elata Black Chokeberry	4' O.C.
62	CP OC	Cephalanthus occidentalis 'SMCOSS' SUGAR SHACK	#3 POT	Sugar Shack Buttonbush	3' O.C.
104	DILO	Diervilla lonicera 'Copper'	#3 POT	Southern Bush Honeysuckle	4' O.C.
5	HA VE	Hamamelis vernalis	#5 POT	Vernal Witchhazel	6' O.C.
16	HYLL	Hydrangea paniculata 'Jane' LITTLE LIME	#3 POT	Little Lime Dwarf Panicle Hydrangea	3.5' O.C.
18	HYQU	Hydrangea quercifolia 'Flemygea' SNOW QUEEN	#3 POT	Snow Queen Oakleaf Hydrangea	4' O.C.
19		Itea virginica 'Henry's Garnet'	#3 POT	Henry's Garnet Virginia Sweetspire	4' O.C.
32	PO MT	Potentilla fruticosa 'Uman' MANGO TANGO (D. fruticosa)	#3 POT	Mango Tango Potentilla	30" O.C.
116	RH TI	Rhus typhina 'Bailtiger' TIGER EYES	#3 POT	Tiger Eyes Sumac	4' O.C.
29	RI AL	Ribes alpinum 'Green Mound'	#3 POT	Green Mound Alpine Currant	3' O.C.
35	ST IN	Stephanandra incisa 'Crispa'	#3 POT	Cutleaf Stephhenandra	3' O.C.
22	VI AC	Vibernum acerifolium	#3 POT	Maple-leaf Viburnum	3' O.C.
7	VIDE	Viburnum dentatum 'Ralph Senior' AUTUMN JAZZ	#5 POT	Autumn Jazz Arrowwood	6' O.C.
13	VI XR	Viburnum x rhytidophylloides 'Allegheny'	#5 POT	Allegheny Lantanaphyllum Viburnum	6' O.C.
/FRGRE		S		5, 1,	
Total	Symbol	Scientific Name		Common Name	Spacing
2		Juniperus conferta 'Blue Pacific'		Blue Pacific Juniper	
22		Taxus x modia 'Wardii'	1 OAL.	Mardii Intermediate Yew	5'00
			30		5 0.0.
	AF EVERG	KEENS			
lotal	Symbol			Common Name	Spacing
5	IL XM	llex x meserveae 'Blue Girl', and 'Blue Boy'	36"	Blue Boy/Girl Meserve Hollies	3' O.C.
NES					
Total	Symbol	Scientific Name		Common Name	
154	PAQU	Parthenocissus guinguefolia	12 FLAT	Virginia Creeper	24" O.C.

1. SEE SPECIFICATION 329300 "EXTERIOR PLANTINGS" FOR MATERIAL SUPPLY, INSTALLATION, AND WARRANTY MAINTENANCE PROVISIONS WHICH INCLUDE: A. WARRANTY MAINTENANCE PERIOD:

1. WARRANTY PERIOD FOR TREES AND SHRUBS: 1 YEAR FROM DATE OF SUBSTANTIAL COMPLETION.

2. WARRANTY PERIOD FOR SODDING COVERED UNDER THIS SECTION: 1 YEAR FROM DATE OF SUBSTANTIAL COMPLETION. 3. WARRANTY PERIOD FOR HERBACEOUS PLANTS: 2 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

4. WARRANTY PERIOD FOR NATIVE SEEDING: 2 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

ECT
403 West St. Charles Road
Phone: (630) 559-2000
www.ectinc.com

OAKTON

COMMUNITY

COLLEGE

LANDSCAPING AT

VARIOUS SITES

22-0627

XXX

XXX/XXX

XXX/XXX

XXX

2023-04-21

03-31-2023

ECT PROJECT No.:

DESIGNED BY:

DRAWN BY:

CHECKED BY:

STATUS:

APPROVED BY:

BID DOCUMENTS

REVISIONS:

ADDENDUM #2

PLANT SCHEDULES

L2.00

All other specifications, terms, and conditions noted in the original bid documents remain in effect and unchanged.

Please sign and return this addendum with your bid.