

Project Name: UNIVERSITY OF CALIFORNIA, MERCED
LITTLE LAKE AMPHITHEATER UPGRADE
Project No.: 907075

ADDENDUM NO. 1
to the
CONTRACT DOCUMENTS
August 16, 2013

- I. Bidder acknowledges that it is the Bidder's responsibility to ascertain whether any Addenda have been issued and if so, to obtain copies of such Addenda. Bidder therefore agrees to be bound by all Addenda that have been issued for this bid.

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents. The following changes, additions, or deletions shall be made to the following documents as indicated and all other Contract Documents shall remain the same.

II. CLARIFICATIONS

A. PRE-BID QUESTIONS – Questions received from bidders and responses are as follows:

1. Q. Provide the missing specification sections for DIV 2, 3, 5, & 10.
A. The specifications sections are attached to this Addendum.
2. Q. Please identify the limits of the temporary fence.
A. A Site Plan is attached to this Addendum.

III. BIDDING/CONTRACT DOCUMENTS AND DIVISION 1 SPECIFICATIONS – VOLUME 1 OF 2

NONE

IV. DIVISION 2 – 33 SPECIFICATIONS – VOLUME 2 OF 2

1. Add Division 2 Specification Section 02 41 13 Selective Site Demolition.
2. Add Division 3 Specification Section 03 23 00 Reinforcing Steel
3. Add Division 5 Specification Section 05 52 00 Metal Railings
4. Add Division 10 Specification Section 10 14 40 Signage

V. DRAWINGS

1. Add UC Merced Site Plan – Project Construction Traffic Plan – Plan identifies traffic flow and project access.
Plan identifies limit lines of the construction fence.

UNIVERSITY OF CALIFORNIA, MERCED

**By: University of California, Merced
University's Representative**

Min Jiang
Project Director

End of Addendum No. 1

SECTION 02 41 13 - SELECTIVE SITE DEMOLITION

PART 1 - GENERAL

1.1 DESCRIPTION

A. Section Includes:

1. Work required to demolish, modify, salvage, relocate, dispose, and convert existing structures, pavements, utilities, landscaping, and miscellaneous items as required for the construction of the improvements as shown on the Drawings and as specified.
2. Protect all on-site personnel and the public at all areas of demolition.
3. Protect, support, and maintain adjoining structures, utilities, sitework facilities, and miscellaneous items surrounding the demolition work from damage or harmful effects.
4. In accordance with all applicable state and local laws, properly dispose of all hazardous materials as required, obtain EPA generator number from the University, and prepare safety plans.

1.2 RELATED DOCUMENTS

- A. Section 01 41 00 - Regulatory Requirements
- B. Section 01 35 00 - Environmental Mitigation
- C. Section 01 73 30 - Cutting and Patching.
- D. Section 01 73 36 - Selective Demolition.

1.3 SELECTIVE SITE DEMOLITION WORK

A. Selective demolition work includes, but is not limited to:

1. General Sitework: Asphalt and concrete paving and slabs, sidewalks, curbs, gutters, utilities, irrigation systems, and landscaping. Demolition of existing sitework structures that conflict with the new Work shown on the Drawings.

1.4 PROTECTION

- A. Maintain free and safe passage for all on-site personnel at all times.
- B. Prevent movement or settlement of structures or surrounding areas to demolition work. Provide bracing, shoring, and debris barriers as required and assume responsibility for the safety and support of affected structures.
- C. Protect existing finishes, equipment, and adjacent work to remain from damage. Cut finish surfaces such as concrete by methods which will terminate or join work in a straight line at an

appropriate point of division.

- D. Protect existing landscaping and irrigation systems to remain.
- E. Cease operations and notify the University's Representative immediately if the safety of any structure or utility appears to be endangered. Take additional precautions to properly support such structure(s) and do not resume demolition operations until safety is restored.
- F. Utility locations shown on the Drawings are approximate and may vary from where they are shown. The Contractor shall contact the University Representative and coordinate field marking to determine the exact locations of utilities owned by agencies. Record, preserve and protect the field markings.
- G. Blasting and the use of explosives shall not be permitted for any demolition work.
- H. Promptly repair any damage caused to facilities or landscaping by demolition operations as directed by the Design Professional and at no additional cost to the University. The minimum quality of repair shall be equal to that which existed prior to the start of the Contractor's work.

1.5 SCHEDULING

- A. Schedule all demolition work to meet the requirements of Section 01 31 45 and minimize disruption to the work of the University. Exercise due concern and procedures for maintaining plant operation and diligently direct all activities towards maintaining continuous operation of the existing plant and minimizing operation inconvenience.

1.6 CONDITION OF STRUCTURES

- A. Conditions existing at the structures and areas to be demolished at the time of the bid period shall be maintained by the University insofar as practical. Minor variations in small piping, electrical equipment, and miscellaneous materials shall be expected by the Contractor and this work shall be completed at no additional cost to the University.

1.7 DISPOSAL OF MATERIAL REMOVED BY DEMOLITION WORK

- A. All materials removed by demolition work shall become the property of the Contractor as soon as actual demolition is initiated. The Contractor shall remove demolition materials as soon as possible but in no case shall store materials removed by demolition on the project site longer than 5 working days. Demolition materials other than concrete and soil shall be properly contained in covered waste disposal bins. Concrete and soil shall be tightly stockpiled until removal.

1.8 SUBMITTALS

- A. All submittals shall be in accordance with Sections 01 33 23.
- B. Submit letters to the University Representative showing proposed start and finish dates, times, and detailed descriptions of demolition work a minimum of fourteen (14) days in advance of such work. See also Section 01 73 35.

PART 2 - PRODUCTS

2.1 PATCHING MATERIALS

- A. See Section 01 73 30 for non-shrink cementitious and epoxy grout to be used for patching.

PART 3 - EXECUTION

3.1 SEQUENCE OF WORK

- A. The Contractor shall mark all facility components to be demolished in advance of demolition to permit Design Professional review. The purpose of this requirement is to provide an opportunity to avoid unnecessary or erroneous demolition. The Contractor remains responsible for demolition as shown and specified in the Contract Documents.
- B. The Contractor shall schedule a meeting and meet with the University at the site of the proposed demolition in advance of the start of demolition. Contractor shall ensure that subcontractors are present if necessary or requested by the Design Professional.

3.2 REMOVAL OF STRUCTURES

- A. Contractor shall remove all components of structures shown or required to be removed.

3.3 REMOVAL AND ABANDONMENT OF BURIED PIPING

- A. Unless specifically noted on the Drawings to be abandoned-in-place, all abandoned buried piping shall be excavated and removed from the site.

3.4 DEMOLITION OF AND ADJOINING TO ARCHITECTURAL FINISHES

- A. Demolition of finishes where adjoining finishes are to remain shall be carefully completed. Such special finishes include concrete. Overcuts shall not be permitted unless approved by the Design Professional.

3.5 CLEAN-UP

- A. The Contractor shall remove from the site all debris. Upon completion of the immediate demolition work, the Contractor shall thoroughly clean each area, including dusting, vacuuming, sweeping, and window cleaning.

END OF 02220 - SITE DEMOLITION

SECTION 03 20 00 - REINFORCING STEEL

PART 1- GENERAL

1.1 GENERAL REQUIREMENTS

- A. Requirements of Division 1 apply to all work of this Section.

1.2 SCOPE

- A. Unless noted otherwise, furnish and install reinforcing for all concrete, including dowels, chairs, spacers, bolsters, etc., necessary for supporting and fastening reinforcement in place as shown on the Drawings and specified herein.

1.3 RELATED WORK (See also Table of Contents)

- A. Cast-In-Place Landscape Concrete: Section 32 13 13.

1.4 QUALITY ASSURANCE

A. General:

1. Acceptable Manufacturers: Regularly engaged in the manufacture of steel bar and welded wire fabric reinforcing.
2. Installer Qualifications: Installation shall be done only by an installation firm normally engaged in this business. All work shall be performed by qualified mechanics working under an experienced supervisor.
3. Welding Qualifications: Welding procedures, welding operators and welders shall be qualified in accordance with AWS D1.4 - "Structural Welding Code Reinforcing Steel".
 - a. Welders whose work fails to pass inspection shall be re-qualified before performing further welding.
4. Reinforcement Work shall conform to ACI 301 and CBC Section 1907, as minimum standards.
5. Allowable Tolerances:
 - a. Fabrication:
 - 1) Sheared length: 1 inch.
 - 2) Depth of truss bars: Plus 0 minus 1/2-inch.
 - 3) Ties: Plus or minus 1/2-inch.
 - 4) All other bends: Plus or minus 1 inch.
 - b. Placement:
 - 1) Concrete cover to form surfaces: Plus or minus 1/4-inch.

- 2) Minimum spacing between bars: Plus or minus ¼-inch.
 - 3) Crosswise of members: Spaced evenly within 2 inches of stated separation.
 - 4) Lengthwise of members: Plus or minus 2 inches.
 - c. Maximum bar movement to avoid interference with other reinforcing steel, conduits, or embedded items: 2 bar diameters.
- B. Standards and References: (Latest Edition unless otherwise noted):
 - 1. American Concrete Institute (ACI).
 - a. ACI 301 - "Specifications for Structural Concrete for Buildings".
 - b. ACI 315 - "Details and Detailing of Concrete Reinforcing".
 - c. ACI 318 – “Building Code Requirements for Reinforced Concrete”
 - 2. American Society for Testing and Materials (ASTM).
 - a. ASTM A82 - "Cold Drawn Wire for Concrete Reinforcement".
 - b. ASTM A185 - "Welded Steel Wire Fabric for Concrete Reinforcement".
 - c. ASTM A615 - "Deformed and Plain Billet-Steel Bars for Concrete Reinforcement".
 - d. ASTM A706 – “Low Alloy Steel Deformed Bars for Concrete Reinforcement”.
 - 3. Concrete Reinforcing Steel Institute (CRSI) - "Manual of Standard Practice".
 - 4. 2010 California Building Code (CBC),.
- C. Submittals: (Submit under provisions of Section 01 33 23)
 - 1. Shop Drawings: Prepare in accordance ACI 315. Indicate bending diagrams, assembly diagrams, splicing and laps of bars and shapes, dimensions and details of bar reinforcing and assemblies. Correctness of all reinforcing requirements and work is the responsibility of Contractor. Identify such shop drawings with reference thereon to sheet and detail numbers from Contract Drawings.
 - a. Do not use scaled dimensions from Contract Drawings in determining the lengths of reinforcing bars.
 - b. No reinforcing steel shall be fabricated without approved shop drawings.
 - c. Any deviations from the contract documents must be clearly indicated as a deviation on the shop drawings.

- d. Areas of high congestion, including member joints and embed locations shall be fully detailed to verify clearances and assembly parameters and coordination with other trades.
 - 2. Certified mill test reports of supplied reinforcing indicating chemical and physical analysis. Tensile and bend tests shall be performed by the mill in accordance with ASTM A615.
 - 3. Certificates of Compliance with specified standards:
 - a. Reinforcing bars.
 - 4. Samples: Only as requested by Design Professional.
- D. Tests and Inspections:
- 1. A testing program is required prior to start of construction. Testing program to be done in Compliance with the 2007 CBC requirements and in collaboration with Testing Laboratory, Design team, contractor, University and submitted for review by the agency in charge of building enforcement. Requirements below are minimum requirements; additional requirements may be required in final testing program.
 - 2. All reinforcing steel whose properties are not identifiable by mill test reports shall be tested in accordance with ASTM A615. One Series of tests for each missing report to be borne by the Contractor.
 - 3. When inspections are indicated for reinforcement placement on the Structural drawings, a special inspector shall be employed to inspect reinforcing placement per CBC Section 1704.
 - 4. When tests are indicated for reinforcing steel on the structural drawings, the reinforcing steel used shall be tested in accordance with ASTM A615. One tensile and one bend test for each 2-1/2 tons of steel or fraction thereof, shall be made.
 - 5. Inspect shop and field welding in accordance with AWS D1.4, including checking materials, equipment, procedure and welder qualification as well as the welds. Inspector will use non-destructive testing or any other aid to visual inspection that he deems necessary to assure himself of the adequacy of the weld.
 - 6. Tests and inspection shall be performed by the University's testing agency except when needed to justify rejected work, in which case the cost of retests and reinspection shall be borne by the Contractor.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver reinforcement to project site in bundles marked with metal tags indicating bar size and length.
- B. Handle and store materials to prevent contamination.

1. Store reinforcement in a manner that will prevent excessive rusting or coating with grease, oil, dirt, and other objectionable materials. Storage shall be in separate piles or racks so as to avoid confusion or loss of identification after bundles are broken.

PART 2- PRODUCTS

2.1 MATERIALS

- A. Reinforcement Bars: ASTM A615, Grade 40 for No. 3 and smaller bars; ASTM A615, Grade 60 for No. 4 and larger bars.
 1. Bar reinforcement to be welded shall meet chemical requirements of ASTM A706.
- B. Stirrups and Ties: ASTM A615, Grade 60 for No.4 and larger bars, ASTM A615, Grade 40 for No. 3 and smaller bars.
- C. Steel Dowels: Same grade as bars to which dowels are connected.
- D. Tie Wires: FS-QQ-W-461, annealed steel, black, 16 gauge minimum.

PART 3- EXECUTION

3.1 FABRICATION

- A. Shop fabricate reinforcement to meet requirements of Drawings.
- B. Fabricate reinforcement in accordance with the requirements of ACI 315 where specific details are not shown or where Drawings and Specifications are not more demanding.
- C. Steel reinforcement shall not be bent or straightened in a manner that will injure the material. Bars with kinks or bends not shown on the Drawings shall not be used. Heating of bars for bending will not be permitted.
- D. Reinforcing shall not be field bent or straightened without Design Professional's review.
- E. Provide offsets in rebar (1:6 maximum) where required to maintain clearances.

3.2 CONDITION OF SURFACES

- A. Examine surfaces and conditions receiving or affecting the work. Do not proceed until unsuitable conditions have been corrected.

3.3 GENERAL

- A. Concrete shown without reinforcing shall be reinforced as similar parts shown with reinforcing except where concrete is specifically noted to be unreinforced.

3.4 PLACEMENT

- A. All reinforcement shall be accurately set in place, lapped, spliced, spaced rigidly and

securely held in place and tied with specified wire at all splices and crossing points. All wire tie ends shall point away from the form. Carefully locate all dowel steel to align with wall and column steel.

1. Bars shall be in long lengths with laps and splices as shown. Offset laps in adjacent bars. Place steel with clearances and cover as shown. Bar laps shall be as indicated on the Drawings. Tie all laps and intersections with the specified wire.
 2. Maintain clear space between parallel bars not less than 1-1/2 times nominal diameter, but in no case shall clear space be less than 1-1/2 times maximum size concrete aggregate.
 3. Reinforcing dowels for slabs shall be placed as detailed. Sleeves may be used if reviewed by the Design Professional before installation. Install dowel through all construction and expansion joints for all slabs on grade.
- B. Bar Supports: Support and securely fasten bars with chairs, spacers and ties to prevent displacement by construction loads or placement of concrete beyond the tolerances specified. Conform to CRSI as a minimum standard.
- C. Steel Adjustment:
1. Move within allowable tolerances to avoid interference with other reinforcing steel, conduits, or embedded items.
 2. Do not move bars beyond allowable without concurrence of Design Professional.
 3. Do not heat, bend, or cut bars without concurrence of Design Professional.
 4. Reinforcement shall not be bent after being embedded in hardened concrete.
- D. Splices:
1. Splice reinforcing as shown.
 2. Lap Splices: Tie securely with wire to prevent displacement of splices during placement of concrete.
 3. Splice Devices: Install in accordance with manufacturer's written instructions. Obtain Design Professional's review before using.
 4. Do not splice bars except at locations shown without concurrence of Design Professional.
 - a. Where splices in addition to those indicated are required, indicate location on shop drawings clearly and highlight "for Design Professional's approval".
- E. Reinforcement shall be free of mud, oil or other materials that may reduce bond at the time

concrete is placed. Reinforcement with tightly adhered rust or mill scale will be accepted without cleaning provided that rusting has not reduced dimensions and weights below applicable standards. Remove loose rust.

F. Protection against rust:

1. Where there is danger of rust staining adjacent surfaces, wrap reinforcement with impervious tape or otherwise prevent rust staining.
2. Remove protective materials and clean reinforcement as required before proceeding with concrete placement.

G. Drawing Notes: Refer to notes on Drawings for additional reinforcement requirements.

END OF 03 20 00 - REINFORCING STEEL

SECTION 05 52 00 - METAL RAILINGS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Metal Railings.
- B. Related Sections. See Related Sections for additional requirements applicable to this Section.
 - 1. Section 32 13 13 - Sitework Cast-In-Place Concrete.

1.02 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

- A. American Institute of Steel Construction (AISC):
 - 1. Manual of Steel Construction – Thirteenth Edition.
- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM A53 - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
 - 2. ASTM A108 - Standard Specification for Steel Bars, Carbon, Cold Finished, Standard Quality.
 - 3. ASTM A123 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- C. American Welding Society (AWS):
 - 1. AWS D1.1 - Structural Welding Code – Steel.
 - 4. AWS A2.0 - Standard Welding Symbols.
- D. National Association of Architectural Metal Manufacturers (NAAMM)
 - 1. NAAMM AMP 521 (2001) Pipe Railing Manual.

1.03 SUBMITTALS

- A. Prior to fabrication, submit to the Engineer, in accordance with Section 01 33 23, shop drawings, showing methods of assembly, anchorage and connection to other members. Indicate

welded connections in accordance with AWS A2.0. Shop drawings are required for all items included under this Section.

- B. Metal fabrication submittals greater than 30 sheets will take longer than 30 days for review by the Engineer.
- C. Mock up: Prepare a sample of finished railing material with one (1) welded 'T' connection and one (1) radiused end corner of the railing. Sample to be painted as specified below.

1.04 QUALITY ASSURANCE

- A. Coordinate completely the work of this Section with the work of other Sections. Verify at the site both the dimensions and work of other trades adjoining items of work before fabrication and installation of the items specified.
- B. Furnish to the pertinent trades all items that are to be built into the work of other Sections.
- C. Field welding shall be done by certified welders and shall be in accordance with the appropriate AWS Specification.
 - 1. Qualify welders in accordance with the appropriate AWS for each process, position, and joint configuration.
 - 2. WPS's for each joint type shall indicate proper AWS qualification and be available where welding is performed.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver items to be incorporated into the work of other trades in sufficient time to be checked prior to installation.
- B. Delivery anchorage devices with setting drawings, templates and instructions for installation.
- C. Store delivered items off the ground and protected from dirt and weather.
- D. Repair items which have become damaged or corroded to the satisfaction of the University Representative prior to incorporating them into the work.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Steel:
 - 1. Welded and seamless steel pipe: ASTM A53, Type S, Grade B Schedule 40. Use standard malleable iron fittings, galvanized for exterior work.
 - 2. Welding Materials: AWS D1.1.

3. Galvanizing: ASTM A123.

2.02 FABRICATION

- A. Form all miscellaneous metal work true to detail, with clean, straight, sharply defined profiles, and smooth surfaces of uniform color and texture. Provide fabrications free from defects impairing strength or durability. Drill or punch holes and smooth edges. Ease exposed edges to a small, uniform radius. Fabricate supplementary pieces necessary to complete each item though such pieces are not definitely shown or specified.
- B. Supply components required for anchorage of fabrications. Connections and accessories shall be of sufficient strength to safely withstand stresses and strains to which they will be subjected. Steel accessories and connections to steel or cast iron shall be steel, unless otherwise specified. Threaded connections shall be made so that the threads are concealed by fitting.
- C. Welded joints shall be rigid and continuously welded or spot welded as specified or shown. Dress the face of welds flush and smooth. Continuously weld and grind smooth welds that will be exposed. Exposed joints shall be close fitting and jointed where least conspicuous. Conceal fastenings where practical. Punch or drill for temporary field connections and for attachment of the work of other trades.
- D. Welding of parts shall be in compliance with the latest edition of the AWS structural welding code for steel (D1.1); aluminum (D1.2) or stainless steel (D1.6) as appropriate, and shall only be done where shown, specified, or permitted by the Engineer. Welding shall be performed only by welders certified to perform the required welding in compliance with the requirements of the AWS Code. Component parts of built-up members to be welded shall be adequately supported and clamped or held by other adequate means to hold the parts in proper relation for welding.
- E. Shop painting will not be required for galvanized metal, stainless steel, aluminum, copper, brass and bronze unless specifically specified.
- F. Thoroughly clean steel fabrications of all loose mill scale, rust, grease or oil, moisture, dirt, or other foreign matter.
 1. Remove scale, rust and other deleterious materials before shop coat of paint is applied.
 2. Clean off heavy rust and loose mill scale in accordance with SSPC SP-2, SSPC SP-3 or SSPC SP-6.
 3. Remove oil, grease and similar contaminants in accordance with SSPC SP-1.

2.03 FINISHES

- A. Steel
 1. Items in areas which are not exposed to weather or moisture, shall have exposed surfaces painted with a shop coat of primer compatible with the finish coatings

specified on the drawings, after fabrication but before shipping. Apply two shop coats of primer to surfaces that will be inaccessible after erection.

- a. Remove scale, rust and other deleterious material before shop coat of paint is applied. Clean off heavy rust and loose mill scale in accordance with SSPC-2, SSPC-3 or SSPC-6. Remove oil, grease and similar contaminants in accordance with SSPC SP-1.
 - b. Immediately after surface preparation, brush or spray on metal primer paint, applied in accordance with manufacturer's instructions and at rate to provide a uniform dry film thickness of 3.0 mils per coat applied. Use painting methods which will result in full coverage of joints, corner, edges and all exposed surfaces.
 - c. As soon as possible after installation, touch up any scraped, abraded or unpainted surfaces using primer as specified for shop coats.
2. Items exposed to weather, submerged in water or subject to splashing, or located in corrosive environments shall be hot dip galvanized after fabrication.
- a. Following all manufacturing operations, items to be galvanized shall be thoroughly cleaned, pickled, fluxed and completely immersed in a bath of molten zinc. The resulting coating shall be adherent and shall be the normal coating to be obtained by immersing the items in a bath of molten zinc and allowing them to remain in the batch until their temperature becomes the same as the bath. Coating shall be not less than 2 oz/sq ft of surface.
 - b. Where field welding of galvanized material is necessary, welds shall be wire brushed clean and immediately regalvanized in the field using galvanizing compound or coating. Materials shall comply with local regulations controlling use of volatile organic compounds.
3. Finish color to be Sherwin Williams No. 6200 "Link Gray."

PART 3 EXECUTION

3.01 INSTALLATION - GENERAL

- A. Install all items finished except items to be embedded in concrete which shall be installed under Division 3.
- B. Items to be attached to concrete after such work is completed shall be installed in compliance with the details shown. Furnish to appropriate trades all anchors, sockets, or fastenings required for securing work to other construction.
- C. Set metal work level, true to line and plumb as indicated.

- D. Weld field connections and grind smooth where practicable. Clean and strip primed, steel items to bare metal where site welding is required. Conceal fastenings where practicable.

Weld only in accordance with approved WPS's which are to be available to welders and inspectors during the production process.

- E. Touch-up abrasions to finish or primer coatings immediately after erection and prior to both final coating and final acceptance.

- F. Field-apply coatings for installation of metal fabrications according to the following schedule. (For embedded items, coat the embed.)

1. All steel surfaces in contact with exposed concrete shall receive a protective coating of an approved heavy bitumastic troweling mastic applied in compliance with the manufacturer's instructions prior to installation.

3.02 FIELD QUALITY CONTROL - INSPECTION

- A. The fact that steel work has been accepted at the shop and mill will not prevent its final rejection at the site, before or after erection, if it is found to be defective.
- B. Remove rejected steel work from the site within 10 working days after notification of rejection.

END OF 05 52 00 - METAL RAILINGS

SECTION 10 14 00 - SIGNAGE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: International Symbol of Access for Hearing Loss per CBC figure 11B-11C.

1.2 SUBMITTALS

- A. Procedures: In accordance with signage graphic in plan, Product Data and Samples.
- B. Shop Drawings: scale drawings for each sign indicating materials, attachments, lettering layout, and colors.
 - 1. Show details of fabrication and installation including foundations, and mounting details, elevations, and relationship to adjacent improvements.
 - 2. Shop Drawing size: 17"L x 11"H.
 - 3. Show all material dimensions, finishes, hardware, and anchorage.
- C. Samples:
 - 1. One partial sign sample showing each sign type, minimum 12 inches square or larger as appropriate for sign configuration. Submit for each required color.
 - 2. Dimensional Characters: Full-size of each type of dimensional character required. Show character style, material, finish, and method of attachment.
 - 3. Complete typeface fonts including upper and lower case letters, numbers, and punctuation as applicable to text shown or provided by University's Representative.
 - 4. Samples of letter and word spacing for each letter size.
 - 5. Other Exposed Components: As specified under other Sections.
- D. Quality Control:
 - 1. Manufacturer/fabricator qualifications.
 - 2. Installer qualifications.
 - 3. Verification of adequacy of power feed for monument sign.

1.3 QUALITY ASSURANCE

- A. Applicable Standards and Publications: Unless otherwise specified or shown, signage shall conform to the following standards and publications:

1. ANSI A-117.1 and the Americans with Disabilities Act (ADA).
 2. ATBCB Design Guidelines for Signage in relation to the Americans with Disabilities Act.
 3. California Code of Regulations, Titles 19 and 24. California Grade 2 Braille shall be used whenever Braille symbols are specifically required. Refer to CBC Section 1117B.5.2. All signage shall conform to CBC Sections 1003, 1103.2.4, and 1117B.5.
 4. Uniform Sign Code.
- B. Vendor shall be responsible for the quality of materials and workmanship of any firm acting as the vendor's subcontractor.

1.4 GUARANTEE

- A. At a minimum, the Contractor shall warrant that all work installed under this Contract is free of defect and will remain in good working order for a period of one year for all surface improvements and five years for all underground work. If warranties specified elsewhere in these documents are for a longer period of time than that specified in this section, the longer warranties shall apply.
- B. Time of Guarantees Submittals:
1. For Work activities, provide updated submittal within 10 calendar days after Final Completion, listing the date of Final Completion as the start of the Guarantee to Repair Period.
 2. For Work activities, where Final Completion is delayed beyond the date of Substantial Completion, provide updated submittal within 10 calendar days after Final Completion, listing the date of Final Completion as the start of the Guarantee to Repair Period.

PART 2 - PRODUCTS

2.1 SIGNAGE

- A. Signage Furnished and Installed Under this Contract:
1. International Symbol of Access for Hearing Loss Signs:
 - a. Shall be manufactured using a 1/4" exterior Photopolymer Process.
 - b. Tactile characters shall be raised the required 1/32" inches from sign face. Glue on letters or etched backgrounds are not acceptable.
 - c. All text shall be accompanied by Grade 2 Braille. Braille shall be separated 1/2" from the corresponding raised characters or symbols. Grade 2 Braille translation to be provided by signage manufacturer.
 - d. All letters, numbers and/or symbols shall contrast with their background, either light characters on a dark background or dark characters on a light background. Characters and background shall have a non-glare finish.

- e. Background Color: Dark Rhein Silver. All sides of the background must consist of the same color as selected.
- f. Graphic Color: Benjamin/Moore-Branchport Brown.
- g. Letterform shall be: Universe 57 Condense.
- h. Signage Installation and Locations: Signs shall be mounted to nearby electrical cabinet(s) using stainless steel tamper proof hardware. All signs shall be mounted 60" from the floor to the center of the sign within reach of walkways. Installer assumes responsibility for suitable installation of the signs. Signs shall be level within one quarter of degree. Locations to be confirmed by University Representative before installation.

2.2 MATERIALS AND COMPONENTS

- A. Paint Coatings: Matthews Acrylic Polyurethane ("MAP") by Matthews Paint Company (MPC), or equal. Provide primer as recommended by coating manufacturer for each type of substrate.
 - 2. Colors: To match Pantone colors as specified above.
- B. Vinyl: Opaque non-reflective film with pressure-sensitive adhesive backing, suitable for exterior applications.
- C. Sealant: As required to prevent light and water leakage into cabinet. No exposed sealant shall be allowed except as indicated on the reviewed shop drawings.

2.3 FABRICATION

- A. Fabricate signage and mountings as described on drawings and shop drawings.
- B. Fabricate signage to remain flat under installed conditions with smooth, mechanically finished edges. Ease corners slightly for plastic signs.
- C. Shop-assemble wherever practicable and ready for installation at project site. If not shop assembled, pre-fit in shop to assure proper and expeditious field assembly.
- D. Graphic Elements: All text and symbols shall be sharply distinct and clear.
- E. Attachment Method: Stainless steel fasteners as recommended by sign manufacturer for mounting signs on substrates involved. Do not use exposed fasteners except where shown, or accepted by the University's Representative.
- F. Tolerances for Flat Metal Components, unless Otherwise Approved.

PART 3 - EXECUTION

3.1 PREPARATION OF CUSTOM SIGNAGE

- A. Prior to installation, inspect site to confirm that all sign locations are as specified, and signs have been received and are ready for installation.

3.2 INSTALLATION OF CUSTOM SIGNAGE

A. General:

1. Use concealed mounting in compliance with manufacturer's instructions.
2. Install signs true, level and plumb at height indicated, with sign surfaces free from distortion or other defects in appearance.
3. Locate signage where shown or as directed by the University's Representative, and as required by code.

B. Erection Tolerances:

1. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch.
2. Variation from True Position: 1/16 inch.

3.3 CLEANING, ADJUSTING AND PROTECTION

- A. Inspect installed work. Correct deficiencies.
- B. Restore finishes damaged during installation and construction period so that no evidence of correction work remains.
- C. Return items that cannot be refinished in the field to the shop. Make required alterations and refinish entire unit, or provide new units.
- D. After installation, clean soiled signs surfaces according to manufacturer's instructions. Protect from damage until acceptance by Owner.

3.4 RECORD DOCUMENTS

A. As-Built Drawings:

1. The Contractor shall submit to the University's Representative, 10 calendar days after Final Completion, fully updated As-built Drawings and Shop Drawings for review.
2. The As-Built Drawings and Shop Drawings shall be in PDF format. Email is acceptable.

B. RECORD DRAWINGS

The Contractor shall submit to the University's Representative, 10 calendar days after review and approval by the University, fully updated As-Built Drawings and Shop Drawings. Contractor shall:

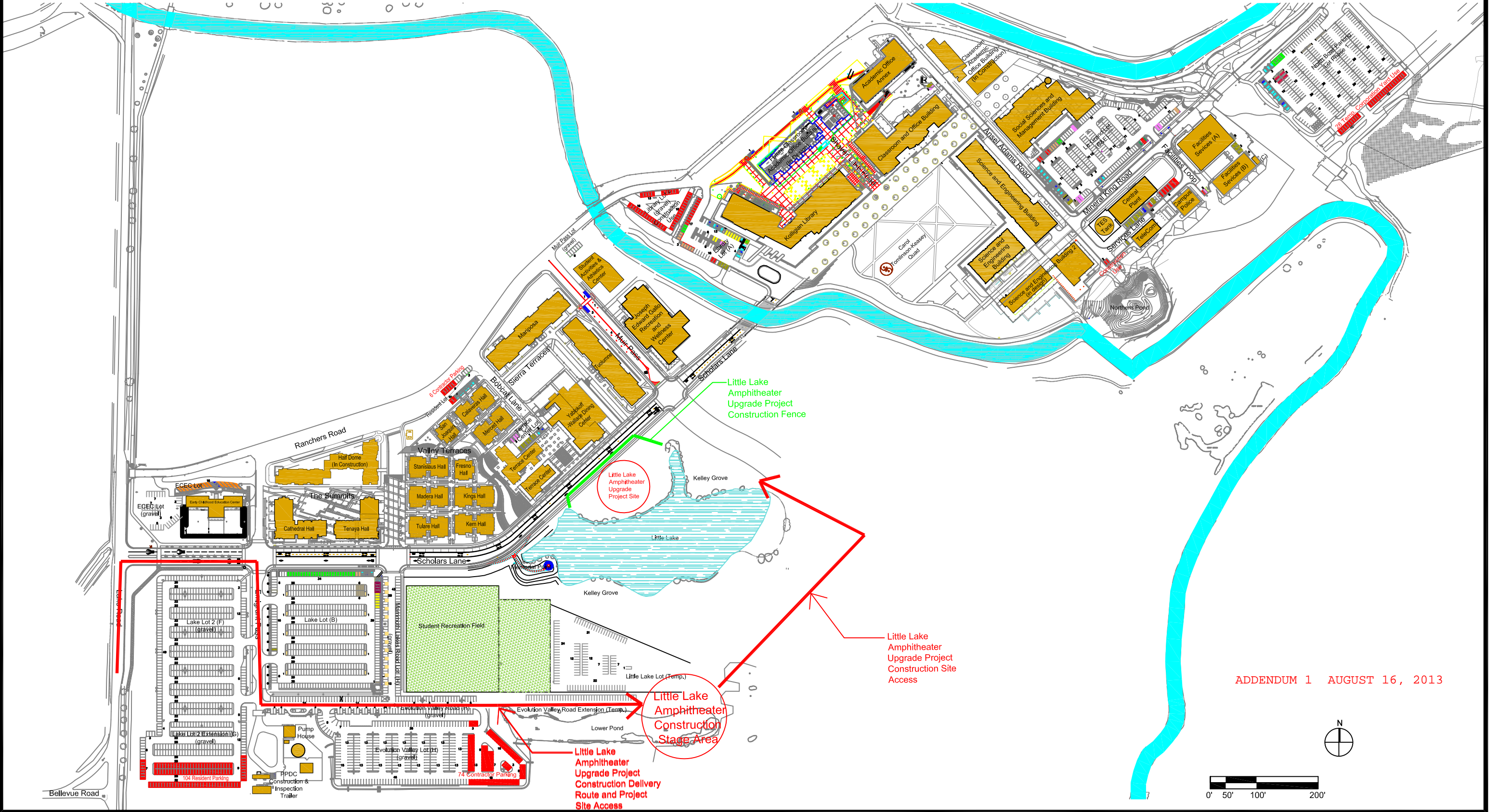
1. Provide two (2) hard copies of the Shop Drawings in size 17"L x 11"H paper.

2. Provide two (2) CD-ROMs, each of which contains all electronic drawing files. File shall be in ORIGINAL format of the graphic program and PDF format.

END OF SECTION 10 14 40 - SIGNAGE

UC Merced Site Plan

Little Lake Amphitheater Upgrade Project Construction Site Logistics Plan



ADDENDUM 1 AUGUST 16, 2013