SECTION 01 11 00

SUMMARY OF THE WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The following subjects are included in this section:
   1. Project Description
   2. Project Phasing
   3. Superintendent / Supervisory Staff
   4. Special Project Requirements
   5. Protection of Work
   6. Owner Furnished / Contractor Installed
   7. Permits, Licenses, & Fees
   8. Partnering

1.3 PROJECT DESCRIPTION

A. Work Included in the Contract: This project proposes to renovate the flooring of room RWC201 within the Recreation and Wellness Center West Gym. Work to include removal of existing Mondo Athletic flooring and installation of new Ecore flooring per plan and new rubber base along existing walls. The Work included shall consist of all construction and services involving work related to:

   1. Demolition of 3,990 SF of existing rubber (Mondo) flooring.
   2. Installation of new Resilient Athletic Flooring and transitions.
   3. Installation of rubber base. 6” height along 50’ length walls and 4” height along wood slat walls (38’ length walls).

B. Contract Time: **77 Calendar days.**

C. Liquidated Damages: **$1,000 per day.**

1.4 PROJECT PHASING

A. No phased construction is proposed.

B. Owner Occupancy: Work will occur in an operating University environment.

C. Maintenance and Operation

1.5 SUPERINTENDENT / SUPERVISORY STAFF

A. The following requirements are in addition to the requirements of the Contract General Conditions:

1. The Contractor shall employ a competent Superintendent able to read, write and communicate fluently in English. The Superintendent shall be on site at all times during which work occurs on the project site and shall be fully authorized to represent Contractor in all matters pertaining to the work of this contract. All communications and agreements with the Superintendent shall be binding upon Contractor. The Superintendent shall be acceptable to the University and shall continue in the capacity of Superintendent for the duration of the project unless the Superintendent ceases employment with Contractor or the University otherwise agrees. The Superintendent shall not be employed on any other project by the Contractor during the course of this project.

2. Work shall not occur on the site except under the direct supervision of the Superintendent. Failure to maintain a Superintendent on the Project site at all times that work is occurring will result in the issuance of a stop work notice by the University Representative. Any schedule impact resulting from said stop work order shall be the responsibility of the Contractor; no additional costs for delay will be due Contractor, nor will assessment of liquidated damages be suspended to account for the work stoppage.

3. In addition to the Superintendent, Contractor shall assign a full time project manager solely dedicated to the work of this project for the duration of the project.

1.7 SPECIAL PROJECT REQUIREMENTS

See Special Conditions Exhibit.

1.8 PROTECTION OF WORK

A. Protect the Work from theft, vandalism, and unauthorized entry. The Contractor shall have the sole responsibility for job site security.

1.9 PERMITS, LICENSES AND FEES

A. Permits, Licenses and Fees, General: Refer to Contract General Conditions.

B. Licenses: Contractor shall obtain and pay all licenses associated with construction activities, such as business licenses, contractors' licenses and vehicle and equipment licenses. All costs for licenses shall be included in the Contract Amount.

C. Parking Fees: Contractor shall obtain and pay for all parking permits and fees for vehicles parked off of the Construction Site. Refer to Section 01 55 00, Vehicular and Pedestrian Controls for additional parking requirements.

1.10 PARTNERING

A. The Trustees intend to encourage the foundation of a cohesive partnership with the Contractor and its Subcontractors, the Architect and its consultants, and the Trustees. This partnership will be structured to draw on the strengths of each organization to identify and achieve reciprocal goals. The objectives are effective and efficient Contractor performance, intended to achieve completion within budget, on schedule, and in accordance with the Contract Drawings and Specifications.

END OF SECTION

SECTION 01 14 00

WORK RESTRICTIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The following subjects are included in this section.

1. Submittals
2. Work Plans
3. Contractor's use of Premises
4. Contractor's Use of Project Area
5. Time Restrictions
6. Noise and Vibration Restrictions
7. University's use of Site and Premises

1.3 SUBMITTALS

A. Submit each Work Plan for review and approval a minimum of (21) calendar days prior to the start of construction in areas affecting University operations. Participate in review of proposed Work Plan with the Construction Manager, Architect and University. Within 3 calendar days after joint review, submit revised Work Plan.

B. Format/Submittal Requirements

1. Contractor's Work Plans shall be in the form of marked-up drawings, sketches and/or original drawings that clearly convey the nature and location of Contractor's planned activities. Drawings shall be supplemented by written descriptions of the work. Work Plans shall be submitted in written narrative form where without drawings where deemed adequate by the Construction Administrator to fully describe construction activities, impacts and protectionary measures.
2. Work Plans shall be submitted in accordance with the requirements of Section 01 33 00.

1.4 WORK PLANS

A. Contractor shall submit comprehensive written work plans for all activities affecting University operations, including but not limited to, the following:

1. Barricade and Fencing locations.
2. Haul routes.
3. Routing of vehicular and pedestrian traffic around specific construction area(s).
5. Disabled access routes.
6. Fire Department access to University buildings.
7. Vehicular traffic access to buildings.
8. Parking spaces impacted.
9. Construction site and contractor parking access.

11. Work within pedestrian thoroughfares and campus roads.
12. Work within the inner-Campus area.

B. The Work Plans shall be used to communicate Project impacts to the campus community.

C. Contractor shall cooperate with the University to minimize conflicts and facilitate University operations.

1. Off-hours and weekend work may be required for existing utility shutdowns and other work of major impact to the University. No additional costs shall be paid by the University due to this requirement.

1.5 CONTRACTOR'S USE OF PREMISES (Also refer to Contract General Conditions)

A. General

1 Contractor shall at all times conduct the work so as to impose no hardship on the Trustees or others engaged in the Trustees' work nor cause any unreasonable delay or hindrance thereto.
2. Construction activities will be scheduled to minimize disruption to the University and to Campus users.
3. The Contractor may not interrupt any Campus utilities without prior written permission from the Trustees. Requests for utility shutdowns shall be submitted a minimum of 7 calendar days in advance of the requested shutdown date in writing to the Construction Administrator.

B. Surrounding Site Condition Survey

1. Prior to commencing the work, the Contractor and the University Representative shall tour the Project Site together to examine and record damage to existing buildings, landscape, hardscape and other improvements, both on and adjacent to the project site. The contractor and the campus shall video record the condition of all areas where work is to take place. The video shall be turned over to the University prior to the Notice to Proceed along with Site Survey and Acceptance Form # 702.08.

2. The resulting record shall serve as a basis for determination of subsequent damage due to Contractor's operations and shall be signed parties involved in the tour. Any damage to existing improvements not noted in the original survey, but subsequently discovered, shall be reported to the University Representative immediately.

C. Protection of Existing Structures and Utilities (also refer to Contract General Conditions)
1. Contractor shall visit existing building(s) and grounds and thoroughly familiarize itself with existing conditions. Existing record drawings have been made available for Contractor review.
2. When cutting, removal or alteration of existing work is required to form connections with new work or otherwise to meet the requirements of the contract documents, perform such work so as not to damage the work that will remain in place. Refer to Sections 01 35 16 and 01 73 29 for cutting, patching and repair requirements.
3. Contractor shall provide all necessary materials, equipment and labor to adequately protect existing structures, floors, architectural finishes, utilities, landscape and hardscape that may be impacted by the work of this contract.

D. Allowable Work Schedule

1. Normal construction activities shall be performed Monday through Friday between the hours of 7:00 am and 6:00 pm, excluding holidays.
2. Shutdown of existing utilities or other activities which impact Campus operations shall be scheduled in advance with the University Representative in accordance with paragraph 1.4-A-3 above, and shall be scheduled during off-hours at the discretion of the University and at no additional cost to the University.
3. Contractor shall submit an "Off-hours Work Schedule Request Form" (attached) a minimum of 72 hours prior to any anticipated weekend or holiday work. A form must also be submitted for work outside of normal working hours. The form to be utilized is included at the end of this section.

E. Site Decorum

1. Contractor is to control the conduct of labor forces and prevent unwanted interaction initiated by workers with the University staff, students or other individuals other than those associated with the project.
2. In the event that any worker initiates unwanted interaction, utilizes profanity, or (in the opinion of the University Representative) conducts him/herself in an offensive or unprofessional manner, the Contractor shall immediately remove the worker from the project and replace said worker with another of equivalent technical skill at no additional cost to the University.
3. No smoking is allowed on the University Campus.
4. No radios, other than 2-way communication type, shall be allowed on the project site.
5. Contractor shall provide a ANSI Class II - Heavy Duty Safety Vest (Item#:SV59G-Green/SV59O-Orange) http://www.safetygearonline.com/safety-vest/custom-screen-printing/screen-printing-service and Hard Hat for every employee, every subcontractor, every sub-tier subcontractor, and subcontractor employee working on-site. Custom made Class II Safety Vest shall at a minimum indicate the Contractor and Project Name, on BOTH the back and front of the vest. Vests can be ordered: http://www.safetygearonline.com/. **Vests are not optional. Failure to comply with this requirement will result in a $1,000.00 credit to the University via credit change order.**

F. University Keys

1. Contractor shall provide a written request to the University for keys to existing facilities. In accordance with University policy, the Contractor shall be assessed a refundable deposit of $50 per change key and $100 for maintenance or building master keys issued for use in conjunction with the work. The deposit may be made in the form of cash, cashier’s check, company check or personal check. The Physical Plant Management Key Shop must receive deposits prior to issuance of keys. The CSUN Physical Plant Management Key Shop will refund the deposit upon completion of the project and receipt of the keys. If the Contractor fails to return a key, a lost key fine shall be charged for the actual cost of re-keying campus locks up to a maximum of $5,000 per building.
2. Site fences shall be locked with the University standard lock in order to allow the University 24 hour access for maintenance and inspection, or response to an emergency condition. Should Contractor wish to use a different lock, it shall be double-locked with the University standard lock at all times that the site is secured.

1.3 CONTRACTOR'S USE OF PROJECT AREA

A. Location of Work: The Work shall be accomplished within areas indicated on Drawings as Project Area or, if not indicated, to areas as directed by University's Representative. Use of other areas, including parking areas, shall be subject to approval by University's Representative. Refer to Section

01 55 29 - Construction Staging Areas and Section 01 55 00 - Vehicular and Pedestrian Controls for additional requirements.

1. Contractor shall not unreasonably encumber the site with materials or equipment.
2. Contractor shall assume full responsibility for protection and safekeeping of products stored on the premises.
3. Contractor shall move any stored products which interfere with operations of University or contractors performing work under separate contracts for University.
4. Temporary closures or restrictions of use of public thoroughfares, necessary to accomplish the Work, shall be made only as approved in advance by public safety and parking authorities having jurisdiction, as directed in writing by the University's Representative.

B. Unless otherwise specified or indicated on the Drawings, during the construction period the Contractor shall have full use of the designated Project Area for construction operations, including use of the site. Contractor's use of Project Area shall be limited only by University's right to perform construction operations with its own forces or to employ separate contractors on portions of the Project in accordance with the Contract General Conditions.

C. Continued Use of Existing Building: Maintain existing building in a weather tight condition throughout construction period. Repair damage caused by construction operations. Protect building and its occupants during construction period.

D. Cooperation with Others:

1. The Contractor shall at all times cooperate with, coordinate the Work with and provide access to the University, University Contractors, and buildings operating in the vicinity of the Project Site to the extent necessary for the Work and ongoing operations at the University may progress in an orderly manner. The Contractor shall implement measures to minimize disruption to ensure the Contractor’s actions and methods of operation will not result in interference with ongoing operations at the University. The Contractor shall have no claim against the University as a result of these other activities. If Contractor’s Work causes disruption to ongoing campus operations, Contractor shall work irregular hours and/or implement other measures, at the Contractor’s expense, to avoid any disruption to ongoing University operations.
2. The Contractor agrees and acknowledges that the Work of the Project is to be completed within an operating University, and that University operations and construction activities by others will be in progress at the Work Site during the course of this Contract.
3. The Contractor shall coordinate construction activities with the Construction Manager to minimize interference with all parties concerned.

E. Protection of Existing Improvements and Facilities: Contractor shall protect property adjacent to the Project Area and all existing improvements and facilities within the Project Area, including paving and landscaping indicated to remain.

1. All existing improvements and facilities, except those specifically indicated for removal or reconstruction shall be protected with temporary barriers, enclosures and passageways.
2. After completion of Work, existing improvements and facilities shall be restored to original condition and location. Project Area shall be cleaned and restored to presentable condition, equivalent to or better than the condition prior to start of Work.
3. Should existing improvements and facilities be damaged or soiled beyond renovation or repair, new products shall be provided by Contractor equivalent to existing products, as directed by University's Representative.

F. Project Area Access: Limit access to site to indicated routes and access points as identified. If routes and access points are not indicated, access shall be as approved and as directed by University's Representative. Do not restrict access to adjacent facilities and do not restrict access for those

performing work under separate contracts for University.

1. Access to and egress from Project Area shall be in strict conformance to prearranged routes approved by University's Representative, with the understanding that curtailment of construction traffic or revision of access routes may be required on short notice if University's operations mandate such changes because of excessive noise or problems of safety, service or supply.
2. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to service and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
    a. Schedule deliveries to minimize use of driveways and entrances.
    b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

G. Emergency Access: Provide pathways, drives, gates, directional signage and other provisions as required by authorities having jurisdiction for emergency access to Project Area and adjoining campus facilities.

H. Emergency Egress: Maintain all pathways, drives, gates, and other means of egress during construction as required by public safety authorities having jurisdiction.

1.4 TIME RESTRICTIONS

A. Contractor's Work Hours: Work shall be limited to Monday through Friday, except University-observed holidays and periods when classes are not in session, during hours of 7:00am to 6:00pm.
1. Work on other days and at other hours shall be only with written approval of University's Representative.
2. Work during final exam periods at ends of class sessions shall be restricted to minimize noise, vibrations and other distracting and inhibiting activities.
3. If it becomes necessary to perform Work on weekends and holidays, in order to meet milestone and final completion dates, Work shall be performed at no change in Contract Amount unless authorized by written Change Order or Field Instruction by the Construction Administrator.

B. Utility Outages and Shutdown: Schedule utility outages and shutdowns to nights, weekends, school holidays or times and dates acceptable to and approved by University's Representative. Limit shutdown of utility services during normal business hours to [_____] hours at a time.
1. Time and duration of outages and shutdowns shall not hinder normal campus activities except as authorized in writing by University's Representative.
2. Provide seven (7) calendar days' notice in writing to University's Representative of all utility outages and shutdowns. Describe Work to be performed, which utilities will be interrupted and time and duration of interruption.
3. Contractor shall provide temporary utilities to occupied facilities and adjacent properties when utilities must be interrupted for more than two hours, unless otherwise directed by University's Representative.
4. Power interruptions beyond the authorized time shall be subject to liquidated damages in the amount of $5,000 per day. [*Campus should modify this section as appropriate*]
5. Refer also to requirements for temporary utilities specified in Section 01 51 00, Temporary Utilities.

1.5 NOISE AND VIBRATION RESTRICTIONS

A. Noise Restrictions: Minimize noise from construction activities. Limit loud construction activities to times when classes are not in session in adjacent [facilities] [spaces].

B. Vibration Restrictions: Do not perform activities that cause vibrations in adjacent occupied spaces, including spaces above and below location where Work is performed. If vibrations transmit through structure, perform Work at times when University activities are not being conducted.

1.6 UNIVERSITY'S USE OF SITE AND PREMISES

A. University's Use of Site and Premises: University reserves the right to occupy and to place and install equipment in completed or partially completed areas of buildings and site. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.

1. Full University Occupancy: University will occupy site and existing buildings during entire construction period. Cooperate with University during construction operations to minimize conflicts and facilitate University usage. Perform the Work so as not to interfere with University's operations.
2. Partial University Occupancy: University reserves the right to occupy and to place and install equipment in completed areas of building provided such occupancy does not interfere with completion of the Work. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work.
3. Before University occupancy, mechanical, electrical, and fire safety systems shall be fully operational, and required tests and inspections shall be successfully completed. Any occupancy of a building is contingent upon a certificate of temporary or final occupancy provided by the State Fire Marshal. Unless otherwise agreed, University will provide operation and maintenance of mechanical and electrical systems in portions of the building used by University. Unless otherwise agreed in writing by the University, warrantee periods shall not begin until date established by Notice of Completion filed at Contract closeout.
4. Upon occupancy, University will assume responsibility for maintenance and custodial service for occupied portions of building.

PART 2 - PRODUCTS

Not Applicable to this Section

PART 3 - EXECUTION

Not Applicable to this Section

END OF SECTION

SECTION 01 25 00

SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of Contract, including Contract General Conditions and Supplementary General Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. General requirements applicable to substitutions of materials, products, equipment and systems.

1.3 DEFINITIONS

A. Substitutions: Changes in products, materials, equipment, and methods of construction required by Contract Documents proposed by Contractor after award of Contract are considered to be requests for substitutions. Following are not considered to be requests for substitutions:

1. Substitutions requested during bidding period, and accepted by Addendum prior to award of Contract, are included in Contract Documents and are not subject to requirements specified in this Section for Substitutions.
2. Revisions to Contract Documents requested by University Representative or Architect.
3. Specified options of products and construction methods included in Contract Documents.
4. Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.

1.4 SUBSTITUTION OF MATERIALS AND EQUIPMENT

A. Substitutions, General: Catalog numbers and specific brands or trade names are used in materials, products, equipment and systems required by the Specifications to establish the standards of quality, utility and appearance required. Alternative products which are of equal quality and of required characteristics for the purpose intended may be proposed for use provided the Contractor complies with provisions of Supplementary General Conditions and Contract General Conditions, subject to the following provisions.

1. See Section 01 60 00 - Basic Product Requirements for requirements regarding product options.
2. Substitutions will only be authorized by properly executed Change Order or Field Instruction.
3. Product and Material Substitution period ended 10 days prior to bid. The University has no obligation to entertain substitutions**.** ***[Can be modified per campus discretion]***

1.5 SUBMITTALS

A. Requests for substitutions will not be considered before selection of Contractor. Substitutions will not be considered when:

1. Indicated on shop drawings or product data submittals without separate formal "Substitution Request by the Contractor.
2. Requested directly by subcontractor or supplier.
3. Acceptance will require revision of Contract Documents.
4. Proposed changes are not in compliance with general intent of Contract Documents.

B. Requests for substitutions will be considered only as allowed in the Supplementary General Conditions and Contract General Conditions. Other requests will be considered after Notice to Proceed only when:

1. Specified product or method of construction cannot be provided within Contract Time. Architect or University Representative will not consider request if product or method cannot be provided as result of failure to pursue Work promptly or coordinate activities properly.
2. Subsequent information or changes indicate specified product will not perform as intended.
3. Requested substitution offers University substantial advantage, in cost, time, energy conservation, or other considerations, after deducting additional responsibilities University must assume. University's additional responsibilities include compensation to Architect for redesign and evaluation services, compensation to University Representative for additional processing and evaluation services, increased cost of other construction by University, and similar considerations.
    a. University Representative and Architect's time shall be compensated as specified for compensation of time in paragraph 01 25 00-H-3-a.
4. Specified product or method of construction cannot receive necessary approval by governing authority, and requested substitution can be approved.
5. Specified product or method of construction cannot be provided in manner that is compatible with other materials and where Contractor certifies that substitution will overcome incompatibility.
6. Specified product or method of construction cannot be coordinated with other materials and where Contractor certifies that proposed substitution can be coordinated.
7. Specified product or method of construction cannot provide warranty required by Contract Documents and where Contractor certifies that proposed substitution provides required warranty.

C. Do not order or install substitute products without written acceptance from the University.

D. Only 1 request for substitution for each product will be considered. When substitution is not accepted, provide specified product.

E. Architect will determine acceptability of substitutions.

F. Submit 2 copies of each request to Architect through University Representative on Substitution Request Form at end of Section. Submit separate form for each substitution.

1. Identify products by Specification Section and Article numbers.
2. Provide manufacturer's name and address, trade name of products, and model or catalog number.
3. List fabricators and suppliers as appropriate.
4. Document each request with complete data substantiating compliance of proposed substitution with requirements of Contract Documents including independent laboratory testing reports, approval numbers, listings, and approved assembly descriptions as requested by Campus Construction Manager or Architect, or as required by agencies having jurisdiction.
5. Attach product data as specified in Section 01 33 00.

6. Give itemized comparison of proposed substitution with specified product, listing variation, and reference to Specification Section and Article numbers.
7. Give quality and performance comparison between proposed substitution and specified product.
8. Submit written certification from manufacturer that proposed substitution is appropriate for this application.
9. List availability of maintenance services and replacement materials.
10. State effect of substitution on construction schedule, and changes required in other Work or products.

G. By making requests for substitutions, Contractor:

1. Represents that Contractor has personally investigated proposed substitute product and determined that it is equal to or superior in all respects to that specified.
2. Represents that Contractor will provide same warranty for substitution that Contractor would for the specified product.
3. Will coordinate installation of accepted substitute, making such changes as may be required for Work to be compatible with substrates and adjacent materials, and complete in all respects.
4. Waives claims for additional time related to substitution that may later become apparent.
5. Certifies that cost data presented is complete and includes related costs under this Contract, including redesign costs, and waives claims for additional costs related to substitution which may later become apparent.

H. Modification of Documents: Where substitution requires changes to design of Work as indicated on accepted Shop Drawings for proper installation; furnish drawings and specifications prepared by and bearing seal of licensed Architect and Architects as appropriate, revising Shop Drawings.

1. Submit revised Documents for acceptance in accordance with Section 01 33 00.
2. Revised Drawings shall be sufficiently complete for proper installation of substitution and related Work.
    a. Include details of connection to and relationship with adjacent materials.
3. If, in Architect’s sole judgment, proposed substitution is of such significance or deals with product or system affecting basic design or aesthetics, pay Architect for changes required to Contract Documents as follows:
    a. Reimburse Owner for Architect's account for time spent in changing Contract Documents at rate of 3.2 times rate of Direct Personnel Expense (DPE). Direct Personnel Expense is defined as direct salaries of Architect's personnel engaged on Project and portion of costs of mandatory, and customary contributions and benefits related thereto, including employment taxes and other statutory employee benefits, insurance, sick leave, holidays, vacations, pensions, and similar contributions and benefits.
4. Contractor is responsible for cost of revised Documents, obtaining and paying for review and plan check by authorities having jurisdiction, and cost of revised construction.
5. Submit revised drawings with Record Documents in accordance with Section 01 78 39.

1.6 SUBMITTAL PROCEDURES

A. Architect's and University Representative’s Action: If necessary, Architect through University Representative will request additional information or documentation for evaluation within 1 week of receipt of request for substitution. Architect will notify Contractor of acceptance or rejection of substitution within 2 weeks of receipt of request, or 1 week of receipt of additional information or

documentation, whichever is later. Acceptance will be in form of Change Order, should a change in Contract cost or time be associated with the substitution.

1. Architect or University Representative will not make exhaustive attempt to determine products proposed for substitution are equivalent to, or can be modified in order to be equivalent to specified products.
   a. Where extensive investigation is required by University Representative or Architect, as determined by University Representative or Architect, Contractor shall reimburse University for University Representative's or Architect's account for time spent in processing additional resubmittals at rate of 3.2 times rate of Direct Personnel Expense (DPE). Direct Personnel Expense is defined as direct salaries of Architect's or University Representative's personnel engaged on Project and portion of costs of mandatory, and customary contributions and benefits related thereto, including employment taxes and other statutory employee benefits, insurance, sick leave, holidays, vacations, pensions, and similar contributions and benefits.
2. Use product specified if Architect and University Representative couldn't make decision on use of proposed substitute within time allocated.
3. If accepted by Architect and University Representative, products proposed for substitution are accepted subject to modifications by manufacturer, if necessary, to meet detailed requirements of Drawings and Specifications.

B. For Accepted Products: Submit shop drawings, product data, and samples in accordance with Section 01 33 00.

C. Contractor's submittal, and Architect's and University Representative's acceptance of Shop Drawings, Product Data, or Samples for construction activities not complying with Contract Documents do not constitute acceptable or valid request for substitution, nor do they constitute approval.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used

END OF SECTION

SECTION 01 26 13
REQUESTS FOR INTERPRETATION (RFI)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division l Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. Procedures for submitting requests for interpretation (RFI).

B. Limitations on use of RFI to obtain interpretation and clarification.

1.3 RELATED SECTIONS (NOT USED)

1.4 DEFINITIONS

A. Request for Interpretation: A document submitted by the Contractor requesting clarification of a portion of the Contract Documents, hereinafter referred to as an RFI.

1.5 CONTRACTOR'S REQUESTS FOR INTERPRETATION (RFIs)

A. Contractor's Requests for Interpretation (RFIs): Should Contractor be unable to determine from the Contract Documents the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of Work is described differently at more than one place in the Contract Documents; the Contractor shall request that the Architect make an interpretation of the requirements of the Contract Documents to resolve such matters. Contractor shall comply with procedures specified herein to make Requests for Interpretation (RFIs).

B. Submission of RFIs: RFIs shall be prepared and submitted electronically on a form provided by the Contractor and approved by the University Representative.

1. Forms shall be completely filled in and submitted via an Electronic Project Management (EPM) System agreed upon by the University Representative.

2. Each RFI shall be given a discrete, consecutive number.

3. Each page of the RFI and each attachment to the RFI shall bear the University's project name, project number, date, RFI number and a descriptive title.

4. Contractor shall sign all RFIs attesting to good faith effort to determine from the Contract Documents the information requested for interpretation. Electronic signatures are acceptable and subject to authentication. Frivolous RFIs shall be subject to reimbursement from Contractor to University for fees charged by Architect, Architect's consultants and other design professionals engaged by the University.

C. Subcontractor-Initiated and Supplier-Initiated RFIs: RFIs from subcontractors and material suppliers shall be submitted through, be reviewed by and be attached to an RFI prepared, signed and submitted by Contractor. RFIs submitted directly by subcontractors or material suppliers will be returned unanswered to the Contractor.

1. Contractor shall review all subcontractor- and supplier-initiated RFIs and take actions to resolve issues of coordination, sequencing and layout of the Work.

2. RFIs submitted to request clarification of issues related to means, methods, techniques and sequences of construction or for establishing trade jurisdictions and scopes of subcontracts will be returned without interpretation. Such issues are solely the Contractor's responsibility.

3. Contractor shall be responsible for delays resulting from the necessity to resubmit an RFI due to insufficient or incorrect information presented in the RFI.

D. Requested Information: Contractor shall carefully study the Contract Documents, in particular, the Contract General Conditions, to ensure that information sufficient for interpretation of requirements of the Contract Documents is not included. RFIs that request interpretation of requirements clearly indicated in the Contract Documents will be returned without interpretation.

1. In all cases in which RFIs are issued to request clarification of issues related to means, methods, techniques and sequences of construction, for example, pipe and duct routing, clearances, specific locations of Work shown diagrammatically, apparent interferences and similar items, the Contractor shall furnish all information required for the Architect or University's Representative to analyze and/or understand the circumstances causing the RFI and prepare a clarification or direction as to how the Contractor shall proceed.

2. If information included with this type RFI by the Contractor is insufficient, the RFI will be returned unanswered.

E. Unacceptable Uses for RFIs: RFIs shall not be used to request the following:

1. Approval of submittals

2. Approval of substitutions

3. Changes that entail change in Contract Time and Contract Sum (comply with provisions of the Contract General Conditions)

4. Different methods of performing Work than those indicated in the Contract Drawings and Specifications (comply with provisions of the Contract General Conditions).

F. Disputed Requirements: In the event the Contractor believes that a clarification by the University's Representative results in additional cost or time, Contractor shall comply with the Contract General Conditions.

G. RFI Log: Contractor shall prepare and maintain a log of RFIs, and at any time requested by the University's Representative, the Contractor shall furnish copies of the log showing all outstanding RFIs.

H. Review Time: Architect will return RFIs to Contractor and University's Representative within seven calendar days of receipt. RFIs received after 5:00 pm shall be considered received on the next regular working day for the purpose of establishing the start of the seven-calendar day response period.

PART 2 - PRODUCTS

Not Applicable to this Section.

PART 3 - EXECUTION

Not Applicable to this Section.

END OF SECTION

SECTION 01 35 23

OWNER SAFETY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. Procedures for health and safety protection and requirements for reporting accidents.

1.3 SUBMITTALS

A. Accident Reporting: A copy of each accident report, which the Contractor or subcontractors submit to their insurance carriers, shall be forwarded to the University's Representative as soon as possible, but in no event later than seven (7) calendar days after the day the accident occurred.

B. Contractor shall submit a copy of its Injury and Illness Prevention Plan (IIPP) adhering to all requirements of Title 8-Cal-OSHA prior to start of construction.

C. Contractor will not be given a Notice-to-Proceed without approval of a complete IIPP to the University's EH&S Department.

D. The Contractor's IIPP shall describe the policies it uses to provide a safe and healthy workplace for employees. The IIPP submittal shall include but is not limited to the following required information (per Title 8, CCR 3203):

1. Identification of the person responsible (by name) for implementing the plan.
2. Describe the system used for insuring employee compliance with the plan.
3. Describe the system used for communication health and safety information to employees.
4. Describe the procedure used for correction of unsafe conditions.
5. Describe the procedure used for investigating injuries and illnesses.
6. Describe the procedure used for identifying and evaluating workplace hazards including:
    a. Establishing IIPP program on site
    b. Inspection of the worksite.
    c. Evaluation of new substances, processes, or equipment
    d. Awareness of new or previously unrecognized hazards
7. Describe how safety and health regulations and standards shall be met.
8. Describe type of protective equipment and work procedures to be used.
9. Describe emergency procedures for accidental spills or exposures.
10. Describe methods for hazard detection and air sampling of confined spaces
11. Describe procedures used to safely enter confined spaces

1.4 FACILITIES AND EQUIPMENT

A. Special facilities, devices, equipment, clothing, and similar items used by the Contractor in the execution of the Work shall comply with the applicable regulations.

1.5 HAZARDOUS MATERIALS

A. The Contractor shall bring to the attention of the University, any material suspected of being hazardous which he encounters during execution of the Work. The University shall perform tests to determine if the material is hazardous. If the material is found hazardous and additional protective measures are needed, a Contract Change Order may be required, subject to the requirements of the General Conditions.

1.6 SMOKING POLICY

A. California State University, Northridge is a Tobacco and Smoke-free Campus. Smoking and use of Tobacco and/or electronic cigarettes is prohibited within the campus, buildings, grounds, site, and parking lots.

B. Definition: Smoking means inhaling, exhaling, burning and carrying a lighted cigarette, cigar, pipe, or other smoking apparatus.

C. The University regulations are intended to mitigate exposure to secondhand smoke.

1. Smoking is prohibited in all University buildings (including facilities under construction) and leased space (including space within buildings shared with others). This prohibition shall apply to any area enclosed by the perimeter (outermost) walls of the building, including restrooms, warehouse and storage space. Atriums, balconies, stairwells, and other similar building features are to be considered "within a building."
2. Smoking is prohibited in state/university-owned vehicles. This prohibition includes passenger vehicles and all other state-owned mobile equipment, including light and heavy-duty trucks, cargo and passenger vans, buses, and any other mobile equipment with an enclosed or enclosable driver/passenger compartment.
3. Smoking is prohibited within 25 feet of doorways/buildings.
4. Smoking is prohibited on major walkways throughout campus.
5. Specific outside areas for smoking will not be established or identified.
6. The Contractor will clearly display signs at the entrances/exits and other appropriate locations throughout the construction site to notify workers and the public that smoking is prohibited within the building.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 STOP WORK ORDERS

A. When the Contractor or its subcontractors are notified by the University's Representative of an incident of noncompliance with the provisions of the Contract, and the action(s) to be taken, the Contractor shall

immediately, if so directed, or within 48 hours after receipt of a notice of violation, correct the unsafe or unhealthy condition.

B. If the Contractor fails to comply promptly, all or any part of the work performed may be stopped by with a "Stop Work Order." When, in the opinion of the University's Representative, satisfactory corrective action has been taken to correct the unsafe and unhealthy condition, a start order will be given immediately.

C. The Contractor shall not be allowed any extension of time or compensation for damages by reason of or in connection with such work stoppage.

3.2 PROTECTION

A. Contractor shall take all necessary precautions to prevent injury to the public, building occupants, or damage to property of others. For the purposes of the Contract, the public or building occupants shall include all persons not employed by the Contractor or a subcontractor working under the Contractor's direction.

B. Work shall not be performed in any area occupied by the public or Owner's employees unless specifically permitted by the Contract or the Owner and unless adequate steps are taken for the protection of the public and the Owner's employees.

C. Whenever practicable, the work area shall be fenced, barricaded, or otherwise blocked off from the public or building occupants to prevent unauthorized entry into the work area.

D. Alternate Precautions: When the nature of the Work prevents isolation of the work area, and the public or building occupants may be in or pass through, under or over the work area, alternate precautions such as the posting of signs, the use of signal persons, the erection of barricades or similar protection around particularly hazardous operations shall be used as appropriate.

E. Public Thoroughfare: When Work is to be performed over a public thoroughfare such as a sidewalk, lobby, or corridor, the thoroughfare shall be closed, if possible, or other precautions taken such as the installation of screens or barricades. When the exposure to heavy falling objects exists, as during the erection of building walls or during demolition, special protection of the type detailed in 29 CFR 1910/1926 shall be provided.

F. Fences and barricades shall be removed upon completion of the project to the satisfaction of the University.

G. Storing, positioning or use of equipment, tools, materials, scraps, and trash in a manner likely to present a hazard to the public or building occupants by its accidental shifting, ignition, or other hazardous qualities is prohibited.

END OF SECTION

SECTION 01 35 53

SECURITY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. Contractor Security requirements.

1.3 SECURITY (Also refer to Contract General Conditions)

A. Protect the Work from theft, vandalism and unauthorized entry. Contractor shall have sole responsibility for job site security.

B. Maintain security throughout construction until the University's occupancy or acceptance.

C. Provide keying different from permanent keying of locks and include organized, locked and supervised storage for receiving and dispensing items of finish hardware throughout the construction.

D. Provide the Project Inspector with keys necessary to gain access to locked areas of the Work. The Project Inspector will be responsible for such keys and will return them to the Contractor upon acceptance of the project or area as complete.

1.4 ENTRY CONTROL

A. Restrict entrance of persons and vehicles into project site.

B. Allow building entrance only to authorized persons with proper identification.

1.5 PERMANENT KEYS

A. Immediately upon receipt of permanent keys for whatever purpose (finish hardware, mechanical equipment, casework, dispensers, lockers, switches, equipment items, etc.), tag or otherwise clearly identify keys according to one approved system and turn them over to the University prior to any opportunity of access to keys by parties other than the University.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 45 00

QUALITY CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. Definitions

B. Responsibilities

C. Inspections

D. Submittals

E. Regulatory requirements for testing and inspection.

F. Contractor's quality control.

G. Quality of the Work.

H. Inspections and tests by authorities having jurisdiction.

I. Inspections and tests by serving utilities.

J. Inspections and tests by manufacturer's representatives.

1.3 RELATED SECTIONS

A. Section 01 45 29 - Testing Laboratory Services: Selection of independent testing and inspection laboratory; tests and inspections conducted by testing laboratory.

B. Technical Drawings - Product Requirements: Product options, substitutions, transportation and handling requirements, storage and protection requirements, and system completeness requirements.

1.4 DEFINITIONS

A. Quality control services include inspections, tests, and related actions, including reports performed by Contractor, by independent agencies, and by governing authorities. They do not include contract enforcement activities performed by University Representative or Architect.

B. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with Contract Document requirements.

1. Specific quality control requirements for individual activities are specified in Sections relative to those activities.

2. Specified inspections, tests, and related actions do not limit Contractor's quality control procedures that facilitate compliance with Contract Document Requirements.

3. Requirements for Contractor to provide quality control services required by University Representative, Architect, or authorities having jurisdiction are not limited by provisions of this Section.

0.5 RESPONSIBILITIES

A. General: Comply with requirements of Contract General Conditions.

B. Unless otherwise indicated as the responsibility of another identified entity, Trustees will employ and pay for services of independent testing laboratory to perform inspections, tests, and other quality control services specified elsewhere in Contract Documents and required by authorities having jurisdiction.

0. Where individual Sections specifically indicate that certain inspections, tests, and other quality control services are Contractor's responsibility, Contractor shall employ and pay qualified independent testing agency to perform quality control services. Costs for these services are included in Contract Sum.

a. Where Trustees have engaged testing agency for testing and inspecting part of Work, and Contractor is also required to engage entity for same or related element, Contractor shall not employ entity engaged by Trustees, unless agreed to in writing by Trustees.

C. Retesting: Contractor is responsible for retesting where results of inspections, tests, or other quality control services prove unsatisfactory and indicate noncompliance with Contract Document requirements, regardless of whether original test was Contractor's responsibility.

0. Cost of retesting Work, revised or replaced by Contractor, is Contractor's responsibility where required tests performed on original Work indicated noncompliance with Contract Document requirements.

D. Associated Services: Cooperate with agencies performing required inspections, tests, and similar services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include, but are not limited to, the following:

0. Provide access to Work.

1. Furnish incidental labor and facilities necessary to facilitate inspections and tests.

2. Assist Trustees as requested in taking quantities of representative samples of materials that require testing or assist testing agency in taking samples.

3. Provide facilities for storage and curing of test samples.

4. Provide security and protection of samples and test equipment at Project Site.

E. Duties of Testing Agency: Independent agency engaged to perform inspections, sampling, and testing of materials and construction specified in individual Sections shall cooperate with University Representative, Architect, and Contractor in performance of agency's duties. Testing agency shall provide qualified personnel to perform required inspections and tests.

1. Agency shall notify University Representative, Architect, and Contractor promptly of irregularities or deficiencies observed in Work during performance of its services.

2. Agency is not authorized to release, revoke, modify, alter, interpret, or expand requirements of Contract Documents or approve or accept any portion of Work.

3. Agency shall not perform any duties of Contractor.

1.6 INSPECTIONS

A. General: All construction work shall be subject to inspection by the Trustees (hereinafter referred to as Owner) and the Architect, and all such construction or work shall remain accessible and exposed for inspection purposes until approved by the Owner.

1. The Owner will provide project personnel, including inspectors, to be available at the project site.

2. Approval as a result of an inspection shall not be construed to be an approval of any violation of the provisions of the building code or of other ordinances of the California State Building Code or other regulations of Agencies having jurisdiction over this project, including plans and specifications. Inspections presuming to give authority to violate or cancel the provisions of code or contract documents shall not be valid.

3. It shall be the duty of the contractor to cause the work to remain accessible and exposed for inspection purposes. Neither the Inspector, Trustees, nor Architect shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

B. Inspection Requests: It shall be the duty of Contractor to notify the Inspector that specific work is ready for inspection. The Owner requires that every request for inspection be filed at least two working days (48 hours) before such inspection is desired. Such requests shall be submitted in writing, using the inspection request form included at the end of this section.

C. Approval Required: Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the Inspector. The Inspector, upon notification, shall make the requested inspections and shall either indicate in writing that a specific portion of the construction is satisfactory as completed, or shall notify the Contractor that same fails to comply with plans and specifications. Any portions which do not comply shall be corrected by the Contractor prior to the end of the workday, or a Deficiency Notice will be issued by the Inspector placing the Contractor on notice that the work does not conform to the requirements of the Contract Documents. Such portion of Work shall not be covered or concealed until authorized by the Inspector.

1. There shall be a final inspection and approval of all buildings and structures when completed and ready for occupancy and use.

D. Inspection Coordination: Contractor shall provide, on a weekly basis, an anticipated Inspection Requirements Schedule, coordinated with the three-week look ahead schedule. The Inspection Requirements Schedule shall show the anticipated inspection needs for the following three weeks to facilitate appropriate campus coordination, as well as mobilization of required inspection staffing.

E. Required Inspections: Reinforcing steel, structural framework or interior wall and/or ceiling support framing of any part of any building or structure shall not be covered or concealed without first obtaining the approval of the Inspector.

1. Listed below are the minimum inspection requirements:

a. Foundation Inspection: To be made after excavations for footings are completed and all reinforcing steel is in place. For concrete foundations, all required forms shall be in place prior to inspection. All materials for foundation shall be on the project site, with the exception of ready-mixed concrete prepared at an off-site batch plant in accordance with the Project Specifications.

b. Concrete Slab or Under-floor Inspection: To be made after all in-slab or under-floor building service equipment, conduit, piping, accessories, and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed (including subfloor).

c. Frame Inspection: To be made after all framing, fire blocking and bracing are in place and all pipes and vents are complete and the rough electrical, plumbing and heating wires, pipes and ducts are approved.

d. Mechanical and Electrical Rough-In Inspection: To be made after all mechanical and electrical rough-in work is completed.

e. Lath or Gypsum Board Inspection: To be made after all lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or before gypsum board joints and fasteners are taped and finished.

f. Final Inspection: To be made when the building is completed and ready for occupancy.

g. Other Inspections: In addition to the inspections specified above, the inspector may make or require other inspections of any construction work to ascertain compliance with the provisions of the plans and specifications.

h. Reinspections: A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete, or when corrections called for are not made.

i. *[ARCHITECT/CAMPUS TO REVISE/ADD TO LIST AS REQUIRED BY PROJECT TECHNICAL DETAILS]*

2. The Contractor is responsible for reviewing all of the Contract Documents for any additional inspection requirements.

0.7 SUBMITTALS

A. Reports:

1. Where Trustees are responsible for service, independent testing agency shall submit certified reports electronically (or in writing if necessary), of each inspection, test, or similar service to University Representative and Architect.

2. If Contractor is responsible for service, independent testing agency shall submit certified report electronically (or in writing if necessary) of each inspection, test, or similar service through Contractor for distribution as noted above.

3. Submit additional copies of each written report directly to governing authority when authority so directs.

B. Report Data: Provide reports electronically of each inspection, test, or similar service including, but not limited to the following:

1. Date of issue.

2. Project title and number.

3. Name, address, and telephone number of testing agency.

4. Dates and locations of samples and tests or inspections.

5. Names of individuals making inspection or test.

6. Designation of Work and test method.

7. Identification of Specification Section.

8. Complete inspection or test data.

9. Test results and interpretation of test results.

10. Ambient conditions at time of sample taking and testing.

11. Comments or professional opinion on whether inspected or tested Work complies with Contract Document requirements.

12. Name and signature of laboratory inspector.

13. Recommendations on retesting.

1.8 REGULATORY REQUIREMENTS FOR TESTING AND INSPECTION

A. Building Code Requirements: Comply with requirements for testing and inspections in the California Building Code (CBC), as interpreted by authorities having jurisdiction. Additional requirements for testing and inspection, as adopted by authorities having jurisdiction, shall be included in the Contract Sum and Contract Time.

B. Requirements of Fire Regulations: Comply with testing and inspection requirements of the Fire Marshal having jurisdiction. All tests and inspections shall be included in Contract Sum and Contract Time.

1.9 CONTRACTOR'S QUALITY CONTROL

A. Contractor's Quality Control: Contractor shall ensure that products, services, workmanship and site conditions comply with requirements of the Drawings and Specifications by coordinating, supervising, testing and inspecting the Work and by utilizing only suitably qualified personnel.

B. Quality Requirements: Work shall be accomplished in accordance with quality requirements of the Drawings and Specifications, including, by reference, all Codes, laws, rules, regulations and standards. When no quality basis is prescribed, the quality shall be in accordance with the best accepted practices of the construction industry for the locale of the Project, for projects of this type.

C. Quality Control Personnel: Contractor shall employ and assign knowledgeable and skilled personnel as necessary to perform quality control functions to ensure that the Work is provided as required.

D. Coordination of Field Quality Control: Contractor shall coordinate and schedule field quality control activities of University's independent testing and inspection agency and inspectors from authorities having jurisdiction.

1.10 QUALITY OF THE WORK

A. Quality of Products: Unless otherwise indicated or specified, all products shall be new, free of defects and fit for the intended use.

B. Quality of Installation: All Work shall be produced plumb, level, square and true, or true to indicated angle, and with proper alignment and relationship between the various elements.

C. Protection of Existing and Completed Work: Take all measures necessary to preserve and protect existing and completed Work free from damage, deterioration, soiling and staining, until Acceptance by the University.

D. Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Unless more stringent requirements are indicated or specified, comply with manufacturer's instructions and recommendations, reference standards and building code research report requirements in preparing, fabricating, erecting, installing, applying, connecting and finishing Work.

E. Deviations from Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Document and explain all deviations from reference standards and building code research report requirements and manufacturer's product installation instructions and recommendations, including acknowledgement by the manufacturer that such deviations are acceptable and appropriate for the Project.

F. Verification of Quality: Work shall be subject to verification of quality by University or Architect in accordance with provisions of the Contract General Conditions.

1. Contractor shall cooperate by making Work available for inspections and observations by University's Representative, Architect and their consultants.

2. Such verification may include mill, plant, shop, or field inspection, as required.

3. Provide access to all parts of the Work, including plants where materials or equipment are manufactured or fabricated.

4. Provide all information and assistance as necessary, including that from subcontractors, fabricators, materials suppliers and manufacturers, for verification of quality by University's Representative or Architect.

5. Contract modifications, if any, resulting from such verification activities shall be governed by applicable provisions in the Contract General Conditions.

G. Observations by Architect and Architect's Consultants: Periodic and occasional observations of Work in progress will be made by Architect and Architect's consultants as deemed necessary to review progress of Work and general conformance with the design intent.

H. Limitations on Inspection, Test and Observations: Employment of an independent testing and inspection agency and observations by Architect and Architect's consultants shall not relieve Contractor of the obligation to perform Work in full conformance to all requirements of Contract Documents and applicable Building Code and other regulatory requirements.

I. Rejection of Work: The University reserves the right to reject any and all Work not in conformance to the requirements of the Contract Documents.

J. Correction of Non-Conforming Work: Non-conforming Work shall be modified, replaced, repaired or redone by the Contractor at no change in Contract Sum or Contract Time.

K. Acceptance of Non-Conforming Work: Acceptance of non-conforming Work, without specific written acknowledgement and approval of the University's Representative, shall not relieve the Contractor of the obligation to correct such Work.

L. Contract Adjustment for Non-conforming Work: Should University's Representative determine that it is not feasible or not in University's interest to require non-conforming Work to be repaired or replaced, an equitable reduction in Contract Sum shall be made by agreement between University's Representative and Contractor. If an equitable amount cannot be agreed upon, a Field Instruction will be issued and the amount in dispute resolved in accordance with applicable provisions of the Contract General Conditions.

M. Non-Responsibility for Non-Conforming Work: Architect and Architect's consultants disclaim any and all responsibility for Work produced that is not in conformance with the Contract Drawings and Contract Specifications.

1.11 INSPECTIONS AND TESTS BY AUTHORITIES HAVING JURISDICTION

A. Inspections and Tests by Authorities Having Jurisdiction: Contractor shall cause all tests and inspections required by authorities having jurisdiction to be made for Work under this Contract.

1. Except as specifically noted, scheduling, coordinating and conducting such inspections and tests shall be solely the Contractor's responsibility.

2. All time required for inspections and tests by authorities having jurisdiction shall be included in the Contract Time.

3. Costs for inspections and tests by authorities having jurisdiction will be paid by University.

1.12 INSPECTIONS AND TESTS BY SERVING UTILITIES

A. Inspections and Tests by Serving Utilities: Contractor shall cause all tests and inspections required by serving utilities to be made for Work under the Contract.

1. Except as specifically noted, scheduling, coordinating and conducting such inspections and tests shall be solely the Contractor's responsibility. All time required for inspections and tests by serving utilities shall be included in the Contract Time.

2. Except as specifically noted, all costs for inspections and tests by serving utilities shall be included in the Contract Sum.

1.13 INSPECTIONS AND TESTS BY MANUFACTURER'S REPRESENTATIVES

A. Inspections and Tests by Manufacturer's Representatives: Contractor shall cause all specified tests and inspections to be conducted by materials or systems manufacturers. Additionally, all tests and inspections required by materials or systems manufacturers as conditions of warranty or certification of Work shall be made, the cost of which shall be included in the Contract Sum.

1. Scheduling, coordinating and conducting such inspections and tests shall be solely the Contractor's responsibility. All time required for inspections and tests by manufacturer's representatives shall be included in the Contract Time.

2. All costs for inspections and tests by manufacturer's representatives shall be included in the Contract Sum.

1.14 INSPECTIONS BY INDEPENDENT TESTING AND INSPECTION AGENCY

A. Inspections by independent Testing Laboratory: Refer to Section 01 45 29 - Testing Laboratory Services.

PART 2 - PRODUCTS

Not applicable to this Section.

PART 3 - EXECUTION

Not applicable to this Section.

END OF SECTION

SECTION 01 52 00

CONSTRUCTION FACILITIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. This Section specifies requirements for temporary facilities, including temporary construction fencing, security and protection.

B. Temporary construction and support facilities that are required include but are not limited to:
1. Storage sheds
2. Temporary enclosures
3. Waste disposal services
4. Construction aids and miscellaneous services and facilities.

C. Security and protection facilities that are required include but are not limited to:
1. Barricades, warning signs, lights
2. Site security for theft.

1.3 ACTION SUBMITTALS

A. Layout of Field Offices and Sheds: Within five working days of the Notice-to-Proceed, Contractor shall submit to University's Representative a proposed layout for any proposed field offices, sheds and storage areas. University's Representative will review and respond within five working days with comments and directions. Contractor shall comply with directions of University's Representative.

B. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

1.4 QUALITY ASSURANCE

A. Regulations: Comply with industry standards and applicable laws and regulations of the authorities having jurisdiction, including but not limited to:

1. Cal OSHA
2. Building Code requirements
3. Health and safety regulations
4. Utility company regulations
5. Police, Fire Department and Rescue Squad rules

6. Environmental protection regulations.

B. Standards: Comply with NFPA Code 241, "Building Construction and Demolition Operations", ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition", and NECA Electrical Design Library, "Temporary Electrical Facilities".

1. Refer to "Guidelines for Bid Conditions for Temporary Job Utilities and Services", prepared jointly by AGC and ASC, for industry recommendations.
2. Electrical Service: Comply with NEMA, NECA and UL standards and regulations for temporary electric service. Install service in compliance with National Electric Code (NFPA 70).

1.5 PROJECT CONDITIONS

A. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or permit them to interfere with progress. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on the site.

B. Contractor shall be responsible for building and individual room security to all areas of work where Contractor or its subcontractors enter and perform work.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Provide new materials; if acceptable to the University Representative, undamaged previously used materials in serviceable condition may be used. Provide materials suitable for the use intended. Their use and methods of installation shall not create unsafe conditions or violate requirements of applicable codes and standards.

B. All work areas within the campus and public spaces shall be fenced with minimum 6 feet chain link portable fence sections, with 1-1/2” top, bottom and side rails. All fencing shall be covered with blue fabric shade cloth material, secured to top, bottom and side rails with integral metal eyelets. Shade cloth shall not be left unsecured. Fencing materials shall be maintained in good, damage free condition at all times.

1. Fencing shall extend around and enclose entire work area, as well as stored materials and equipment.
2. Fencing shall be secured in a closed condition when not required to be open to allow completion of the work. Fencing shall be secured each day at the close of work.
3. The use of alternate materials such as barricades, delineators and caution tape to enclose or delineate work areas will not be accepted.
4. 3 sand bags shall be placed on every stand. Contractor shall replace sand bags whenever a sand bag ruptures.
5. Contractor can tie-back fencing to fixed stakes as required in lieu of sand bags. Tie backs shall not be trip hazards.

2.2 EQUIPMENT

A. General: Provide new equipment; or, if acceptable to the University, Contractor may provide undamaged, previously used equipment in serviceable condition. Provide equipment suitable for use intended.

B. First Aid Supplies: Comply with governing regulations.

C. Fire Extinguishers: Provide 2 hand-carried, portable UL-rated, class "A" fire extinguishers for temporary offices and similar spaces. In other locations provide hand-carried, portable, UL- rated, class "ABC" dry chemical extinguishers, or a combination of extinguishers of NFPA recommended classes for the exposures.

D. Comply with NFPA 10 and 241 for classification, extinguishing agent and size required by location and class of fire exposure.

2.3 PROJECT IDENTIFICATION

A. Provide project signs at all fenced laydown areas and at entrance to work areas. Signs located in the exterior shall be laminated or similarly weatherproofed.

B. List title of project, the name of the University and the Contractor, as well as a Contractor phone number that the community may call with noise complaints 24-hours a day seven days a week. University shall approve signs before installation.

C. No other signs are allowed without University permission except those required by law.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.

B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed, or are replaced by authorized use of completed permanent facilities.

3.2 SECURITY

A. Prior to commencement of the work, initiate a security program and install enclosure fence with lockable entrance gates. Location shall be sufficient to encompass the entire area of construction operation.

1. Lock entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.
2. University will not be liable for damage or loss to the Work due to trespass or theft. In addition, the University or University shall not be liable for loss or damage to Contractor's materials, tools, or equipment. The contractor is solely responsible for the security the contractor’s work area.

B. Security Enclosure and Lockup: Lock entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.

1. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.

3.3 REMOVAL OF CONSTRUCTION FACILITIES

A. Removal of Construction Facilities: Unless otherwise mutually agreed by University's Representative and Contractor, remove temporary materials, equipment, services, and construction prior to Contract Completion review.

1. Coordinate removal with requirements specified in Section 01 55 00 - Vehicular and Pedestrian Controls
2. Completely remove in-ground construction facilities to minimum depth of two feet. Backfill, compact and regrade site as necessary to restore areas or to prepare for indicated paving and landscaping.

B. Cleaning and Repairs: Clean and repair damage caused by installation or use of temporary construction facilities on public and private rights-of-way.

END OF SECTION

SECTION 01 55 29

CONSTRUCTION STAGING AREAS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. Contractor Staging Area requirements.

1.3 RELATED SECTIONS

A. Section 01 14 00 – Work Restrictions.

B. Section 01 52 00 - Construction Facilities: Field offices and sheds.

C. Section 01 35 53 - Security

1.4 SUBMITTALS

A. Shop Drawings: Prior to site mobilization, Contractor shall prepare and submit for review by University's Representative a site plan indicating detailed layout of Contractor Staging Area, including:

1. Temporary utilities
2. Temporary fencing and gates
3. Temporary offices and sheds
4. Construction aids
5. Vehicular access ways and on-site parking
6. Temporary barriers and enclosures
7. Storm water pollution prevention measures

PART 2 - PRODUCTS

Not applicable to this Section.

PART 3 - EXECUTION

3.1 CONTRACTOR STAGING AREA REQUIREMENTS

A. Contractor Staging Areas: Refer to reference drawings included in the set of Contract Drawings for location of Contractor Staging Areas.

1. Contractor shall use only site areas designated specifically by University as Contractor Staging Area for the Project.

2. Contractor Staging Area for the Project shall be clearly indicated on site plan. Contractor shall remove equipment placed or located outside of areas designated for Contractor Staging Area to within Contractor Staging Area at no change in Contract Time and Contract Sum.

3. Contractor shall keep access to Contractor Staging Areas and other construction access ways and thoroughfares clear at all times. Contractor shall provide traffic and parking control signage acceptable to University's Representative.

B. Cleanliness: Contractor shall keep Staging Area clear of trash and debris and in neat order. Contractor shall be responsible for cleanliness and order of assigned Staging Areas, as acceptable to University's Representative.

3.2 REMOVAL OF CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

A. Removal of Construction Facilities and Temporary Controls: Unless otherwise mutually agreed by University's Representative and Contractor, Contractor shall remove temporary materials, equipment, services, and construction prior to Contract Completion review. Contractor shall coordinate removal with requirements specified in Section 01 51 00 - Temporary Utilities, Section 01 52 00 - Construction Facilities, Section 01 55 00 - Vehicular & Pedestrian Controls and Section 01 57 00 - Temporary Controls.

B. Cleaning and Repairs: Contractor shall clean and repair damage caused by installation or use of temporary facilities on public and private rights-of-way.

C. Removal of Temporary Utilities and Restoration: Contractor shall remove temporary underground utility installations to a depth of two feet. Backfill, compact and regrade site as necessary to restore areas or to prepare for indicated paving and landscaping.

END OF SECTION

SECTION 01 57 10

EXISTING FINISH PROTECTION

GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. Section specifies the requirements for construction activities impacting the interior and exterior improvements within and adjacent to the construction site. The protection requirements herein are minimum requirements and is/are the contractors responsibility to ensure all aspects of work are protected regardless of the listing within this specification or not. Protection of work is an on-going process whereby the contractor shall adjust, add, change, and replace protection as needed throughout the project to ensure all aspects of work are protected to the greatest possible extent. Section includes but is not limited to the following:

1. Protection of existing finishes within and adjacent to the work area(s).

2. Protection of existing equipment within and adjacent to the work area(s).

3. Protection of completed work.

4. Protection of Building systems, i.e. mechanical, electrical, plumbing utilities and data systems.

5. Protection of ingress and egress pathways.

6. Protection of elevator and lifts.

7. Erection and maintenance of temporary barriers and enclosures.

1.3 CODES AND REGULATIONS

A. California Building Code (CBC): Comply with California Building Code (CBC) Chapter 33, Section 3303, Protection of Pedestrians During Construction or Demolition

B. Fire Regulations: Comply with requirements of fire authorities having jurisdiction, including California Fire Code (CFC) Article 87 during performance of the Work.

C. Safety Regulations: Comply with requirements of all applicable Federal, State and local safety rules and regulations. Contractor shall be solely responsible for jobsite safety.

D. Barricades and Barriers: As required by governing authorities having jurisdiction, provide substantial barriers, guardrails and enclosures around Work areas and adjacent to embankments and excavations for protection of workers and the public.

1.4 **PRODUCTS**

The following products, or approved equals, shall be used in all locations within new work and/or path of travel to, or within existing work, and/or as directed by the University.

A. Plywood / wood Framing – For use for semi-permanent long term temporary closure and opening protection as directed by the University. Public facing side shall be painted white.

B. Pro-Tect (www.pro-tect.com) – Floor protection for existing materials and/or newly installed materials.

C. Pro-Tect EZ Prop System (www.pro-tect.com) – Temporary enclosure for dust control to enclosure interior work space within an existing space.

D. Pro-Tect 1-2-3 Door Shield (www.pro-tect.com) – Door and jamb protection for use to protect new or existing doors and frames.

E. Pro-Tect Dust Door with zipper (www.pro-tect.com)

F. Pro-Tect Corner guards (www.pro-tect.com) – for use to protect existing or new finished wall corners.

G. Pro-Tect Tacky Mats (www.pro-tect.com) – for use as walk off mats both inside and outside of new to existing work.

1.5 INTERIOR AND EXTERIOR PROTECTION OF EXISTING IMPROVEMENTS

A. Walking surface protection: Provide non-destructive compatible walking surface protection over all floor finishes remaining in-place during the period of construction

B. Wood, Vinyl or Concrete Flooring: Use RAM BOARD or Pro-Tect Hardboard-WR brand floor over entire surface, HARDBOARD-WR or equal.

C. Ingress and egress protection: Provide protection for the surfaces of doors, door frames and outside corners.

D. Door surfaces: Use Pro-Tect brand Door Shield, PTDS.30,.40 or equal.

E. Door Frames: Use Pro-Tect brand FPB Jamb Protector, FPB60 or equal.

F. Corner Guards: Use Pro-Tect brand corner guards, PCCG-1 or equal.

G. Walk-off Mats: Use Pro-Tect brand walk-off mats, PTM-2-3624 or equal.

H. Stairs: Use Pro-Tect brand red rosin paper with painter's tape, PTRP or equal.

I. Shoe Covers: Use Pro-Tect brand removable shoe covers when traveling inside the construction area to outside the construction area, PBDG or equal.

J. Dust and Dirt reduction and elimination: Provide the entry and exit close off protection to eliminate the spread of construction dust and dirt.

K. Construction Area Entrance: Use Pro-Tect brand Zipper, ZPU-7.25 or equal.

L. Ceiling Protection: Use Pro-Tect brand Clip and Snap connectors to hold plastic sheeting, PTCSB-1 or PTCSR-1 or equal.

M. Provide seal-off and/or HEPA filtering of HVAC system air delivery and exhaust systems. The type and location of protection shall be instituted with the consultation of the University facilities maintenance staff's direct input. This protection shall include lighting, HVAC ductwork, audio/visual, laboratory and any other equipment, materials or systems which may be vulnerable to dust and dirt.

N. Ductwork Closures: Use Pro-Tect brand Duct Shield, PDS24, 36 or equal.

O. Provide protective coverings over casework, countertops, tables, desk and etc. Countertop/Casework Protection: Use Pro-Tect brand Multi-use Red Film, PMR24, 36, 48 or equal.

P. Miscellaneous Protection: Provide protective devises and materials to protect fire sprinkler heads, fire alarm devices and the like. Contact the device manufacturer for the correct protective covers for their devices.

Q. Fire Alarm Devices: Use Simplex brand dustproof device covers. University provided Heat Detectors can replace existing smoke detectors only when approved by the State Fire Marshal.

R. Elevators and accessibility lifts: Provide floor, wall and ceiling protective devices in all vertical circulation systems. Maintain clear access to the controls for these systems. Use protection cab wall blankets where hooks are available. Where cab wall hooks are not available use MDO plywood connected to bump/hand rails and supported from the cab floor. Rails used for connection shall be first individually protected with a cushioned cover wrap.

S. Safe Exiting: All protective measures shall be designed, installed and maintained so they do not interfere with the safe exiting of the area's occupants in an emergency. If lighting systems have been disabled, the Contractor shall install temporary construction lighting sufficient to safely perform the work.

1.6 MAINTENANCE OF CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

A. Maintenance: Use all means necessary to maintain temporary barriers and enclosures in proper and safe condition throughout progress of the Work.

B. Replacement: In the event of loss or damage, promptly restore temporary barriers and enclosures by repair or replacement at no change in the Contract Sum or Contract Time.

1.7 TEMPORARY BARRIERS, ENCLOSURES AND PASSAGEWAYS

A. Temporary Barriers, General: Provide temporary fencing, barriers and guardrails as necessary to provide for public safety, to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
   1. Note requirements for continued occupancy and use of existing buildings and site areas during construction
   2. Comply with applicable requirements of California Building Code (CBC) and authorities having jurisdiction, including industrial safety regulations. Review requirements with University's Representative
   3. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways, and other access routes for firefighting

B. HVAC Protection: Provide dust barriers at HVAC return grilles and air inlets to prevent spread of dust and clogging of filters

C. Temporary Floor Protection: Protect existing floors from soiling and damage
   1. Cover floor with 2 layers of 3-mil polyethylene sheets, extending sheets 18" up the side walls
   2. Cover polyethylene sheets with ¾" fire-retardant plywood
   3. Provide 'sticky' floor mats to clean dust from shoes

D. Security Closures and Lockup: Provide substantial temporary closures of openings in exterior surfaces and interior areas as appropriate to prevent unauthorized entrance, vandalism, theft and similar violations of security. Provide doors with self-closing hardware and locks.

E. Weather Closures: Provide temporary weather-tight closures at exterior openings to prevent intrusion of water, to create acceptable working conditions, to protect completed Work and to maintain temporary heating, cooling and ventilation. Provide access doors with self-closing hardware and locks.

F. Provide temporary lighting, illuminated interior exit signage, non-illuminated directional and instructional signage, and temporary security alarms for temporary exits and exit passageways.

G. Temporary measures shall suit and connect to existing building systems, and shall be approved by University's Representative and authorities having jurisdiction.

1.8 PROTECTION OF INSTALLED WORK

A. Protection of Installed Work, General: Provide temporary protection for installed products. Control traffic in immediate area to minimize damage.

C. Protective Coverings: Provide protective coverings at walls, projections, jambs, sills, and soffits of openings as necessary to prevent damage from construction activities, such as coatings applications, and as necessary to prevent other than normal atmospheric soiling.
   a. Carpeting: Use Pro-Tect brand adhesive plastic sheeting roller over entire surface, PCD2430 or equal.
   b. Wood, Vinyl or Concrete Flooring: Use RAM BOARD or Pro-Tect Hardboard-WR brand floor over entire surface, HARDBOARD-WR or equal. Kraft or Red Rosin Paper is NOT Acceptable.
   c. Door surfaces: Use Pro-Tect brand Door Shield, PTDS.30.40 or equal.
   d. Door Frames: Use Pro-Tect brand FPB Jamb Protector, FPB60 or equal.
   e. Corner Guards: Use Pro-Tect brand corner guards, PCCG-1 or equal.
   f. Casework: Cardboard all vertical and horizontal surfaces

D. Traffic Protection:
   a. Protect finished floors, stairs and other surfaces from traffic, soiling, wear and marring.
   b. Temporary covers shall not slip or tear under normal use

1.9 REMOVAL OF TEMPORARY BARRIERS AND ENCLOSURES

A. Removal of Temporary Barriers and Enclosures: Unless otherwise mutually agreed by University's Representative and Contractor, remove temporary materials, equipment, services, and construction prior to Contract Completion review.

B. Cleaning and Repairs: Clean and repair damage, soiling and marring caused by installation or use of temporary barriers and enclosures.

END OF SECTION

SECTION 01 74 00

CLEANING REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. Cleaning during construction.

B. Cleaning for Contract Completion review and final acceptance of the Work.

1.3 RELATED REQUIREMENTS

A. Additional Requirements: Cleaning for specific products or elements of Work are described in individual product Specification Sections in Divisions 2 through 33. Contractor shall comply also with University's Contractor Safety Handbook.

1.4 SUBMITTALS

A. Product List: Contractor shall submit complete list of all cleaning agents and materials for University's Representative's review and approval.

B. Cleaning Procedures: Contractor shall submit description of cleaning processes, agents and materials to be used for final cleaning of the Work. Processes and degree of cleanliness shall be as directed by University's Representative. All cleaning processes, agents and materials shall be subject to University's Representative's review and approval.

1.5 QUALITY ASSURANCE

A. Cleaning and Disposal Requirements, General: Contractor shall conduct cleaning and disposal operations in compliance with all applicable codes, ordinances and regulations, including environmental protection laws, rules and practices.

B. Cleaning Workers: Contractor shall employ experienced workers or professional cleaners for final cleaning. Contractor shall clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Contractor shall comply with manufacturer's instructions.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents and Materials: Contractor shall use only those cleaning agents and materials which will not create hazards to health or property and which will not damage or degrade surfaces. Contractor shall:

1. Use only those cleaning agents, materials and methods recommended by manufacturer of the material to be cleaned.
2. Use cleaning materials only on surfaces recommended by cleaning agent manufacturer.

PART 3 - EXECUTION

3.1 CLEANING DURING CONSTRUCTION

A. Garbage Control: Contractor shall control accumulation of debris, waste materials and rubbish. Periodically, Contractor shall dispose of debris, waste and rubbish off-site in a legal manner.

B. Cleaning, General: Contractor shall clean sidewalks, driveways and streets frequently to maintain public thoroughfares free of dust, debris and other contaminants.

C. Cleaning of Existing Facilities: Contractor shall clean surfaces in existing structures where alteration and renovation Work is being performed or where other construction activities have caused soiling and accumulation of dust and debris. Contractor shall:

1. Clean dust and soiling from floor surfaces.
2. Clean dust from horizontal and vertical surfaces.

D. Parking Area Cleaning: Contractor shall keep parking areas clear of construction debris, especially debris hazardous to vehicle tires.

E. Thoroughfare Clearing and Cleaning: Contractor shall keep site accessways, parking areas and building access and exit facilities clear of mud, soiling and debris. Contractor shall:

1. Remove mud, soil and debris and dispose in a manner which will not be injurious to persons, property, plant materials and site.
2. Comply with runoff control requirements stated above and as required by governing authorities having jurisdiction.

F. Cleaning Frequency: At a minimum, Contractor shall clean Work areas daily.

G. Failure to Clean: Should cleaning by Contractor not be sufficient or acceptable to University's Representative, especially regarding paths of travel, University may engage cleaning service to perform cleaning and deduct costs for such cleaning from sums owed to Contractor.

3.2 CONTRACT COMPLETION REVIEW CLEANING, GENERAL

A. Contract Completion Review Cleaning, General: Contractor shall execute a thorough cleaning prior to Contract Completion review by University's Representative and Architect. Contractor shall complete final cleaning before submitting final Application for Payment. Contractor shall:

1. Conduct cleaning in compliance with regulations of authorities having jurisdiction and industrial safety standards for cleaning.
2. Employ professional building cleaners to thoroughly clean building.
3. Complete cleaning operations specified below before requesting inspection for Certification of Completion. Contractor shall:
    a. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films and similar foreign substances. Leave concrete floors broom clean.
    b. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps.
    c. Clean the site, including landscape development areas, of rubbish, litter and foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits.

B. Waste Disposal, Contractor shall:

1. Remove waste materials from the site and conduct disposal in a lawful manner.
2. Do not burn waste materials.
3. Do not bury debris or excess materials on the University property.
4. Do not discharge volatile, harmful or hazardous materials into drainage systems.
5. Where extra materials of value remaining after completion of associated work have become the University's property, arrange for disposition of these materials as directed.

3.3 INTERIOR CLEANING

A. Interior Cleaning, Contractor shall:

1. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program.
2. Remove labels that are not permanent labels.
3. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from all visible interior and exterior surfaces.
4. Remove dust from all horizontal surfaces not exposed to view, including light fixtures, ledges and plumbing fixtures.
5. Clean all horizontal surfaces to dust-free condition, including tops of door and window frames, tops of doors and interiors of cabinets and casework.
6. Remove waste and surplus materials, rubbish and temporary construction facilities, utilities and controls.

B. Floor Cleaning: At unoccupied spaces, Contractor shall leave concrete floors broom clean.

3.4 EXTERIOR CLEANING

A. Building Exterior Cleaning: Contractor shall clean exterior of adjacent facilities where construction activities have caused soiling and accumulation of dust and debris. Contractor shall:

1. Remove labels that are not permanent labels.
2. Wash down exterior surfaces to remove dust.
3. Clean exterior surfaces of mud and other soiling.
4. Clean exterior side of windows, storefronts and curtainwalls, including window framing.

B. Glass and Mirror Cleaning: Contractor shall clean all glass. Contractor shall replace chipped or broken glass and other damaged transparent materials.

C. Site Cleaning: Contractor shall broom clean exterior paved surfaces. Contractor shall rake clean other surfaces of the grounds. Contractor shall:

1. Wash down and scrub where necessary all paving soiled as a result of construction activities. Thoroughly remove mortar droppings, paint splatters, stains and adhered soil.
2. Remove from the site all construction waste, unused materials, excess soil and other debris resulting from the Work. Legally dispose of waste.

3.5 CLEANING INSPECTION

A. Cleaning Inspection: Prior to Final Payment or acceptance by University for partial occupancy or beneficial use of the premises, Contractor and University's Representative shall jointly conduct an inspection of interior and exterior surfaces to verify that entire Work is acceptably clean.

B. Inadequate Cleaning: Should final cleaning be inadequate, as determined by University's Representative, and Contractor fails to correct conditions, University may engage cleaning service under separate contract and deduct cost from Contract Sum.

END OF SECTION

SECTION 01 74 19
CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

Section includes requirements and procedures for ensuring optimal diversion of construction and demolition (C&D) waste materials generated by the Work from landfill disposal within the limits of the Construction Schedule and Contract Sum.

A. California State law (Public Resources Code sections 40000 *et seq.*) requires the California State University to develop source reduction, re-use, recycling, and composting programs to divert 75% of all solid waste from landfill disposal by 2020. Construction waste materials generated by the Work are targeted to a~~o a~~chieve and maintain these diversion rates.

B. The Work of this Contract requires that a minimum of ~~6~~50% by weight of the construction and demolition materials generated in the Work is diverted from landfill disposal through a combination of re-use and recycling activities (2016 California Green Building Standards Code, Section 5.408).

~~C. For LEED® projects, requirements for submittal of LEED documentation in compliance with the Materials and Resources category, Construction and Demolition Waste Management credit.~~

~~D. Requirements for submittal of Contractor's Construction Waste and Recycling Plan prior to the commencement of the Work.~~

~~E.~~C. Contractor's quantitative reports for construction waste materials as a condition of approval of the third progress payment.

1.3 DEFINITIONS

A. Class III Landfill: A landfill that accepts non-hazardous resources such as household, commercial, and industrial waste, resulting from construction, remodeling, repair, and demolition operations. A Class III landfill must have a solid waste facilities permit from CalRecycle and is regulated by the Enforcement Agency (EA).

B. Construction and Demolition Debris: Building materials and solid waste resulting from construction, remodeling, repair, cleanup, or demolition operations that are not hazardous as defined in California Code of Regulations, Title 22, and Section 66261.3 *et seq*. This term includes, but is not limited to, asphalt concrete, Portland cement concrete, brick, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, plastic pipe, and steel. The debris may be commingled with rock, soil, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction or land development projects.

C. C&D Recycling Center. A facility that receives only C&D material that has been separated for reuse prior to receipt, in which the residual (disposed) amount of waste in the material is less than 10% of the amount separated for reuse by weight.

D. Disposal. Final deposition of construction and demolition or inert debris into land, including stockpiling onto land of construction and demolition debris that has not been sorted for further processing or resale, if such stockpiling is for a period of time greater than 30 days; and construction and demolition debris that has been sorted for further processing or resale, if such stockpiling is for a period of time greater than one year, or stockpiling onto land of inert debris that is for a period of time greater than one year.

E. Enforcement Agency. Enforcement agency as defined [i.e. in Public Resources Code 40130].

F. Inert Disposal Facility or Inert Waste Landfill: A disposal facility that accepts only inert waste such as soil and rock, fully cured asphalt paving, uncontaminated concrete (including fiberglass or steel reinforcing rods embedded in the concrete), brick, glass, and ceramics, for land disposal.

G. Mixed Debris: Loads that include commingled recyclable and non-recyclable materials generated at the construction site.

H. Mixed Debris Recycling Facility: A processing facility that accepts loads of commingled construction and demolition debris for the purpose of recovering re-usable and recyclable materials and disposing the non-recyclable residual materials.

I. Recycling: The process of sorting, cleansing, treating and reconstituting materials for the purpose of using the altered form in the manufacture of a new product. Recycling does not include burning, incinerating or thermally destroying solid waste.

J. Reuse. The use, in the same or similar form as it was produced, of a material which might otherwise be discarded.

K. Separated for Reuse. Materials, including commingled recyclables, that have been separated or kept separate from the solid waste stream for the purpose of additional sorting or processing those materials for reuse or recycling in order to return them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace, and includes materials that have been “source separated.”

L. Solid Waste: All putrescible and non-putrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes. "Solid waste" does not include hazardous waste, radioactive waste, or medical waste as defined or regulated by State law.

M. Source-Separated: Materials, including commingled recyclables, that have been separated or kept separate from the solid waste stream at the point of generation for the purpose of additional sorting or processing of those materials for reuse or recycling in order to return them to the economic mainstream in the form of raw materials for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.

N. Waste Hauler: A company that possesses a valid permit from the local waste management authority to collect and transport solid wastes from individuals or businesses for the purpose of recycling or disposal in the locality.

1.4 SUBMITTALS

A. Contractor’s Construction Waste and Recycling Plan

A. Review Contract Documents and estimate the types and quantities of materials under the Work that are anticipated to be feasible for on-site processing, source separation for re-use or recycling. Indicate the procedures that will be implemented in this program to effect jobsite source separation, such as, identifying a convenient location where dumpsters would be located, putting signage to identify materials to be placed in dumpsters, etc.

B. Prior to commencing the Work, submit Contractor's Construction Waste and Recycling Plan. Submit in format provided (**Section 01 74 19A**). The Plan must include, but is not limited to the following:
   a. Contractor's name and project identification information;
   b. Procedures to be used;
   c. Materials to be re-used and recycled;
   d. Estimated quantities of materials;
   e. Names and locations of re-use and recycling facilities/sites;
   f. Tonnage calculations that demonstrate that Contractor will re-use and recycle a minimum 65% by weight of the construction waste materials generated in the Work.

C. Contractor's Construction Waste and Recycling Plan must be approved by the Construction Administrator prior to the start of Work.

D. Contractor's Construction Waste and Recycling Plan will not otherwise relieve the Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures.

B. Contractor's Reuse, Recycling, and Disposal Report

A. Submit Contractor's Reuse, Recycling, and Disposal Report on the form provided (**Section 01 74 19B**) with each application for progress payment. Failure to submit the form and its supporting documentation will render the application for progress payment incomplete and delay progress payments. If applicable, include manifests, weight tickets, receipts, and invoices specifically identifying the Project for re-used and recycled materials:
   a. Reuse of building materials or salvage items on site (i.e. crushed base or red clay brick).
   b. Salvaging building materials or salvage items at an off-site salvage or reuse center (i.e. lighting, fixtures).
   c. Recycling source separated materials on site (i.e. crushing asphalt/ concrete for base course, or grinding for mulch).
   d. Recycling source separated material at an offsite recycling center (i.e. scrap metal or green materials).
   e. Use of material as Alternative Daily Cover (ADC) at landfills.
   f. Delivery of soils or mixed inert material to an inert landfill for disposal (inert fill).
   g. Disposal at a landfill or transfer station (where no recycling takes place).
   h. Other (describe).

B. Contractor's Reuse, Recycling, and Disposal Report must quantify all materials generated in the Work, disposed in [Class III] landfills, or diverted from disposal through recycling. Indicate zero (0) if there is no quantity to report for a type of material.

C. As indicated on the form:
   a. Report disposal or recycling either in tons or in cubic yards: if scales are available at disposal or recycling facility, report in tons; otherwise, report in cubic yards. Report in units for salvage items when no tonnage or cubic yard measurement is feasible.
   b. Indicate locations to which materials are delivered for reuse, salvage, recycling, accepted as daily cover, inert backfill, or disposal in landfills or transfer stations.
   c. Provide legible copies of weigh tickets, receipts, or invoices that specifically identify the project generating the material. Said documents must be from recyclers and/or disposal site operators that can legally accept the materials for the purpose of re-use, recycling, or disposal.

D. Indicate project title, project number, progress payment number, name of the company completing the Contractor's Report and compiling backup documentation, the printed name, signature, and daytime phone number of the person completing the form, the beginning and ending dates of the period covered on the Contractor's Report, and the date that the Contractor's Report is completed.

C. For LEED Projects, complete the LEED Construction and Demolition Waste Management Calculator in format provided under the most current version of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program. Include a signed cover letter with calculation summary on company letterhead.

A. Certify that the project has completed a waste management plan and diverted construction, demolition, and land clearing waste to uses other than landfill.
B. Provide quantities of diverted materials and means of diversion in accordance with the results table in the LEED Construction and Demolition Waste Management Calculator.
C. Indicate how and where waste was diverted.
D. Indicate quantities of waste diverted in tons [or cubic yards].
E. Letter will also include: Total quantity of diverted waste, total quantity of waste, and the percentage of waste diverted.
F. Include name, organization, and role in project. Provide signature and date completed.
G. Include legible copies of weigh tickets, receipts, or invoices that specifically identify the project generating the material. Said documents must be from recyclers and/or disposal site operators that can legally accept the materials for the purpose of re-use, recycling, or disposal.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SALVAGE, RE-USE, RECYCLING AND PROCEDURES

A. Identify re-use, salvage, and recycling facilities.

B. Develop and implement procedures to re-use, salvage, and recycle new construction and excavation materials, based on the Contract Documents, the Contractor's Construction Waste and Recycling Plan, estimated quantities of available materials, and availability of recycling facilities. Procedures may include on-site recycling, source separated recycling, and/or mixed debris recycling efforts.

A. Identify materials that are feasible for salvage, determine requirements for site storage, and transportation of materials to a salvage facility.
B. Source separate new construction, excavation and demolition materials including, but not limited to the following types:
a. Asphalt.
b. Concrete, concrete block, slump stone (decorative concrete block), and rocks.
c. Drywall.
d. Green materials (i.e. tree trimmings and land clearing debris).
e. Metal (ferrous and non-ferrous).
f. Miscellaneous construction debris.
g. Paper or cardboard.
h. Red clay brick.
i. Reuse or salvage materials
j. Soils.
k. Wire and cable.
l. Wood.
m. Other (describe)
C. Miscellaneous Construction Debris: Develop and implement a program to transport loads of mixed (commingled) new construction materials that cannot be feasibly source separated to a mixed materials recycling facility.

3.2 DISPOSAL OPERATIONS AND WASTE HAULING

A. Legally transport and dispose of materials that cannot be delivered to a source separated or mixed recycling facility to a transfer station or disposal facility that can legally accept the materials for the purpose of disposal.

B. Use a permitted waste hauler or Contractor's trucking services and personnel. To confirm valid permitted status of waste haulers, contact the local solid waste authority.

C. Become familiar with the conditions for acceptance of new construction, excavation and demolition materials at recycling facilities, and prior to delivering materials.

D. Deliver to facilities that can legally accept new construction, excavation and demolition materials for purpose of re-use, recycling, composting, or disposal.

E. Do not burn, bury or otherwise dispose of solid waste on the project job-site.

3.3 RE-USE AND DONATION OPTIONS

Implement a re-use program to the greatest extent feasible. Options may include:

California Materials Exchange (CAL-MAX) is a free program sponsored by CalRecycle and is designed to help connect businesses, organizations, manufacturers, schools, and individuals with the most effective online resources for exchanging materials. Go to http://www.calrecycle.ca.gov/CalMAX/. Public Surplus is a government agency surplus auction system used by many universities. Go to https://www.publicsurplus.com for more information.

Field Code Changed

3.4 REVENUE

Revenues or other savings obtained from recycled, re-used, or salvaged materials shall accrue to Contractor unless otherwise noted in the Contract Documents.

END OF SECTION

SECTION 01 77 00

CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. This Section specifies administrative and procedural requirements for project closeout, including but not limited to:
   1. Final inspection procedures.
   2. Operating and maintenance manual submittal
   3. Spare parts/materials
   4. Submittal of warranties
   5. Training
   6. State Fire Marshal inspection
   7. Other regulatory inspections
   8. Final cleaning and pest control
   9. Commissioning/equipment startup

1.3 PUNCH LIST INSPECTION

A. When each building/phase is, in the opinion of the Contractor, complete in all respects, the Contractor shall call for a punch-list inspection.

B. Inspection Procedures: On receipt of a request for inspection, the University Representative will schedule the Inspection. The Architect will then perform a preliminary walk-through. If, in the judgment of the University Representative and the Architect, the project is not sufficiently complete in all respects, the University Representative will so advise the Contractor and discontinue the inspection.
   1. The University Representative and Architect will repeat inspection when requested and assured that the work has been completed.
   2. Results of the completed inspection will form the basis of requirements for final acceptance punch-list.

1.4 RECORD DOCUMENT SUBMITTALS

A. General: Do not use record documents set as a working drawing set for construction purposes. Protect from deterioration and loss in a secure, fire-resistive location. Provide access to record documents for The University' and the Architect's reference during normal working hours throughout the course of the Project.

B. Record Drawings: Maintain a clean, undamaged set of blue or black line prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies from the Work as originally shown or specified. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.

1. Mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the work.
2. Mark new information that is important to the University, but was not shown on Contract Drawings or Shop Drawings. Show all utilities, obstructions, etc. not previously noted in the Contract Documents, but discovered through completion of the work.
3. Note related Change Order, Field Instruction and RFI numbers where applicable.
4. Update Record Drawings at a minimum of once per week throughout the course of the Project.
5. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set.
6. Upon completion of the work, submit Record Drawings to the University Representative for further processing.

C. Record Specifications: Maintain one complete copy of the Project Specifications, including addenda, and one copy of other written construction documents such as Change Orders, Field Instructions, RFI's and modifications issued in printed form during construction. Mark these documents to show substantial variations in actual work performed in comparison with the text of the Specifications and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data.

1. Upon completion of the work, submit record Specifications to the Architect for the University's records.

D. Operating and Maintenance Manuals: Submit one (1) set to the Architect for review and approval. Once approved send one hard copy set and one electronic set to the University with a transmittal to be signed and accepted by the Construction Administrator.

1.5 CLOSEOUT PROCEDURES: CLOSEOUT MEETING

A. The University Representative will call for a Project closeout meeting approximately four to six weeks prior to the anticipated completion date.

1. At this meeting, a completion Action List will be prepared listing all major items to be completed prior to the issuance of the Notice of Completion.
2. The Action List shall assign a responsibility and a projected completion date to each item.
3. The Contractor shall be solely responsible for the timely completion of all required closeout items.

1.6 FINAL CLEANING

A. General Cleaning: General cleaning during the construction period is required by the General Conditions and included in Section 01 52 00, Construction Facilities.

B. Cleaning Standards: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.

1. Complete the following cleaning operations before requesting inspection for Certification of Completion.
   a. Remove labels that are not permanent labels. Remove temporary protective coverings from finish hardware, toilet accessories and other items.
   b. Clean transparent materials, including mirrors and glass in doors and windows (inside and outside). Remove glazing compound and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
   c. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films and similar foreign substances. Restore reflective surfaces to their original reflective condition.
   d. Leave concrete floors broom clean. Thoroughly clean all finish flooring materials in accordance with manufacturer recommendations to as-new condition. Remove any stains, films, or foreign materials. Thoroughly vacuum all carpets and shampoo if necessary.
   e. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication and other substances. Clean and polish plumbing fixtures to a sanitary condition. Clean light fixtures, lamps and lenses.
   f. Clean the site, including landscape development areas, of rubbish, litter and foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits.

C. Pest Control: Engage an experienced licensed exterminator to make a final inspection, and rid the project of rodents, insects and other pests.

D. Removal of Protection: Remove temporary protection and facilities installed for protection of the work during construction and repair site to previous conditions.

E. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner. Where extra materials of value remaining after completion of associated work have become the University's property, arrange for disposition of these materials as directed.

1.7 FINAL ACCEPTANCE

A. Preliminary Procedures: Before requesting final inspection for certification of University and Architect's final acceptance, complete the following:

1. Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance, and the list has been endorsed and dated by the Architect and the University Representative.

B. Re-inspection Procedure: The University and Architect will re-inspect the work upon receipt of notice that the work, including inspection list items from earlier inspections, has been completed, except items whose completion has been delayed because of circumstances acceptable to the University.

1. Upon completion of re-inspection, the Architect will prepare and submit to the University, a certificate of final acceptance, or advise the Contractor of work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
2. Upon final acceptance by the University and the Architect, the University Representative will then prepare a letter to the University stating that the project has been constructed in accordance with the contract documents and is complete in all respects.

C. Completion Schedule: All punch list corrections shall be completed by Contractor within 30 days after Substantial Completion or the contract completion date, whichever is earlier. The University reserve the right to complete any outstanding punch list work remaining after the thirty-day period at Contractor's expense.

D. Additional Inspections: Should additional re-inspections be required, Contractor shall reimburse University for University Representative's and Architect's account for time spent in conducting additional re-inspections at a rate of 3.2 times rate of Direct Personnel Expense (DPE). Direct Personnel Expense is defined as direct salaries of University Representative's and Architect's personnel engaged on Project and portion of costs of mandatory and customary contributions and benefits related thereto, including employment taxes and other statutory benefits, insurance, sick leave, holidays, vacations, pensions, and similar contributions and benefits.

1.8 FINAL PAYMENT

A. Final Payment: After completion of all items listed for completion and correction and after submission of all documents and products and after final cleaning, Contractor shall submit final Application for Payment, identifying total adjusted Contract Sum, previous payments and sum remaining due. Payment will not be made until the following are accomplished:

1. All Project Record Documents have been received and accepted by the Architect.
2. All extra materials and maintenance stock have been transferred and accepted by University.
3. All warranty documents and operation, maintenance data, service agreements, maintenance contracts and salvage materials have been received and accepted by University's Representative.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 78 23

OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. Format and content of operation and maintenance manuals.

1. Data requirements for materials and finishes.

B. Instruction of University's personnel.

C. Submission of operation and maintenance manuals.

1.3 RELATED REQUIREMENTS

A. Section 01 31 13 - Coordination: Coordination documents and models prepared for performance of the Work, to be incorporated into operation and maintenance data submitted to University's Representative at Contract closeout.

B. Product Specifications Sections in Divisions 2 through 33: Specific requirements for operation and maintenance data.

1.4 QUALITY ASSURANCE

A. Preparation of data shall be done by personnel:

1. Trained and experienced in maintenance and operation of described products.
2. Familiar with requirements of this Section.
3. Skilled as technical writer to the extent required to communicate essential data.

1.5 SUBMITTALS

A. Submittal for Review: Contractor shall submit one electronic bookmarked PDF copy to Engineer for review and approval.

B. Final Submittal: Contractor shall submit one electronic PDF copy and three hard copies prior to submission of final Application for Payment.

1.6 SUBMITTAL FORMAT

A. Format for Operation and Maintenance Data Manuals: Contractor shall prepare data in the form of an instructional manual. Contractor shall comply with the general requirements specified below and comply with specific requirements for types of products in Articles following. See Article titled "SUBMISSION OF OPERATION AND MAINTENANCE MANUALS" for number of copies of manuals.

B. Electronic File: Contractor shall also provide all operation and maintenance data into a single PDF bookmarked file with a table of contents. The table of contents shall be linked to the various sections in the PDF file.

C. Hard Copy Format:

1. Size: 8-1/2 in. by 11 in.
2. Paper: Manufacturer's printed data, or neatly typewritten.
3. Drawings:
   a. Provide reinforced punched binder tab, bind in with text.
   b. Fold larger drawings to size of text pages.
4. Provide fly-leaf for each separate product, or each piece of operating equipment.
5. Organize manual in order of specification Divisions and Sections.
   a. Provide typed description of product, and major component parts of equipment.
   b. Provide indexed tabs.
6. Cover: Identify each volume with typed or printed title, "Operating and Maintenance Instructions". List:
   a. Title of Project
   b. Identity of separate structure as applicable.
   c. Identity of general subject matter covered in the manual.
7. Binders:
   a. Commercial quality three-ring binders with durable and cleanable plastic covers.
   b. Maximum ring size: 2 inches per 170 sheets
   c. When multiple binders are used, correlate the data into related consistent groupings.

1.7 CONTENT OF MANUAL

A. Neatly typewritten table of contents for each volume, arranged in systematic order.

1. Include name of Contractor, name of responsible principal, address and telephone number.
2. Include a list of each product required to be included, indexed to content of the volume.
3. List, with each product, the name, address and telephone number of:
   a. Subcontractor or installer.
   b. Maintenance contractor, as appropriate.
   c. Local source of supply for replacement parts.
4. Identify each product-by-product name and other identifying symbols as set forth in Contract Documents.

B. Product Data:

1. Include only those sheets that are pertinent to the specific product.
2. Annotate each sheet to:
   a. Clearly identify specific product or part installed.
   b. Clearly identify data applicable to installation.
   c. Delete references to inapplicable information.

C. Drawings:

1. Supplement product data with drawings as necessary to clearly illustrate:
   a. Relations of Component parts of equipment and systems.
   b. Control and flow diagrams.
2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
   a. Do not use Project Record Documents as maintenance drawings.

D. Provide written text as required to supplement product data for the particular installation:

1. Organize in a consistent format under separate headings for different procedures.
2. Provide logical sequence of instructions for each procedure.

E. Provide a copy of each warranty, bond and service contract issued.

1. Provide information sheet for Owner's personnel, including:
   a. Proper procedures in event of failure.
   b. Instances that might affect validity of warranties or bonds.

F. Provide a copy of each Material Safety Data Sheet (MSDS) received with products or materials delivered to the site for incorporation into the Project, for Owner's future reference.

1.8 MANUAL FOR MATERIALS AND FINISHES

A. Content, for architectural products, applied materials and finishes:

1. Manufacturer's data, giving full information on products.
   a. Catalog number, size, and composition.
   b. Color and texture designations.
   c. Information required for re-ordering special manufactured products.
2. Instructions for care and maintenance.
   a. Manufacturer's recommendation for types of cleaning agents and methods.
   b. Cautions against cleaning agents and methods that are detrimental to the product.
   c. Recommended schedule for cleaning and maintenance.

1.9 INSTRUCTION OF UNIVERSITY PERSONNEL

A. Operating and maintenance manual shall constitute the basis of instruction.

1. Review contents of manual with personnel in full detail to explain all aspects of operations and maintenance.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 78 36

WARRANTIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Construction Drawings, Technical Specifications, Addenda, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturers' standard guaranties, warranties on products and special warranties.

B. Refer to the General conditions for terms of the Contractor's special warranty of workmanship and materials.

C. Specific requirements for warranties for the work and products and installations that are specified to be guaranteed or warranted are included in the individual Sections of Divisions 2 through 16.

D. Certifications and other commitments and agreements for continuing services to the University are specified elsewhere in the Contract Documents.

E. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

1.3 RELATED REQUIREMENTS

A. Section 01 77 00 - Contract Closeout Procedures: General requirements for closeout of the Contract.

B. Section 01 78 23 - Operation and Maintenance Data: Operating and maintenance data binders, to include copies of warranties and bonds.

C. Product Specification Sections in Divisions 2 through 33: Special Project warranty requirements for specific products or elements of the Work; commitments and agreements for continuing services to University.

1.4 DEFINITIONS

A. The terms product guaranty or warranty are synonymous for this Project and shall be taken to mean the required guaranty or warranty required by the Contract General Conditions or by the Contract Drawings or Specifications.

B. Standard Product Warranties are pre-printed written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the University.

C. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the University. Special Warranties shall be in writing.

1.5 WARRANTY REQUIREMENTS

A. Related Damages and Losses: When correcting warranted work that has failed, remove and replace other work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted work.

B. Reinstatement of Warranty: When work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

C. Replacement Cost: Upon determination that work covered by a warranty has failed, replace or rebuild the work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective work regardless of whether the University has benefited from use of the work through a portion of its anticipated useful service life.

D. University's Recourse: Written warranties made to the University are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the University can enforce such other duties, obligations, rights, or remedies.

1. Rejection of Warranties: The University reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.

E. The University reserves the right to refuse to accept work for the Project where a special warranty, certification, or similar commitment is required on such work or part of the work, until evidence is presented that entities required to countersign such commitments are willing to do so.

1.6 SUBMITTALS

A. Submit a copy of the Standard or Special written warranties to the University for each Specification Section as part of the complete submittal package for review and approval by the University.

B. Submit written warranties to the University prior to the date of acceptance by the University. Submittal of the project Guarantees and Warranties is a requirement precedent to the filing of the Notice of Completion by the University.

1. When a designated portion of the work is completed and occupied or used by the University, by separate agreement with the Contractor during the construction period but prior to acceptance of

the entire project, Contractor shall submit properly executed warranties to the University within fifteen days of occupancy or use of that designated portion of the work.

C. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the University for approval prior to final execution.

D. Form of Submittal: At Final Completion, compile two copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual. Use guarantee form at the end of this Section.

E. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-inch by 11-inch paper.
   1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name, of the product, and the name, address and telephone number of the installer.
   2. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES & GUARANTEES ", the Project title or name, and the name of the Contractor.
   3. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

CSU The California State University

PROJECT PROJECT NO.

CONTRACTOR CONTRACT NO.

ARCHITECT_____ DATE_____

GUARANTEE QUALITY AND PERFORMANCE

We the undersigned hereby guarantee that the:

which we have installed on the subject campus has been done in accordance with the plans and specifications and that all the work as installed will fulfill the requirements of the guarantees included in the specifications. We further agree to repair or replace any or all of our work, together with any other adjacent work which may be displaced in so doing, that may prove to be defective in its materials, workmanship or installation within a period of year(s) from the date of official acceptance of the project as complete, by the Trustees of the California State University or any Officer or Employee authorized to act on its behalf. The repairs or replacement shall be done without any expense whatsoever to the Trustees of the California State University, ordinary wear and tear and unusual abuse or neglect excepted. Within days after being notified in writing by the Trustees of any defects in the work, we agree to commence and prosecute the work necessary with due diligence in order to fulfill the terms of this guarantee, and to complete the work within a reasonable period of time, and in the even of our failure to so comply, we, separately and collectively, do hereby authorize the Trustees of the California State University to proceed to have such work done at our expense and will honor and pay the costs thereof upon demand.

By: Subcontractor or Supplier	Date:
By: General Contractor	Date:

Construction Mgmt.
702.19 • 6/07

END OF SECTION

SECTION 02 41 00
DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Construction Drawings, Technical Specifications, Addend, and general provisions of the Contract, including Contract General Conditions and Supplementary General Conditions, and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes:
   1. Demolition and removal.
   5. Demolition materials recycling requirements: The Work of this contract shall provide for a minimum of 50% by weight of the solid waste generated in the Work to be diverted from landfill disposal through a combination of re-use and recycling activities.
   6. This section includes requirements for submittal of:
      a. Contractor's Waste Management and Recycling Plan prior to the commencement of the Work.
      b. Contractor's quantitative reports for demolition waste materials generated by the Contractor, as a condition of approval of progress payments.

1.3 DEFINITIONS

A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or recycled

B. Environmental Pollution and Damage: The presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human or animal life; affect other species of importance to humanity; or degrade the utility of the environment for aesthetic, cultural or historical purposes.

C. Inert Fill: A permitted facility that accepts inert waste such as asphalt and concrete exclusively for the purpose of disposal.

Inert Solids/Inert Waste: Non-liquid solid waste including, but not limited to, soil and concrete that does not contain hazardous substances or soluble pollutants at concentrations in excess of water-quality standards established by a regional water board and does not contain significant quantities of decomposable solid waste.

D. Class III Landfill: A landfill that accepts non-hazardous materials such as household, commercial, and industrial waste, resulting from construction, remodeling, repair, and demolition operations. A Class III landfill must have a solid waste facilities permit from the governing state/local entity.

E. Demolition Waste: Building materials and solid waste resulting from construction, remodeling, repair, cleanup, or demolition operations that are not hazardous. This term includes, but is not limited to, asphalt concrete, Portland cement concrete, brick, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, plastic pipe, and steel. The materials may include rock, soil, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction or land development projects.

F. Chemical Waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, organic chemicals and inorganic wastes.

G. Recycling: The process of sorting, cleansing, treating and reconstituting materials for the purpose of using the altered form in the manufacture of a new product. Recycling does not include burning, incinerating or thermally destroying solid waste.

H. Reuse: The use, in the same or similar form as it was produced, of a material which might otherwise be discarded.

I. Solid Waste: All putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes. "Solid Waste" does not include hazardous waste, radioactive waste, or medical waste as defined or regulated by State law.

1.4 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain property of the Trustees, demolished materials shall become the Contractor's property and shall be removed, recycled, or disposed from Project site in an appropriate and legal manner.

B. Arrange a meeting no less than ten (10) days prior to demolition with the Construction Administrator and other designated representatives to review any salvageable items to determine if the Trustees wants to retain ownership, and discuss Contractor’s Waste Management and Recycling Plan.

1.5 SUBMITTALS

A. Submittal for Construction Document Phase
Qualification Data: for demolition firm.

B. Submittals for Demolition Phase:

1. If Contractor encountered and disposed of hazardous materials, submit landfill records indicating receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.

2. Contractor’s Waste Management and Recycling Plan:
   a. Review Contract Documents and site conditions and estimate total Project C&D materials to be generated, names of landfills where disposal of Project C&D materials would normally occur. Indicate types and quantities of materials under the Work that are anticipated to be feasible for on-site processing, and source-separation for re-use or recycling. Indicate procedures that will be implemented in this program to effect jobsite source-separation, such as, identifying a convenient location where dumpsters would be located, signage to identify materials to be placed in dumpsters, etc.,
   b. Contact Construction Administrator for a list of local re-use and recycling organizations and companies.
   c. Prior to commencing the Work, submit the Contractor’s Waste Management and Recycling Plan. Submit in format provided (***02 41 00A***). The Contractor’s Waste Management and Recycling Plan must include, but not be limited to, the following:
      - Contractor’s name and project identification information;
      - Procedures to be used;

- Materials to be re-used and recycled;
- Estimated total quantities of materials generated in Project;
- Names and locations of landfills, re-use and recycling facilities/sites;
- Tonnage calculations that demonstrate that Contractor will re-use and recycle a minimum of 50%-75% by weight of C&D materials generated in the Work.

d. Contractor's Waste Management and Recycling Plan must be approved by Construction Administrator prior to the Start of Work.

e. Contractor's Waste Management and Recycling Plan will not otherwise relieve the Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures.

3. Contractor's Reuse, Recycling, and Disposal Report

a. Submit Contractor's Reuse, Recycling, and Disposal Report on the form provided (***02 41 00B***) with each application for progress payment. Failure to submit the form and its supporting documentation will render the application for progress payment incomplete and delay progress payments. If applicable, include manifests, weight tickets, receipts, and invoices specifically identifying the Project for re-used and recycled materials:

- Reuse of building materials or salvageable items;
- Source-separated recycling facilities;
- Mixed debris recycling facilities;
- Recycling of material, including soils, as landfill alternative daily cover;
- Other (describe).

b. Contractor's Reuse, Recycling, and Disposal Report must quantify all materials generated in the Work, disposed in Class III Landfills, or diverted from disposal through recycling. Indicate zero (0) if there is no quantity to report for a type of material. As indicated on the form:

- Report disposal or recycling either in tons or in cubic yards. If scales are available at disposal or recycling facility, report in tons; otherwise, report in cubic yards. Report in units for salvage items when no tonnage or cubic yard measurement is feasible.
- Indicate locations to which materials are delivered for reuse, salvage, recycling, accepted as daily cover, inert backfill, or disposal in landfills or transfer stations.
- Provide legible copies of weigh tickets, receipts, or invoices that specifically identify the project generating the material. Said documents must be from recyclers and/or disposal site operators that can legally accept the materials for the purpose of re-use, recycling, or disposal:

Indicate project title, project number, progress payment number, name of company completing the Contractor's Report and compiling backup documentation, the printed name, signature, and daytime phone number of the person completing the form, the beginning and ending dates of the period covered on the Contractor's Report, and the date that the Contractor's Report is completed.

1.6 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with governing EPA notification regulations before starting demolition. Comply with hauling and disposal regulations of authorities having jurisdiction. Obtain and pay for all permits required.

1.7 PROJECT CONDITIONS

A. Storage or sale of removed items or materials on-site will not be permitted without advance written approval from Cal Poly Humboldt**.**

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Survey existing conditions and correlate with requirements indicated to determine extent of demolition and recycling required.

B. 1. Survey condition of the building to determine whether removing any element might result in a structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during demolition.
2. Retain a licensed and qualified civil or structural engineer to provide analysis, including calculations, necessary to ensure the safe execution of the demolition work.

C. Perform surveys as the Work progresses to detect hazards resulting from demolition activities.

3.2 PREPARATION

A. As part of the project scope, the Contractor shall prepare all drawings, documents, and applications and shall obtain all government agency approvals and permits required for demolition activities.

B. Conduct demolition operations and remove C&D materials to ensure minimum interference with roads, streets, walks, and other adjacent occupied and utilized facilities.

Do not close or obstruct streets, walks, or other adjacent occupied or utilized facilities without permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.

C. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around demolition area.
1. a. Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction.
b. Maintain temporary protection to people at exterior areas of the existing building where decorative medallion removal work is being done.
2. Protect existing site improvements, appurtenances, and landscaping that are designated to remain in place.

D. 1. Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of buildings to be demolished and adjacent buildings to remain.
2. Strengthen or add new supports when required during progress of demolition.

3.3 EXPLOSIVES

Explosives: Use of explosives will not be permitted.

3.4 ENVIRONMENTAL CONTROLS

A. Comply with federal, state and local regulations pertaining to water, air, solid waste, recycling, chemical waste, sanitary waste, sediment and noise pollution.

B. Protection of Natural Resources: Preserve the natural resources within the project boundaries or restore to an equivalent condition.

1. a. Confine demolition activities to areas defined by public roads, easements, and work area limits indicated on the drawings.

2. Water Resources: Comply with applicable regulations concerning the direct or indirect discharge of pollutants to underground and natural surface waters.
   a. Oily Substances: Prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water in such quantities as to affect normal use, aesthetics, or produce a measurable ecological impact on the area.
   b. Store and service construction equipment at areas designated for collection of oil wastes.

3. Dust Control, Air Pollution, and Odor Control: Prevent creation of dust, air pollution and odors.
   a. Use temporary enclosures and other appropriate methods to limit dust and dirt rising and scattering in air to lowest practical level.
   b. Store volatile liquids, including fuels and solvents, in closed containers.
   c. Properly maintain equipment to reduce gaseous pollutant emissions.

4. Noise Control: Perform demolition operations to minimize noise.
   a. Repetitive, high level impact noise will be permitted only between the hours of 7:00 a.m. and 6:00 p.m. Repetitive impact noise on the property shall not exceed the 85 dB, measured at 100 feet from the source of the noise. During finals week, the noise level shall not exceed 70 dB, measured at 100 feet from the source of the noise.
   b. Provide equipment, sound-deadening devices, and take noise abatement measures that are necessary to comply with the requirements of this Contract.

5. Salvage, Re-use, and Recycling Procedures
   a. Identify re-use, salvage, and recycling facilities. Contact Construction Administrator to obtain a list of local reuse organizations and C&D recycling companies.
   b. Develop and implement procedures to re-use, salvage, and recycle demolition materials, based on the Contract Documents, the Contractor's Waste Management and Recycling Plan, estimated quantities of available materials, and availability of recycling facilities. Procedures may include on-site recycling, source-separated recycling, salvage, and/or mixed debris recycling efforts.
   c. Identify materials that are feasible for salvage, determine requirements for site storage, and transportation of materials to a salvage facility.
   d. Source-separate new construction, excavation and demolition materials
   e. Develop and implement a program to transport loads of mixed (commingled) demolition materials that cannot be feasibly source separated to a mixed materials recycling facility [whenever available].

6. Disposal Practices and Waste Hauling
   a. Legally transport and dispose of materials that cannot be delivered to a source-separated or mixed recycling facility to a transfer station or disposal facility that can legally accept the materials for the purpose of disposal.
   b. Use a permitted waste hauler or Contractor's trucking services and personnel. To confirm valid permitted status of waste haulers, contact the state or local waste management agency.

c. Become familiar with the conditions for acceptance of new construction, excavation and demolition materials at recycling facilities, prior to delivering materials.
d. Deliver to facilities that can legally accept new construction, excavation and demolition materials for purpose of re-use, recycling, composting, or disposal.
e. Do not burn, bury or otherwise dispose of rubbish and waste materials on project site.

7. Re-use and Donation Options
Implement a re-use program to the greatest extent feasible. Options may include:

California Materials Exchange (CAL-MAX) Program is sponsored by the California Integrated Waste Management Board. CAL-MAX is a free service provided by the California Integrated Waste Management Board, designed to help businesses find markets for materials that traditionally would be discarded. The premise of the CAL-MAX Program is that material discarded by one business may be a resource for another business. To obtain a current Materials Listings Catalog, call CAL-MAX/California Integrated Waste Management Board at (916) 255-2369 or send a FAX to (916) 255-2200. The CALMAX Catalog is available through the Internet Site at http://www.ciwmb/ca.gov/calmax.

8. Revenue
a. Revenues or other savings obtained from recycled, re-used, or salvaged materials shall accrue to Contractor unless otherwise noted in the Contract Documents.
b. Remove and transport C&D materials in a manner that will prevent spillage on adjacent surfaces, streets, and areas or dust being emitted into the atmosphere.
c. Clean adjacent streets of dust, dirt, and C&D materials caused by demolition operations. At the end of each work day, return adjacent areas to condition existing before start of demolition.

3.5 DEMOLITION

A. Conduct demolition to minimize interference with occupied building areas.

B. Damages: Promptly repair damages to adjacent facilities caused by demolition operations.

3.6 HANDLING OF DEMOLISHED MATERIALS

A. General: Promptly re-use, salvage, recycle, or dispose of demolished materials. Do not allow demolished materials to accumulate or be stored on-site for more than fourteen (14) days.

B. Burning: Do not burn demolished materials.

C. Disposal: Transport demolished materials off the Trustees' property and legally reuse, salvage, recycle, or dispose of materials.

END OF SECTION 02 41 00