



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

Division of Facilities Construction and Management

DFCM

**MULTI-STEP BIDDING PROCESS
FOR
GENERAL CONTRACTORS**

Single Project---Short-Listing

Request for Submittals

July 9, 2009

INTRAMURAL FIELDS IMPROVEMENTS

UTAH VALLEY UNIVERSITY

OREM, UTAH

DFCM Project Number 09025790

King Engineering

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Current copies of the following documents are hereby made part of these contract documents by reference. These documents are available on the DFCM web site at <http://dfcm.utah.gov/StdDocs/index.html> "Reference Documents 1 6. Supplemental General Conditions" or are available upon request from DFCM:

DFCM Supplemental General Conditions dated July 1, 2009 *

DFCM Supplemental General Conditions dated July 15, 2008

DFCM General Conditions dated May 25, 2005

*** NOTE: THE NEW SUPPLEMENTAL GENERAL CONDITIONS EFFECTIVE JULY 1, 2009 DEALING WITH HEALTH INSURANCE AND IMMIGRATION ARE REFERENCED AT THE LINK ABOVE.**

The Agreement and General Conditions dated May 25, 2005 have been updated from versions that were formally adopted and in use prior to this date. The changes made to the General Conditions are identified in a document entitled Revisions to General Conditions that is available on DFCM's web site at <http://dfcm.utah.gov>

NOTICE TO CONTRACTORS

The State of Utah - Division of Facilities Construction and Management (DFCM) is requesting submissions for the following project:

Project Name: Intramural Fields Improvements – Utah Valley University – Orem, Utah
Project No. 09025790
Project Description: Grub, level, irrigate and sod multiple sections of earth for intramural sports at UVU Orem Campus
Cost Estimate: \$425,000.00

DFCM is entering into a Multi-Step Bidding Process for Construction services. A short-listing of contractors will be based on the selection criteria outlined in the bidding documents contained herein. Short-listed contractors will be invited to submit bids on the project described above. **The only contractors allowed to bid on this project will be contractors short-listed by the selection committee.**

All contractors responding to this procurement must comply with and require all of their subcontractors to comply with the license laws as required by the State of Utah.

The bidding documents including plans and specification, short-listing requirements and schedule will be available at **3:00 PM on Thursday, July 9, 2009** on the DFCM web page at <http://dfcm.utah.gov> and from DFCM, 4110 State Office Building, Salt Lake City, Utah 84114, telephone 801-538-3018. For questions regarding this solicitation, please contact **Michael Ambre**, DFCM, at 801-209-9104. No others are to be contacted regarding this solicitation.

A **mandatory** pre-submittal meeting to discuss the multi-step bidding process will be held at **2:45 PM on Tuesday, July 14, 2009** at 1112 South 400 West Orem, Utah

When bidding on this project, short-listed contractors will be required to submit a Bid Bond in the amount of five percent (5%) of the bid amount, made payable to the Division of Facilities Construction and Management on DFCM's Bid Bond Form. A Bid Bond must accompany each bid.

The Division of Facilities Construction & Management reserves the right to reject any or all submittals/bids or to waive any formality or technicality in any submittal/bid in the interest of the State.

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
JOANNA REESE, CONTRACT COORDINATOR
4110 State Office Bldg., Salt Lake City, Utah 84114

DESCRIPTION OF WORK

The only contractors allowed to bid on this project will be contractors short-listed by the selection committee.

Project Description:

Grub, level, irrigate and sod multiple sections of earth for intramural sports at UVU Orem Campus

Individual contractors or alliances between two or more contractors are allowed in this process to form a team. However, one contractor or firm MUST be declared as the lead firm representing the team. If the team is short-listed through this multi-step process, the state will only enter into contracts with the lead contractor or firm. The lead contractor or firm must be licensed by the State of Utah and comply with and require all of its subcontractors to comply with the license laws as required by the State of Utah.

MULTI-STEP BIDDING PROCESS

SHORT-LISTING OF GENERAL CONTRACTORS

The short-listing of contractors will be based on the selection criteria outlined in this document.

1. Multi-Step Bidding Documents

The Multi-Step bidding documents consist of all of the information contained in this solicitation and all documents listed in the Table of Contents. All said documents are incorporated in this document by reference.

2. Availability of Documents

Bidding documents are available free of charge at the locations stated on the Schedule. The bidding documents are also available at DFCM's internet web site at <http://dfcm.utah.gov>.

3. Drawings and Specifications and Interpretations

Drawings, specifications and other contract documents may be obtained as stated in the Notice to Contractors. If any firm is in doubt as to the meaning or interpretation of any part of the drawings, specifications, scope of work or contract documents, they shall submit, in writing, a request for interpretation to the authorized DFCM representative by the deadline identified in the schedule. Answers to questions and interpretations will be made via addenda issued by DFCM. Neither DFCM nor the designer shall be responsible for incorrect information obtained by contractors from sources other than the official drawings/specifications and addenda issued by DFCM.

4. Contact Information

Except as authorized by the DFCM Representative or as otherwise stated in the bidding documents or the pre-submittal meeting, communication during the multi-step bidding process shall be directed to the specified DFCM's Representative. In order to maintain the fair and equitable treatment of everyone, contractors shall not unduly contact or offer gifts or gratuities to owners, users or selection committee members in an effort to influence the selection process or in a manner that gives the appearance of influencing the selection process. This prohibition applies before the bidding documents are issued as the project is developed, and extends through the award of a contract. Failure to comply with this requirement may result in a disqualification from the multi-step bidding process. Contractors should be aware that selection committee members will be required to certify that they have not been contacted by any of the contractors in an attempt to influence the selection process.

5. Requests for Information

All requests for information shall be in writing and directed to:

Project Manager Michael Ambre
Division of Facilities Construction and Management
4110 State Office Building
Salt Lake City, Utah 84114
E-mail: mambre@utah.gov
Phone: 801-209-9104
Facsimile: 801-538-3267

6. **Schedule**

The Schedule lists the important events, dates, times and locations of meetings and submittals that must be met by the contractor.

7. **Pre-Submittal Meeting**

A **mandatory** pre-submittal meeting will be held on the date and time and at the location listed on the Schedule. During the meeting, questions will be answered about the multi-step bidding process. Questions about the project, plans and specifications will also be addressed. Attendance at this meeting is mandatory for General Contractors.

8. **Submittal Due Dates and Times**

All required submittals must be delivered to, and received by, the Division of Facilities Construction and Management by the time deadline established in the Schedule. Submittals received after the specified time deadline will not be accepted. Please allow adequate time for delivery. If using a courier service, the contractor is responsible for ensuring that delivery will be made directly to the required location prior to the deadline.

9. **Last Day to Submit Questions**

Questions must be submitted in writing to the DFCM project manager by the deadline listed on the Schedule.

10. **Addendum**

All clarifications will be in writing and issued as addenda to the RFS. Addenda will be posted on DFCM's web site at <http://dfcm.utah.gov>. **Contractors are responsible for obtaining information contained in the addenda from the web site. Any addenda issued prior to the submittal deadline shall become part of the multi-step bidding process and any information required must be included in the contractor's submittal.** Addenda issued prior to the submittal deadline shall become part of the bidding process and must be acknowledged on the bid form. Failure to acknowledge addenda may result in disqualification from bidding. DFCM shall not be responsible for incorrect information obtained by contractors from sources other than official addenda issued by DFCM.

11. **Bid Bond Requirements**

A bid bond properly signed by a qualified surety, as indicated on the DFCM Bid Bond form provided along with this Instruction to Bidders, in the amount of 5% of the bid, shall accompany the bid submission to DFCM. **THIS BID BOND MUST BE ON THE DFCM BID BOND FORM PROVIDED WITH THIS INSTRUCTION TO BIDDERS IN ORDER TO BE CONSIDERED AN ACCEPTABLE BID** unless only one bid is received by DFCM, or the failure to comply with the bid bond requirements is determined by the Director of DFCM to be nonsubstantial based on the following:

- (a) the bid bond is submitted on a form other than DFCM's required Bid Bond form and the bid bond meets all other requirements including being issued by a surety firm authorized to do business in the State of Utah and be listed in the U.S. Department of the Treasury Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies for an amount not less than the amount of the bond to be issued. A co-surety may be utilized to satisfy this requirement; and

- (b) the contractor provides a bid bond properly signed by a qualified surety and on the required DFCM Bid Bond form by the close of business of the next succeeding business day after the DFCM notifies the bidder of the defective bid bond.

12. Performance and References

DFCM will rate each firm's performance on every project worked on (rating scale: 1 = low; 5 = high). The rating may include comments from agencies. The firm will have an opportunity to review and comment on their ratings. Ratings on DFCM projects over the previous five years will be provided to the selection committee for their consideration in evaluating and scoring the past performance of each firm. If a firm has not completed at least three DFCM projects in the last five years, they shall provide by the time indicated on the Schedule, a list of references on additional projects for a total of five projects. References should include: (a) name and address of the project; (b) name and phone number of the person able to answer questions about the project; (c) date of when the work was completed; (d) the cost of the project and the type of project (school, office, warehouse, etc).

13. Statement of Qualifications

The Contractor (firm) shall provide five copies of a statement of qualifications by the time indicated on the Schedule. The statement should describe: (a) the financial viability of your firm; (b) the experience, skill level and qualifications of your firm - identify the specific project manager and site superintendent that will be assigned to this project; (c) provide examples of similar projects completed by your firm and the specific project manager and site superintendent that will be assigned to this project; (d) describe your firm's areas of expertise and other special qualifications as they pertain to this project; (e) document your firm's track record of completing projects on time and within budget; (f) explain your firm's reputation and commitment to high-quality workmanship; and (g) document your firm's ability to comply with the bonding requirements outlined earlier in this document. The statement of qualifications should be concise (**limit three pages**) yet contain sufficient information for evaluation by the selection committee. Note: If multiple firms combine to form a team, only the lead contractor or firm will be allowed to bid on projects. In addition, if any member of the team (contractor or firm) withdraws from the team, the entire team is disqualified and will not be allowed to bid.

14. Termination or Debarment Certification

Each firm must submit a certification that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from soliciting work by any governmental department or agency. The firm must also certify that neither the firm nor its principals have been terminated during the performance of a contract or withdrew from a contract to avoid termination. If the firm cannot certify to these statements, the firm shall submit a written explanation. Firms are to submit the certifications with their Statement of Qualifications.

15. Project Management Plan

Each Contractor (firm) shall provide five copies of a document describing their management plan by the time indicated on the Schedule. The document should include: (a) the process used for selecting and managing subcontractors; (b) a description of how the your firm is organized - pertaining to this project, document who will be in charge with decision making authority; (c) a project schedule detailing your firm's plan to ensure that the project will be completed on time (include timeline for ordering long lead materials and equipment); (d) a description of the process (action plan) your firm will take to bring the project back on schedule if it falls behind; (e) the procedures your firm has in place to minimize change

orders; (f) the methodology used to ensure the accuracy of your bid; (g) your firm's approach to site security and project safety; (h) your firm's understanding of DFCM's construction general conditions and contract requirements; and (i) any other information that will assist the selection committee in evaluating your firm's approach to project management.

Include an organization chart of key personnel and a description of their duties. The management plan document should be concise (**limit three pages**) yet contain sufficient information for evaluation by the selection committee. The organization chart is a separate document and is not counted as one of the three pages.

16. Selection Committee

The selection committee will evaluate and score each firm/team. Committee members may include individuals from DFCM, User Agency/Institution, and a representative from the design or construction disciplines.

17. Interviews

If interviews are required, firms will be notified of the date and time of their interview. Otherwise, the selection committee reserves the right to short-list firms/teams based on their submitted past performance ratings/references, statement of qualifications and project management plan.

If necessary, interviews will be conducted with all responsive and responsible contractors. Firms that are late or do not appear for the interview may be disqualified by the committee. The evaluation will be made using the selection criteria contained in this document. Information provided by the past performance/references, statement of qualifications, project management plan and the interview will be evaluated using the selection criteria as the basis for the selection. The purpose of the interview is to allow contractors an opportunity to present their qualifications, discuss past performance/references and describe their project management plan. It will also provide an opportunity for the selection committee to ask questions about these items. Firms may elect to have management personnel, project managers and superintendents in attendance. Attendance of subcontractors is at the discretion of the contractor. The method of presentation is at the discretion of the contractor.

18. Selection Criteria

The following criteria and weighting will be used in evaluating each firm/team. The selection committee will consider all criteria in performing a comprehensive evaluation of each firm/team. Each firm/team will be scored by each selection committee member in the categories listed below.

- A. Performance Rating/References.** The committee will receive a past performance rating and/or reference score for each firm/team. DFCM will compute the score for each firm/team based upon the information outlined earlier in this document. **Possible Points: 35**
- B. Statement of Qualifications.** The committee will evaluate and score each firm's/team's qualifications in accordance with the information outlined earlier in this document as well as additional information about the firm's/team's qualifications presented during the interview. **Possible Points: 35**

- C. **Project Management Plan.** The committee will evaluate and score each firm's/team's project management approach in accordance with the information outlined earlier in this document as well as additional information about the firm's/team's project management approach presented during the interview. **Possible Points: 30**

TOTAL POINTS = 100 POINTS

19. Short-Listing

DFCM will **short-list up to six firms** receiving the highest score above the minimum score of 85 points from the selection committee. No firms receiving fewer than 85 points will be short-listed. Only short-listed firms will be invited to bid on this project. During the bidding process, the final contractor selection will be based on the lowest responsive and responsible bidder.

20. Product Approvals

Where reference is made to one or more proprietary products in the contract documents, but restrictive descriptive materials of one or more manufacturer(s) is referred to in the contract documents, the products of other manufacturers will be accepted, provided they equal or exceed the standards set forth in the drawings and specifications and are compatible with the intent and purpose of the design, subject to the written approval of the Designer. Such written approval must occur prior to the deadline established for the last scheduled addendum to be issued. The Designer's written approval will be included as part of the addendum issued by DFCM. If the descriptive material is not restrictive, the products of other manufacturers specified will be accepted without prior approval provided they are compatible with the intent and purpose of the design as determined by the Designer.

21. Trade Secrets or Confidential Matters

Any submitter may designate those portions of the submittals which contain trade secrets or other confidential matters that the Governmental Records and Access Management Act (GRAMA) would allow to be a protected record. Any disclosure of submittals or portions thereof shall be in accordance with GRAMA and State law.

22. Financial Responsibility of Contractors, Subcontractors and Sub-subcontractors

Contractors shall respond promptly to any inquiry in writing by DFCM to any concern of financial responsibility of the Contractor, Subcontractor or Sub-subcontractor. Failure to respond may result in the Contractor (firm) receiving a poor performance rating on this project.

23. Licensure

The Contractor shall comply with and require all of its Subcontractors to comply with the license laws as required by the State of Utah.

24. Permits

In concurrence with the requirements for permitting in the General Conditions, it is the responsibility of the Contractor to obtain the fugitive dust plan requirements from the Utah Division of Air Quality and the SWPPP requirements from the Utah Department of Environmental Quality and submit the

completed forms and pay any permit fee that may be required for this specific project. Failure to obtain the required permit may result in work stoppage and/or fines from the regulating authority that will be the sole responsibility of the Contractor. Any delay to the project as a result of any such failure to obtain the permit or noncompliance with the permit shall not be eligible for any extension in the Contract Time.

25. Time is of the Essence

Time is of the essence in regard to all the requirements of the contract documents.

26. Bids

Before submitting a bid, each bidder shall carefully examine the contract documents; shall visit the site of the work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the bid the cost of all items required by the contract documents including those added via addenda. If the bidder observes that portions of the contract documents are at variance with applicable laws, building codes, rules, regulations or contain obvious erroneous or uncoordinated information, the bidder shall promptly notify the DFCM Project Manager. Changes necessary to correct these issues will be made via addenda issued by DFCM.

The bid, bearing original signatures, must be typed or handwritten in ink on the Bid Form provided in the procurement documents and submitted in a sealed envelope at the location specified by the Notice to Contractor's prior to the published deadline for the submission of bids.

Bid bond security, in the amount of five percent (5%) of the bid, made payable to the Division of Facilities Construction and Management, shall accompany bid. **THE BID BOND MUST BE ON THE BID BOND FORM PROVIDED IN THE PROCUREMENT DOCUMENTS IN ORDER TO BE CONSIDERED AN ACCEPTABLE BID.**

If the bid bond security is submitted on a form other than the Owner's required bid bond form, and the bid security meets all other legal requirements, the bidder will be allowed to provide an acceptable bid bond by the close of business on the next business day following notification by DFCM of submission of a defective bid bond security. **A cashier's check cannot be used as a substitute for a bid bond.**

27. Listing of Subcontractors

Listing of Subcontractors shall be as summarized in the "Instructions and Subcontractors List Form", included as part of the contract documents. The Subcontractors List shall be delivered to DFCM or faxed to DFCM at (801)538-3677 within 24 hours of the bid opening. Requirements for listing additional subcontractors will be listed in the contract documents.

DFCM retains the right to audit or take other steps necessary to confirm compliance with requirements for the listing and changing of subcontractors. Any contractor who is found to not be in compliance with these requirements may receive a poor performance rating on this project.

28. Contract and Bond

The Contractor's Agreement will be in the form found in the specifications. The contract time will be as indicated in the bid. The successful bidder, simultaneously with the execution of the Contract Agreement, will be required to furnish a performance bond and a payment bond, both bearing original signatures, upon the forms provided in the procurement documents. The performance and payment bonds shall be for an amount equal to one hundred percent (100%) of the Contract Sum and secured from a company that meets the requirements specified in the requisite forms. Any bonding requirements for Subcontractors will be specified in the Supplementary General Conditions.

29. Award of Contract

The Contract will be awarded as soon as possible to the lowest, responsive and responsible bidder, based on the lowest combination of base bid and acceptable prioritized alternates, provided the bid is reasonable, is in the interests of DFCM to accept and after applying the Utah Preference Laws in U.C.A. Title 63, Chapter 56. DFCM reserves the right to waive any technicalities or formalities in any bid or in the bidding. Alternates will be accepted on a prioritized basis with Alternate 1 being highest priority, Alternate 2 having second priority, etc.

30. Right to Reject Bids

DFCM reserves the right to reject any or all Bids.

31. Withdrawal of Bids

Bids may be withdrawn on written request received from bidders within 24 hours after the bid opening if the contractor has made an error in preparing the bid.



MULTI-STEP PROJECT SCHEDULE

PROJECT NAME:		INTRAMURAL FIELDS IMPROVEMENTS – UTAH VALLEY UNIVERSITY OREM, UTAH		
DFCM PROJECT NO. :		09025790		
Event	Day	Date	Time	Place
Document Available, including Plans and Specifications	Thursday	July 9, 2009	3:00 PM	DFCM 4110 State Office Building SLC, UT and DFCM web site*
Mandatory Pre-Submittal Meeting	Tuesday	July 14, 2009	2:45 PM	1112 South 400 West Orem, Utah
Last Day to Submit Questions on Shortlisting (In Writing)	Monday	July 20, 2009	4:00 PM	<i>Michael Ambre</i> - DFCM E-mail mambre@utah.gov Fax 801-538-3267
Addendum on Shortlisting	Wednesday	July 22, 2009	2:00 PM	DFCM web site*
List of References, Statement of Qualifications, Project Management Plan, and Termination/Debarment Certification Due	Monday	July 27, 2009	12:00 NOON	DFCM 4110 State Office Building SLC, UT
Interviews by Selection Committee (if necessary)	Wednesday	July 29, 2009	To Be Announced	DFCM 4110 State Office Building SLC, UT
Short-List Announced	Monday	August 3, 2009	12:00 PM	
Notice: Only Short-Listed Firms Will Be Allowed To Bid On This Project				
Last Day to Submit Questions (In Writing)	Wednesday	August 5, 2009	12:00 PM	<i>Michael Ambre</i> - DFCM E-mail mambre@utah Fax 801-538-3267
Final Addendum (exception for bid delays)	Monday	August 10, 2009	2:00 PM	DFCM web site*
Prime Contractors Turn in Bid and Bid Bond/Bid Opening in DFCM Conference Room	Wednesday	August 12, 2009	2:30 PM	DFCM 4110 State Office Building SLC, UT
Subcontractors List Due	Thursday	August 13, 2009	2:30 PM	DFCM 4110 State Office Building SLC, UT Fax 801-538-3677
Project Completion Date	Friday	November 20, 2009	5:00 PM	

* DFCM’s web site address is <http://dfcm.utah.gov>



BID FORM

NAME OF BIDDER _____ DATE _____

To the Division of Facilities Construction and Management
4110 State Office Building
Salt Lake City, Utah 84114

The undersigned, responsive to the "Notice to Contractors" and in accordance with the "Instructions to Bidders", in compliance with your invitation for bids for the **Intramurals Fields Improvements - Utah Valley University – Orem, Utah – Project No. 09025790** and having examined the Contract Documents and the site of the proposed Work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. This price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this bid is a part:

I/We acknowledge receipt of the following Addenda: _____

For all work shown on the Drawings and described in the Specifications and Contract Documents, I/we agree to perform for the sum of:

_____ DOLLARS (\$_____)

(In case of discrepancy, written amount shall govern)

I/We guarantee that the Work will be Substantially Complete by November 20, 2009, should I/we be the successful bidder, and agree to pay liquidated damages in the amount of **\$300.00** per day for each day after expiration of the Contract Time as stated in Article 3 of the Contractor's Agreement.

This bid shall be good for 45 days after bid opening.

Enclosed is a 5% bid bond, as required, in the sum of _____

The undersigned Contractor's License Number for Utah is _____.

Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in the Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract.

The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable 100% Performance and Payment bonds are not delivered within the time set forth.

Type of Organization:

(Corporation, Partnership, Individual, etc.)

Any request and information related to Utah Preference Laws:

Respectfully submitted,

Name of Bidder

ADDRESS:

Authorized Signature



INSTRUCTIONS AND SUBCONTRACTORS LIST FORM

The three low bidders, as well as all other bidders that desire to be considered, are required by law to submit to DFCM within 24 hours of bid opening a list of **ALL** first-tier subcontractors, including the subcontractor's name, bid amount and other information required by Building Board Rule and as stated in these Contract Documents, based on the following:

DOLLAR AMOUNTS FOR LISTING

PROJECTS UNDER \$500,000: ALL FIRST-TIER SUBS \$20,000 OR OVER MUST BE LISTED
PROJECTS \$500,000 OR MORE: ALL FIRST-TIER SUBS \$35,000 OR OVER MUST BE LISTED

- Any additional subcontractors identified in the bid documents shall also be listed.
- The DFCM Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law.
- List subcontractors for base bid as well as the impact on the list that the selection of any alternate may have.
- Bidder may not list more than one subcontractor to perform the same work.
- If there are no subcontractors for the job that are required to be reported by State law (either because there are no subcontractors that will be used on the project or because there are no first-tier subcontractors over the dollar amounts referred to above), then you do not need to submit a sublist. If you do not submit a sublist, it will be deemed to be a representation by you that there are no subcontractors on the job that are required to be reported under State law. At any time, DFCM reserves the right to inquire, for security purposes, as to the identification of the subcontractors at any tier that will be on the worksite.

LICENSURE:

The subcontractor's name, the type of work, the subcontractor's bid amount, and the subcontractor's license number as issued by DOPL, if such license is required under Utah Law, shall be listed. Bidder shall certify that all subcontractors, required to be licensed, are licensed as required by State law. A subcontractor includes a trade contractor or specialty contractor and does not include suppliers who provide only materials, equipment, or supplies to a contractor or subcontractor.

'SPECIAL EXCEPTION':

A bidder may list 'Special Exception' in place of a subcontractor when the bidder intends to obtain a subcontractor to perform the work at a later date because the bidder was unable to obtain a qualified or reasonable bid under the provisions of U.C.A. Section 63A-5-208(4). The bidder shall insert the term 'Special Exception' for that category of work, and shall provide documentation with the subcontractor list describing the bidder's efforts to obtain a bid of a qualified subcontractor at a reasonable cost and why the bidder was unable to obtain a qualified subcontractor bid. The Director must find that the bidder complied in good faith with State law requirements for any 'Special Exception' designation, in order for the bid to be considered. If awarded the contract, the Director shall supervise the bidder's efforts to obtain a qualified subcontractor bid. The amount of the awarded contract may not be adjusted to reflect the actual amount of the subcontractor's bid. Any listing of 'Special Exception' on the sublist form shall also include amount allocated for that work.

GROUND FOR DISQUALIFICATION:

The Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law. Director may withhold awarding the contract to a particular bidder if one or more of the proposed subcontractors are considered by the Director to be unqualified to do the Work or for

INSTRUCTIONS AND SUBCONTRACTORS LIST FORM
PAGE NO. 2

such other reason in the best interest of the State of Utah. Notwithstanding any other provision in these instructions, if there is a good faith error on the sublist form, at the sole discretion of the Director, the Director may provide notice to the contractor and the contractor shall have 24 hours to submit the correction to the Director. If such correction is submitted timely, then the sublist requirements shall be considered met.

CHANGES OF SUBCONTRACTORS SPECIFICALLY IDENTIFIED ON SUBLIST FORM:

Subsequent to twenty-four hours after the bid opening, the contractor may change its listed subcontractors only after receiving written permission from the Director based on complying with all of the following criteria.

- (1) The contractor has established in writing that the change is in the best interest of the State and that the contractor establishes an appropriate reason for the change, which may include, but not is not limited to, the following reasons: the original subcontractor has failed to perform, or is not qualified or capable of performing, and/or the subcontractor has requested in writing to be released.
- (2) The circumstances related to the request for the change do not indicate any bad faith in the original listing of the subcontractors.
- (3) Any requirement set forth by the Director to ensure that the process used to select a new subcontractor does not give rise to bid shopping.
- (4) Any increase in the cost of the subject subcontractor work is borne by the contractor.
- (5) Any decrease in the cost of the subject subcontractor work shall result in a deductive change order being issued for the contract for such decreased amount.
- (6) The Director will give substantial weight to whether the subcontractor has consented in writing to being removed unless the Contractor establishes that the subcontractor is not qualified for the work.

EXAMPLE:

Example of a list where there are only four subcontractors:

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONTRACTOR LICENSE #
ELECTRICAL	ABCD Electric Inc.	\$350,000.00	123456789000
LANDSCAPING	"Self" *	\$300,000.00	123456789000
CONCRETE (ALTERNATE #1)	XYZ Concrete Inc	\$298,000.00	987654321000
MECHANICAL	"Special Exception" (attach documentation)	Fixed at: \$350,000.00	(TO BE PROVIDED AFTER OBTAINING SUBCONTRACTOR)

* Bidders may list "self", but it is not required.

PURSUANT TO STATE LAW - SUBCONTRACTOR BID AMOUNTS CONTAINED IN THIS SUBCONTRACTOR LIST SHALL NOT BE DISCLOSED UNTIL THE CONTRACT HAS BEEN AWARDED.



SUBCONTRACTORS LIST
FAX TO 801-538-3677

PROJECT TITLE: _____

Caution: You must read and comply fully with instructions.

Table with 4 columns: TYPE OF WORK, SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION", SUBCONTRACTOR BID AMOUNT, CONT. LICENSE #

We certify that:

- 1. This list includes all subcontractors as required by the instructions, including those related to the base bid as well as any alternates.
2. We have listed "Self" or "Special Exception" in accordance with the instructions.
3. All subcontractors are appropriately licensed as required by State law.

FIRM: _____

DATE: _____

SIGNED BY: _____

NOTICE: FAILURE TO SUBMIT THIS FORM, PROPERLY COMPLETED AND SIGNED, AS REQUIRED IN THESE CONTRACT DOCUMENTS, SHALL BE GROUNDS FOR OWNER'S REFUSAL TO ENTER INTO A WRITTEN CONTRACT WITH BIDDER. ACTION MAY BE TAKEN AGAINST BIDDERS BID BOND AS DEEMED APPROPRIATE BY OWNER. ATTACH A SECOND PAGE IF NECESSARY.

CONTRACTOR'S AGREEMENT

FOR:

THIS CONTRACTOR'S AGREEMENT, made and entered into this __ day of _____, 2006, by and between the DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT, hereinafter referred to as "DFCM", and _____, incorporated in the State of Utah and authorized to do business in the State of Utah, hereinafter referred to as "Contractor", whose address is _____ Utah _____.

WITNESSETH: WHEREAS, DFCM intends to have _____ Work performed at _____

WHEREAS, Contractor agrees to perform the Work for the sum stated herein.

NOW, THEREFORE, DFCM and Contractor for the consideration provided in this Contractor's Agreement, agree as follows:

ARTICLE 1. SCOPE OF WORK. The Work to be performed shall be in accordance with the Contract Documents prepared by _____ and entitled "_____."

The DFCM General Conditions ("General Conditions") dated May 25, 2005 and Supplemental General Conditions dated July 15, 2008 and July 1, 2009 (also referred to as "General Condition"), on file at the office of DFCM and available on the DFCM website, are hereby incorporated by reference as part of this Agreement and are included in the specifications for this Project. All terms used in this Contractor's Agreement shall be as defined in the Contract Documents, and in particular, the General Conditions.

The Contractor Agrees to furnish labor, materials and equipment to complete the Work as required in the Contract Documents which are hereby incorporated by reference. It is understood and agreed by the parties hereto that all Work shall be performed as required in the Contract Documents and shall be subject to inspection and approval of DFCM or its authorized representative. The relationship of the Contractor to the DFCM hereunder is that of an independent Contractor.

ARTICLE 2. CONTRACT SUM. The DFCM agrees to pay and the Contractor agrees to accept in full performance of this Contractor's Agreement, the sum of _____ **DOLLARS AND NO CENTS (\$_____)**, which is the base bid, and includes the cost of a 100%

CONTRACTOR'S AGREEMENT
PAGE NO. 2

Performance Bond and a 100% Payment Bond as well as all insurance requirements of the Contractor. Said bonds have already been posted by the Contractor pursuant to State law. The required proof of insurance certificates have been delivered to DFCM in accordance with the General Conditions before the execution of this Contractor's Agreement.

ARTICLE 3. TIME OF COMPLETION AND DELAY REMEDY. The Work shall be Substantially Complete by _____ after the date of the Notice to Proceed. Contractor agrees to pay liquidated damages in the amount of _____ per day for each day after expiration of the Contract Time until the Contractor achieves Substantial Completion in accordance with the Contract Documents, if Contractor's delay makes the damages applicable. The provision for liquidated damages is: (a) to compensate the DFCM for delay only; (b) is provided for herein because actual damages can not be readily ascertained at the time of execution of this Contractor's Agreement; (c) is not a penalty; and (d) shall not prevent the DFCM from maintaining Claims for other non-delay damages, such as costs to complete or remedy defective Work.

No action shall be maintained by the Contractor, including its or Subcontractor or suppliers at any tier, against the DFCM or State of Utah for damages or other claims due to losses attributable to hindrances or delays from any cause whatsoever, including acts and omissions of the DFCM or its officers, employees or agents, except as expressly provided in the General Conditions. The Contractor may receive a written extension of time, signed by the DFCM, in which to complete the Work under this Contractor's Agreement in accordance with the General Conditions.

ARTICLE 4. CONTRACT DOCUMENTS. The Contract Documents consist of this Contractor's Agreement, the Conditions of the Contract (DFCM General Conditions, Supplementary and other Conditions), the Drawings, Specifications, Addenda and Modifications. The Contract Documents shall also include the bidding documents, including the Notice to Contractors, Instructions to Bidders/Proposers and the Bid/Proposal, to the extent not in conflict therewith and other documents and oral presentations that are documented as an attachment to the contract.

All such documents are hereby incorporated by reference herein. Any reference in this Contractor's Agreement to certain provisions of the Contract Documents shall in no way be construed as to lessen the importance or applicability of any other provisions of the Contract Documents.

ARTICLE 5. PAYMENT. The DFCM agrees to pay the Contractor from time to time as the Work progresses, but not more than once each month after the date of Notice to Proceed, and only upon Certificate of the A/E for Work performed during the preceding calendar month, ninety-five percent (95%) of the value of the labor performed and ninety-five percent (95%) of the value of materials furnished in place or on the site. The Contractor agrees to furnish to the DFCM invoices for materials purchased and on the site but not installed, for which the

CONTRACTOR'S AGREEMENT
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Contractor requests payment and agrees to safeguard and protect such equipment or materials and is responsible for safekeeping thereof and if such be stolen, lost or destroyed, to replace same.

Such evidence of labor performed and materials furnished as the DFCM may reasonably require shall be supplied by the Contractor at the time of request for Certificate of Payment on account. Materials for which payment has been made cannot be removed from the job site without DFCM's written approval. Five percent (5%) of the earned amount shall be retained from each monthly payment. The retainage, including any additional retainage imposed and the release of any retainage, shall be in accordance with UCA 13-8-5 as amended. Contractor shall also comply with the requirements of UCA 13-8-5, including restrictions of retainage regarding subcontractors and the distribution of interest earned on the retention proceeds. The DFCM shall not be responsible for enforcing the Contractor's obligations under State law in fulfilling the retention law requirements with subcontractors at any tier.

ARTICLE 6. INDEBTEDNESS. Before final payment is made, the Contractor must submit evidence satisfactory to the DFCM that all payrolls, materials bills, subcontracts at any tier and outstanding indebtedness in connection with the Work have been properly paid. Final Payment will be made after receipt of said evidence, final acceptance of the Work by the DFCM as well as compliance with the applicable provisions of the General Conditions.

Contractor shall respond immediately to any inquiry in writing by DFCM as to any concern of financial responsibility and DFCM reserves the right to request any waivers, releases or bonds from Contractor in regard to any rights of Subcontractors (including suppliers) at any tier or any third parties prior to any payment by DFCM to Contractor.

ARTICLE 7. ADDITIONAL WORK. It is understood and agreed by the parties hereto that no money will be paid to the Contractor for additional labor or materials furnished unless a new contract in writing or a Modification hereof in accordance with the General Conditions and the Contract Documents for such additional labor or materials has been executed. The DFCM specifically reserves the right to modify or amend this Contractor's Agreement and the total sum due hereunder either by enlarging or restricting the scope of the Work.

ARTICLE 8. INSPECTIONS. The Work shall be inspected for acceptance in accordance with the General Conditions.

ARTICLE 9. DISPUTES. Any dispute, PRE or Claim between the parties shall be subject to the provisions of Article 7 of the General Conditions. DFCM reserves all rights to pursue its rights and remedies as provided in the General Conditions.

ARTICLE 10. TERMINATION, SUSPENSION OR ABANDONMENT. This Contractor's Agreement may be terminated, suspended or abandoned in accordance with the General Conditions.

ARTICLE 11. DFCM'S RIGHT TO WITHHOLD CERTAIN AMOUNT AND MAKE USE THEREOF. The DFCM may withhold from payment to the Contractor such amount as, in DFCM's judgment, may be necessary to pay just claims against the Contractor or Subcontractor at any tier for labor and services rendered and materials furnished in and about the Work. The DFCM may apply such withheld amounts for the payment of such claims in DFCM's discretion. In so doing, the DFCM shall be deemed the agent of Contractor and payment so made by the DFCM shall be considered as payment made under this Contractor's Agreement by the DFCM to the Contractor. DFCM shall not be liable to the Contractor for any such payment made in good faith. Such withholdings and payments may be made without prior approval of the Contractor and may be also be prior to any determination as a result of any dispute, PRE, Claim or litigation.

ARTICLE 12. INDEMNIFICATION. The Contractor shall comply with the indemnification provisions of the General Conditions.

ARTICLE 13. SUCCESSORS AND ASSIGNMENT OF CONTRACT. The DFCM and Contractor, respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement, and to partners, successors, assigns and legal representatives of such other party with respect to all covenants, provisions, rights and responsibilities of this Contractor's Agreement. The Contractor shall not assign this Contractor's Agreement without the prior written consent of the DFCM, nor shall the Contractor assign any moneys due or to become due as well as any rights under this Contractor's Agreement, without prior written consent of the DFCM.

ARTICLE 14. RELATIONSHIP OF THE PARTIES. The Contractor accepts the relationship of trust and confidence established by this Contractor's Agreement and covenants with the DFCM to cooperate with the DFCM and A/E and use the Contractor's best skill, efforts and judgment in furthering the interest of the DFCM; to furnish efficient business administration and supervision; to make best efforts to furnish at all times an adequate supply of workers and materials; and to perform the Work in the best and most expeditious and economic manner consistent with the interests of the DFCM.

ARTICLE 15. AUTHORITY TO EXECUTE AND PERFORM AGREEMENT. Contractor and DFCM each represent that the execution of this Contractor's Agreement and the performance thereunder is within their respective duly authorized powers.

ARTICLE 16. ATTORNEY FEES AND COSTS. Except as otherwise provided in the dispute resolution provisions of the General Conditions, the prevailing party shall be entitled to reasonable attorney fees and costs incurred in any action in the District Court and/or appellate body to enforce this Contractor's Agreement or recover damages or any other action as a result of a breach thereof.

PERFORMANCE BOND
(Title 63, Chapter 56, U. C. A. 1953, as Amended)

That _____ hereinafter referred to as the "Principal" and _____, a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____ and authorized to transact business in this State and U. S. Department of the Treasury Listed (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); hereinafter referred to as the "Surety," are held and firmly bound unto the State of Utah, hereinafter referred to as the "Obligee," in the amount of _____ DOLLARS (\$_____) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated the _____ day of _____, 20____, to construct _____ in the County of _____, State of Utah, Project No. _____, for the approximate sum of _____ Dollars (\$_____), which Contract is hereby incorporated by reference herein.

NOW, THEREFORE, the condition of this obligation is such that if the said Principal shall faithfully perform the Contract in accordance with the Contract Documents including, but not limited to, the Plans, Specifications and conditions thereof, the one year performance warranty, and the terms of the Contract as said Contract may be subject to Modifications or changes, then this obligation shall be void; otherwise it shall remain in full force and effect.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the state named herein or the heirs, executors, administrators or successors of the Owner.

The parties agree that the dispute provisions provided in the Contract Documents apply and shall constitute the sole dispute procedures of the parties.

PROVIDED, HOWEVER, that this Bond is executed pursuant to the Provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to the same extent as if it were copied at length herein.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 20____.

WITNESS OR ATTESTATION:

PRINCIPAL:

By: _____

(Seal)

Title: _____

WITNESS OR ATTESTATION:

SURETY:

By: _____

Attorney-in-Fact

(Seal)

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 20____, personally appeared before me _____, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney in-fact of the above-named Surety Company and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this _____ day of _____, 20____.

My commission expires: _____

Resides at: _____

NOTARY PUBLIC

Agency: _____
Agent: _____
Address: _____
Phone: _____

Approved As To Form: May 25, 2005
By Alan S. Bachman, Asst Attorney General

PAYMENT BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

KNOW ALL PERSONS BY THESE PRESENTS:

That _____ hereinafter referred to as the "Principal," and _____, a corporation organized and existing under the laws of the State of _____ authorized to do business in this State and U. S. Department of the Treasury Listed (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); with its principal office in the City of _____, hereinafter referred to as the "Surety," are held and firmly bound unto the State of Utah hereinafter referred to as the "Obligee," in the amount of _____ Dollars (\$ _____) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated the _____ day of _____, 20____, to construct _____ in the County of _____, State of Utah, Project No. _____ for the approximate sum of _____ Dollars (\$ _____), which contract is hereby incorporated by reference herein.

NOW, THEREFORE, the condition of this obligation is such that if the said Principal shall pay all claimants supplying labor or materials to Principal or Principal's Subcontractors in compliance with the provisions of Title 63, Chapter 56, of Utah Code Annotated, 1953, as amended, and in the prosecution of the Work provided for in said Contract, then, this obligation shall be void; otherwise it shall remain in full force and effect.

That said Surety to this Bond, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the terms of the Contract or to the Work to be performed thereunder, or the specifications or drawings accompanying same shall in any way affect its obligation on this Bond, and does hereby waive notice of any such changes, extensions of time, alterations or additions to the terms of the Contract or to the Work or to the specifications or drawings and agrees that they shall become part of the Contract Documents.

PROVIDED, HOWEVER, that this Bond is executed pursuant to the provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to the same extent as if it were copied at length herein.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 20____.

WITNESS OR ATTESTATION:

(Seal)

WITNESS OR ATTESTATION:

STATE OF _____)
) ss.
COUNTY OF _____)

PRINCIPAL:

By: _____

Title: _____

SURETY:

By: _____
Attorney-in-Fact (Seal)

On this _____ day of _____, 20____, personally appeared before me _____, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney-in-fact of the above-named Surety Company, and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this _____ day of _____, 20____.
My commission expires: _____
Resides at: _____

NOTARY PUBLIC

Agency: _____
Agent: _____
Address: _____
Phone: _____

Approved As To Form: May 25, 2005
By Alan S. Bachman, Asst Attorney General

UVU CAMPUS STANDARDS

Irrigation and Landscaping

Contractors are responsible to use all information enclosed in this list of standards and specifications for use on UVU campus and properties owned by the university. Exceptions will only be considered or allowed when submitted in writing to the campus grounds department before project or projects are started. This is the standard for installation of irrigation and landscaping on UVU properties. Questions must be submitted before proceeding on any projects. If discrepancies arise between these standards and the plans and specifications these standards shall govern.

***CONTRACTOR IS RESPONSIBLE TO READ AND UNDERSTAND ALL INFORMATION BEFORE BEGINNING ANY PROJECT ON UVU PROPERTIES, NO EXCEPTION**

CONTRACTOR MUST BE LICENSED, INSURED AND BONDABLE

CONTRACTOR MUST BE GLUE CERTIFIED

Primary Grounds Department Contacts:

Jack Boswell	Director of Grounds	801-863-8354	office
		801-376-5942	cell
Russell Clegg	Water master/Lead	801-863-7238	office
		801-362-9515	cell

IRRIGATION

Controllers will be Rain Bird ESP-SAT- TWO WIRE or ESP-SITE -SAT controllers wall mount or stainless steel pedestals as per plans or specifications given on project
Installation of controller must meet Rain Bird installation guidelines including surge suppression for 110 power as well as two wire maxi wire protection (surge pipe). All two wire paths must be in 2" conduit with pull boxes no more than 100' apart. Electrical runs will be in 1" conduit with pull boxes no more than 100' apart. Grounding grid as per Rain Bird specifications must also be included at controller location. Controller pads will be a minimum of 28" x 28" x 4" thick with a minimum of two conduit sweeps entering through the base of the pad. One for power appropriately sized and two for control and Maxicom wiring appropriately sized. One pull box must be installed outside next to controller pad to accommodate connections and grounding before entering controller. All wiring must meet current National Electrical Code.

Spray heads in lawn areas shall be Rain Bird 1804 prs series type
Spray heads in shrub areas shall be Rain Bird 1812 prs series type

Rotors in lawn areas will be Hunter I-20 or I-25 gear driven heads as directed by plans or specifications of project

Spacing on all heads shall be a minimum of head x head coverage no exceptions

Funny pipe connections allowed on all heads that do not exceed rated flows of funny pipe(8 gpm)

Lateral Swing Joints on all 1" or larger inlets on heads must use o-ring pre manufactured swings joints only. (Spears Joint Riser Assemblies or equivalent)

Valves shall be Rain Bird PESB electric remote control scrubber valves 1", 1 1/2" or 2"
2" valves not to exceed 50 gpm no exceptions

1 1/2" valves not to exceed 32 gpm no exceptions

1" valves not to exceed 14 gpm no exceptions

One Appropriate size isolation valve in all valve boxes, gate valves or ball valves (example: 2" valves require 2" isolation)

No more than 2 valves in any valve box

Manifolds will be slip x threaded tee connections or slip x slip with toe nipples only. Sch 40 or sch 80 fittings only on manifolds.

Valve boxes shall be standard or jumbo boxes only, extension boxes can be used only to meet appropriate elevation when needed and approved by UVU grounds department.

All control wires shall be 14 ga. Wire (red - hot, white-common , blue- spare)

Spare wire must be run through all valve boxes to the farthest point or points from the controller

All wire must travel with main lines when ever possible and be taped in a bundle at all times.

Wire must travel under hard surfaces in its own sleeve and not with any pipe. Sleeve must be

sized as two times wire bundle diameter minimum.

Maxicom wire will be 14-2 Rain bird maxi wire or PE-39 communication wire no exceptions

PVC pipe shall be sch 40 on 3/4" through 2" pressure rated pipe

PVC pipe 2 1/2" and up to 6" shall be gasket pressure rated pipe class 200 only

All fittings on 2 1/2" pipe or larger will have Harco or cast iron type fittings. No glued fittings on any pipe over 2"!

Glue shall be 711 medium base glue and used with p-70 primer. Contractor must be glue certified.

Pipe smaller than 2" will be sch 40 glued or threaded fittings only

Thrust blocks will be used on all fittings over 2" no exceptions. Thrust blocks must be of a size to handle high pressure situations as campus pressures are over 100 psi.

Main lines shall be buried a minimum of 24" to the top of pipe in a rock and debris free trench

Lateral lines shall be buried a minimum of 12" to the top of pipe in a rock and debris free trench

2" nut type isolation gate valve on any connection point off the 6", 4", 3" mains

Sleeves must be used anywhere that pipe travels under concrete or asphalt. They must be sized at least 3 times the diameter of pipe passing through sleeve up to 12" sleeves.

1" Rain Bird 44d quick couplers to be installed as noted on plans inside 10" round minimum valve box or larger. They must have purple covers on all covers for non-potable water.

Reduced pressure back flow systems (RPZ) check valves when needed are the only excepted back flow device allowed on UVU properties. These must be installed on an appropriate cement pads and with Hot Box stainless steel enclosures installed over check valves. Check valves must have isolation valves on both sides of valve for maintenance and testing purposes. Risers must place valve a minimum of 14" above pad and must be of rigid materials (galvanized or ductile iron).

King automatic drains (1/2") are required on lateral lines as needed for proper drainage.

Manual drains shall be 3/4" Muller stop and waste valve on all main lines and points of connections as needed for proper drainage with a 2" pvc sleeve and 6" round box for cover over sleeve

All lateral drains will have a gravel sump of at least 12" x 12" x 12" around drain

All main line drains will have 18" x 18" x 18" gravel sump or larger around drain no exceptions

All main lines will be pressure checked at a minimum of 150 psi for a period of no less than 24 hours. Line can not lose no more than 1 lb. in 24hrs.

All wiring that is done on Maxicom system wiring will be Super Serviseal closures or equivalent their will be no exceptions. (Equivalent must be approved prior to use)

All field wiring will be done with waterproof 3m type connections on all splices at valves and in field. Wire connections must always be in valve boxes or pull boxes no exceptions.

All connections on Maxicom ground and grounding grid will be done with a Cadweld grounding "one shot" ground rod connectors used with #6 bare copper wire connections to and from controller.

Top soil shall be imported rock and debris free soil with a minimum of 10% organic material. Sand based field soils will be washed sand, free from rock and debris. It will have a maximum of 8% organic. Sand based fields will have a minimum of at least 12" of 1" gravel placed evenly on the sub grade before sand can be placed. Sand will be at a depth of 12" minimum. Drainage system shall be engineered for proper drainage as per project needs and specifications. The minimum drainage pipe shall be at least 4" diameter perforated pvc with cloth cover sock. (NDS or ADS type PVC)

Soil PH levels will be 7.00 and the soil will be 40% sand, 35% silts, and 25% clays plus or minus 5% in each category. Contractor is responsible to provide soil testing results from an independent source for results and certifications.

Trees in ball and burlap must have at least 50% of basket and burlap removed from tree. Trees in buckets must have the bucket removed from tree completely and soil scarified around root ball.

Shrubs must be removed from bucket, scarified and placed in hole.

Holes for trees and shrubs must be equivalent to two times the diameter of root ball of plant or tree. A preparation of 30% mulch and 70% clean soil must be filled into hole around plant or tree and compacted to stabilize plant or tree. Staking is necessary on trees 2" or larger. All trees and shrubs will have a minimum of 3" bark placed around tree ring and all shrub beds.

Any and All changes must be approved before preceding with any work related to project. Their will be no recourse action after change if no approval was given in writing prior to doing work!

UVU grounds department will inspect all pipe, head and valve layout before allowing any burial of system. This also includes controller locations as well as isolation valves and the complete MAXICOM installation!! UVU grounds will also inspect and approve the use of landscape soils, plants, trees and any other materials used in the landscape project. Contractor is responsible for soil testing and certifications.

Contacts: UVU GROUNDS

Jack Boswell 801-376-5942
Russell Clegg 801-362-9515

rc/2009

SECTION 02810 - IRRIGATION SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide all irrigation equipment and accessories complete, in place, as shown on the drawings, specified herein, and needed for a complete and proper installation.

- B. It will be the contractor's responsibility to report to the Engineer any deviations between the drawings, specifications and the site. Failure to do so prior to the installing of equipment, and resulting in replacing, and/or relocating, will be done at the contractor's expense.

1.2 AS-BUILT IRRIGATION DRAWINGS

- A. Prepare as-built drawings which show deviations from the contract documents made during construction affecting the main line pipe, controller locations, remote control valves, manual drain valves, and all drip distribution and collection line locations. The drawings shall also indicate and show approved substitutions of size, materials and manufacturer's name and catalog number. The Contractor will keep a record of all departures from the contract drawings that occur during construction. These shall be kept on a clean set of prints of the contract drawings. The Engineer will review the "as-built" to verify that changes are being recorded as construction occurs.

1.3 PERMITS AND FEES

- A. Obtain all permits and pay required fees to any governmental agency having jurisdiction over the work. Inspections required by local ordinances during the course of construction shall be arranged as required. On completion of the work, satisfactory evidence shall be furnished to the Owner's representative to show that all work has been installed in accordance with the ordinances and code requirements. See existing utilities paragraph below.

1.4 QUALITY ASSURANCE

- A. This contract work is to be conducted primarily by and coordinated by a licensed Landscape Irrigation Contractor specializing in landscape irrigation work. All work that is irrigation related work shall be conducted by employees who have each had a minimum of one year of experience constructing landscape irrigation systems. The on site supervisor must have a minimum of three years experience constructing landscape irrigation systems and one year experience in a supervisory role.

1.5 COORDINATION

- A. Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and efficiently as possible.

1.6 INSPECTION OF SITE

- A. The contractor shall acquaint him/herself with all site conditions. Should utilities not shown on the plans be found during excavations notify the Engineer. Failure to do so will make the contractor liable for any and all damage thereto arising from his/her operations subsequent to discovery of such utilities not shown on plans.

1.7 EXISTING UTILITIES

- A. Before any trenching, excavation or digging below the surface for any reason is begun, the contractor shall have the area "Blue Staked" in order to determine as close as possible the location of all underground utilities. The contractor will conduct his/her work in such a manner to protect all utilities from damage. It is the responsibility of the contractor to repair or replace any damage incurred by the contractor or the contractor's employees at no expense to the owner.

1.8 PROTECTION OF EXISTING SITE CONDITIONS

- A. The contractor shall take necessary precautions to protect site conditions to remain. Should damage be incurred, the contractor shall repair the damage to its original condition at the contractor's own expense. Contractor shall be responsible for the continued watering of all areas affected by construction. This can be completed by handwatering, the use of temporary irrigation systems or the continued operation of existing systems not disturbed by construction.

1.9 GUARANTEE

- A. All work shall be guaranteed for compliance with the drawings and specifications for a period of one year after the date of substantial completion. The contractor shall make good any deficiencies at the time he/she is notified of any faults, and place in satisfactory condition any damage to the buildings or grounds without cost to the owner. All guarantees shall be in writing and approved by the Engineer before submitting to the Owner.

1.10 SUBMITTALS

- A. Submit one copy of manufacturer's technical data and installation instructions for landscape irrigation system.

PART 2 - MATERIALS

2.1 GENERAL

- A. All materials throughout the system shall be new and in perfect condition. After award of the contract and prior to beginning work, the Contractor shall submit for approval three copies of the complete list of materials which he/she proposes to install. Quantities of materials and equipment need not be included. No

deviations from the specifications shall be allowed, except as provided for in these documents.

2.2 PIPING

- A. All main line pipe shall be Schedule 40, Type 1120-1220 Polyvinyl Chloride (PVC) pipe and shall conform to CS-256-63. All lateral lines shall be Schedule 40, Type 1120-1220 Polyvinyl Chloride (PVC). All piping shall be free from cracks, holes, foreign material, blisters, inside bubbles, wrinkles and dents. Pipe ratings shall be printed on the pipe and no pipe shall be less than 3/4" diameter.
- B. Pipe Joints: All joints shall be solvent welded as per manufacturer's recommendations, using both the proper primer and glue. All joints must be allowed to set for a minimum of 24 hours prior to pressure testing.

2.3 FITTINGS

- A. Fittings for main and lateral lines shall be Schedule 40, Polyvinyl Chloride (PVC). Do NOT use galvanized fittings of any kind.
- B. Fittings on flex swing risers shall be barbed insert ells made of THICK-WALLED POLY PIPE as manufactured by Rainbird.

2.4 RISERS

- A. Flexible swing pipe shall be THICK-WALLED POLY PIPE (funny pipe) as manufactured by Rainbird. This pipe is to be used only between heads and lateral lines and shall not exceed a distance of 5 feet.

2.5 SOLVENT CEMENT

- A. Compatible with PVC pipe and of proper consistency.

2.6 AUTOMATIC CONTROLLERS

- A. The Contractor shall connect all new valves to the existing controller (as shown on the plan) using the station callouts shown on the plan to the satisfaction of the University.

2.7 VALVES

- A. Ball Valves: Ball valves shall be solid bronze meeting Federal Specification WW-V-54, CLASS A, TYPE 1. Size shall be the same size as the electric valve it is installed next to. Valve shall be installed on the up-stream side of the electric remote control valve and in the same valve box.
- B. Manual Drain Valves: All drain valves shall be 3/4" Mueller Oriseal or approved equal and installed as per details on the drawings. This valve is to be installed on mainlines only.
 - 1. Drains: Drains shall be installed at all low points on the mainline only. Each drain shall be provided with a gravel sump of 18" x 18" x 18" filled with 1" diameter gravel.

Install the mainline such that a minimum number of drains are required. Refer to the detail on the drawings for valve stem extensions where required and valve markers.

- C. Automatic Drain Valves: Automatic drains shall be 1/2" King Drains or approved equal and installed as per UVU requirements. Automatic drains are to be installed at low points of lateral lines only.
- D. Electric Remote Control Valve: All electric remote control valves shall be of the size and type as specified on the drawings,
 - 1. Rainbird 200 PESP Series, Automatic Remote Control Valves, or approved equal.

2.8 SLEEVES

- A. All sleeves shall be PVC Schedule 40 sized 2 pipe sizes larger than the pipe or pipes being sleeved (6" diameter min.). Install sleeves in locations as shown on the drawings and at the depths specified for lateral and mainlines. Coordinate the installation of the sleeves with installation of all hard surfaces. Mark location of all sleeves with a 3/4" galvanized roofing nail at both sides of sidewalk or curb and gutter or asphalt in such a manner that future location will not require more than hand shovel excavation. Insure that adequate amounts of sleeving are installed for both water lines and electric control wires.

2.9 ELECTRIC CONTROL WIRE

- A. Wires shall be UF DIRECT BURIAL type. No wire shall be smaller than #14. Ground or neutral wires shall be WHITE, grass areas shall be RED and shrubbery areas shall be BLUE. Spare wires shall be Green.
- B. No splices in electric control wires. All wires shall be 'homeruns' from the valve to the controller.
- C. Conduit: Standard Electrical Conduit. Size as needed.
- D. Rainbird maxicom communication wire

2.10 HEADS

- A. All heads shall be as specified on the drawings. Nozzle patterns are indicated and shown, however, specific site conditions may require that different nozzle patterns be used. Contractor shall adjust patterns to provide adequate coverage.
 - 1. Rainbird 1800 Series pop up rotors. Rainbird standard angle Raincurtain Nozzles as called for on drawing.
 - 2. TORO 300 Stream rotors.
- B. All heads shown on the drawings shall be installed. Contractor shall consult with the Engineer prior to the deletion or addition of any heads.

2.11 VALVE BOXES

- A. Valve boxes shall be of sufficient size to house 1 (one) electric remote control valve and still allow room for maintenance without having to excavate or perform similar operations. Boxes shall be as manufactured by Carson or Brooks Industries meeting ASTM D368 for tensile strength of 12" deep and furnish with a non-hinged cover. Each valve box is to have a 6" bottom extension minimum. The extension should allow for the installation of the valve cluster at the depth of the lateral line (12"). The contractor shall also allow for 4-6" of clear space between the valve cluster and the gravel below the valve.
- B. Valve boxes shall be set flush with the finished grade. Valves shall be set 12" below the top of the box including ball valves and quick couplers where called for. Do NOT install more than one (1) electric remote control valves in a single standard valve box. All valves must have ample room and access for repair.

2.12 QUICK COUPLERS

- A. All quick couplers shall be a Rainbird 1" 440 LRC quick coupler or approved equal.

PART 3 - EXECUTION

3.1 WORKMANSHIP

- A. Lay Out work as accurately as possible to the drawings. The drawings, though carefully drawn, are generally diagrammatic to the extent that swing joints, offsets and all fittings are not shown. All irrigation lines shall be installed in common trenches where possible. Where possible, all trenching shall occur on soft spaces.
- B. If for any reason full and complete coverage of all irrigation areas does not cover, irrigation contractor shall be responsible to contact the Engineer before continuing with his work.
- C. All existing systems with lateral lines and heads running along existing curbs that are to be removed shall be replaced with new piping and heads. Existing heads are to be turned over to the University.
- D. Any Major Revisions to the irrigation system must be submitted and answered in written form, along with any change in contract price.

3.2 EXCAVATION AND TRENCHING

- A. Perform all excavations as required for the installation of the work included under this section, including shoring of earth banks to prevent cave-ins. Restore all surfaces, existing underground installations, etc., damaged or cut as a result of the excavations to their original condition.
- B. Trenches for lateral lines shall be dug a minimum of 12" deep and as wide as necessary to properly install pipes.

- C. Trenches for mainlines shall be dug a minimum of 18" deep. Run all electrical wires in mainline trench as shown in detail on drawings. Where it becomes necessary for wires to leave the mainline trench, the trench for all electrical wires shall be treated as a mainline trench, as herein described.
- D. Trenches shall be made wide enough to allow a minimum of 6 inches between parallel pipe lines.
- E. All trenches are to be 12" away from all curbs, buildings and sidewalks.

3.3 PIPE LINE ASSEMBLY

- A. Install automatic control valves where shown and group together where practical. Place no closer than 12 inches to walk edges, building, and walls. Install in valve box, arranged for easy adjustment and removal. Allow sufficient space around entire valve assembly. Each valve group (up to 4 valves) shall be connected to the main line through a ball valve.
- B. Adjust automatic control valves to provide flow rate of rated operating pressure required for each sprinkler circuit. See schedule.
- C. Plastic pipe and fittings shall be solvent welded using solvents and methods as recommended by manufacturer of the pipe, except where screwed connections are required. Pipe and fittings shall be thoroughly cleaned of dirt, dust and moisture before applying solvent with a non-synthetic bristle brush.
- D. Install pipe in dry weather when temperature is above 40 degrees F. in strict accordance with Manufacturers instructions.
- E. Pipe may be assembled and welded on the surface. Snake pipe from side to side of trench bottom to allow for expansion and contraction.

3.4 BACKFILLING OF TRENCHES

- A. Backfill around and over the pipes in accordance with the details on the drawings. All material that is to come in contact with the pipes shall be less than 1/4 inch in diameter. This material shall be imported for this specific use if necessary. Upon the approval of the Engineer, the existing material on site may be used as backfill material above the pipes.

3.5 FLUSHING AND TESTING

- A. After installation of all new pipes, including laterals for a given circuit, the control valve shall be opened fully and a full head of water be used to flush out the system
- B. Testing will be performed after completion of each circuit and after completion of the entire system. At this time any necessary repair work will be done at the contractor's expense and the

entire system will be in good working order prior to the issuance of the Certificate of Substantial Completion.

3.6 PIPING INSPECTIONS

- A. Before any pipes are covered, the Engineer shall inspect the system for compliance with specifications and drawings. Any required changes will be made at this time at the expense of the contractor.

3.7 SYSTEM OPERATION

- A. The entire system will be tested in the presence of the Engineer, in order to insure COMPLETE coverage of all areas to be watered and the automatic operation of the system using the automatic clock. Any changes required will be made at this time at the contractor's expense.
- B. All heads will be adjusted to their proper coverage and set to the proper depth at this time.

3.8 AUTOMATIC CLOCK

- A. All new valves shall be connected to a new Maxicom compatible controller furnished and installed by the contractor to the satisfaction of the University.

3.9 ELECTRICAL CONTROL WIRES

- A. Electrical control wires shall be installed in the same trench as the main line wherever possible. Wires shall be laid alongside the pipe by "snaking" into the trench to allow as much slack as possible for contraction and expansion of the wire. All wire connections at remote control valves will be left with two feet of wire so that the splice or the valve manifold can be brought to the surface for repairs without disconnecting the wires.
- B. It is important that the joint be absolutely waterproof so that there is no chance for leakage of water and corrosion build-up on the connection. All wiring shall be 'home-run from the valve to the controller.
- C. Conduit: Standard Electrical Conduit from mainline outside building to irrigation controller inside building. Size as needed for 26 wires.

3.10 SLEEVING

- A. All lines to be laid under hard surfaces shall be installed in a 6" minimum PVC Schedule 40 sleeve unless noted otherwise. Depth of sleeves to be determined by the type of line that is to be placed in sleeve. In the case of new construction, all sleeves are to be placed prior to laying of any hard surface. In the case of existing construction, the sleeves must be installed by boring under the existing hard surface.

3.11 QUICK COUPLERS

- A. Quick couplers shall be installed on a swing joint as detailed on the drawings.
- B. Install one (1) quick coupler at each remote control valve or valve cluster.

3.12 TESTING

- A. Operation Testing: After finish grading, contouring and mulching, test the entire system for operation including electrically actuating the remote control valve. Run the system until water begins to puddle and/or run off to determine the initial controller run time to determine the number of irrigation cycles necessary to meet weekly evapotranspiration rates (E.T.) for the plant material installed.

3.13 ADJUSTMENT

- A. After completion of grading, seeding, or sodding, and rolling of grass areas, carefully adjust lawn sprinkler heads so they will be flush with, or not more than 1/2" below finish grade.

3.14 CLEAN-UP

- A. Remove from the site all debris resulting from work of this section.

END OF SECTION 02810

SECTION 02900 - LANDSCAPING

PART 1 - GENERAL

1.1 SUMMARY

- A. The Extent of the landscape development work is shown on the drawings and schedules and includes preparation of landscaped areas, restoration of areas disturbed by construction, and placement of all sod.

1.2 AS-BUILT DRAWINGS

- A. The Contractor will keep a record of all departures from the contract drawings that occur during construction. These shall be kept on a clean set of prints of the contract drawings. The Engineer will review the "as-built drawings" to verify that changes are being recorded as construction occurs.

1.3 QUALITY ASSURANCE

- A. The landscape work shall be done by a single licensed Landscape Contractor specializing in landscape work. The on site supervisor must have a minimum of three years experience in landscape construction and one year experience in a supervisory role.

1.4 PLANT MATERIAL SOURCE QUALITY CONTROL

- A. General: Ship landscape materials with certificates of inspection as required by governmental authorities. Comply with governing regulations applicable to landscape materials.
- B. The source or supplier for all sod materials shall be furnished to the University prior to the delivery of any sod materials on site or stored elsewhere.
- D. Plant materials and other landscape items will be evaluated according to compliance with drawings, schedules, and specifications; as well as overall aesthetic quality, grower or supplier reputation, physical inspection, and American Association of Nurseryman Standards (AANS).

1.5 PLANT MATERIALS

- A. Not Used.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Not Used.

1.7 GRADING AND TOPSOIL

- A. Examine the subgrade, verify the elevations to be no more than 2" above or below subgrade elevation which should allow for 6" of topsoil in all sod areas. Observe the conditions under which work

is to be performed, and notify the University of unsatisfactory conditions.

B. Topsoil is to be placed at a 6" depth in all sodded areas.

1.8 EXISTING UTILITIES

A. Determine location of underground utilities and perform work in a manner which will avoid possible damage. Hand excavate, as required, to minimize possibility of damage to underground utilities. The Contractor shall have the area "Blue Staked" prior to digging. It is the responsibility of the Contractor to repair or replace any damage incurred by the contractor or the contractor's employees at no expense to the owner.

1.9 EXCAVATION

A. When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify the University before planting.

1.10 PLANTING SCHEDULE

A. Proceed with and complete the landscape work as rapidly as portions of the site become available, working within the seasonal limitations for each kind of landscape work required.

1.11 GUARANTEE

A. Guarantee lawns through the specified maintenance period.

PART 2 - MATERIALS:

2.1 TOPSOIL

A. Topsoil: All topsoil is to be imported topsoil which shall consist of natural sandy loam and be of uniform quality, free from subsoil, hard clods, stiff clay, hard-pan, sod, partially disintegrated debris or any other undesirable material. Soil shall be free of plants roots or seeds that would be toxic or harmful to growth. Topsoil shall be obtained from naturally drained areas and shall have an acidity range from 5.5 to 7.7 inclusive.

C. Contractor shall furnish a certified report from an approved analytical chemist showing the analysis of the topsoil proposed for use. Furnish sample of topsoil to Engineer prior to delivery of topsoil on site.

1. Prior to the installation of any topsoil, contractor shall inspect the existing subgrade for compliance with the specifications with regards to the grade and cleanliness. Any discrepancy shall be brought to the attention of the Engineer for appropriate action.

2. Spread the topsoil to a minimum of 6" of topsoil in all lawn areas.

2.2 PLANT MATERIALS:

A. Not Used.

2.3 GRASS MATERIALS

A. Sod: All sod shall conform to the following seed mix:

Variety/Kind	Purity	Germination	Origin
Courtyard Kentucky Bluegrass	24.77%	85%	ID
Midnight II Kentucky Bluegrass	24.76%	85%	OR
Blue Max Kentucky Bluegrass	24.75%	85%	WA
Midnight Star Kentucky Bluegrass	24.72%	85%	WA

B. This sod shall be cut fresh within 24 hours of installation. Only sod that has been grown in a commercial sod farm shall be used, Do not use sod from any other source. All sod that has not been laid with 24 hours shall be deemed unacceptable and shall be removed from the site.

2.4 MISCELLANEOUS MATERIALS

A. Fertilizer for lawns and ground covers shall be 16-16-8 with guaranteed chemical analysis marked on container.

PART 3 - EXECUTION

3.1 COORDINATION

A. The contractor shall coordinate his work with that of other contractors on site, and shall cooperate to the fullest extent to see that the work is completed in a timely and workmanship like manner.

3.2 INSTALLATION OF TOPSOIL

A. Prior to the installation of any topsoil, contractor shall inspect the existing subgrade for compliance to the specifications with regards to the grade and cleanliness. Any discrepancy shall be brought to the attention of the Engineer for appropriate action.

B. When contract operations have been completed to a point where the areas will not be disturbed, subgrade shall be cleaned free of waste material of all kinds. Scarify and pulverize the subgrade to a depth of not less than 6" inches. Scarification shall be completed in all areas that are to be planted or sodded or are to receive topsoil.

D. Spread the topsoil mix to a minimum depth of 6" in all lawn areas. Do not place topsoil over subgrade that is frozen or damp.

3.3 PREPARATION FOR SOD

- A. The surface on which the sod is to be installed shall be firm and free of footprints, depressions or undulations of any kind. The surface shall be free of all rocks larger than 1/2" in diameter and all sticks, roots, rubbish, and other extraneous materials. NO EXCEPTIONS.
- B. The finish grade of the topsoil adjacent to all sidewalks, etc., prior to sodding shall be 1" below the top surface of the concrete or hard surface.
- C. If a crust has formed on the topsoil, it shall be loosened by raking prior to sodding.

3.4 PREPARATION FOR PLANTING TREES AND SHRUBS

- A. Not Used.

3.5 TREE, SHRUB AND PRENNIAL PLANTING

- A. Not Used.

3.6 SOD

- A. Prior to laying of sod, the entire surface to receive sod shall be uniformly covered with the specified fertilizer at the rate of 5 pounds per 1000 square feet.
- B. Upon completion of the laying operation, an inspection of the area shall be made. All voids and large cracks between individual pieces of sod shall be filled with topsoil, prior to watering. Upon completion of filling all voids in the newly laid sod areas, the sod is to be completely saturated with water.
- C. Watering of the sod shall be the complete responsibility of the contractor. Provide acceptable visual barriers by means of barricades set at appropriate distances and strings or tapes between the barriers as an indication of new work. Restore any damaged areas caused by others, erosion, or vehicular traffic until such a time as the lawn is accepted by the owner.

3.8 MAINTENANCE

- A. Begin maintenance immediately after planting.
- B. Maintain lawns for not less than the period stated below, and longer as required to establish an acceptable lawn.
 - 1. Not less than four (4) growing months (April to September), and a minimum of two (2) mowings, after Substantial Completion.
 - 2. If installed in fall and not given full four months of maintenance, or if not considered acceptable at that time,

continue maintenance the following spring until acceptable lawn is established.

3. The contractor shall be responsible for the protection, watering and replacement of any damaged lawn until acceptance by the owner. This guarantee shall include repairing of any eroded places and maintaining the lawn by watering, mowing and controlling of insects as well as advising the owner of any maintenance or watering procedures necessary to care for and promote plant life. All lawn must be in satisfactory condition at the time of the final acceptance.

3.9 CLEANUP AND PROTECTION

- A. During landscape work store materials and equipment where directed. Keep pavements clean and work area in an orderly condition.
- B. Protect landscape areas, work and materials from damage due to operations by other contractors, trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed.
- C. The contractor shall keep the site free from accumulation of waste material. At the time of completion, all areas must be swept or washed clean and all rubbish removed to the satisfaction of the Engineer.

3.10 INSPECTION AND ACCEPTANCE

- A. Substantial Completion for landscape work.
 1. When the landscape work is completed, including maintenance, the Engineer will, upon request, make an inspection to determine acceptability.
 2. The landscape work may not be inspected for acceptance in parts.
 3. Where inspected landscape work does not comply with the requirement, replace rejected work and continue specified maintenance until re-inspected by the Engineer and found to be acceptable. Remove rejected plants and materials promptly from the project site.
 4. As-built Drawings shall be furnished to the Engineer at the time of the Substantial Completion Inspection before final acceptance.

END OF SECTION 02900