

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

OFFICE OF DESIGN & CONSTRUCTION SERVICES and PHYSICAL FACILITIES

CONTRACTING SERVICES

Building 439

Santa Barbara, California 93106-1030

Telephone (805) 893-3356

Fax (805) 893-8592

SENT VIA: FAX ON THIS DATE
 HAND DELIVERY ON THIS DATE
 FEDERAL EXPRESS ON THIS DATE
 UNITED PARCEL SERVICE ON THIS DATE

HOLDERS OF PLANS AND SPECIFICATIONS:

El Colegio Road Improvement
Project No. FM080435L/986051

Addendum No. 2

July 28, 2008

Enclosed is **ADDENDUM NO. 2** to the Construction Documents on the above-captioned project.

Bid date has been changed from Thursday, July, 31, 2008 at 2:30 PM to **Thursday, August 7, 2008 at 2:30 PM** to be held at:

CONTRACTING SERVICES
Facilities Management, Bldg. 439,
Door #E, Reception Counter
University of California, Santa Barbara
Santa Barbara, CA 93106-1030.

Late arrivals shall be disqualified. Please allow time for unforeseen traffic delays, securing a parking permit and potential parking problems.

Anna Galanis
Director, Contracting Services

ADDENDUM NUMBER 2

to the

CONSTRUCTION DOCUMENTS

July 28, 2008**GENERAL**

The following changes, additions or deletions shall be made to the following document(s) as Indicated; all other conditions shall remain the same.

I. TABLE OF CONTENTSItem No.

1. **Replace** Table of Contents with attached "Table of Contents", one page.

II. ADVERTISEMENT FOR BIDSItem No.

1. **Second Page, sentence beginning with "Bid Deadline", Change to read:** "Bid Deadline: Sealed bids must be received on or before 2:30 P.M. on Thursday, August 7, 2008. Sealed bids will be received only at: Contracting Services facilities Management, Building #439 Door E, Reception Counter, University of California, Santa Barbara, Santa Barbara, California 93106-1030."

III. SUPPLEMENTARY INSTRUCTIONS TO BIDDERSItem No.

1. **Note No. 4. Change to read:** "Bids will be received on or before the Bid Deadline: 2:30 P.M., Thursday, August 7, 2008, and only at: Contracting Services facilities Management, Building #439 Door E, Reception Counter, University of California, Santa Barbara, Santa Barbara, California 93106-1030."

Item No.

2. **Note No. 8. Instructions to Bidders (Article 6- "Consideration of Bids") Change to read in it's entirety:**
 "A. Amend paragraph 6.3.3 to read as follows:
 University will determine the low Bidder on the basis of the sum of the Lump Sum Base Bid plus all Unit Prices multiplied by their respective Estimated Quantities as stated in the Bid Form, if any, plus the daily rate for compensable delay multiplied by the "multiplier" as stated in the Bid Form, plus the amount of all Alternates. The contract Sum will be the sum of the Lump Sum Base Bid and the amount for the Alternates that University has selected to be included in the Contract Sum at the time of award."

IV. BID FORMItem No.

1. **Replace in its entirety with** “REVISED BID FORM, REVISED PER ADDEMDUM TWO.” Bids must received on the Revised Bid Form, Revised per Addendum Two. Any bids received not on the revised form will be rejected.

V. SPECIFICATIONSItem No.

1. Table of Contents, **Replace** in its entirety:
Division I - “GENERAL REQUIREMENTS” – Table of Contents, attached 2-pages.

Item No.

2. Section 01010 – “SUMMARY OF WORK”, Part 1 – General, 1.04, UNIVERSITY’S PRECONSTRUCTION ACTIVITIES, **Add** the following:

“A. The University has applied to the County of Santa Barbara Public Works Department for the temporary encroachment permit necessary for the performance of the work. All fees for the encroachment permit have been paid for.”

Item No.

3. Section 01020 - "ALLOWANCES", **Add** in its entirety. (attached 3-pages)

Item No.

4. Section 01026 – “UNIT PRICES”, Part 2 - Products, 2.01, List of Unit Price Items and Descriptions, **Delete** Unit Price No. 2 in its entirety.

Item No.

5. Section 01030 – “ALTERNATES”, **Replace** in its entirety with attached (2 pages).

Item No.

6. Section 02010 – “SITE DEMOLITION”, Part 1- General, 1.01, Section Includes, **Delete** A.4 in its entirety.

Item No.

7. Section 02205 – “SOIL MATERIALS”, Part 2 - Products, Soil Materials, 2.01 “C” **Replace** in its entirety with the following language:

“Retaining Wall Backfill: Backfill material shall be granular backfill free of organic material, construction debris, cobbles and boulders, per CBC-07 1803.6. Backfill shall

be no more than 35 percent passing the No. 200 sieve. In landscape areas, the top 12" to 24" of final backfill shall be native or top soil, to promote plant growth."

Item No.

8.

Section 02205 – "SOILS MATERIALS", Part 2- Products, 2.01, Soil Materials, "D", "1" **Replace** in its entirety with the following language:

"Pervious Backfill" conforming to Item 19-3.065, Caltrans Standard Specifications, May 2006."

Item No.

9.

Section 02205 – "SOILS MATERIALS", Part 2- Products, 2.01, Soil Materials, "G" **Add** the following language after the first sentence: "Aggregate Base shall be non-reactive."

Item No.

10.

Section 02315 – "EARTHWORK", Part 3 – Execution, 3.02, Grading, "A" **Add** the following language after the first sentence:

"The exposed sub-grade shall be scarified minimum of 8" thick and compact to minimum 95 percent relative compaction. The exposed sub-grade material shall be moisture conditioned."

Item No.

11.

Section 02315 – "EARTHWORK", Part 3 – Execution, 3.05, Control and Disposal of Excess and Waste Materials, "A", "3"

Replace in its entirety with the following language:

"3. Install sufficient length and depth (minimum 20' long, 20' wide and 12" compacted thickness) gravel pads or Rumble Rack at all access points from the job site to prevent tracking of mud onto University and public roads."

Item No.

12.

Section 02317 – TRENCHING, BACKFILLING AND COMPACTING FOR UTILITIES, Part 2 – Materials, 2.02, Trench Backfill Material, "E"

Add the following language after the first sentence:

"Aggregate Base shall be non-reactive."

Item No.

13.

Section 02752 – PORTLAND CEMENT CONCRETE PAVEMENT, Part 3 – Execution, 3.06, Concrete Finishing "A", "2", "b".

Replace in its entirety with the following language:

“b. Concrete pavement color, texture, and finish shall be to Santa Barbara County Department of Public Works standards”.

Item No.

14. Section 02950 – Planting. **Replace** in its entirety with attached, 17 pages

VI. DRAWINGS

Item No.

1. DRAWING NO. G003 (Notes El Colegio Road Improvements), **Replace** in its entirety with attached drawing G003, dated 7/18/2008.

Item No.

2. DRAWING NO. C001 (Demolition Plan El Colegio Road STA. 60+00 to STA. 71+00), **Replace** in its entirety with attached drawing C001, dated 7/18/2008.

Item No.

3. DRAWING NO. C002 (Demolition Plan El Colegio Road STA. 71+00 to STA. 82+00), **Replace** in its entirety with attached drawing C002, dated 7/18/2008.

Item No.

4. DRAWING NO. C003 (Demolition Plan El Colegio Road STA. 82+00 to STA. 92+00), **Replace** in its entirety with attached drawing C003, dated 7/18/2008.

Item No.

5. DRAWING NO. C004 (Demolition Plan El Colegio Road STA. 92+00 to STA. 97+00), **Replace** in its entirety with attached drawing C004, dated 7/18/2008.

Item No.

6. DRAWING NO. C005 (Demolition Plan Los Carneros Road STA. 0+42 to STA. 10+34.78), **Replace** in its entirety with attached drawing C005, dated 7/18/2008.

Item No.

7. DRAWING NO. C103 (Geometric Plan El Colegio Road STA. 82+00 to STA. 92+00), **Replace** in its entirety with attached drawing C103, dated 7/18/2008.

Item No.

8. DRAWING NO. C406 (Plan & Profile El Colegio Road STA. 83+00 to STA. 87+50), **Replace** in its entirety with attached drawing C406, dated 7/18/2008.

Item No.

9. DRAWING NO. C409 (Plan & Profile Los Carneros Road STA. 00+42 to STA. 4+50), **Replace** in its entirety with attached drawing C409, dated 7/18/2008.

- Item No.
10. DRAWING NO. C410 (Plan & Profile Los Carneros Road STA. 4+50 to STA. 9+51.24), **Replace** in its entirety with attached drawing C410, dated 7/18/2008.
- Item No.
11. DRAWING NO. C411 (Storm Drain "A" and "B" Profile El Colegio Road), **Replace** in its entirety with attached drawing C411, dated 7/18/2008.
- Item No.
12. DRAWING NO. C412 (Storm Drain "C" Profile El Colegio Road STA. 10+00 to STA. 19+00.00), **Replace** in its entirety with attached drawing C412, dated 7/18/2008.
- Item No.
13. DRAWING NO. C414 (Storm Drain Lateral Profile El Colegio Road), **Replace** in its entirety with attached drawing C414, dated 7/18/2008.
- Item No.
14. DRAWING NO. C415 (Fire Hydrant Plan and Profile El Colegio Road), **Replace** in its entirety with attached drawing C415, dated 7/18/2008.
- Item No.
15. DRAWING NO. C416 (Fire Hydrant Plan and Profile El Colegio Road), **Replace** in its entirety with attached drawing C416, dated 7/18/2008.
- Item No.
16. DRAWING NO. C417 (Irrigation Meter Plan & Profile), **Replace** Note 2 in it's entirety to read - "Construct 2" copper water service from connection to meter per trench detail "C" on sheet C418".
- Item No.
17. DRAWING NO. C418 (Details El Colegio Road), **Replace** in its entirety with attached drawing C418, dated 7/18/2008.
- Item No.
18. DRAWING NO. C421 (Plan Details), **Replace** in its entirety with attached drawing C421, dated 7/25/2008.
- Item No.
19. DRAWING NO. C422 (Plan Details El Colegio Road), **Replace** in its entirety with attached drawing C422, dated 7/18/2008.
- Item No.
20. DRAWING NO. C501 (Street Cross Sections – El Colegio Road), Modified Section DC, **Replace** note "Construct 5' Sidewalk" in its entirety and replace with "Construct 5' Sidewalk".
- Item No.
21. DRAWING NO. C502 (Street Cross Sections – El Colegio Road), Typical Cross Section H, **Remove** note "(Does Not Show Bus Pocket, See Section "D" Sheet C411)".

in its entirety and **replace** with “(Does Not Show Bus Pocket, See Section “BP” sheet C503.”

Item No.

22.

DRAWING NO. C515 (Retaining Wall Details and Sections) Modify Wall Construction Note 7, **Modify** to read as follows: “. . . 2” diameter x-strong pipe posts, hot-dipped galvanized after fabrication, with minimum..“

Item No.

23.

DRAWING NO. C601 (Traffic Striping and Signage Plan – El Colegio Road – STA. 62+00 to STA. 86+00) General Note No. 1, **Replace** Note 1 to read in it’s entirety: “All conflicting pavement markings shall be removed by sandblasting.”

Item No.

24.

DRAWING NO. C602 (Traffic Striping and Signage Plan El Colegio Road to Stadium Road), **Replace** in its entirety with attached drawing C602, dated 7/18/2008.

Item No.

25.

DRAWING NO. C603 (Traffic Signal Modification Plan Intersection at Los Carneros Rd. and El Colegio Road), **Replace** in its entirety with attached drawing C603, dated 7/18/2008.

Item No.

26.

DRAWING NO. C604 (Traffic Signal Installation Plan, Intersection at El Colegio Road and Camino Pescadero), General Note No. 10, **Modify** note to read: “. . . Edison Service Planner James Rydberg (805) 683-5292.”

Item No.

27.

DRAWING NO. C605 (Traffic Signal Modification Plan, Intersection at El Colegio Road and Embarcadero Del Mar), General Note No. 10, **Modify** note to read: “. . . Edison Service Planner James Rydberg (805) 683-5292.”

Item No.

28.

DRAWING NO. C606 (Traffic Signal Installation Plan, Intersection at El Colegio Road and Embarcadero Del Norte), General Note No. 10, **Modify** note to read: “. . . Edison Service Planner James Rydberg (805) 683-5292.”

Item No.

29.

DRAWING NO. C607 (Traffic Signal Modification Plan, Intersection at El Colegio Road and Stadium Road), General Note No. 10, **Modify** note to read: “. . . Edison Service Planner James Rydberg (805) 683-5292.”

Item No.

30.

DRAWING NO. C701 (Traffic Management Plan El Colegio Road Improvements Title Sheet and Notes), **Replace** in its entirety with attached drawing C701, dated 7/18/2008.

Item No.

31. DRAWING NO. C702 (Traffic Management Plan El Colegio Road Improvements Phase I), **Replace** in its entirety with attached drawing C702, dated 7/18/2008.

Item No.

32. DRAWING NO. C703 (Traffic Management Plan El Colegio Road Improvements Phase I), **Replace** in its entirety with attached drawing C703, dated 7/18/2008.

Item No.

33. DRAWING NO. C704 (Traffic Management Plan El Colegio Road Improvements Phase II), **Replace** in its entirety with attached drawing C704, dated 7/18/2008.

Item No.

34. DRAWING NO. C705 (Traffic Management Plan El Colegio Road Improvements Phase II), **Replace** in its entirety with attached drawing C705, dated 7/18/2008.

Item No.

35. DRAWING NO. E301 (Lighting Plan-El Colegio Road – STA 70+50 TO STA 75+00), General Notes, "8", **Replace** in its entirety with the following: Contractor shall coordinate with Southern California Edison (SCE) and its subcontractors, and make provisions for electrical service and work accordingly. Contractor shall refer to SCE sketches 1 & 2 for Contractor's work to SCE's standards and interface with SCE's work. The University shall contract directly with SCE for installation of the streetlight poles, streetlight wiring and streetlight fixtures, including SCE charges to energize system. The Contractor shall provide and install all traffic signal assemblies and infrastructure, including all wiring back to meter panel. The University shall contract directly with SCE to set meter and energize traffic signals.

VII. LIST OF SKETCHES

Item No.

1. **Add** List of Sketches, Attached.

VIII. SKETCHES

Item No.

1. **Add** ADD2-SCE Sketch 1, Dated 7/24/2008

Item No.

2. **Add** ADD2-SCE Sketch 2, Dated 7/24/2008.

Item No.

3. Add ADD2-Sk-C001, Dated 7/18/2008

Item No.

4. Add ADD2-Sk-C002, Dated 7/18/2008

Item No.

5. Add ADD2-Sk-C003, Dated 7/18/2008

Item No.

6. Add ADD2-Sk-C004, Dated 7/18/2008

Item No.

7. Add Sketch "Additional Irrigation Details ADD.2, LSK-1, 7/28/08

Item No.

8. Add Sketch "Portion of Sheet L302 ADD.2, LSK-2, 7/28/08

Item No.

9. Add Sketch "Portion of Sheet L304 & L305 ADD.2, LSK-3, 7/28/08

Item No.

10. Add Sketch "Portion of Sheet L308 ADD.2, LSK-4, 7/28/08

END OF ADDENDUM NO. 2

TABLE OF CONTENTS

Cover Page	
Certification	
Table of Contents	
Advertisement for Bids	
Project Directory	
Instructions to Bidders	
Supplementary Instructions to Bidders	
Information Available to Bidders	
Bid Form	
Bid Bond	
Agreement	
General Conditions	
Supplementary Conditions	
Exhibits:	
1.	Certificate of Insurance
2.	Payment Bond
3.	Performance Bond
4.	Application For Payment
5A.	Selection of Retention Options
5B.	Escrow Agreement for Deposit of Securities In Lieu of Retention and Deposit of Retention
6.	Submittal Schedule
7.	Cost Proposal
8.	Field Order
9.	Change Order
10.	Subcontractor's Conditional Waiver and Release Upon Progress Payment
11.	Subcontractor's Unconditional Waiver and Release Upon Progress Payment
12.	Summary of Builder's Risk Insurance Policy
13A.	Distribution of Contract Dollars – Report of Subcontractor Information
13B.	Final Distribution of Contract Dollars
14.	Self Certification - Contractor/Subcontractor Form
15.	Material/Product Substitution Request
16.	Automatic Sprinkler Systems - Contractor's Material and Test Certificate for Underground Piping
17.	Automatic Sprinkler Systems - Contractor's Material and Test Certification for Aboveground Piping
18.	Certificate of Substantial Completion
19.	Subcontractor's Conditional Waiver and Release Upon Final Payment
20.	Subcontractor's Unconditional Waiver and Release Upon Final Payment
21.	Contractor Claim Certification
22.	Subcontractor Claim Certification
Specifications	
List of Drawings	
Drawings (Under Separate Cover)	
List of Sketches	
Sketches	

REVISED BID FORM
REVISED PER ADDENDUM TWO

FOR: El Colegio Road Improvement
FM080435L/986051
UNIVERSITY OF CALIFORNIA
SANTA BARBARA
SANTA BARBARA, CALIFORNIA

June 2008

BID TO: University of California, Santa Barbara
Facilities Management, Building 439
Door E, Reception Counter
Santa Barbara, CA 93106
(805)893-3298

BID FROM:

(Name of Bidder)

(Address)

(City) (State) (Zip)

(Telephone Number)

(Fax Number)

(Email Address)

DATE BID SUBMITTED

(Date)

Note: All portions of this Bid Form must be completed and the Bid Form must be signed before the Bid is submitted. Failure to do so may result in the BID being rejected as non-responsive.

1.0 BIDDER'S REPRESENTATIONS

Bidder, represents that a) Bidder and all Subcontractors, regardless of tier, has the appropriate current and active Contractor's licenses required by the State of California and the Bidding Documents; b) it has carefully read and examined the Bidding Documents for the proposed Work on this Project; c) it has examined the site of the proposed Work and all Information Available to Bidders; d) it has become familiar with all the conditions related to the proposed Work, including the availability of labor, materials, and equipment. Bidder hereby offers to furnish all labor, materials, equipment, tools, transportation, and services necessary to complete the proposed Work on this Project in accordance with the Contract Documents for the sums quoted. Bidder further agrees that it will not withdraw its Bid within 60 days after the Bid Deadline, and that, if it is selected as the apparent lowest responsive and responsible Bidder, that it will, within 10 days after receipt of notice of selection, sign and deliver to University the Agreement in triplicate and furnish to University all items required by the Bidding Documents. If awarded the Contract, Bidder agrees to complete the proposed Work within Two-hundred forty (240) calendar days after the date of commencement specified in the Notice to Proceed.

2.0 ADDENDA

Bidder acknowledges that it is Bidder's responsibility to ascertain whether any Addenda have been issued and if so, to obtain copies of such Addenda from University's facility at the appropriate address stated on Page 1 of this Bid Form. Bidder therefore agrees to be bound by all Addenda that has been issued for this Bid.

3.0 NOT USED**4.0 LUMP SUM BASE BID**

\$, , .

(Place Figures in appropriate boxes)

5.0 SELECTION OF APPARENT LOW BIDDER

Refer to the Instructions to Bidders for selection of apparent low bidder.

6.0 UNIT PRICES

The quantities set forth in the unit prices are estimates. University does not represent that the actual quantity of any Unit Price item will equal the Estimated Quantity stated below. University will perform the extension of the Unit Price times the respective Estimated Quantity.

Unit Price #1

Unit Price for Filter Fabric, Float Rock and Geogrid
(Description of Item)
as specified in Section 01026 Unit Prices
(Specification Section Number)

Estimated Quantity of units: 5,000 Square Feet
(MULTIPLIER)

\$, . **Per 1 Square Feet**
(Place unit price figures in appropriate boxes)

Unit Price #2 – NOT USED

Unit Price #3

Unit Price for Filter Fabric, Class II Aggregate Base and Geogrid
(Description of Item)
as specified in Section 01026 Unit Prices
(Specification Section Number)

Estimated Quantity of units: 5,000 Square Feet
(MULTIPLIER)

\$, . **Per 1 Square Feet**
(Place unit price figures in appropriate boxes)

7.0 DAILY RATE OF COMPENSATION FOR COMPENSABLE DELAYS (Used As Basis For Award)

Bidder shall determine and provide below the daily rate of compensation for any Compensable Delay caused by University at any time during the performance of the Work:

\$, . x 30 **MULTIPLIER**
(Place Amount in Figures in appropriate boxes)

University will perform the extension of the daily rate times the multiplier.

The daily rate shown above will be the total amount of Contractor entitlement for each day of Compensable Delay caused by University at any time during the performance of the Work and shall constitute payment in full for all delay costs, direct or indirect (including, without limitation, compensation for all extended home office overhead and extended general conditions), of the Contractor and all subcontractors, suppliers, persons, and entities under or claiming through Contractor on the Project. The number of days of Compensable Delay shown as a "multiplier" above is not intended as an estimate of the number of days of Compensable Delay anticipated by the University. The University will pay the daily rate of compensation only for the actual number of days of Compensable Delay, as defined in the General Conditions; the actual number of days of Compensable Delay may be greater or lesser than the "multiplier" shown above.

8.0 ALTERNATES

In order for a Bid to be responsive, Bidder must submit an additive bid, a deductive bid, or a "no change" bid, for each Alternate listed below. Bidder shall mark the additive, deductive, or "no change" box for each Alternate. The failure to do so shall result in the Bid being rejected as non-responsive. The failure to quote an amount, unless the bidder marks the "no change" box, will result in the bid being rejected as non-responsive.

The Contract Time will change by the number of days, if any, specified for each accepted Alternate.

Alternate No. 1

Description: All construction materials, time and labor required to construct grading, demolition, erosion control, concrete curb, concrete curb and gutter, sidewalk per ADA, curb ramp, roadway pavement structural section, traffic control, landscape, irrigation, retaining wall and all other improvements as shown on the construction documents and within the Alternate No. 1 area shown on the plans.

as specified in Section 01030 Alternates

(Alternate Specification Section Number)

Bid for Alternate No. 1

Indicate by marking only **ONE** of the two boxes ("Add," or "No Change") and state the amount, if "Add" is selected, by placing figures in the corresponding boxes.

Add \$, .

No Change Bidder will perform alternate without change to Contract Sum.

If this Alternate is accepted, the Contract Time will be extended by 30 days.

University reserves the right to accept any Alternate(s) for 30 calendar days after the date University signs the Agreement.

Alternate No. 2

Description: Reuse existing traffic signal equipment at the intersection of El Colegio Road and Embarcadero del Mar, and at the intersection of El Colegio Road and Los Carneros Road
as specified in Section 01030 Alternates
(Alternate Specification Section Number)

Bid for Alternate No. 2

Indicate by marking only **ONE** of the two boxes ("Deduct," or "No Change") and state the amount, if "Deduct" is selected, by placing figures in the corresponding boxes.

Deduct \$, .

No Change Bidder will perform alternate without change to Contract Sum.

No extension of time will be granted if this Alternate is accepted.

University reserves the right to accept any Alternate(s) for 30 calendar days after the date University signs the Agreement.

9.0 LIST OF SUBCONTRACTORS

Bidder will use Subcontractors for the Work:

Yes _____

If yes, provide in the spaces below (a) the name and the location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the state of California who, under subcontract to the prime contractor, specifically fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of 1/2 of 1 percent of the prime contractor's total bid, (b) the portion of the work which will be done by each subcontractor. The prime contractor shall list only one subcontractor for each such portion as is defined by the prime contractor in its bid.

SUBCONTRACTOR			
Portion of the Work	Name	License No.	Location (City)

(Note: Add additional pages if required.)

10.0 LIST OF CHANGES IN SUBCONTRACTORS DUE TO ALTERNATES

The information below must be provided for all changes in first-tier Subcontractors if University selects Alternates. List changes in Subcontractors only for those portions of the Work valued in excess of 1/2 of 1% of Bidder's Total Bid.

		SUBCONTRACTOR INFORMATION		
Alternate No.	Portion of the Work	Name	License No.	Location (City)

(Note: Add additional pages if required.)

11.0 BIDDER INFORMATION

TYPE OF ORGANIZATION:

(Corporation, Partnership, Individual, Joint Venture, etc.)

- IF A CORPORATION, THE CORPORATION IS ORGANIZED UNDER THE LAWS OF THE STATE OF _____

NAME OF PRESIDENT OF THE CORPORATION:

(Insert Name)

NAME OF SECRETARY OF THE CORPORATION:

(Insert Name)

- IF A PARTNERSHIP, NAMES OF ALL GENERAL PARTNERS:

(Insert Names)

CALIFORNIA CONTRACTORS LICENSE(S):

(Classification) (License Number) (Expiration Date)

(For Joint Venture, list Joint Venture's license and licenses for all Joint Venture partners.)

EMPLOYER IDENTIFICATION NUMBER (EIN):

12.0 REQUIRED COMPLETED ATTACHMENTS

The following documents are submitted with and made a condition of this Bid:

1. Bid Security in the form of _____
(Bid Bond or Certified Check)

13.0 DECLARATION

I, _____, hereby declare that I am
(Printed Name)

the _____ of _____
(Title) (Name of Bidder)

submitting this Bid Form; that I am duly authorized to execute this Bid Form on behalf of Bidder;
and that all information set forth in this Bid Form and all attachments hereto are, to the best of my
knowledge, true, accurate, and complete as of its submission date.

I declare, under penalty of perjury, that the foregoing is true and correct and that this declaration
was

executed at: _____
(Name of City if within a City, otherwise Name of County)

in the State of _____,

on _____
(Date)

(Signature)

BID BOND

KNOW ALL PERSONS BY THESE PRESENTS:

That we, _____,

as Principal, and _____, as Surety, are held and firmly bound unto THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, hereinafter called THE REGENTS, in the sum of ten percent (10%) of the Lump Sum Base Bid amount for payment of which in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT, WHEREAS, Principal has submitted a Bid for the work described as follows:

El Colegio Road Improvement

FM080435L/986051

NOW, THEREFORE, if Principal shall not withdraw said Bid within the time period specified after the Bid Deadline, as defined in the Bidding Documents, or within sixty (60) days after the Bid Deadline if no time period be specified, and, if selected as the apparent lowest responsible Bidder, Principal shall, within the time period specified in the Bidding Documents, do the following:

- (1) Enter into a written agreement, in the prescribed form, in accordance with the Bid.
- (2) File two bonds with THE REGENTS, one to guarantee faithful performance and the other to guarantee payment for labor and materials, as required by the Bidding Documents.
- (3) Furnish certificates of insurance and all other items as required by the Bidding Documents.

In the event of the withdrawal of said Bid within the time period specified, or within sixty (60) days if no time period be specified, or the disqualification of said Bid due to failure of Principal to enter into such agreement and furnish such bonds, certificates of insurance, and all other items as required by the Bidding Documents, if Principal shall pay to THE REGENTS an amount equal to the difference, not to exceed the amount hereof, between the amount specified in said Bid and such larger amount for which THE REGENTS procure the required work covered by said Bid, if the latter be in excess of the former, then this obligation shall be null and void, otherwise to remain in full force and effect.

In the event suit is brought upon this bond by THE REGENTS, Surety shall pay reasonable attorneys' fees and costs incurred by THE REGENTS in such suit.

IN WITNESS WHEREOF, we have hereunto set our hands this ____ day of _____, 20

Principal

Surety

By: _____

By: _____

Title: _____

Title: _____

Address for Notices:

NOTE: Notary acknowledgement for Surety and Surety's Power of Attorney must be attached.

DIVISION 1 -- GENERAL REQUIREMENTS

TABLE OF CONTENTS

<u>Section Number</u>	<u>Title</u>	<u>Pages</u>
Section 01010	Summary of Work	1 - 4
Section 01015	Work Sequence	1 - 2
Section 01020	Allowances	1 - 3
Section 01026	Unit Prices	1 - 3
Section 01030	Alternates	1 - 1
Section 01035	Request for Information	1 - 2
Section 01040	Project Coordination	1 - 4
Section 01045	Cutting and Patching	1 - 4
Section 01050	Field Engineering	1 - 3
Section 01060	Regulatory Requirements	1 - 7
Section 01090	Abbreviations, Symbols, and Definitions	1 - 3
Section 01100	Special Project Procedures	1 -
Section 01120	Alteration Project Procedures	1 - 2
Section 01150	Environmental Protection Requirements	1 - 6
Section 01155	Not Used	
Section 01200	Project Meetings	1 - 4
Section 01300	Submittals	1 - 2
Section 01310	Progress Schedules	1 - 5
Section 01340	Shop Drawings, Product Data, and Samples	1 - 6
Section 01380	Construction Photographs	1 - 3
Section 01400	Quality Control	1 - 5
Section 01500	Construction Facilities and Temporary Controls	1 - 20
Section 01505	Construction Waste Management	1 - 3
Section 01532	Tree and Plant Protection	1 - 3
Section 01560	Storm Water Pollution Prevention	1 - 4
Section 01561	Erosion and Sediment Control	1 - 3
Section 01570	Traffic Control	1 - 5
Section 01600	Material and Equipment	1 - 3

Section 01620	Anchors and Fasteners	1 - 4
Section 01630	Product Options and Substitutions	1 - 6
Section 01700	Project Closeout	1 - 4
Section 01720	Project Record Documents	1 - 4
Section 01730	Operating and Maintenance Data	1 - 5
Section 01740	Guarantees, Bonds, and Maintenance Contracts	1 - 4

SECTION 01020ALLOWANCESMATERIAL PRICE ESCALATION ALLOWANCE

1. GENERAL

- 1.1 Included in the Contract Sum are all Allowances stated in the Contract Documents. Items covered by Allowances shall be supplied for such amounts and by such persons, or entities, as the University's Representative may direct.
- 1.2 The following shall apply, unless otherwise provided in the Contract Documents:
- 1.2.1 The Allowances shall cover the cost to Contractor materials and equipment delivered at the Project site and all required taxes, less applicable trade discounts.
- 1.2.2 Contractor's costs required for storage on and off the Project site, security, loading and unloading, handling at the Project site, labor, installation costs, overhead, profit, and other expenses contemplated for stated Allowance amounts shall be included in the Contract Sum and not in the Allowance.
- 1.2.3 Unless otherwise provided herein, whenever costs are more than or less than Allowances, the Contract Sum shall be adjusted by Change Order based on (1) the difference between actual costs and the Allowances and (2) changes in the Contractor's cost.

2. DESCRIPTION OF ALLOWANCES

The provisions of this section shall apply only to the following contract items:

- a. Hot Mix Asphalt (Open Graded)
- b. Tack Coat
- c. Asphaltic Emulsion (Fog Seal Coat)
- d. Slurry Seal

The compensation payable for asphalt binder used in hot mix asphalt and tack coat and for paving asphalt used in slurry seal will be increased or decreased in conformance with the provisions of this section for paving asphalt price fluctuations exceeding 10 percent (Iu/Ib is greater than 1.10 or less than .90) which occur during performance of the Work.

The quantity of asphalt binder used in tack coat will be determined by multiplying the item quantity for tack coat included in a monthly estimate by the minimum percent residue specified in Section 94, "Asphaltic Emulsions," of the Caltrans Standard Specifications. The asphaltic emulsion minimum percent residue will be based upon the type of emulsion used by the Contractor.

The quantity of paving asphalt used in slurry seal will be determined by multiplying the item quantity of slurry seal included in a monthly estimate times the approved mix design percentage of asphaltic emulsion times the minimum percent residue specified in Section 94, "Asphaltic Emulsions," of the Caltrans Standard Specifications. The asphaltic emulsion minimum percent residue will be based upon the type of emulsion used by the Contractor.

At the Contractor's option, the Contractor may provide actual daily test results for asphalt binder residue for the tack coat used and actual daily test results for asphaltic emulsion residue for the asphaltic emulsion used. Test results provided by the Contractor shall be from an independent testing laboratory that participates in the ASSHTO Proficiency sample Program. The Contractor shall take samples of asphaltic emulsion from the distributor truck at mid-load from a sampling tap or thief. Two separate ½ gallon samples shall be taken in the presence of the University's Representative, or his designated Inspector. The Contractor shall provide one sample to the Contractor's independent testing laboratory within 24 hours of sampling. The second sample shall be given to the University Representative within 24 hours of sampling. The test results from the Contractor's independent testing laboratory shall be delivered to the University Representative within 10 days from sample date.

The adjustment in compensation will be determined in conformance with the following formulae when the item of hot mix asphalt or tack coat, or both, are included in a monthly estimate:

- A. Total monthly adjustment = AQ
- B. For an increase in paving asphalt price index exceeding 10 percent:

$$A = 0.90 (I_u/I_b - 1.10)I_b$$

- C. For decrease in paving asphalt price index exceeding 10 percent:

$$A = 0.90 (I_u/I_b - .90)I_b$$

- D. Where:

A = Adjustment in dollars per ton of paving asphalt used to produce hot mix asphalt and asphaltic emulsion residue used as tack coat and used in slurry seal rounded to the nearest \$0.01.

I_u = The California Statewide Paving Asphalt Price Index which is in effect the first business day of the month within the pay period in which

the quantity subject to adjustment was included in the Monthly Pay Application.

Ib = The California Statewide Paving Asphalt Price Index for the month in which the bid opening for the project occurred.

Q = Quantity in tons of asphalt binder that was used in producing the quantity of hot mix asphalt, as shown by material tickets from the asphalt plant, using the amount of asphalt binder determined by the University's Representative; plus the quantity in tons of asphalt binder that would have been used as residue in the tack coat, as shown by material tickets from the asphalt plant; plus the quantity in tons of paving asphalt that was asphaltic emulsion residue used in the production of slurry seal, as shown by material tickets from the asphalt plant, using the amount of asphalt determined by the University Representative.

The adjustment in compensation will also be subject to the following:

- A. The compensation adjustments provided herein will be shown separately on payment estimates. The Contractor shall be liable to the University for decreased compensation adjustments and the University may deduct the amount thereof from the moneys due or that may become due the Contractor.
- B. In the event of an overrun of contract time, adjustment in compensation for asphalt binder included in estimates during the overrun period will be determined using the California Statewide Paving Asphalt Price Index in effect on the first business day of the month within the pay period in which the overrun began.

The California Statewide Paving Asphalt Price Index is currently determined each month on the first business day of the month by the Department using the median of posted prices in effect as posted by Chevron, Mobil, and Unocal for the Buena Vista, Huntington Beach, Kern River, Long Beach, Midway Sunset, and Wilmington fields.

In the event that the companies discontinue posting their prices for a field, the University will determine an index from the remaining posted prices. The University reserves the right to include in the index determination the posted prices of additional fields. The California Statewide Paving Asphalt Price Index is available on the Division of Engineering Services website at:

http://www.dot.ca.gov/hq/esc/oe/asphalt_index/astable.html

SECTION 01030**ALTERNATES****PART 1 - GENERAL**

1.01 DESCRIPTION

- A. This Section identifies each Alternate and describes basic changes to the Work only when that Alternate is made a part of the Work by specific provision in the Agreement.
- B. The Lump Sum Base Bid and Alternates shall, unless otherwise specified, include the costs of products, materials, equipment, systems, installation and all supporting elements required, so that the combination of the Lump Sum Base Bid and any Alternates shall be complete. The scope of Work for all Alternates shall be in accordance with applicable Drawings and Specifications.
- C. Except as otherwise specifically provided by the University, the Work described in Alternates shall be completed with no increase in Contract Time.
- D. This Section includes only the non-technical descriptions of the Alternates. Refer to the Drawings and specific Sections of DIVISIONS 2 - 16 of the Specifications for technical descriptions of the Alternates.
- E. Coordinate related Work and modify surrounding Work as required to properly and completely integrate the Alternates into the Work.

PART 2 - PRODUCTS

DESCRIPTION OF ALTERNATES

ADD ALTERNATE NO. 1:

Cost for the lump sum price paid shall include full compensation for all construction materials, time and labor required to construct grading, demolition, erosion control, concrete curb, concrete curb and gutter, sidewalk per ADA, curb ramp, roadway pavement structural section, traffic control, landscape, irrigation, retaining wall and all other improvements as shown on the construction documents and within the Alternate No. 1 area as shown on the plans. See construction documents for construction limit, including landscape and irrigation plans sheets L308 to L311 for the complete landscape and irrigation construction.

- A. University reserves the right to accept this Alternate within 30 days.
- B. If this Alternate is accepted the Contract time will be extended by 30 days.

DEDUCT ALTERNATE NO. 2

Cost for the lump sum price credit shall include price of full compensation for all construction materials, time and labor required to:

Reuse existing traffic signal equipment, to replace that specified below, at the intersection of El Colegio Road and Embarcadero del Mar, and at the intersection of El Colegio Road and Los Carneros Road as follows:

Reference Section 02583 TRAFFIC SIGNALS AND SAFETY LIGHTING

C.2.a. 170E (68HC11) Controller Assembly

C.2.b. 412F Prom Module programmed with the BiTrans Systems 200CA Local Intersection Program suitable for use with the HC11 chip.

C.2.k. Video Camera Processors

C.2.l. Video Camera Extension Modules

G.1.,G.2. Video Detection Cameras

University reserves the right to accept this Alternate within 30 days.

No extension of time will be granted if this Alternate is accepted.

PART 3 – EXECUTION (NOT USED)

END OF SECTION 01030

SECTION 02950

PLANTING

PART 1 GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division -1 Specification sections, apply to this section.

1.02 SUMMARY

Furnish all labor, material, equipment and services necessary to furnish and install the Irrigation System as shown on the Drawings and described herein.

A. Furnish all labor, materials and equipment necessary to provide and install all trees, plants and groundcovers as shown on the Drawings. The Contractor's work shall include:

1. Prepare soil for planting and furnish all soil amendments.
2. Furnish and install all plant materials per the planting plan.
3. Prune plants as required.
4. Stake, tie and guy plant materials as specified.
5. Dispose of trash, debris and surplus materials.
6. Maintain the planting until such time as the project has been accepted.
7. Guarantee plant material smaller than 15 gallon for a period of 90 days to commence at final acceptance of project. Guarantee plant material 15 gallon or larger for a period of one year to commence at final acceptance of project.

B. Related Work Specified in Other Sections:

1. Section 02810 - Irrigation System
2. Section 02970 - Landscape Maintenance.

C. Definition: The words University's Representative as used herein refer to the University's authorized representative.

1.03 QUALITY ASSURANCE

A. Source Quality Control

1. Submit documentation to University's Representative within fifteen (15) days after award of Contract that all plant material is secured for the project. Contractor is responsible for all material listed on the plant list. Any and all substitutions due to unavailability must be requested in writing prior to confirmation of ordering.
2. Plants are subject to approval of University's Representative at place of growth or upon delivery for conformity to Specifications. Such approval will not impair the right of review and rejection during progress of the work. Submit written request for review of plants at place of growth to University's Representative. State the place of growth and quantity of plants to be reviewed. University's Representative reserves the right to refuse review at this time, if in his judgement; a sufficient quantity of the plants is not available.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Delivery:

1. Deliver fertilizer to site in original unopened containers bearing manufacturer's guaranteed chemical analysis, name, trademark, and conformance to State Law.
2. Furnish University's Representative with copies of receipts for all amendments Specified in Section 2.01 - Materials.
3. Deliver all plants with legible identification labels. Use durable waterproof labels with water-resistant ink that will remain legible for at least sixty (60) days.
4. Protect plant material during delivery to prevent damage to root ball or desiccation of leaves.
5. Notify the University's Representative seven (7) days in advance of delivery of all plant materials and submit an itemized list of the plants in each delivery.

B. Storage:

1. Store plant material in shade and protect from weather.
2. Maintain and protect plant material in a healthy, vigorous condition at all times.

B. Handling:

Exercise care in handling, loading, unloading and storing of plant materials. Plant materials that have been damaged in any way will be discarded. If installed, such plants will be replaced with undamaged materials at the Contractor's expense.

1.05 JOB CONDITIONS

A. Site Conditions:

1. Verify the locations of underground utilities prior to excavation. Repair damage to any such utilities resulting from the Contractor's work at Contractor's expense.
2. Investigate the site for any subsurface drainage or unusual soil conditions which might prove detrimental to the success of the design. Should any such condition exist, notify the University's Representative and submit a proposal for corrective measures and their cost. Should the contractor fail to provide such notification, he will be held solely responsible for any corrections deemed necessary by the University and the University's Representative should damage occur.

B. Field Conditions:

1. The planting plan is diagrammatic. Scaled dimensions are approximate. Prior to proceeding with installation work, verify all dimensions with field conditions and notify the University's Representative of any deviation on the plan. University's Representative is the final authority in interpretation of the plan and in accommodation of unforeseen field conditions.

PART 2 - PRODUCTS

2.01 **MATERIALS (NOTE: SEE *SPECIAL PROVISION SPECIFICATIONS FOR SPECIFICATIONS OF SOIL PREPARATION AND AMENDMENTS FOR MEDIAN PLANTERS*).**

- A. The following soil amendments and fertilizers are to be used for bid price basis.
- B. All materials shall be of standard, approved and first-grade quality and in prime condition when installed and accepted. Deliver any commercially processed or packaged material to the site in the original unopened container bearing the manufacturer's guaranteed analysis. Supply the University's Representative with samples of all supplied materials accompanied by analytical data from an approved laboratory source illustrating compliance or bearing the manufacturer's guaranteed analysis.
- C. Organic Amendment:
 1. Compost derived from processed organic materials consisting of chipped, shredded, or ground recycled wood products, green waste, and biosolids mixed and composted according to US EPA, 40 CFR, part 503. The compost producer must be fully permitted as specified under the California Integrated Waste Management Board, Local Enforcement Agencies and any other State and Local Agencies that regulate solid waste facilities. If exempt from State permitting requirements, the composting facility must certify that it follows guidelines and procedures for production of compost meeting the environmental health standards of Title 14, California Code of Regulations, Division 7, Chapter 3.1, Article 7.
 2. 0.56% to 0.84% N based on dry weight.

3. Particle Size:
 - 95% - 100% passing 6.35 mm standard sieve
 - 80% - 100% passing 2.33 mm standard sieve
4. Salinity: The saturation extract conductivity shall not exceed 3.0 milliohms/centimeter at 25 degrees centigrade as determined by saturation extract method.
5. Iron content: Minimum 0.08% dilute acid soluble Fe on dry weight basis.
6. Organic Content: Minimum 92% based on dry weight and determined by ash method.
7. Dark brown to black in color, not malodorous.
8. Shall contain no paint, petroleum products, herbicides, fungicides, or other chemical residues that would be harmful to plant or animal life. Inert contaminants such as glass, plastic, wood, metal dirt, or rocks shall not exceed 0.1 %
9. pH: 6.5-7.5

D. Soil Amendments:

1. Soil sulfur: Agricultural grade sulfur containing a minimum of 99% sulfur (expressed as elemental).
2. Iron sulfate: 20% Iron (expressed as metallic iron), derived from ferric and ferrous sulfate, 10% sulfur (expressed as elemental).
3. Calcium Carbonate: 95% lime as derived from oyster shells.
4. Gypsum: Agricultural grade product containing 98% minimum calcium sulfate.
5. Zinc: Agricultural grade zinc sulfate (36% elemental zinc).
6. PAM: Complete Green (310-615-0116)

E. Fertilizer:

1. Planting fertilizer: 'Gro-Power-Plus' (Southern California Organic Fertilizer Company, Inc., 714-750-3830) or approved equal
2. Superthrive vitamin hormone supplement or approved equal

F. GroLife mycorrhizal transplant inoculant (GroPower (800-473-1307) or approved equal

- G. Topsoil shall be obtained by excavating the top 12" inches of material from proposed excavation and embankment areas and other areas shown on the plans or designated by the Engineer. Topsoil shall be stockpiled adjacent to the project site at a location approved in

writing by the Engineer. Rocks and plant material in excess of 3" inches in greatest dimension shall be removed from the excavated topsoil.

- G. Imported Topsoil: Fertile, friable, natural topsoil of character and texture similar to the project site soil; without admixture of subsoil material, obtained from a well-drained arable site, reasonably free from clay, lumps, coarse sands, stones, plants, roots, sticks, and other foreign materials, with an acidity range of between pH 5.8 and 8.2. The sodium absorption ratio (SAR) shall not exceed 6 and the electrical conductivity (Ece) of the saturation extract of this soil shall not exceed 3.0 milliohms per centimeter at 25 degrees centigrade. The boron content shall be no greater than 1 part per million as measured on the saturation extract. In order to insure conformance, samples of the imported soil shall be submitted to an approved laboratory for analysis prior to, and following, backfilling.
- H. Add one (1) cubic yard of $\frac{3}{4}$ " washed gravel per hole for each tree to be planted as shown on plans and planting detail.
- I. Install two (2) 4" diameter Sch40 PVC perforated pipes with caps for each tree and fill with $\frac{3}{4}$ " washed gravel.
- J. Continuous 4" diameter slotted plastic pipe wrapped with geogrid fabric root control barrier to be installed in $\frac{3}{4}$ " gravel along median and at base of trees as shown on plans and detail. Root control barrier to provide both physical and chemical barrier zone to restrict vegetative root encroachment.
- K. Plant Material:
1. In accordance with the California State Department of Agriculture's regulation for nursery inspections, rules and rating. All plants shall have a normal habit of growth and shall be sound, healthy, vigorous and free of insect infestations, plant diseases, sunscalds, fresh abrasions of the bark, excessive abrasions, or other objectionable disfigurements. Trees shall have sturdy trunks shall have well hardened and vigorous, fibrous root systems which are not root- or pot-bound. In case the sample plants are found to be defective, the University's Representative reserves the right to reject the entire lot or lots of plants represented by the defective samples. The University's Representative is the sole judge of acceptability. Any defective plants unsuitable for planting will be considered as samples provided at the expense of the Contractor.
 2. The size of the plants will correspond with that normally expected for species and variety of commercially available nursery stock or as specified on Drawings. The minimum acceptable size of all plants measured before pruning with the branches in normal position, shall conform with the measurements, if any, specified on the Drawings in the list of plants to be furnished. Plants larger in size than Specified may be used with the approval of the University's Representative, but the use of larger plants will make no change in the Contract price.
 3. All plants not conforming to the requirements herein Specified shall be considered defective. Such plants, whether in place or not, shall be marked as rejected and

immediately removed from the site of work and replaced with new plants at the Contractor's expense. The plants shall be of the species, variety, size and condition Specified herein or as shown on the Drawings. Under no condition will there be any substitutions of plants or sizes listed on the accompanying plans, except with the expressed consent of the University's Representative.

4. Pruning: At no time shall trees or plant materials be pruned, trimmed or topped prior to delivery. Any alteration of their shape shall be conducted only with the approval and when in the presence of the University's Representative.
5. Plant material shall be true to botanical and common name and variety as Specified in the latest edition of "Annotated Checklist of Woody Ornamental Plants in California, Oregon and Washington", published by the University of California School of Agriculture.
6. Nursery Grown and Collected Stock:
 - a. Grown under climatic conditions within two (2) USDA climatic zones of the locality of project.
 - b. Container-grown stock in vigorous, healthy condition, not root-bound or with root system hardened off.
 - c. Use only flatted or liner stock plant material which is well established in removable containers or formed homogeneous soil sections.
7. Substitute plant material will not be permitted unless specifically approved in writing by the University's Representative.

L. Backfill Mix:

1. Backfill all planting holes with the following mix (rates are per cubic yard of amended soil):
 - 15 pounds GroPower Plus
 - Agricultural gypsum – 1/2 pound.
 - Organic amendment/ Compost: 15% by volume.
2. GroLife mycorrhizal transplant inoculant in backfill mix at the following rates:

<u>Plant size</u>	<u>Rate of application in ounces per plant</u>
Flatted	1/4 cup, dust root ball
1 gallon	1/4 cup, dust root ball
2 gallon	1/2 cup, dust root ball
5 gallon	1 cup, dust root ball
15 gallon	2 cups, incorporate into backfill
24" box	3 cups, incorporate into backfill

36" box	4 cups incorporate into backfill
42", 48" box	5 cups incorporate into backfill
60" box	6 cups incorporate into backfill
72" box	6 cups incorporate into backfill

M. Guying and Staking Materials: Install per plant list.

1. Wood tree stakes: Lodge pole pine, fully treated with Coppernapthanate Wood Preservative in strict accordance with Federal Spec. TT-W-572 Type 1 Composition B, 2" (min. nominal size) diameter x 10 ft. long (12 ft. long for 24" box size trees); no split stakes.
2. Ties: Cinch-Tie
3. Duckbill Professional Tree Guying Systems: Foresight Products 1- 800- 325-5360

N. Water: Furnished by University; transport as required

O. Mulch: Shredded bark, 0-1" size ('Walk-On-Bark') sources per plan

P. Deep Root Barrier: As manufactured by Biobarrier (biobarrier.com) or equal. Install per manufacturer's specifications.

PART 3 – EXECUTION (NOTE: SEE SPECIAL PROVISION SPECIFICATIONS FOR SPECIFICATIONS OF SOIL PREPARATION AND AMENDMENTS FOR MEDIAN PLANTERS).

3.01 INSPECTION

- A. Obtain certification that final grades to within .10' have been established prior to commencing planting operations. Provide for inclusion of all amendments, settling, etc. Contractor shall be responsible for shaping all planting areas as indicated on plans or as directed by the University's Representative.
- B. Inspect trees, shrubs and liner stock for injury, insect infestation and trees and shrubs for improper pruning.
- C. Do not begin planting until deficiencies are corrected or plants replaced.

3.02 PREPARATION

A. Soil preparation (All Areas to be planted shall be cultivated):

1. After approximate finished grades have been established, rip the soil to a depth of 12 inches. Apply compost to a depth of 4 inches by using specialized equipment such as a pneumatic blower or side discharge spreader. Compost may be incorporated by hand; by using a backhoe, bulldozer, or grading blade to a depth between 12 and 18 inches. Do not incorporate compost to a strip 2

feet wide adjacent to the edge of pavement. Following incorporation, compact the area to a relative compaction between 82 percent and 90 percent. Incorporate compost into the top 12".

2. After incorporation of compost and immediately prior to cultivation, soil amendment and commercial fertilizer shall be added to the areas to be cultivated. Soil amendment shall be added at the rate shown on the plans and commercial fertilizer shall be applied at the rates given below in pounds per 1,000 square feet or per soils report. Soil amendment and fertilizer shall be thoroughly mixed with the soil to a minimum 6 inch depth. (Application Rates are for base bid, modify per soils analysis)

50 pounds GroPower Plus.

Agricultural gypsum - 50 lbs.

Ammonium sulfate (21-0-0) – 5 lbs.

Potassium sulfate (0-0-50) – 10 lbs.

Triple superphosphate (0-45-0) – 4 lbs.

PAM from Complete Green (310-615-0116) – 12 lbs.

3. At the time of planting, the top two inches of all areas to be planted shall be free of stones, stumps, or other deleterious matter 1" in diameter or larger, and shall be free from all wire, plaster or similar objects that would hinder to planting or maintenance.

B. Final Grades:

1. Minor modifications to grade may be required to establish the final grade.
2. Finish grading shall insure proper drainage of the site as depicted on the Civil Engineer's Grading Plan.
3. All areas shall be graded so that the final grades will be a maximum of 1" below adjacent paved areas, sidewalks, valve boxes, headers, clean-outs, drains, manholes, etc., or as indicated on plans.
4. Surface drainage shall be away from all building foundations.
5. Eliminate erosion scars prior to commencing maintenance period.

C. Pre-Planting Weed Control:

1. After irrigation system is operational, apply water for five (5) to ten (10) consecutive days as needed, to achieve weed germination. If live perennial weeds are present, spray with a non-selective systemic contact herbicide, recommended and applied by an approved licensed landscape pest control advisor and applicator. Leave sprayed plants intact for at least fifteen (15) days to allow systemic kill. Repeat as needed to eliminate perennial weeds.
 2. Clear and remove dead weeds least 1/4" below the surface of the soil over the entire area to be planted.
 3. Maintain site weed-free utilizing mechanical and chemical treatment until final acceptance by University.
- D. Installation of Imported Topsoil: Provide and install imported topsoil mix in all raised planters to a finish grade of 1" below the top of the planter. Allow for settling. Refer to drawings for depth of planters.
- E. Disposal of Excess Soil: Dispose of any unacceptable or excess soil at an offsite location approved by University.

3.03 PLANTING INSTALLATION:

A. General:

1. Plant when weather and soil conditions are suitable and in accordance with locally accepted practice.
 2. Place only as many plants as can be installed and watered on that same day.
 3. Open containers and remove plants to maintain the integrity of the ball of earth surrounding the roots. Plant and water immediately after removal from the containers. Do not open containers prior to placing the plants in the planting area.
- B. Lay-out of Major Plantings: University's Representative must approve layout of all containerized plants in their containers before any plant pits are dug. If any underground construction or utility lines are encountered in the excavation of planting areas, other locations for planting may be selected by the University's Representative. It is the Contractor's responsibility to confirm the location and depth of all underground utilities and obstructions. Refer to Engineer's plans.

C. Planting of Trees and Shrubs:

1. Excavation for planting shall include the stripping and stacking of all acceptable topsoil encountered within the areas to be excavated for trenches, tree holes, plant pits, and planting beds. Install washed gravel and perforated stand pipes per plans and planting detail. Join gravel area with gravel at continuous slotted plastic drain pipe at the bottom of trench per detail.

2. All excavated holes shall have vertical sides with roughened surfaces and shall be of a size that is twice the diameter and equal to the depth of the root ball for all trees and shrubs. Install plant with top of root ball 1" above adjacent grade.
3. Protect all planting areas from excessive compaction when trucking plants or other material to the planting site.
4. Remove excess soil generated from the planting holes and not used as backfill or in establishing the final grades.
5. Can Removal: after removing plant, superficially cut edge roots with knife on three (3) sides and bottom.
6. Box Removal:
 - a. Remove bottom of plant boxes before planting.
 - b. Remove sides of box without damage to root ball after positioning plant and partly backfilling.
7. Center plant in pit or trench.
8. Face plants with fullest growth into prevailing wind.
9. Set plant plumb and hold rigidly in position until soil has been tamped firmly around ball or roots.
10. After the plant has been placed, add backfill to the hole to cover approximately one-half (1/2) of the height of the root ball. Water to thoroughly saturate the root ball and adjacent soil.
11. Set crown of trees 4" above finished grade. Raise all plants that settle deeper than the surrounding grade to the correct level.
12. Fill the remainder of the hole with backfill mix and tamp firm.
13. After backfilling, construct an earthen basin around each plant. Each basin shall be of a depth sufficient to hold at least two (2) inches of water. The basins shall be constructed of amended backfill materials. Remove basin in all turf areas after initial watering. Add 10 drops Superthrive to each 1 gallon of water at the following rates:
 - 1 quart per each plant from flats
 - 1 gallon per 1 gallon plant
 - 3 gallons per 5 gallon plant
 - 5 gallons per 15 gallon plant
 - 10 gallons per 24" box

20 gallons per 30" box

30 gallons per 36" box

14. Pruning: Limit pruning to the minimum necessary to remove injured twigs and branches, and the shape the plant material as directed by the University's Representative. Pruning may not be done prior to delivery of plants. Cuts over 3/4" in diameter shall be painted with tree paint.
15. Staking and Guying: Stake trees only if directed to do so by the University's Representative. Complete staking of all trees immediately after planting. Install all stakes plumb and as indicated in details. Allow for staking of all trees, providing unit price, and credit University for all trees not staked.

D. Planting of Groundcovers:

1. Groundcover plants shall be grown in flats as indicated on the plans. Leave flat-grown plants in those flats until transplanting. Keep the flat's soil moist so that it will not fall apart when lifting the plants.
2. Plant groundcover in rows and evenly spaced, unless otherwise noted, and at intervals called out in the Drawings. Use triangular spacing unless otherwise noted on the Drawings.
3. Sprinkle plants after planting until the entire hole is soaked to its full depth.
4. Exercise care at all times to protect the plants after planting. Repair any damage to plants immediately.

3.04 CLEAN-UP

- A. After all planting operations have been completed; remove all trash, excess soil, empty plant containers, and rubbish from the property. Repair all scars, ruts or other marks in the ground caused by this work and leave the ground in a neat and orderly condition throughout the site. Pick up all trash resulting from this work no less frequently than each Friday before leaving the site, once a week, and/or the last working day of each week. Remove all trash from the site.
- B. Leave the site area broom-clean and wash down all paved areas within the Contract area, leaving the premises in a clean condition. Leave all walks in a clean and safe condition.

3.05 OBSERVATION SCHEDULE

- A. Notify the University's Representative in advance for the following site visits, according to the time indicated:
 1. Plant material review: 48 hours

2. Plant layout review: 48 hours
 3. Soil preparation and planting operations: 48 hours
 4. Pre-maintenance: 7 days
 5. Final walk-through: 7 days.
- B. When observations are conducted by someone other than the University's Representative, show evidence in writing of when and by whom these reviews were made.
- C. No site visits will commence without all items noted in previous Observation Reports either completed or remedied unless such compliance has been waived by the University.

3.06 SPECIAL PROVISIONS SPECIFICATIONS FOR MEDIAN PLANTERS

I. COMPOST, INCORPORATE

1. This work includes incorporating compost into the surface of areas 4:1 (horizontal:vertical) or flatter where shown on the plans.
2. Apply compost to all planting areas prior to cultivation.

B. COMPOST MATERIALS

1. The compost producer must be fully permitted as specified under the California Integrated Waste Management Board, Local Enforcement Agencies and any other State and Local Agencies that regulate solid waste facilities. If exempt from State permitting requirements, the composting facility must certify that it follows guidelines and procedures for production of compost meeting the environmental health standards of Title 14, California Code of Regulations, Division 7, Chapter 3.1, Article 7.
2. Apply compost to all planting areas as shown on the plans prior to cultivation.
3. Compost may be derived from any single or mixture of any of the following feedstock materials:
 - a. Green material consisting of chipped, shredded, or ground vegetation; or clean processed recycled wood products
 - b. Biosolids
 - c. Manure
 - d. Mixed food waste

3. Compost feedstock materials such that weed seeds, pathogens and deleterious materials are reduced as specified under Title 14, California Code of Regulations, Division 7, Chapter 3.1, Article 7, Section 17868.3
4. Compost must not be derived from mixed municipal solid waste and must be reasonably free of visible contaminants. Compost must not contain paint, petroleum products, pesticides or any other chemical residues harmful to animal life or plant growth. Compost must not possess objectionable odors.
5. Metal concentrations in compost must not exceed the maximum metal concentrations listed in Title 14, California Code of Regulations, Division 7, Chapter 3.1, Section 17868.2.
7. Before compost application, submit a copy of the compost producer's compost technical data sheet and a copy of the compost producers Seal of Testing Assurance certification. The compost technical data sheet must include:
 - a. Laboratory analytical test results
 - b. Directions for product use
 - c. List of product ingredients
8. Before compost application, submit a Certificate of Compliance.

Compost must comply with the following:

Physical and Chemical Requirements

Property	Test Method	Requirement
pH	TMECC 04.11-A Elastometric pH 1:5 Slurry Method pH Units	6.0-8.0
Soluble Salts	TMECC 04.10-A Electrical Conductivity 1:5 Slurry Method dS/m (mmhos/cm)	0-10.0
Moisture Content	TMECC 03.09-A Total Solids & Moisture at 70+/- 5 deg C % Wet Weight Basis	30-60
Organic Matter Content	TMECC 05.07-A Loss-On-Ignition Organic Matter Method (LOI) % Dry Weight Basis	30-65
Maturity	TMECC 05.05-A Germination and Vigor Seed Emergence Seedling Vigor % Relative to Positive Control	80 or Above 80 or Above
Stability	TMECC 05.08-B Carbon Dioxide Evolution Rate mg CO ₂ -C/g OM per day	8 or below
Particle Size	TMECC 02.02-B Sample Sieving for Aggregate Size Classification % Dry Weight Basis	Inches % Passing 3 99% 3/8 < 25% Max. Length 4 inches
Pathogen	TMECC 07.01-B Fecal Coliform Bacteria < 1000 MPN/gram dry wt.	Pass
Pathogen	TMECC 07.01-B Salmonella < 3 MPN/4 grams dry wt.	Pass
Physical Contaminants	TMECC 02.02-C Man Made Inert Removal and Classification: Plastic, Glass and Metal % > 4mm fraction	Combined Total: < 1.0
Physical Contaminants	TMECC 02.02-C Man Made Inert Removal and Classification: Sharps (Sewing needles, straight pins and hypodermic needles) % > 4mm fraction	None Detected

NOTE: TMECC refers to "Test Methods for the Examination of Composting and Compost," published by the United States Department of Agriculture and the United States Compost Council (USCC).

C. APPLICATION

1. Apply compost to a depth of 4 inches by using specialized equipment such as a pneumatic blower or side discharge spreader.
2. You may incorporate the compost by hand; by using a backhoe, bulldozer, or grading blade to a depth between 12 and 18 inches. Do not incorporate compost to a strip 2 feet wide adjacent to the edge of pavement.
3. Following incorporation, compact the area to a relative compaction between 82 percent and 90 percent except as otherwise specified in Section 19-5 "Compaction," of the Standard Specifications.

D. MEASURE AND PAYMENT

1. Compost, Incorporate will be measured by the square yard.
6. The contract price paid per square yard for compost, incorporate includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in applying compost, incorporate complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

II. TOPSOIL

1. Topsoil shall be obtained from sources within the project as shown on the plans. Topsoil work shall consist of excavating, windrowing or stockpiling, removing from windrows or stockpiles, spreading, and compacting topsoil as shown on the plans or as designated by the Engineer.
2. Trash and objectionable material shall be removed from sites prior to topsoil excavation. Removed trash and objectionable material shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.
3. Attention is directed to "Clearing and Grubbing" of these special provisions regarding the clearing of vegetation. Excavating topsoil shall not be performed in an area until clearing and grubbing has been completed in that area.
4. Topsoil shall be obtained by excavating the top 12" inches of material from proposed excavation and embankment areas and other areas shown on the plans or designated by the Engineer. Topsoil shall be stockpiled adjacent to the project site at a location approved in writing by the Engineer. Rocks and plant material in excess of 3" inches in greatest dimension shall be removed from the excavated topsoil.
5. Upon completion of the grading operations for the excavation and embankment slopes and other areas to receive topsoil, the topsoil shall be spread to a uniform depth of not less than 12 inches and compacted or stabilized in a manner that retains.

the material in place on the slopes. The topsoil shall not be compacted or stabilized to the degree that the topsoil is not maintained as a viable growing medium.

III. CULTIVATION AND FERTILIZER

1. Commercial Fertilizer and Soil Conditioners (Granular)

Commercial fertilizer (granular) shall be a pelleted or granular form and shall conform to the following guaranteed chemical analysis and products listed:

2. After incorporation of compost and Immediately prior to cultivation, soil amendment and commercial fertilizer shall be added to the areas to be cultivated. Soil amendment shall be added at the rate shown on the plans and commercial fertilizer shall be applied at the rates given below in pounds per 1,000 square feet or per soils report. Soil amendment and fertilizer shall be thoroughly mixed with the soil to a minimum 6 inch depth.

50 pounds GroPower Plus.

Agricultural gypsum - 50 lbs.

Ammonium sulfate (21-0-0) – 5 lbs.

Potassium sulfate (0-0-50) – 10 lbs.

Triple superphosphate (0-45-0) – 4 lbs.

PAM from Complete Green (310-615-0116) – 12 lbs.

Ingredient	Percentage
Nitrogen	21
Phosphoric Acid	45
Water Soluble Potash	50

3. Add Superthrive vitamin hormone supplement or approved equal at manufacturer's recommended rates and GroLife mycorrhizal transplant inoculant (GroPower (800-473-1307) or approved equal in backfill mix at the following rates:

Plant size	Rate of application in ounces per plant
Flatted	1/4 cup, dust root ball
1 gallon	1/4 cup, dust root ball
2 gallon	1/2 cup, dust root ball
5 gallon	1 cup, dust root ball
15 gallon	2 cups, incorporate into backfill
24" box	3 cups, incorporate into backfill
36" box	4 cups incorporate into backfill

42", 48" box	5 cups incorporate into backfill
60" box	6 cups incorporate into backfill
72" box	6 cups incorporate into backfill

2. Add one (1) cubic yard of $\frac{3}{4}$ " washed gravel per hole for each tree to be planted as shown on plans and planting detail.
3. Install two (2) 4" diameter Sch40 PVC perforated pipes with caps for each tree and fill with $\frac{3}{4}$ " washed gravel.
4. Continuous 4" diameter slotted plastic pipe wrapped with geogrid fabric root control barrier to be installed in $\frac{3}{4}$ " gravel along median and at base of trees as shown on plans and detail. Root control barrier to provide both physical and chemical barrier zone to restrict vegetative root encroachment.

IV. TREE PLANTING TRENCH

1. Planting trenches shall be centered on the planting line.
4. Tree planting drainage trench for the medians shall be installed as shown on plans and detail. Full compensation for trenching, furnishing and installing materials in trenches shall be included in the contract price.

End of Section 02950

LIST OF SKETCHES

ADD2-SCE Sketch 1	Dated 7/24/2008
ADD2-SCE Sketch 2	Dated 7/24/2008
ADD2-SK-C001	Dated 7/18/2008
ADD2-SK-C002	Dated 7/18/2008
ADD2-SK-C003	Dated 7/18/2008
ADD2-SK-C004	Dated 7/18/2008
ADD2-LSK1	Additional Irrigation Details, Dated 7/28/2008
ADD2-LSK2	Portion of Sheet L302 Dated 7/28/2008
ADD2-LSK3	Portion of Sheet L304 & L305 Dated 7/28/2008
ADD2-LSK4	Portion of Sheet L308 Dated 7/28/2008