

CONSTRUCTION OF

PROJECT NAME

PROJECT NO. ##-####

SPECIAL PROVISIONS

SECTION L – LANDSCAPING & IRRIGATION SYSTEMS

The following Special Provisions supplement and amend the Standard Specifications for Public Works Construction 2015 Edition (Greenbook) . These Special Provisions have been arranged into a format that parallels the Greenbook.

Bidders with pre-bid inquiries regarding the Work covered in this Section should be directed to **Project Manager at (951) ###-####**.

Prepared By:

Date

Reviewed:

Date

SECTION L – LANDSCAPING & IRRIGATION SYSTEMS

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PART 3 – CONSTRUCTION METHODS

SECTION 300 - EARTHWORK

300-1 CLEARING AND GRUBBING.

300-1.1 General.

Insert the following after the second paragraph:

Clearing and Grubbing shall also include but not be limited to:

- a) Removing any existing plant material (including roots), rocks, concrete, boulders, asphalt, and any other trash or debris to a depth of 12 inches below top of curb elevations.
- b) Protection of all existing improvements within the project area, including all materials, temporary fencing, and labor required to protect existing improvements.

Removal shall be disposed of in a legally acceptable manner outside of right-of-way. All green waste material shall be disposed of at a recycling center. Contractor shall provide weight tickets as evidence of disposal of all green waste.

300-1.4 Payment.

Replace the first sentence with the following: [NOTE – Not necessary if in Section R]

Payment for “CLEARING AND GRUBBING” shall be at the lump sum Bid price and shall include full compensation for subgrade preparation, material, placement, removal, labor, tools, equipment, and incidentals necessary to do the work involved thereof, complete, in place and accepted.

PART 8 – LANDSCAPING AND IRRIGATION

SECTION 800 - MATERIALS

800-1 LANDSCAPING MATERIALS.

Insert the following:

Contractor shall submit a complete list of all materials proposed to be furnished and installed under this Section, demonstrating complete conformance with the requirements specified.

Materials list shall include, but not be limited to, the weed control materials and quantities per acre intended for use in controlling the weed types prevalent and expected on the site, as supplied by the Engineer. Engineer shall furnish the data to demonstrate the compatibility of the weed control materials and methods with the intended plant and seed varieties.

Deliver all certificates to the City upon delivery to job site. Include:

- c) Quantity of commercial fertilizers used by type
- d) Quantity of soil amendments
- e) Quantity of plant material by type
- f) Quantity of organic mulch

800-1.2 Soil Fertilizing and Conditioning Materials.

800-1.2.3 Commercial Fertilizer.

Add the following to the end of the section:

Commercial fertilizer will bear the manufacturer's guaranteed statement of analysis and will meet the following minimum requirements: 16% nitrogen, 20% phosphoric acid, 20% potash, when used from October to March or, a slow release formulation like 16% nitrogen, 6% phosphoric acid, 8% potash or 15% nitrogen, 4% phosphoric acid, 6% potash, when used from April to September.

800-1.2.4 Organic Soil Amendment.

Add the following to the end of the section:

Soil conditioners may include any or all of the conditioners herein specified and shall be applied at rates indicated on the plans or as determined by the agronomical soils report.

Soil amendments are to be distributed at the following rates per one thousand square feet (1,000 sq. ft.):

3 cu. yds.	Nitrogen Stabilized Organic Amendment
200 lbs.	5-3-1 Commercial Fertilizer
10 lbs.	Iron Sulfate*
50 lbs.	Agricultural Gypsum

(Mix to be used for bidding purposes only, to be verified with agronomic soils test.)

*Care shall be taken when using or handling Iron Sulfate to avoid contact with cement.

- a) Shavings: Nitrogen stabilized organic amendments derived from redwood sawdust, fir sawdust or finely ground fir or pine bark containing the following physical properties:

<u>Percent Passing</u>	<u>Sieve Size</u>
95 - 100	6.33 mm (1/4 inch)
80 - 100	2.38 mm (No. 8, 8 mesh)
0 - 30	500 Micron (No. 35, 32 mesh)
Nitrogen Content - Dry weight 0.56% - 0.84%	
Iron Content - Minimum 0.08% dilute acid soluble Fe on dry weight basis.	
Soluble Salts - 2.5 millimhos/ centimeter at 25 degrees C as determined by maximum saturation extract method.	
Ash - Dry weight 0 - 6.0%	

- b) Fertilizer: Commercial fertilizers with an analysis of 5-3-1 Gro-Power Plus, 16-20-0, and 12-8-8 Gro-Power Controlled Release Nitrogen, as designated herein, or approved substitute as required by the agronomical soils report.

Fertilizer shall be delivered to the site in the original unopened containers, bearing the manufacturer's guaranteed analysis. Any fertilizer that becomes caked or damaged, making it unsuitable for use, will not be accepted.

- c) Gypsum: To be agricultural grade gypsum and shall conform to Section 212-1.2.
- d) Iron Sulfate: Pelleted or granular form containing not less than 18.5% expressed metallic iron and shall be registered as an agricultural mineral, with the State Department of Agriculture in compliance with Article 2 - "Fertilizer Materials," Section 1030 of the Agricultural Code.
- e) Ammonium Sulfate: Granular form containing not less than 21% nitrogen and 24% sulfur and shall be registered as an agricultural miner, with the State Department of Agriculture in compliance with Article 2 - "Fertilizer Materials," Section 1030 of the

Agricultural Code.

- f) Fertilizer planting tablets shall be tightly compressed commercial grade planting tablets have a 12-8-8 formula, weighing 7 grams each, as Gro-Power planter tablets or equal. The planting tablets shall be delivered to the site in the original, unopened containers, bearing the manufacturer's guaranteed analysis. Any damaged tablets will not be accepted.

800-1.2.5 Mulch.

Add the following to the end of the section:

- g) **Type 7 mulch** (organic mulch bark), shall be used for all planting areas to be mulched with walk on bark. Wood mulch is to be 1/2" to 1-1/2" fibrous and woody bark mixture of Douglas Fir, and placed in a minimum 3" layer unless otherwise stated within the plans. Contractor shall submit a one cubic foot sample for approval prior to installation.

800-1.4 Plants.

800-1.4.1 General.

Add the following to the end of the section:

All plants will be true to name, and one of each tree and no less than 2% of each plant species will be tagged with the name and size of plants in accordance with the standards of practice recommended by the American Association of Nurserymen. The root condition of plants furnished in containers will be checked. The Engineer will check no more than two plants of each species or variety from each source. All plants rendered unsuitable will be rejected and replaced at no additional cost. In case the sample plants are found to be defective, the entire lot or lots of plants represented by the defective samples may be rejected.

All trees and shrubs will be from nurseries in geographical areas with similar climates and transported covered. The specified standard height and diameter will be set by the American Standard for Nursery Stock.

All trees will have a single leader and begin branching no lower than 4 feet from ground, unless otherwise indicated on drawings.

Written certifications are required to be submitted to the City upon delivery of the respective materials to the job site. All submitted products may only be used when approved by the City.

800-2 IRRIGATION SYSTEM MATERIALS.

800-2.1 Pipe and Fittings.

800-2.1.1 General.

Insert the following before the first paragraph:

All irrigation materials and appurtenances shall be purple in color, for future use of reclaimed water. Due to the scale of drawings, it is not possible to indicate all offsets, fittings, sleeves, etc., which may be required. Carefully investigate the structural and finished conditions affecting all of this work and plan this work accordingly, furnishing such fittings, etc., as may be required to meet such conditions. Drawings are generally diagrammatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting and architectural features.

Manufacturer's directions and detailed drawings shall be followed in all cases where the

manufacturer's furnishings are used in this Contract for furnish directions covering points not shown in the drawings and specifications. Work called for on the drawings by notes or details shall be furnished and installed whether or not specifically mentioned in the specifications.

The Contractor shall not install the irrigation system as shown on the drawings when it is obvious in the field that obstructions, grade differences or discrepancies in equipment usage or area dimensions exist that might not have been considered in the engineering. Such obstructions or differences shall be brought to the attention of the Engineer. In the event this notification is not performed, the Contractor shall assume full responsibility for any revision necessary at no cost to the City.

Prior to the installation of any work, prepare a detailed list of each material proposed for use in the project and submit to Engineer for approval. Prepare typed written material list using the following format, as a sample: Double space between each item.

<u>Item No.</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Model No.</u>
1.	Pressure Supply Lines	Pac. Western	Sched. 40 PVC
2.	Lawn Head	Rain Bird	1806-SAM PRS
3.	Etc.	Etc.	Etc.

800-2.1.6 Plastic Pipe.

Add the following subsection:

Identify all pipes with the following indelible markings:

- a) Manufacturer's name
- b) Nominal pipe size
- c) Schedule of class
- d) Pressure rating psi
- e) NSF (National Sanitation Foundation) seal of approval
- f) Date of extrusion

Pipe (solvent weld type): manufacture from virgin polyvinyl chloride compound in accord with ASTM D1784 or ASTM D2241, cell classification 12454B; hydrostatic design stress rating no less than 2,000 psi.

Fittings shall be standard weight, Schedule 40, injection molded PVC, and comply with ASTM D1784, cell classification 13454B. Threads (where required) shall be injection molded type. Tees and ells shall be side gated.

Threaded nipples shall be standard weight, Schedule 80 with molded threads.

The main line pressure pipe and lateral pipe shall be Schedule 40 PVC IPS Type 1, Grade 1 pipe. All plastic pipes will bear the following markings: the manufacturer's name, nominal pipe size, or schedules.

The main line fittings will be fitted together and will be solvent welded using pipe primer ASTM F656 and pipe solvent ASTM D-2564. All other fittings will be fitted together, will be solvent welded with pipe solvent ASTM D-2564, NSF or approved equal.

800-2.1.7 Joint Cement and Primer.

Add the following subsection:

Non-pressure plastic pipes and fittings shall be cemented using a 100% active solvent, Christy's Blue Glue. Pressure plastic pipes and fittings shall be coated with a primer and then with a 100% active solvent, Christy's Blue Glue for 4" and smaller and Grey 4" and larger. Both primer and solvent shall be similar in all respects to that manufactured by Christy's or approved

equal.

800-2.2 Valves and Valve Boxes.

800-2.2.7 Valve Boxes.

Replace the section in its entirety with the following:

Valve boxes shall be fabricated from a durable plastic material resistant to weather, sunlight and chemical action of soils. They shall be purple in color. The cover shall be secured with a stainless steel bolt mechanism. The cover shall be capable of sustaining a load of 1,500 pounds. Valve box extensions shall be by the same manufacturer as the valve box. All valve boxes shall be as manufactured by Ametek, Carson, or an approved equal.

- a) Quick coupling valve boxes shall be round. The cover shall be heat branded with the letters "QCV-RW", 2" high.
- b) Gate valve boxes shall be round. The cover shall be heat branded with the letters "GV-RW", 2" high.
- c) Remote control valve boxes shall be 12" x 18" concrete with metal lid. The cover shall be welded with the letters "RCV-RW" and the valve number in characters 2" high. Electric remote control valves will be as noted on the drawing, and will be identified per plan and/or with Christy's tag or equal.
- d) Splice boxes shall be 12" x 18". The cover shall be heat branded with the letters "SB-RW", 2" high.
- e) Provide at all locations indicated, 18 inches minimum from hardscape.
- f) Fill area under box with minimum of 3 cubic feet of pea gravel before box is installed.

SECTION 801 - INSTALLATION

801-1 GENERAL.

Add the following to the end of the section:

Contractor shall notify the Engineer for the following reviews, with 48 hours minimum notice:

- a) Pressure supply line installation and testing
- b) Systems layout
- c) Coverage tests
- d) Final review

Contractor shall provide "walkie-talkie" equipment and/or personnel to maintain communication from review area to automatic controllers and provide up-to-date as-built drawings at each review. In the event the Contractor schedules any review and the system is not fully ready, record drawings are not current, or required corrective work has not been completed, the Contractor shall be responsible for reimbursing the Engineer at an hourly rate, plus all travel expenses. No further reviews will be conducted until this charge is paid.

Contractor shall examine surfaces for conditions that will adversely affect execution, permanence and quality of work. Contractor shall verify that grading has been completed and the work of this section can properly proceed. Contractor shall exercise extreme care in

excavating and working near existing utilities. Contractor is responsible for damages to utilities which are caused by his operations or neglect. Check existing utility drawings for locations.

Contractor shall notify the Engineer in writing, describing unacceptable conditions. Contractor shall not proceed with work until unacceptable site conditions are corrected or existing utilities are located.

The Contractor will contact the Engineer at least two Working Days in advance of each inspection. An inspection is required at each of the following steps listed below:

- a) Inspection of all materials delivered to site
- b) Inspection of rough grade
- c) Acceptance of organic mulch and taking of soil samples
- d) Inspection of soil amendment work
- e) Inspection of plants at nursery and upon delivery to the project site
- f) Irrigation coverage test
- g) Four hour irrigation main lines, valves, laterals, and wires before backfill or during irrigation installation pressure test
- h) During planting
- i) At the start of the establishment period
- j) At the end of the plant establishment period, concurrent with final acceptance of the project. Project acceptance will be confirmed in writing.
- k) Completion of hardscape work

Where it is necessary to excavate adjacent to existing trees, use all possible care to avoid injury to trees and tree roots. Excavation in areas where 2-inch and larger roots occur shall be done by hand. Roots 2 inches and larger in diameter, except directly in the path of pipe or conduit, shall be tunneled under and shall be heavily wrapped in burlap, to prevent scarring or excessive drying. Where a ditching machine is run close to trees having roots smaller than 2 inches in diameter, the wall of the trench adjacent to the tree shall be hand trimmed, make clean cuts through. Roots 1-inch and larger in diameter shall be painted with coats of Tree Seal, or equal. Trenches adjacent to trees should be closed within 24 hours. Where this is not possible, the side of the trench adjacent to the tree shall be kept shaded with burlap or canvas.

801-2 EARTHWORK AND TOPSOIL PLACEMENT.

801-2.2 Topsoil Preparation and Conditioning.

801-2.2.1 General.

Insert the following before the first paragraph:

During weed abatement procedures, the Contractor is responsible for the erection of all signs and barriers required to prevent intrusion into the treated areas and to notify the public. No material or methods used for weed abatement shall affect the landscape planting or hydroseed germination. No material or method shall render the job site unusable for more than 10 calendar days from date of application.

Prior to spreading soil amendments and prior to installation of irrigation systems, crossrip or otherwise till to a depth of 12" all planting areas to receive soil preparation. All rock 1" and

larger shall be removed to a depth of 12". Dispose of all debris off-site in a legal manner.

To all planting areas, uniformly broadcast soil amendments and thoroughly incorporate to minimum 6" depth by means of a rototiller or equal.

Rough grade has been left within one tenth of one foot of finish grade. Work such as fine grading and light cultivation are required of all planting areas indicated on the Plans to prepare grades prior to seed or stolon planting. After approximate finished grades have been established, all soil areas shall be compacted and settled by application of heavy irrigation to a minimum depth of 12".

All landscape areas will be graded to finish grades, reestablishing flow lines as approved prior to amending the soil. Finish grades will be inspected upon completion. The Contractor will not proceed with planting work until finish grades have been inspected and accepted by the City.

801-2.2.2 Fertilizing and Conditioning Procedures.

Insert before the first sentence of the third paragraph:

Fertilizers will be applied at the rate recommended by the manufacturer. The Contractor will fertilize the plants one month prior to the end of the establishment period.

801-2.3 Finish Grading.

Add the following to the end of the section:

After the foregoing specified deep watering, minor modifications to grade may be required to establish the final grade. These areas shall not be worked on until the moisture content has been reduced to a point where working it will not destroy soil structure.

Finished grading shall ensure proper drainage of the site. Finished earth berm surfaces shall be smooth and even between contours. Surface drainage shall be away from all building foundations. Eliminate all erosion scars.

The Contractor shall request a review by the City for recommended approval of the final grades and elevations before beginning planting operations.

801-4 PLANTING.

801-4.2 Protection and Storage.

Add the following after the first paragraph:

Deliver all items to the job site in their original containers with all labels intact and legible at time of the City's review. Immediately remove from the site all plants which are not true to name, and all materials which do not comply with the specified requirements. Use all means necessary to protect plant materials before, during, and after installation and to protect the work and materials of all other trades. In the event of damage, immediately make all repairs and replacements necessary to the recommended approval of the City and at no additional cost to the City.

801-4.9 Erosion Control Planting.

801-4.9.5 Watering.

Add the following to the end of the section:

Immediately after planting, apply water to each shrub by means of a hose. Apply water in a moderate stream in the planting hole until the material about the roots is completely saturated from the bottom of the hole to the top of the ground.

Apply water in sufficient quantities and as often as seasonal conditions require in order to keep the planted areas sufficiently moist at all times, well below the root system of grass and plants.

All groundcover areas shall be kept damp at all times and irrigation should be adjusted accordingly. This normally would involve 4 to 6 watering periods daily, each watering period (ON) regulated to just dampen the mulch without creating run-off.

Intervals between irrigation (OFF) sequence should be judged by the length of the time the mulch remains damp. Once the mulch begins to dry out, the water (ON) sequence should be repeated.

801-5 IRRIGATION SYSTEM INSTALLATION.

801-5.1 General.

Replace the fourth paragraph with the following:

Contractor shall connect to existing water services at locations indicated on the Plans and make any minor changes in location necessary due to actual site conditions as a part of this Contract.

801-5.2 Irrigation Pipeline Installation.

801-5.2.1 General.

Replace the fourth paragraph with the following:

Plastic pipe and threaded fittings shall be assembled using Teflon tape applied to male threads only. Tape all open ends of pipe during installation to prevent entry of any foreign matter into the system.

801-6 MAINTENANCE AND PLANT ESTABLISHMENT.

Replace the section in its entirety with the following:

Normal progress reviews shall be requested from the City at least 48 hours in advance of an anticipated inspection. A review will be made by the City on each of the steps listed below. The Contractor will not be permitted to initiate the succeeding steps of work until he has received written recommendation of approval to proceed by the City.

- a) Pre-inspection immediately prior to the commencement of the Work on this Section.
- b) Spotting of all shrubs, trees and palms, and minor adjustments prior to planting.
- c) Preparation of areas to groundcover.
- d) Final review.
- e) Provide training of City staff in proper operation of major equipment, including recommended winterization procedures. Submit evidence that training has been successfully completed.
- f) Start of the 90 calendar day plant establishment period.
- g) Completion and acceptance of plant establishment period.
- h) Start of 90 calendar day maintenance period.
- i) Stage 1 – 30 calendar day review and punch list.
- j) Completion of punch list within 5 Working Days.
- k) Start Stage 2
- l) 60 calendar day review and punch list.

- m) Completion of punch list within 5 Working Days.
- n) Start Stage 3
- o) Stage 3 – 90 calendar day review.
- p) Final punch list.
- q) Provide the following:
 - i. Tools/Turn over items
 - ii. Guarantee
 - iii. Release
 - o iv. O/M manuals
- r) Miscellaneous items.
- s) Final punch list shall be completed within 5 Working Days.
- t) Completion of final punch list.
- u) Acceptance of Work.

A punch list will be developed by the City during each 30 day walk-thru to note deficiencies. Each punch list shall be completed in its entirety within 5 Working Days. Failure to complete punch list items within the specified time will correspond in extending the maintenance period.

The Contractor shall continuously maintain all areas involved in this contract during the progress of the Work and especially during the establishment and maintenance period until final acceptance of the Work by the City.

Deliver a signed and dated checklist to the City's Representative 10 calendar days prior to the start of maintenance period. Use the following format:

- a) Plumbing permits: if none required, so note.
- b) Material approvals: approved by and date.
- c) Pressure line tests: by whom and date.
- d) Record drawings: received by and date.
- e) Controller charts: received by and date.
- f) Materials furnished: received by and date.
- g) Operation and maintenance manuals: received by and date.
- h) System and equipment operation instruction: received by and date.
- i) Manufacturer's warranties if required: received by and date.
- j) Written guarantee: received by and date.
- k) Lowering of heads in lawn areas: approved by and date.

The contractual establishment and maintenance period shall be for 90 continuous calendar days. The contractual plant establishment period begins on the first day after all planting in this project is completed and accepted and the planted areas are brought to a neat, clean and weed

free condition.

- a) Any day upon which no work will be required, as determined by the City, will be credited as one of the plant establishment Working Days regardless of whether or not the Contractor performs plant establishment work.
- b) Any day when the Contractor fails to adequately maintain plants, replace unsuitable plants or perform weed control or other work, as determined necessary by the City, will not be credited as one of the plant establishment Working Days.
- c) In order to carry out the plant establishment work, the Contractor shall furnish sufficient labor and adequate equipment to perform the work during the plant establishment period.
- d) Improper maintenance or possible poor conditions of any planting at the termination of the scheduled establishment period may cause postponement of the final acceptance of plant establishment. Contractor shall bear all costs for extension of the plant establishment period.

The plant maintenance period shall begin at the acceptance of the plant establishment period. All areas shall be kept free of debris, and all planted areas shall be weeded at intervals of not more than 10 calendar days. Watering, trimming, fertilization, spraying and pest control, as may be required, shall be included in the maintenance period. Maintenance shall include gopher control. Contractor shall fertilize the plants one month prior to the end of the establishment period.

801-6.1 Litter.

Add the following subsection:

All areas in the work sites shall be kept free of, but not limited to, the following items: bottles, glass, cans, paper, cardboard, metallic items, and other debris on a daily basis.

Contractor shall promptly remove from the work area, all debris generated by their performance.

801-6.2 Use of Chemicals.

Add the following subsection:

Contractor shall submit a list of all chemical herbicides, pesticides, and rodenticides proposed for use under this contract for approval by the Engineer. Materials included on this list shall be limited to chemicals approved by the State of California Department of Food and Agriculture, and shall include the exact brand name and generic formulation. The use of any chemical on the list shall be based on the recommendations of a licensed pest control advisor where required by law.

The use of chemicals shall conform to the current County of Riverside Agriculture Commissioner regulations. No chemical herbicide, rodenticide, or pesticide shall be applied until its use is approved, in writing, by the Engineer as appropriate for the purpose and area proposed.

801-6.3 Disease and Pest Control.

Add the following subsection:

Contractor shall regularly inspect all landscaped areas for the presence of disease, snail, insect or rodent infestation. The Contractor shall advise the Engineer, in writing, within four days when any disease, snail, insect or rodent infestation is found; he shall identify the disease,

snail, insect or rodent and specify control measures to be taken. The Contractor shall implement control measures, exercising extreme caution in the application of all spray materials, dusts or other materials utilized.

Approved control measures shall be continued until the disease, snail, insect or rodent is controlled to the satisfaction of the Engineer. The Contractor shall utilize all safeguards necessary during disease, snail, insect or rodent control operations to ensure safety of the public and the employees of the Contractor.

Contractors shall perform at their sole expense the following services:

- a) All Work involving the use of chemicals will be accomplished by a State of California licensed pest control operator. A written recommendation by a person possessing a valid California Pest Control Advisor License is required prior to chemical application where required by law.
- b) All chemicals requiring a special permit for use must be registered by the Contractor with the County Agricultural Commissioner's Office and a permit obtained with a copy given to the Engineer prior to use.
- c) A copy of all forms submitted to the County Agricultural Commissioner shall be given to the Engineer on a monthly basis.
- d) All regulations and safety precautions listed in the "Pesticide Information and Safety Manual" published by the University of California will be adhered to.

801-6.4 Weed Control.

Add the following subsection:

For the purpose of these specifications, a weed will be considered as "any undesirable or misplaced plant." All areas within the specified maintenance area, including but not limited to, turf grass, shrub and ground cover areas, planters, tree wells, and hardscape areas shall be kept free of weeds at all times. Weed removal shall consist of complete removal of all weeds, including top growth and roots, as the weeds appear.

Weed control shall be performed a minimum of one time per week. Bare areas between plants shall be cultivated by hand on a weekly basis. Weeds shall be controlled either by hand, mechanical or chemical methods; however, the Engineer may restrict the use of chemical weed control in certain areas.

801-6.5 Method of Irrigation.

Add the following subsection:

Irrigation shall be per project Plans and Specifications. Drip emitters will be installed as designated on the drawings and per City Standards. However, failure of the existing irrigation system to provide full and proper coverage shall not relieve the Contractor of the responsibility to provide adequate irrigation with full and proper coverage to all areas in the work site.

All areas receiving marginal coverage shall be irrigated by a portable irrigation method. The Contractor shall furnish all hoses, nozzles, etc., necessary to accomplish this supplemental irrigation.

Care shall be exercised to prevent a waste of water, erosion, and/or detrimental seepage into existing underground improvements or structures.

801-6.6 Irrigation Maintenance and Repairs.

Add the following subsection:

Contractor shall maintain all irrigation systems, at no additional cost to the City, in such a way as to:

- a) Guarantee proper coverage and full working capability.
- b) Make whatever adjustments may be necessary to prevent overspray or excessive runoff into street right-of-ways or other areas not meant to be irrigated.

Contractor shall repair or replace inoperable irrigation equipment to maintain a fully operational system, including but not limited to, pressure pipes from the water meter to the control valves, all irrigation pipes, all manual and automatic valves, pumps used for the irrigation systems, backflow devices, filters, strainers, pressure regulators, sprinkler heads, irrigation clamps and stakes, anti-drain valves, quick couplers, electrical wiring from the controller to the solenoid valves, emitters, drippers, valve boxes, controllers, valve markers, batteries, fittings and risers.

- a) Maintenance includes, but is not limited to, tightening of loose fittings and packing nuts; flushing pipes, nozzles, valves, filters, strainers, and backflow devices; adjusting drip emitters, anti-drain valves and pressure regulators, adjusting and lubricating controllers; and cleaning drip emitters.
- b) Contractor shall repaint by hand all backflow devices, backflow cages, valve box lids, curb faces and curb tops, annually between January 15 and February 28; additional painting may be required as directed. Labor shall be provided at no additional cost to the City; however, the cost of paint shall be incurred by the City.

Irrigation repairs shall be made within the following time limits:

- a) Mainline irrigation breaks shall be repaired within two hours of identification or notification.
- b) All other irrigation repairs shall be made within one calendar days of identification or notification.

Replacement of irrigation components shall be with originally installed materials of the same size and quality. Substitutions must be approved by the Engineer in writing prior to installation.

801-6.7 Water Conservation.

Add the following subsection:

Contractor shall turn off all irrigation systems during periods of rainfall and/or times when suspension of irrigation is desirable to conserve water while remaining within the guidelines of good horticulturally acceptable maintenance practices.

Contractor shall comply with all City of Corona Ordinances and/or Resolutions which relate to water conservation. Failure to comply with Section 29 may result in an equitable amount deducted from the Contractor's payment.

801-6.8 Shrub Care.

Add the following subsection:

All shrubs growing in the work areas shall be pruned annually in February, or more frequently as determined by the Engineer, to encourage healthy growth habits, removal of dead or damaged branches, and maintain natural shape. Shrubs shall be pruned with sharp pruning tools.

Shrubs shall be continually pruned, as necessary, to prevent encroachment of passage

ways, walks, streets, and view of signs. Shrubs shall be tapered to provide irrigation coverage and an aesthetically pleasing landscape. All pruning cuts shall be 1/4 inch above a node (bud). No projections or stubs shall be allowed to remain.

Contractor shall remove all clippings the same day shrubbery is pruned and prior to vacating the work site. Pruning shall be done to maintain a well-groomed, laced out appearance, and encourage air movement through the shrub. Shearing, hedging or severe pruning shall not be permitted without prior written permission from the Engineer. Contractor shall notify the Engineer 5 Working Days prior to the annual pruning, in writing, stating the exact location and date the annual pruning shall be performed.

Shrubs shall be fertilized as necessary to maintain horticulturally acceptable health and color. Foliar fertilization may be performed when appropriate.

All shrubs shall be adequately irrigated to maintain a healthy and attractive appearance. Irrigation run-off and overspray shall be minimized. Shrubs shall be irrigated in a method which promotes deep root growth.

All damaged, diseased (untreatable) or dead shrubs shall be replaced with the same species and size of plant material that existed. Contractors shall be responsible for the complete removal and replacement of shrubs lost due to the Contractor's faulty maintenance or negligence, as determined by the Engineer.

Substitutions for any plant materials must have prior written approval by the Engineer. Original plans and specifications shall be consulted to determine correct identification of species. Care shall be taken to prevent soil build-up around the crown of shrubs.

801-6.9 Green Waste Disposal.

Add the following subsection:

Green waste shall be defined as tree and shrubbery trimmings, grass, weeds, leaves, wood chips and other garden organic materials. Contractor shall be responsible for recycling all green waste generated from their contract performance.

Contractor shall have the duty to keep all green waste from being contaminated to an extent it no longer can be recycled. Contractor shall deliver all green waste to a City approved reclamation site, for the purposes of recycling. Contractor shall submit a monthly report identifying the weight and/or volume of green waste recycled during the preceding month. Payment for green waste disposal shall be included in the Bid price of all applicable bid items.

801-6.10 General Cleanup.

Add the following subsection:

Remove all trash and accumulated debris from the work sites. In addition, dog feces are also to be removed from the walkways, turf or ground cover areas. All areas under maintenance, and other designated areas, will have trash removed between 6:00 AM and 9:00 AM daily, five days per week (Monday through Friday).

The Contractor is responsible for removal of all weeds and grass growing in and around the curb and gutter area. The Contractor is responsible to insure that the roadway is cleared of all dirt and debris within 4 feet of the curb & gutter in all areas adjacent to maintenance responsibilities. Walkways shall be cleaned immediately following mowing, edging and cleaning by use of power sweeping or blower equipment not less than once per week. This includes removal of all foreign objects from surfaces such as gum, dog feces, grease, paint and graffiti. All walkway cracks and expansion joints shall be maintained weed and grass free at all times.

All drains and catch basins shall be kept free of siltation and debris at all times. All drainage areas and V-ditches shall be kept clean and edged weekly by the Contractor.

Accumulation of leaves shall be removed from all areas no less than once per week. All dead, damaged, declining, hazardous or broken plant material (trees, shrubs, vines, ground

cover, turf), whether a result of the Contractor's negligence or an Act of God shall be removed by the Contractor at no additional cost to the City.

801-6.11 Emergency Calls.

Add the following subsection:

Contractor shall have the capability to receive and respond immediately to calls of an emergency nature during normal working hours and outside of normal working hours. Calls of an emergency nature received by the Engineer shall be referred to the Contractor for immediate disposition. If the Contractor cannot be reached within 2 hours, the City will deduct from the monthly billing the cost of City forces, or other sources, used to repair the emergency. The Contractor shall not receive additional compensation for responding to emergencies for work included in these general conditions at contract worksites.

801-6.12 Complaints from City of Corona.

Add the following subsection:

The Contractor shall maintain a monthly written log of all complaints which includes the date and time received and the action taken or the reason for non-action. The monthly log of complaints shall accompany the monthly invoice.

All complaints shall be abated as soon as possible after notification, but in all cases within 24 hours, to the satisfaction of the Engineer. If any complaint is not abated within 24 hours, the Engineer shall be notified immediately of the reasons for not abating the complaint, followed by a written report to the Engineer within five calendar days. If the complaints are not abated within the time specified, or to the satisfaction of the Engineer, the Engineer may correct the specific complaint and the total cost incurred by the City shall be deducted and forfeited from the payments owing to the Contractor from the City.

801-8 PAYMENT.

Replace the first sentence with the following:

The lump sum or unit prices shown in the Bid shall include full compensation to complete removals, complete installations and maintain the landscaping and irrigation work shown on the Plans and in the Specifications, including all material, labor, equipment, samples, testing, manuals, and guarantees.

Add the following at the end of the section:

The City of Corona has set up very specific criteria in which to evaluate the performance of the Contractor on a weekly basis. If performance by the Contractor is deficient, the City reserves the right to subtract costs from the monthly billing and/or hire another contractor to provide the service and deduct the expense from the contract retention. Since it is difficult to quantify and assess a value to every aspect of the work, the City shall implement a standard \$100 cost per incident. The following describes deficiencies:

- a) Lack of compliance to specifications (i.e., failure to adequately mow, edge, litter pick, sweep/rake, weed, prune, remove dead plant material, etc.).
- b) Failure to provide specified reports or to falsify reports.
- c) Failure to supply adequate equipment, labor or supervision.
- d) Failure to repair irrigation deficiencies in the allotted time frame.
- e) Failure to comply with schedules. Variances may be approved by request. Delays in part to acquisition or adverse weather conditions will be taken into consideration.

f) Failure to protect public health and safety.