



Purchasing Division

## Request for Quote

RFQ-5474-24-DD

24 Road and G Road Roundabout Landscape Installation

### **Responses Due:**

July 22, 2024, prior to 2:00 PM

**Accepting Electronic Responses Only**  
**Responses Only Submitted Through the Rocky Mountain E-Purchasing**  
**System (RMEPS)**  
**[www.bidnetdirect.com/colorado](http://www.bidnetdirect.com/colorado)**

(Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor **MUST** contact RMEPS to resolve the issue prior to the response deadline. 800-835-4603)

**NOTE: All City solicitation openings will continue to be held virtually.**

### **Purchasing Representative:**

Dolly Daniels, Senior Buyer

**[dollyd@gjcity.org](mailto:dollyd@gjcity.org)**

970-256-4048

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# 1. Instructions to Quoters

**NOTE:** It is the Contractor's responsibility to read and review all solicitation documentation in its entirety, and to ensure that they have a clear and complete understanding of not only the scope, specifications, project requirements, etc., but also all other requirements, instructions, rules, regulations, laws, conditions, statements, procurement policies, etc. that are associated with the solicitation process and project/Work being solicited.

- 1.1. **A.D.A Document Compliance Requirements:** All work documents, and/or Quote/proposal documents submitted, as a result of this solicitation must comply with all applicable provisions of §§24-85-101, C.R.S., et seq., and the Accessibility Standards for Individuals with a Disability, as established by the Office Of Information Technology according to Section §24-85-103 (2.5), C.R.S. and 3) all State of Colorado technology standards related to technology accessibility and with Level A.A. of the most current version of the Web Content Accessibility Guidelines (WCAG), incorporated in the State of Colorado technology standards.
- 1.2. **Purpose:** The City of Grand Junction is soliciting competitive Quotes from qualified and interested Contractors for all labor, equipment, and materials to provide landscaping and irrigation at 24 Road and G Road Roundabout. All dimensions and scope of work should be verified by Contractors prior to submission of Quotes.
- 1.3. **Issuing Office:** This Invitation for Bid (IFB) is issued by the City of Grand Junction. All contact regarding this IFB is to be directed to:

Dolly Daniels; Senior Buyer  
[dollyd@gjcity.org](mailto:dollyd@gjcity.org)

With the exception of Pre-Bid or Site Visit Meeting(s) all questions, inquiries, comments, or communication pertaining to this solicitation (whether process, specifications, scope, etc.) must be directed (in writing) to the Purchasing Agent. Other communication may result in disqualification.

- 1.4. **Non-Mandatory Pre-Bid Meeting:** There will be no pre-bid meeting for this Project.
- 1.5. **The Owner:** The Owner is the City of Grand Junction, Colorado and is referred to throughout this Solicitation. The term Owner means the Owner or its authorized representative.
- 1.6. **Procurement Process:** The most current version of the City of Grand Junction [Purchasing Policy and Procedure Manual](#) is contracting.
- 1.7. **Submission:** *Each proposal shall be submitted in electronic format only, and only through the Rocky Mountain E-Purchasing website. ([www.bidnetdirect.com/colorado](http://www.bidnetdirect.com/colorado)). This site offers both "free" and "paying" registration options that allow for full access of the Owner's documents and for electronic submission of proposals. (Note: "free" registration may take up to 24 hours to process. Please Plan accordingly.)* Please view our "Electronic Vendor Registration Guide" at <https://co-grandjunction.civicplus.com/501/Purchasing-Bids> for details.

(Purchasing Representative does not have access or control of the vendor side of RMEPS. If the website or other problems arise during response submission, the vendor **MUST** contact RMEPS to resolve the issue prior to the response deadline **800-835-4603**).

**Bid Opening 24 Road and G Road Roundabout Landscape Installation**

**Jul 22, 2024, 2:00 – 2:30 PM (America/Denver)**

Please join my meeting from your computer, tablet or smartphone.

<https://meet.goto.com/897908829>

You can also dial in using your phone.

Access Code: 897-908-829

United States: [+1 \(646\) 749-3122](tel:+16467493122)

Join from a video-conferencing room or system.

Meeting ID: 897-908-829

Dial in or type: 67.217.95.2 or [inroomlink.goto.com](https://inroomlink.goto.com)

Or dial directly: 897908829@67.217.95.2 or 67.217.95.2##897908829

Get the app now and be ready when your first meeting starts:

<https://meet.goto.com/install>

- 1.8. Modification and Withdrawal of Quotes Before Opening.** Quotes may be modified or withdrawn by an appropriate document stating such, duly executed and submitted to the place where Quotes are to be submitted at any time prior to Quote Opening.
- 1.9. Printed Form for Price Quote:** All Price Quotes must be made upon the Price Quote Schedule attached and should give the amounts both in words and in figures and must be signed and acknowledged by the Quoter.

The Quoter shall specify a unit price in figures for each pay item for which a quantity is given and shall provide the products (in numbers) of the respective unit prices and quantities in the Extended Amount column. The total Quote price shall be equal to the sum of all extended amount prices. When an item in the Price Quote Schedule provides a choice to be made by the Quoter, Quoter's choice shall be indicated in accordance with the specifications for that particular item and thereafter no further choice shall be permitted.

Where the unit of a pay item is lump sum, the lump sum amount shall be shown in the "extended amount" column and included in the summation of the total Quote.

All blank spaces in the Price Quote Schedule must be properly filled out.

Quotes by corporations must be executed in the corporate name by the president or vice president or other corporate office accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown below the signature.

Quotes by partnerships must be executed in the partnership name and signed by a partner whose title must appear under the signature and the official address of the partnership must be shown below the signature.

All names must be typed or printed below the signature.

The Quoter's Quote shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Contractor's Quote Form.

The contact information to which communications regarding the Quote are to be directed must be shown.

- 1.10. **Exclusions:** No oral, telephonic, emailed, or facsimile Quote will be considered
- 1.11. **Contract Documents:** The complete RFQ and Quoter's response compose the Contract Documents. Copies of Quote documents can be obtained from the City Purchasing website, <https://co-grandjunction.civicplus.com/501/Purchasing-Bids> .
- 1.12. **Additional Documents:** The July 2010 edition of the "City Standard Contract Documents for Capital Improvements Construction", Plans, Specifications and other Quote Documents are available for review or download on the Purchasing Bids page at <https://co-grandjunction.civicplus.com/501/Purchasing-Bids>.
- 1.13. **Definitions and Terms:** See Article I, Section 3 of the General Contract Conditions in the *Standard Contract Documents for Capital Improvements Construction*.
- 1.14. **Examination of Specifications:** Quoters shall thoroughly examine and be familiar with the project Statement of Work. The failure or omission of any Quoter to receive or examine any form, addendum, or other document shall in no way relieve any Quoter from any obligation with respect to its Quote. The submission of a Quote shall be taken as evidence of compliance with this section. Prior to submitting a Quote, each Quoter shall, at a minimum:
  - a. Examine the *Contract Documents* thoroughly;
  - b. Visit the site to familiarize with local conditions that may in any manner affect cost, progress, or performance of the Work;
  - c. Become familiar with federal, state, and local laws, ordinances, rules, and regulations that may in any manner affect cost, progress or performance of the Work;
  - d. Study and carefully correlate Quoter's observations with the *Contract Documents*, and;
  - e. Notify the Purchasing Agent of all conflicts, errors, ambiguities or discrepancies in or among the *Contract Documents* within the designated inquiry period.

On request, the Owner will provide each Quoter access to the site to conduct such investigations and tests as each Quoter deems necessary for submission of a Quote. It shall be the Quoter's responsibility to make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions of the site or otherwise which may affect cost, progress or performance of the Work and which the Quoter deems necessary to determine its Quote for performing the Work in accordance with the time, price and other terms and conditions of the Contract Documents.

By submission of a Quote, the Quoter shall be conclusively presumed to represent that the Quoter has complied with every requirement of these Instructions to Quoters, that the *Contract Documents* are not ambiguous and are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

- 1.15. **Questions Regarding Statement of Work:** Any information relative to interpretation of Scope of Work or specifications shall be requested of the Purchasing Representative, in writing, in ample time, prior to the inquiry deadline.
- 1.16. **Addenda & Interpretations:** If it becomes necessary to revise any part of this solicitation, a written addendum will be posted electronically on the City's website at <https://co-grandjunction.civicplus.com/501/Purchasing-Bids> . The Owner is not bound by any oral representations, clarifications, or changes made in the written specifications by Owner, unless such clarification or change is provided in written addendum form from the City Purchasing Representative.
- 1.17. **Taxes:** The Owner is exempt from State retail and Federal tax. The Quote price must be net, exclusive of taxes.
- 1.18. **Sales and Use Taxes:** The Contractor and all Subcontractors are required to obtain exemption certificates from the Colorado Department of Revenue for sales and use taxes in accordance with the provisions of the General Contract Conditions. Quotes shall reflect this method of accounting for sales and use taxes on materials, fixtures and equipment.
- 1.19. **Offers Binding 60 Days:** Unless additional time is required by the Owner, or otherwise specified, all formal offers submitted shall be binding for sixty (60) calendar days following opening date, unless the Quoter, upon request of the Purchasing Representative, agrees to an extension.
- 1.20. **Exceptions and Substitutions:** All Quotes meeting the intent of this IFB shall be considered for award. A Contractor taking exception to the specifications does so at the Quoter's risk. The Owner reserves the right to accept or reject any or all substitutions or alternatives. When offering substitutions and/or alternatives, Contractor must state any exception(s) in the section to which the exception(s) pertains. Exception/substitution, if accepted, must meet or exceed the stated intent and/or specifications. The absence of stated exception(s) indicates that the Contractor has not taken exceptions, and if awarded a Contract, shall hold the Contractor responsible to perform in strict accordance with the specifications or scope of the proposal and contract documents.
- 1.21. **Collusion Clause:** Each Contractor by submitting a proposal certifies that it is not party to any collusive action or any action that may be in violation of the Sherman Antitrust Act. Any and all proposals shall be rejected if there is evidence or reason for believing that collusion exists among the proposers. The Owner may or may not, at its discretion, accept future proposals for the same service or commodities for participants in such collusion.
- 1.22. **Disqualification of Quoters:** A Quote will not be accepted from, nor shall a Contract be awarded to, any person, Contractor, or corporation that is in arrears to the Owner, upon

debt or contract, or that has defaulted, as surety or otherwise, upon any obligation to the Owner, or that is deemed irresponsible or unreliable.

Quoters may be required to submit satisfactory evidence that it is responsible, have a practical knowledge of the project Quote upon and that it has the necessary financial and other resources to complete the proposed Work.

Either of the following reasons, without limitation, shall be considered sufficient to disqualify a Quoter and Quote:

- a. More than one Quote is submitted for the same Work from an individual, Contractor, or corporation under the same or different name; and
- b. Evidence of collusion among Quoters. Any participant in such collusion shall not receive recognition as a Quoter for any future Work of the Owner until such participant has been reinstated as a qualified Quoter.

**1.23. Public Disclosure Record:** If the Quoter has knowledge of its employee(s) or sub-Contractors having an immediate family relationship with an Owner employee or elected official, the Quoter must provide the Purchasing Agent with the name(s) of the individuals. The individuals are required to file a "Public Disclosure Record", a statement of financial interest, before conducting business with the Owner.

## **2. General Contract Conditions for Construction Projects**

**2.1. The Contract:** This Request for Quote submitted documents, and any negotiations, when properly accepted by the City, shall constitute a Contract equally binding between the City and Contractor. The contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral. The contract may be amended or modified with Change Orders, Field Orders, or Addendums.

**2.2. The Work:** The term Work includes all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in such construction.

**2.3. Execution, Correlation, Intent, and Interpretations:** The Contract Documents shall be signed by the Owner and Contractor. By executing the Contract, the Contractor represents that it has familiarized itself with the local conditions under which the Work is to be performed and correlated its observations with the requirements of the Contract Documents. The Contract Documents are complementary, and what is required by anyone, shall be as binding as if required by all. The intention of the Contract Documents is to include all labor, materials, equipment, Work and other items necessary for the proper execution and completion of the Scope of Work as defined in the technical specifications and/or drawings contained herein. All drawings, specifications and copies furnished by the Owner are, and shall remain, Owner property. It is not to be used on any other project.

**2.4. The Owner:** The Owner is the City of Grand Junction, Colorado and is referred to throughout the Contract Documents. The term Owner means the Owner or its authorized

representative. The Owner shall, at all times, have access to the Work wherever it is in preparation and progress. The Contractor shall provide facilities for such access. The Owner will make periodic visits to the site to familiarize itself generally with the progress and quality of Work and to determine, in general, if the Work is proceeding in accordance with the contract documents. Based on such observations and the Contractor's Application for Payment, the Owner will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts as provided in the contract. The Owner will have authority to reject Work which does not conform to the Contract documents. Whenever, in its reasonable opinion, it considers it necessary or advisable to ensure the proper implementation of the intent of the Contract Documents, it will have authority to require the Contractor to stop the Work or any portion, or to require special inspection or testing of the Work, whether or not such Work can be then be fabricated, installed, or completed. The Owner will not be responsible for the acts or omissions of the Contractor, and sub-Contractor, or any of its agents or employees, or any other persons performing any of the Work.

- 2.5. Contractor:** The Contractor is the person or organization identified as such in the Agreement and is referred to throughout the Contract Documents. The term Contractor means the Contractor or its authorized representative. The Contractor shall carefully study and compare the General Contract Conditions of the Contract, Specification and Drawings, Scope of Work, Addenda and Modifications and shall at once report to the Owner any error, inconsistency, or omission it may discover. Contractor shall not be liable to the Owner for any damage resulting from such errors, inconsistencies, or omissions. The Contractor shall not commence Work without clarifying Drawings, Specifications, or Interpretations.
- 2.6. Sub-Contractors:** A sub-contractor is a person or organization who has a direct contract with the Contractor to perform any of the Work at the site. The term sub-Contractor is referred to throughout the contract documents and means a sub-Contractor or its authorized representative.
- 2.7. Award of Sub-Contractors & Other Contracts for Portions of the Work:** Contractor shall submit with its Quote response to the Owner, in writing for acceptance, a list of the names of the sub-Contractors or other persons or organizations proposed for such portions of the Work as may be designated in the proposal requirements, or, if none is so designated, the names of the sub-Contractors proposed for the principal portions of the Work. Prior to the award of the contract, the Owner shall notify the successful Contractor in writing if, after due investigation, has reasonable objection to any person or organization on such list. If, prior to the award of the contract, the Owner has a reasonable and substantial objection to any person or organization on such list, and refuses in writing to accept such person or organization, the successful Contractor may, prior to the award, withdraw its proposal without forfeiture of proposal security. If the successful Contractor submits an acceptable substitute with an increase in the proposed price to cover the difference in cost occasioned by the substitution, the Owner may, at its discretion, accept the increased proposal or may disqualify the Contractor. If, after the award, the Owner refuses to accept any person or organization on such list, the Contractor shall submit an acceptable substitute and the contract sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued. However, no increase in the contract sum



shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting a name with respect thereto prior to the award.

- 2.8. Substitutions:** The materials, products and equipment described in the *Solicitation Documents* shall be regarded as establishing a standard of required performance, function, dimension, appearance, or quality to be met by any proposed substitution. No substitution will be considered prior to receipt of Quotes unless the Quoter submits a written request for approval to the City Purchasing Division at least ten (10) days prior to the date for receipt of Quotes. Such requests for approval shall include the name of the material or equipment for which substitution is sought and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for evaluation, including samples if requested. The Quoter shall set forth changes in other materials, equipment, or other portions of the Work including changes of the Work of other contracts, which incorporation of the proposed substitution would require to be included. The Owner's decision of approval or disapproval of a proposed substitution shall be final. If the Owner approves a proposed substitution before receipt of Quotes, such approval will be set forth in an Addendum. Quoters shall not rely upon approvals made in any other manner.
- 2.9. Supervision and Construction Procedures:** The Contractor shall supervise and direct the Work, using its best skill and attention. It shall be solely responsible for all construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under the contract.
- 2.10. Warranty:** The Contractor warrants to the Owner that all materials and equipment furnished under this contract will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not so conforming to these standards may be considered defective. If required by Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If within ten (10) days after written notice to the Contractor requesting such repairs or replacement, the Contractor should neglect to make or undertake with due diligence to the same, the City may make such repairs or replacements. All indirect and direct costs of such correction or removal or replacement shall be at the Contractor's expense. The Contractor will also bear the expenses of making good all Work of others destroyed or damaged by the correction, removal or replacement of its defective Work.
- 2.11. Permits, Fees, & Notices:** The Contractor shall secure and pay for all permits, governmental fees, and licenses necessary for the proper execution and completion of the Work. The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority, including the City, bearing on the performance of the Work. If the Contractor observes that any of the Contract Documents are at variance in any respect, it shall promptly notify the Purchasing Agent in writing, and any necessary changes shall be adjusted. If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Owner, it shall assume full responsibility and shall bear all costs attributable to the non-conforming Work.
- 2.12. Responsibility for Those Performing the Work:** The Contractor shall be responsible to the Owner for the acts and omissions of all its employees and all sub-Contractors, its

agents and employees, and all other persons performing any of the Work under a contract with the Contractor.

**2.13. Use of the Site:** The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents, and shall not unreasonably encumber the site with any materials or equipment.

**2.14. Cleanup:** The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by its operations. At the completion of Work shall remove all its waste materials and rubbish from and about the project, as well as all its tools, construction equipment, machinery, and surplus materials.

**2.15. Insurance:** The selected Quoter agrees to procure and maintain, at its own cost, policy(s) of insurance sufficient to insure against all liability, claims, demands, and other obligations assumed by the Quoter pursuant to this Section. Such insurance shall be in addition to any other insurance requirements imposed by this Contract or by law. The Quoter shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this Section by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

Quoter shall procure and maintain and, if applicable, shall cause any Subcontractor of the Quoter to procure and maintain insurance coverage listed below. Such coverage shall be procured and maintained with forms and insurance acceptable to the Owner. All coverage shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by the Quoter pursuant to this Section. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage. Minimum coverage limits shall be as indicated below unless specified otherwise in the Special Conditions:

(a) Worker Compensation: Contractor shall comply with all State of Colorado Regulations concerning Workers' Compensation insurance coverage.

(b) General Liability insurance with minimum combined single limits of:

FIVE HUNDRED THOUSAND DOLLARS (\$500,000) each occurrence and  
FIVE HUNDRED THOUSAND DOLLARS (\$500,000) per job aggregate.

The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, products, and completed operations. The policy shall include coverage for explosion, collapse, and underground hazards. The policy shall contain a severability of interest's provision.

(c) Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than:

FIVE HUNDRED THOUSAND DOLLARS (\$500,000) each occurrence and  
FIVE HUNDRED THOUSAND DOLLARS (\$500,000) aggregate

This policy shall provide coverage to protect the contractor against liability incurred as a result of the professional services performed as a result of responding to this Solicitation.

With respect to each of Quoter's owned, hired, or non-owned vehicles assigned to be used in performance of the Work. The policy shall contain a severability of interests provision. The policies required by paragraph (b) above shall be endorsed to include the City and/or County, and the City's and/or County's officers and employees as additional insureds. Every policy required above shall be primary insurance, and any insurance carried by the Owner, its officers, or its employees, or carried by or provided through any insurance pool of the Owner, shall be excess and not contributory insurance to that provided by Quoter. No additional insured endorsement to any required policy shall contain any exclusion for bodily injury or property damage arising from completed operations. The Quoter shall be solely responsible for any deductible losses under any policy required above.

- 2.16. Indemnification:** The Contractor shall defend, indemnify and save harmless the Owner, and all its officers, employees, insurers, and self-insurance pool, from and against all liability, suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the Contractor, or of any Contractor's agent, employee, sub-Contractor or supplier in the execution of, or performance under, any contract which may result from proposal award. Contractor shall pay any judgment with costs which may be obtained by and/or against the Owner arising out of or under the performance.
- 2.17. Miscellaneous Conditions: Material Availability:** Contractors must accept responsibility for verification of material availability, production schedules, and other pertinent data prior to submission of Quote. It is the responsibility of the Quoter to notify the Owner immediately if materials specified are discontinued, replaced, or not available for an extended period of time. **OSHA Standards:** All Quoters agree and warrant that Work performed in response to this invitation shall conform to the standards declared by the US Department of Labor under the Occupational Safety and Health Act of 1970 (OSHA). In the event the Work does not conform to OSHA standards, the Owner may require the Work to be redone at no additional expense to the Owner.
- 2.18. Time:** Time is of the essence with respect to the time of completion of the Project and any other milestones or deadline which are part of the Contract. It will be necessary for each Quoter to satisfy the City of its ability to complete the Work within the Contract Time set forth in the Contract Documents. The Contract Time is the period of time allotted in the Contract Documents for completion of the Work. The date of commencement of the Work is the date established in a Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Contract or such other date as may be established therein, or as established as entered on the Quote Form. The Date of Final Completion of the Work is the date certified by the Owner when all construction, and all other Work associated to include, but not be limited to: testing, QA/QC, receipt of required reports and/or forms, grant requirements (if applicable), punch list items, clean-up, receipt of drawings and/or as-builts, etc., is fully complete, and in accordance with the Contract Documents.
- 2.19. Progress & Completion:** The Contractor shall begin Work on the date of commencement as defined in the Contract and shall carry the Work forward expeditiously with adequate forces and shall complete it within the contract time.

- 2.20. Payment & Completion:** The Contract Sum is stated in the Contract and is the total amount payable by the Owner to the Contractor for the performance of the Work under the Contract Documents. Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of application for payment, the Owner's Project Manager will promptly make such inspection and, when it finds the Work acceptable under the Contract Documents and the Contract fully performed, the Owner shall make payment in the manner provided in the Contract Documents.
- 2.21. Contingency/Force Account/Minor Contract Revisions:** Contingency/Force Account/Minor Contract Revisions Work will be authorized by the Owner's Project Manager and is defined as minor expenses to cover miscellaneous or unforeseen expenses related to the project. The expenses are not included in the Drawings, Specifications, or Scope of Work and are necessary to accomplish the scope of this contract. Contingency/Force Account/Minor Contract Revisions Authorization will be directed by the Owner through an approved form. Contingency/Force Account/Minor Contract Revisions funds are the property of the Owner and any Contingency/Force Account/Minor Contract Revisions funds, not required for project completion, shall remain the property of the Owner. Contractor is not entitled to any Contingency/Force Account/Minor Contract Revisions funds, that are not authorized by Owner or Owner's Project Manager.
- 2.22. Protection of Persons & Property:** The Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. Contractor shall erect and maintain, as required by existing safeguards for safety and protection, and all reasonable precautions, including posting danger signs or other warnings against hazards promulgating safety regulations and notifying owners and users of adjacent utilities. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct by the Contractor in the execution of the Work, or in consequence of the non-execution thereof by the Contractor, it shall restore, at its own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as may be directed, or it shall make good such damage or injury in an acceptable manner.
- 2.23. Changes in the Work:** The Owner, without invalidating the contract, may order changes in the Work within the general scope of the contract consisting of additions, deletions or other revisions, the contract sum and the contract time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order and shall be executed under the applicable conditions of the contract documents. A Change Order is a written order to the Contractor signed by the Owner issued after the execution of the contract, authorizing a change in the Work or an adjustment in the contract sum or the contract time. The contract sum and the contract time may be changed only by Change Order.
- 2.24. Claims for Additional Cost or Time:** If the Contractor wishes to make a claim for an increase in the contract sum or an extension in the contract time, it shall give the Owner written notice thereof within a reasonable time after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with the regulations on safety. No such claim

shall be valid unless so made. Any change in the contract sum or contract time resulting from such claim shall be authorized by Change Order.

- 2.25. Minor Changes in the Work:** The Owner shall have authority to order minor changes in the Work not involving an adjustment in the contract sum or an extension of the contract time and not inconsistent with the intent of the contract documents.
- 2.26. Field Orders:** The Owner may issue written Field Orders which interpret the Contract Documents in accordance with the specifications, or which order minor changes in the Work in accordance with the agreement, without change in the contract sum or time. The Contractor shall carry out such Field Orders promptly.
- 2.27. Uncovering & Correction of Work:** The Contractor shall promptly correct all Work rejected by the Owner as defective or as failing to conform to the contract documents whether observed before or after substantial completion and whether or not fabricated installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including the cost of the Owner's additional Work thereby made necessary. If within one (1) year after the date of completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the contract documents, any of the Work found to be defective or not in accordance with the contract documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of condition. All such defective or non-conforming Work under the above paragraphs shall be removed from the site where necessary and the Work shall be corrected to comply with the contract documents without cost to the Owner. The Contractor shall bear the cost of making good all Work of separate Contractors destroyed or damaged by such removal or correction. If the Owner prefers to accept defective or non-conforming Work, it may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect an appropriate reduction in the payment or contract sum, or, if the amount is determined after final payment, it shall be paid by the Contractor.
- 2.28. Amendment:** No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the Contract. All amendments to the Contract shall be made in writing by the City Contract Administrator.
- 2.29. Assignment:** The Contractor shall not sell, assign, transfer or convey the Contract resulting from this IFB, in whole or in part, without the prior written approval from the Owner.
- 2.30. Compliance with Laws:** Quotes must comply with all Federal, State, County and local laws governing the service and the fulfillment of the Work for and on behalf of the public. Contractor hereby warrants that it is qualified to assume the responsibilities and render the Work described herein and has all requisite corporate authority and professional licenses in good standing, required by law.
- 2.31. Confidentiality:** All information disclosed by the Owner to the Contractor for the purpose of the Work to be done or information that comes to the attention of the Contractor during the course of performing such Work is to be kept strictly confidential.

- 2.32. Conflict of Interest:** No public official and/or City/County employee shall have interest in the Contract resulting from this Request for Quote.
- 2.33. Contract Termination:** The Contract shall remain in effect until any of the following occurs: (1) Contract expires; (2) completion of Work; (3) acceptance of Work or, (4) for convenience terminated by either party with a written *Notice of Cancellation* stating therein the reasons for such cancellation and the effective date of cancellation at least thirty days past notification.
- 2.34. Employment Discrimination:** During the performance of any Work per agreement with the Owner, the Contractor agrees to:
- 2.34.1.** Not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, handicap, or national origin except when such condition is a legitimate occupational qualification reasonably necessary for the normal operations of the Contractor. The Contractor agrees to post in conspicuous places, visible to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
  - 2.34.2.** In all solicitations or advertisements for employees placed by or on behalf of the Contractor, it is said that the Contractor is an Equal Opportunity Employer.
  - 2.34.3.** Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- 2.35. Affirmative Action:** In executing a Contract with the City, the Contractor agrees to comply with Affirmative Action and Equal Employment Opportunity regulations presented in the General Contract Conditions.
- 2.36. Immigration Reform and Control Act of 1986 and Immigration Compliance:** The Contractor certifies that it does not and will not during the performance of the Contract employ Worker(s) without authorization Work or otherwise violate the provisions of the Federal Immigration Reform and Control Act of 1986 and/or law regulating immigration compliance.
- 2.37. Ethics:** The Contractor shall not accept or offer gifts or anything of value and/or enter into any business arrangement with any employee, official, or agent of the Owner.
- 2.38. Failure to Deliver:** In the event of failure of the Contractor to perform in accordance with the Contract Documents, the Owner, after due oral or written notice, may procure Work from other sources and hold the Contractor responsible for any and all costs resulting in the purchase of additional Work and materials necessary to perform the Work. This remedy shall be in addition to any other remedies that the Owner may have.
- 2.39. Failure to Enforce:** Failure by the Owner at any time to enforce the provisions of the Contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the Contract or any part thereof or the right of the

Owner to enforce any provision of the Contract Documents at any time in accordance with the terms thereof.

- 2.40. Force Majeure:** The Contractor shall not be held responsible for failure to perform the duties and responsibilities imposed by the Contract due to legal strikes, fires, riots, rebellions, and acts of God beyond the control of the Contractor, unless otherwise specified in the Contract.
- 2.41. Independent Contractor:** The Contractor shall be legally considered an independent Contractor and neither the Contractor nor its employees shall, under any circumstances, be considered servants or agents of the Owner. The Owner shall be at no time legally responsible for any negligence or other wrongdoing by the Contractor, its servants, or agents. The Owner shall not withhold from the Contract payments to the Contractor any federal or state unemployment taxes, federal or state income taxes, Social Security, or any other amounts for benefits to the Contractor. Further, the Owner shall not provide the Contractor with any insurance coverage or other benefits, including Workers' Compensation, normally provided by the Owner for its employees.
- 2.42. Nonconforming Terms and Conditions:** A Quote that includes terms and conditions that do not conform to the terms and conditions of this Request for Quote is subject to rejection as non-responsive. The Owner reserves the right to permit the Contractor to withdraw nonconforming terms and conditions from its Quote prior to a determination by the Owner of non-responsiveness based on the submission of nonconforming terms and conditions.

Items for non-responsiveness may include, but not be limited to:

- a. Submission of the Quote on forms other than those supplied by the City;
- b. Alteration, interlineation, erasure, or partial detachment of any part of the forms which are supplied herein;
- c. Inclusion of unauthorized additions conditional or alternate Quotes or irregularities of any kind which may tend to make the Quote incomplete, indefinite, or ambiguous as to its meaning;
- d. Failure to acknowledge receipt of any or all issued Addenda;
- e. Failure to provide a unit price or a lump sum price, as appropriate, for each pay item listed except in the case of authorized alternative pay items;
- f. Failure to list the names of Sub-Contractors used in the Quote preparation as may be required in the Solicitation Documents;
- g. Submission of a Quote that, in the opinion of the Owner, is unbalanced so that each item does not reasonably carry its own proportion of cost or which contains inadequate or unreasonable prices for any item;
- h. Tying of the Quote with any other Quote or contract; and
- i. Failure to calculate Quote prices as described herein.

**2.43. Evaluation of Quotes and Quoters:** The Owner reserves the right to:

- reject any and all Quotes,
- waive any and all informalities,
- take into account any prompt payment discounts offered by Quoter,
- negotiate final terms with the Successful Quoter,
- take into consideration past performance of previous awards/contracts with the Owner of any Contractor, Vendor, Firm, Supplier, or Service Provider in determining final award. and
- disregard any and all nonconforming, nonresponsive or conditional Quotes.

Discrepancies between words and figures will be resolved in favor of words. Discrepancies between Unit Prices and Extended Prices will be resolved in favor of the Unit Prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. The corrected extensions and totals will be shown in the tabulation of Quotes.

The Owner may consider the qualifications and experience of Sub-Contractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the Work as to which the identity of Sub-Contractors and other persons and organizations must be submitted. Operating costs, maintenance considerations, performance data, and guarantees of materials and equipment may also be considered by the Owner.

The Owner will conduct such investigations as deemed necessary to assist in the evaluation of any Quote and to establish the responsibility, qualifications, and financial ability of the Quoter, proposed Sub-Contractors and other persons and organizations to do the Work in accordance with the *Contract Documents* to the City's satisfaction within the Contract Time.

The Quoter shall furnish the Owner with all information and data requested by the Owner to determine the ability of the Quoter to perform the Work. The Owner reserves the right to reject the Quote if the evidence submitted by, or investigation of such Quoter fails to satisfy the Owner that such Quoter is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein.

By submitting a Quote, each Quoter authorizes the Owner to perform such investigation of the Quoter as the Owner deems necessary to establish the responsibility, qualifications, and financial ability of the Quoter and, by its signature thereon, authorizes the Owner to obtain reference information concerning the Quoter and releases the party providing such information and the Owner from any and all liability to the Quoter as a result of such reference information so provided.

The Owner reserves the right to reject the Quote of any Quoter who does not pass any evaluation to the Owner's satisfaction.

If the Contract is to be awarded, it will be awarded to the Quoter who, by evaluation, the Owner determines will best meet the Owner's interests.

The Owner reserves the right to accept or reject the Work contained in any of the Price Quote Schedules or alternates, either in whole or in part.



**2.44. Award of Contract:** Unless otherwise indicated, a single award will be made for all the Quote items in an individual Quote schedule. In the event that the Work is contained in more than one Quote Schedule, the City may award Schedules individually or in combination. In the case of two Quote Schedules which are alternative to each other, only one of such alternative Schedules will be awarded. Within forty-five (45) Calendar Days of Quote Opening, the City will issue a Notice of Award to the Successful Quoter which will be accompanied by four (4) unsigned copies of the Contract and the Performance and Payment Bond forms. Within ten (10) Calendar Days thereafter, the Successful Quoter shall sign and deliver four (4) copies of the Contract, Performance Bond, Payment Bond, and Certificates of Insurance to the City. Within ten (10) Calendar Days thereafter, the City will deliver two (2) fully executed counterparts of the Contract to the Contractor. No contract shall exist between the Successful Quoter and the City and the Successful Quoter shall have no rights at law or in equity until the Contract has been duly executed by the City.

The Successful Quoter's failure to sign and submit a Contract and other documents set forth in this Paragraph within the prescribed time shall be just cause of annulment of the award, and forfeiture of the Quote Guaranty. The award of Contract may then be made to the next qualified Quoter in the same manner as previously prescribed.

**2.45. Ownership:** All plans, prints, designs, concepts, etc., shall become the property of the Owner.

**2.46. Oral Statements:** No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in this document and/or resulting agreement. All modifications to this request and any agreement must be made in writing by the Owner.

**2.47. Patents/Copyrights:** The Contractor agrees to protect the Owner from any claims involving infringements of patents and/or copyrights. In no event shall the Owner be liable to the Contractor for any/all suits arising on the grounds of patent(s)/copyright(s) infringement. Patent/copyright infringement shall null and void any agreement resulting from response to this Request for Quote.

**2.48. Remedies:** The Contractor and Owner agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

**2.49. Venue:** Any agreement as a result of responding to this IFB shall be deemed to have been made in, and shall be construed and interpreted in accordance with, the laws of the City of Grand Junction, Mesa County, Colorado.

**2.50. Expenses:** Expenses incurred in preparation, submission, and presentation of this IFB are the responsibility of the company and cannot be charged to the Owner.

**2.51. Sovereign Immunity:** The Owner specifically reserves and asserts its right under Colorado Law and the cases applying and construing the same, including but not limited to the Colorado Governmental Immunity Act, 24-10-101 S.R.S. et seq.

**2.52. Non-Appropriation of Funds:** The contractual obligation of the Owner under this contract is contingent upon the availability of appropriated funds from this fiscal year budget as approved by the City Council or Board of County Commissioners from this

fiscal year only. State of Colorado law prohibit obligation of public funds beyond the fiscal year for which the budget was approved. Anticipated expenditures/obligations beyond the end of the current Owner's fiscal year budget shall be subject to budget approval. Any contract will be subject to and must contain a governmental non-appropriation of funds clause.

**2.53. Cooperative Purchasing:** Purchases as a result of this solicitation are primarily for the City/County. Other governmental entities may be extended the opportunity to utilize the resultant contract award with the agreement of the successful provider and the participating agencies. All participating entities will be required to abide by the specifications, terms, conditions, and pricings established in this Quote. The quantities furnished in this Quote document are only for the City/County. It does not include quantities for any other jurisdiction. The City or County will be responsible only for the award for its jurisdiction. Other participating entities will place its own awards on its respective Purchase Orders through its purchasing office or use its purchasing card for purchase/payment as authorized or agreed upon between the provider and the individual entity. The City/County accepts no liability for payment of orders placed by other participating jurisdictions that choose to piggy-back on our solicitation. Orders placed by participating jurisdictions under the terms of this solicitation will indicate its specific delivery and invoicing instructions.

**2.54. Keep Jobs in Colorado Act:** Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a). If Contractor claims it is entitled to a waiver pursuant to C.R.S. §8-17-101(1), Contractor shall state that there is insufficient Colorado labor to perform the Work such that compliance with Article 17 would create an undue burden that would substantially prevent a project from proceeding to completion and shall include evidence demonstrating the insufficiency and undue burden in its response.

Unless expressly granted a waiver by the Owner pursuant to C.R.S. §8-17-101(1), Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public Works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a).

**2.54.1.** "Public project" is defined as:

- (a) any construction, alteration, repair, demolition, or improvement of any land, building, structure, facility, road, highway, bridge, or other public improvement suitable for and intended for use in the promotion of the public health, welfare, or safety and any maintenance programs for the upkeep of such projects.
- (b) for which appropriate or expenditure of moneys may be reasonably expected to be \$500,000.00 or more in the aggregate for any fiscal year
- (c) except any project that receives federal money.

### **3. Statement of Work**

**3.1. GENERAL / BACKGROUND:** The City of Grand Junction is soliciting competitive Quotes from qualified and interested Contractors for all labor, equipment, and materials to provide all landscaping and irrigation at 24 Road and G Road Roundabout. All dimensions and scope of work should be verified by Contractors prior to submission of Quotes.

**3.2. SCOPE OF WORK:** Provide landscape installation in accordance with attached plans, approximately 400 tons of embankment, 800 SY of ABC, and necessary hard and live landscape items, including irrigation.

#### **3.3. SPECIAL CONDITIONS & PROVISIONS:**

**3.3.1 Non-Mandatory Pre-Bid Meeting:** There will be no pre-bid meeting for this Project.

#### **3.3.2 QUESTIONS REGARDING SOLICIATION PROCESS/SCOPE OF WORK:**

Dolly Daniels, Senior Buyer  
City of Grand Junction  
[dollyd@gjcity.org](mailto:dollyd@gjcity.org)

**3.3.3 Project Manager:** The Project Manager for the Project is Eric Rink, Project Engineer, who can be reached at (970) 244-1585 or by email at [ericr@gjcity.org](mailto:ericr@gjcity.org). During construction, all notices, letters, submittals, and other communications directed to the City shall be addressed and mailed or delivered to:

City of Grand Junction  
Attn: Eric Rink  
244 N. 7<sup>th</sup> Ave  
Grand Junction, CO 81501  
[ericr@gjcity.org](mailto:ericr@gjcity.org)

**3.3.4 Contract Administrator:** The Contract Administrator for the Project is Duane Hoff Jr., Contract Administrator, who can be reached at (970)244-1545. During Construction, contract related inquiries, issues, and other communications shall be directed to:

Duane Hoff Jr., Contract Administrator  
[duaneh@gjcity.org](mailto:duaneh@gjcity.org)

**3.3.5 Pricing:** Pricing shall be all inclusive to include but not be limited to: all labor, equipment, supplies, materials, freight (F.O.B. Destination – Freight Pre-paid and Allowed to each site), travel, mobilization costs, fuel, set-up and take down costs, and full-time inspection costs, and all other costs related to the successful completion of the Project.

The Owner shall not pay nor be liable for any other additional costs including but not limited to: taxes, shipping charges, insurance, interest, penalties, termination payments, attorney fees, liquidated damages, etc.

**3.3.6 Freight/Shipping:** All freight/shipping shall be F.O.B. Destination – Freight

Pre-Paid and Allowed to the project site(s), Grand Junction, CO.

Contractor must meet all federal, state, and local rules, regulations, and requirements for providing such Work.

**3.3.7 Contract:** A binding contract shall consist of: (1) the IFB and any amendments thereto, (2) Additional Documents as stated in Section 1.10, (3) the Quoter's response (Quote) to the IFB, (4) clarification of the Quote, if any, and (5) the City's Purchasing Department's acceptance of the Quote by "Notice of Award" or by "Purchase Order". All Exhibits and Attachments included In the IFB shall be incorporated into the Contract by reference.

A. The Contract expresses the complete agreement of the parties and, performance shall be governed solely by the specifications and requirements contained therein.

B. Any change to the Contract, whether by modification and/or supplementation, must be accomplished by a formal Contract amendment signed and approved by and between the duly authorized representative of the Quoter and the City Purchasing Agent or by a modified Purchase Order prior to the effective date of such modification. The Quoter expressly and explicitly understands and agrees that no other method and/or no other document, including acts and oral communications by or from any person, shall be used or construed as an amendment or modification to the Contract.

**3.3.8 Time of Completion:** The scheduled time of Completion for the Project is 60 Calendar Days from the date of the Notice to Proceed. The Earthwork shall be completed within 7 days from the date of the Notice to Proceed and in coordination with the City scheduling of the art installation.

Completion is achieved when site cleanup and all punch list items (resulting from the final inspection) have been completed. Completion shall have the meaning set forth in Article I, Section 3 (Definitions and Terms) of the General Contract Conditions.

**3.3.9 Working Days and Hours:** The working days and hours shall be as stated in the General Contract Conditions or as mutually agreed upon in the preconstruction meeting with the following exception:

All Work shall be performed between the hours of 7:00 AM to 5:00 PM.

**3.3.10 Licenses and Permits:** The City will issue a "Work in the Right-of-Way permit at no cost to the Contractor.

**3.3.11 Quality Control Testing:** Contractor shall perform all Quality Control (QC) testing. The City will perform necessary Quality Assurance (QA) testing.

**3.3.12 Authorized Representatives of the City:** Those authorized to represent the City shall include Purchasing Agent, Engineers, and Inspectors employed by the City, only

**3.3.13 Clean-Up:** The Contractor is responsible for cleaning up all loose materials that have been deposited or swept into gutters, and onto sidewalks and driveways as a result of sidewalk operations. The costs for all clean-up Work shall be considered incidental and will not be paid for separately.

**3.3.14 Excess Material:** All excess materials shall be disposed of in accordance with General Contract Condition Section 50.

**3.3.15 Incidental Items:** Any item of Work not specifically identified or paid for directly, but which is necessary for the satisfactory completion of any paid items of Work, will be considered as incidental to those items, and will be included in the cost of those items.

**3.4. Attachments:**

- A: Price Bid Schedule
- B: Bid Plan Set
- C: Irrigation and Planting Specifications

**3.5. Contractor Quote Documents:** For Contractor's convenience, the following is a list of forms/items to be submitted with the Contractor's Quote response. However, should a form/item not be listed in this section, but required in the solicitation documents, it is the Contractor's responsibility to ensure all forms/items are submitted.

- Contractor's Quote Form
- Bid Schedule

**3.6. IFB TENTATIVE TIME SCHEDULE:**

Request for Quote available	July 8, 2024
Inquiry deadline, no questions after this date	July 15, 2024
Addendum Posted	July 16, 2024
Submittal deadline for proposals	July 22, 2024, 2:00 PM
Notice of Award & Contract execution	July 24, 2024
Earthwork completed	7 Calendar Days from the Notice to Proceed
Final Completion	60 Calendar Days from the Notice to Proceed
Holidays	
Labor Day	September 2, 2024

## **4. Contractor's Quote Form**

**Quote Date:** \_\_\_\_\_

**Project:** RFQ-5474-24-DD "24 Road and g Road Roundabout Landscape Installation"

**Quoting Company:** \_\_\_\_\_

**Name of Authorized Agent:** \_\_\_\_\_

**Email** \_\_\_\_\_

**Telephone** \_\_\_\_\_ **Address** \_\_\_\_\_

**City** \_\_\_\_\_ **State** \_\_\_\_\_ **Zip** \_\_\_\_\_

The undersigned Quoter, in compliance with the Request for Quote, having examined the Instruction to Quoters, General Contract Conditions, Statement of Work, Specifications, and any and all Addenda thereto, having investigated the location of, and conditions affecting the proposed work, hereby proposes to furnish all labor, materials and supplies, and to perform all work for the Project in accordance with Contract Documents, within the time set forth and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Contractor's Quote Form is a part.

The undersigned Contractor does hereby declare and stipulate that this offer is made in good faith without collusion or connection to any person(s) providing an offer for the same work, and that it is made in pursuance of, and subject to, all terms and conditions of the Instructions to Quoters, the Specifications, and all other Solicitation Documents, all of which have been examined by the undersigned.

The Contractor also agrees that if awarded the Contract, to provide insurance certificates within ten (10) working days of the date of Notification of Award. Submittal of this offer will be taken by the Owner as a binding covenant that the Contractor will be prepared to complete the project in its entirety.

The Owner reserves the right to make the award on the basis of the offer deemed most favorable, to waive any formalities or technicalities and to reject any or all offers. It is further agreed that this offer may not be withdrawn for a period of sixty (60) calendar days after closing time. Submission of clarifications and revised offers automatically establish a new thirty day (30) period.

- Prices in this Quote proposal have been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
- No attempt has been made nor will be to induce any other person or Contractor to submit a Quote proposal for the purpose of restricting competition.
- The individual signing this Quote proposal certifies it is a legal agent of the Quoter, authorized to represent the Quoter and is legally responsible for the offer with regard to supporting documentation and prices provided.
- Direct purchases by the City of Grand Junction are tax exempt from Colorado Sales or Use Tax. Tax exempt No. 98-03544. The undersigned certifies that no Federal, State, County or Municipal tax will be added to the above quoted prices.
- City of Grand Junction payment terms shall be Net 30 days.
- Prompt payment discount of \_\_\_\_\_ percent of the net dollar will be offered to the Owner if the invoice is paid within \_\_\_\_\_ days after the receipt of the invoice. The Owner reserves the right to take into account any such discounts when determining the Quote award that are no less than Net 10 days.

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Specifications, and other Contract Documents. State number of Addenda received: \_\_\_\_\_.

It is the responsibility of the Quoter to ensure all Addenda have been received and acknowledged.  
*By signing below, the Undersigned agree to comply with all terms and conditions contained herein.*

**Company:** \_\_\_\_\_

**Authorized Signature:** \_\_\_\_\_

**Title:** \_\_\_\_\_

The Quoter proposes to subcontract the following portion of Work:

<u>Name &amp; address of Sub-Contractor</u>	<u>Description of work to be performed</u>	<u>% of Contract</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The undersigned Quoter acknowledges the right of the City to reject any and all Quotes submitted and to waive informalities and irregularities therein in the City's sole discretion.

By submission of the Quote, each Quoter certifies, and in the case of a joint Quote each party thereto certifies as to its own organization, that this Quote has been arrived at independently, without collusion, consultation, communication, or agreement as to any matter relating to this Quote with any other Quoter or with any competitor.

## Bid Schedule: 24 and G Road Roundabout Landscaping

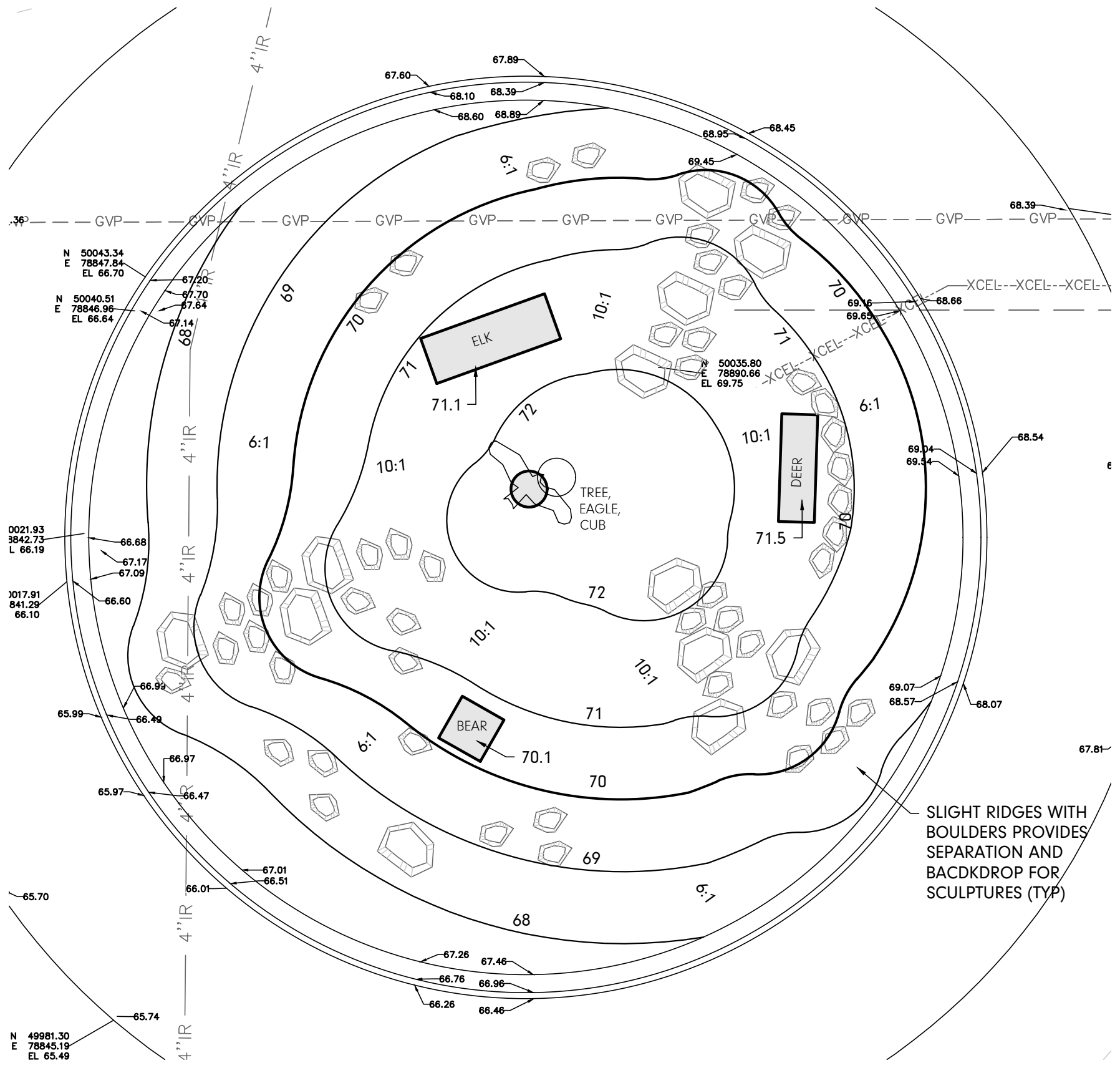
Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	203	Unclassified Embankment	400.	Tons	\$ _____	\$ _____
2	304	Class 6 Aggregate Base Course (6" thickness, under statue foundations)	837.	SY	\$ _____	\$ _____
3	329	Soil Amendment	4,185.	SF	\$ _____	\$ _____
4	329	Type 1 Rock - 1-1/2" Tan Granite, 3" Depth	3,362.	SF	\$ _____	\$ _____
5	329	Type 1 Rock - 1-1/2" Tan Granite, 3" Depth plus Type 2 2-3" La Sal Purple scattered at 2 CF/100 SF	823.	SF	\$ _____	\$ _____
6	329	Landscape Boulders-Small	49.	EA	\$ _____	\$ _____
7	329	Landscape Boulders-Large	12.	EA	\$ _____	\$ _____
8	329	Deciduous Shrubs (5 Gall Container)	27.	EA	\$ _____	\$ _____
9	329	Evergreen Tree (6 Foot, B&B)	2.	EA	\$ _____	\$ _____
10	329	Evergreen Shrubs (5 Gallon Container)	4.	EA	\$ _____	\$ _____
11	329	Perennials (1 Gallon Contained	11.	EA	\$ _____	\$ _____
12	329	Ornamental Grasses (1 Gallon Container)	18.	EA	\$ _____	\$ _____
13	328	1" PVC Lateral Pipe	200.	LF	\$ _____	\$ _____
14	328	Riser Assembly to Compression Tee (not incl. tree rings)	6.	EA	\$ _____	\$ _____
15	328	1/2" Drip Tubing, No Emitters	450.	LF	\$ _____	\$ _____
16	328	Netafim Drip Emitters (incl 1/4" tubing)	151.	EA	\$ _____	\$ _____
17	328	Tree Ring Assembly	2.	EA	\$ _____	\$ _____
18	328	1/2 " Flush Box Assembly	4.	EA	\$ _____	\$ _____
MCR		Minor Contract Revisions	---	---	---	\$ 1,500.00

**Bid Amount:** \$ \_\_\_\_\_



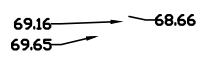
**Bid Amount:** \_\_\_\_\_ dollars

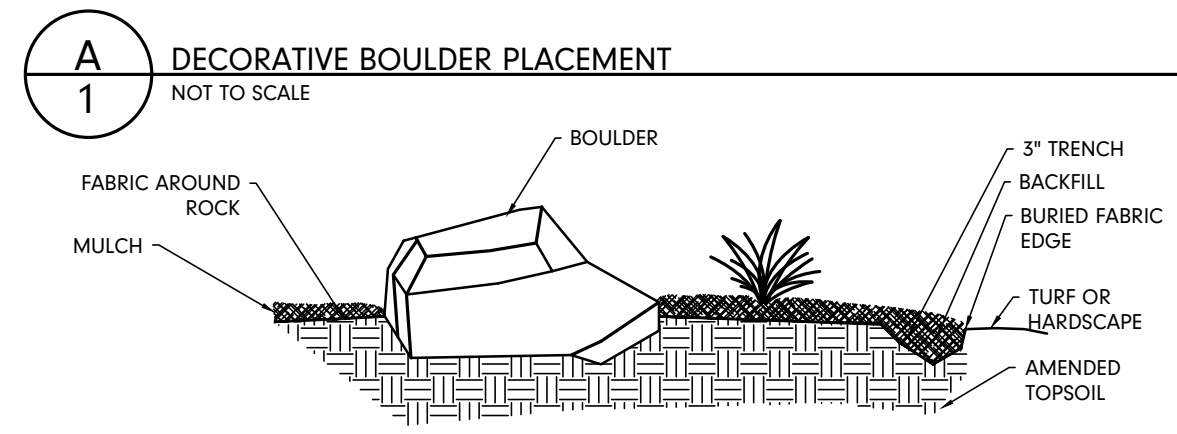


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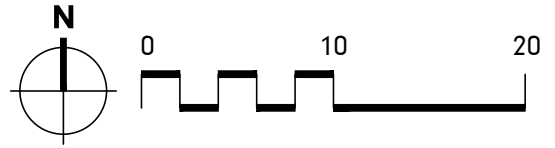
**GRADING PLAN LEGEND**

-  PROPOSED INTERMEDIATE CONTOUR
-  PROPOSED INDEX CONTOUR
-  EXISTING SPOT GRADES, PER CITY OF GRAND JUNCTION  
BOTTOM OF CURB, TOP OF CURB, TOP OF APRON

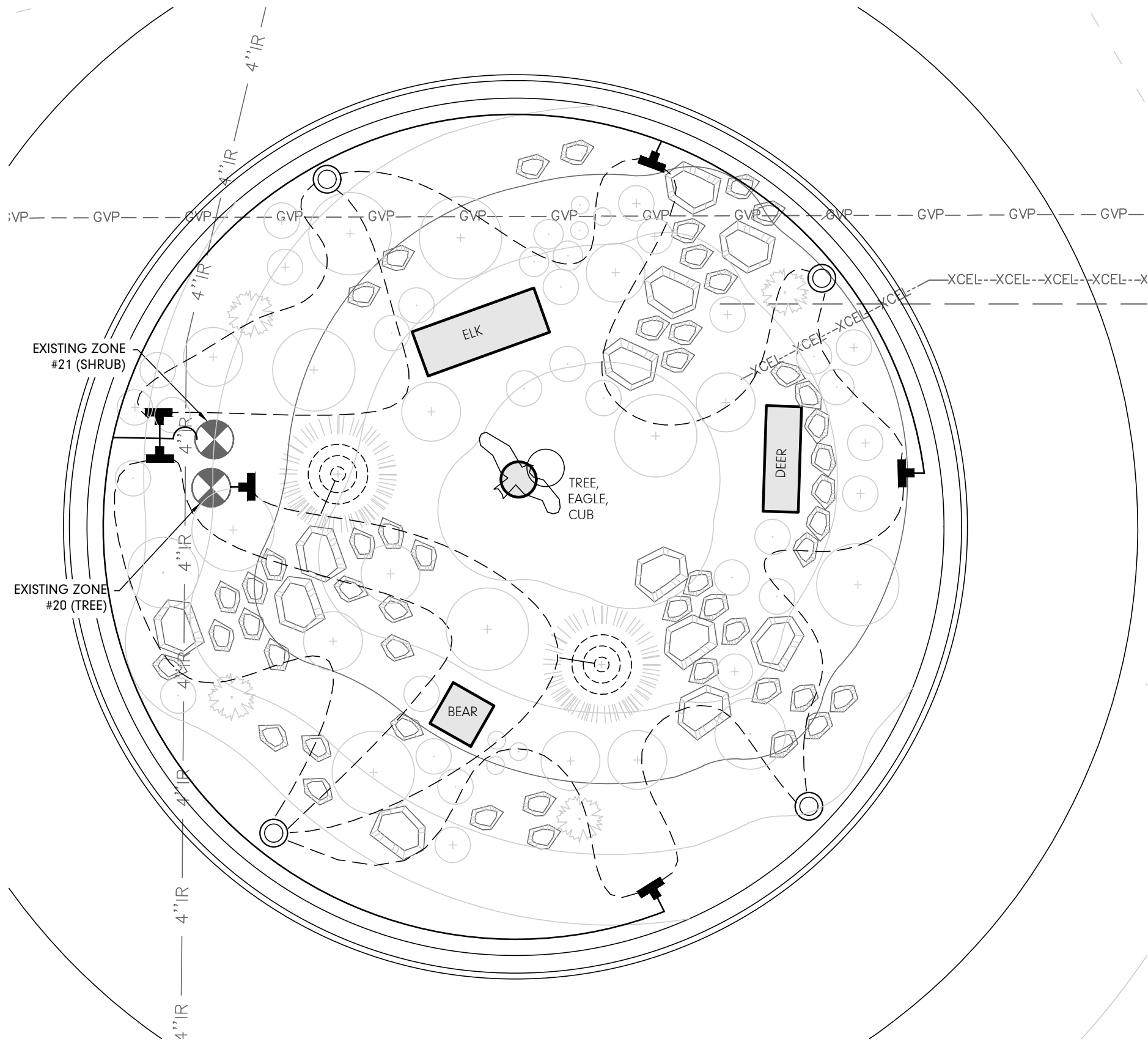


**24 & G ROUNDABOUT LANDSCAPE**

**GRADING PLAN**



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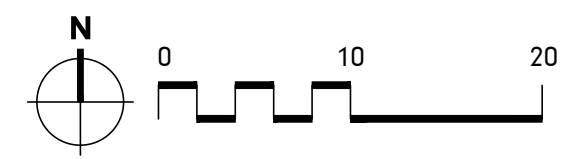
**LEGEND**

- 4"IR — EXISTING HDPE MAIN, 4"
  - LATERAL PVC PIPING 1" UNLESS NOTED OTHERWISE
  - TREE DRIPPER LINE DETAIL A/4
  - 1/2" DRIP TUBE
  - EXISTING RAINBIRD ZONE VALVE; ADD FILTER
  - COMPRESSION "T" FITTING
  - DRIP ZONE FLUSH BOX DETAIL A/4
- UTILITIES (PER CITY DRAWING BASE)**
- GVP — GRAND VALLEY POWER
  - XCEL--XCEL--XCEL- XCEL ENERGY
  - - - - FIBER OPTIC CONDUIT

- IRRIGATION NOTES:**
1. ALL WORK SHALL BE PER EXISTING COUNTY OR STATE CODE AND IS SUBJECT TO INSPECTION AND APPROVAL BY APPROPRIATE INSPECTORS AND THE OWNER'S REPRESENTATIVE.
  2. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
  3. MAIN LINE AND VALVES ARE EXISTING.
  4. ALL LATERAL AND MAIN LINES IN SYSTEM WILL BE CONTAINED IN SLEEVES WHEREVER CONCRETE IS TO BE OVERLAID.
  5. ENSURE CONTINUED SUPPLY AND CONTROL TO EXISTING 24 ROAD AND BRIDGE AREA IRRIGATION ZONES.
  6. DRIP EMITTERS TO BE NETAFIM WPC, 1 GPM EMITTERS. FOR TREE DRIPPER LINES, SEE DETAIL A/SHEET 4.
  7. PIPE FROM CONTROL VALVE TO FIRST " TEE" TO USE 1/2" LARGER THAN VALVE UNLESS NOTED OTHERWISE
  8. PIPE SIZE NOTATION INDICATES MINIMUM PIPE SIZE DOWNSTREAM FROM THAT POINT.

IRRIGATION VALVE SCHEDULE, PHASE ONE

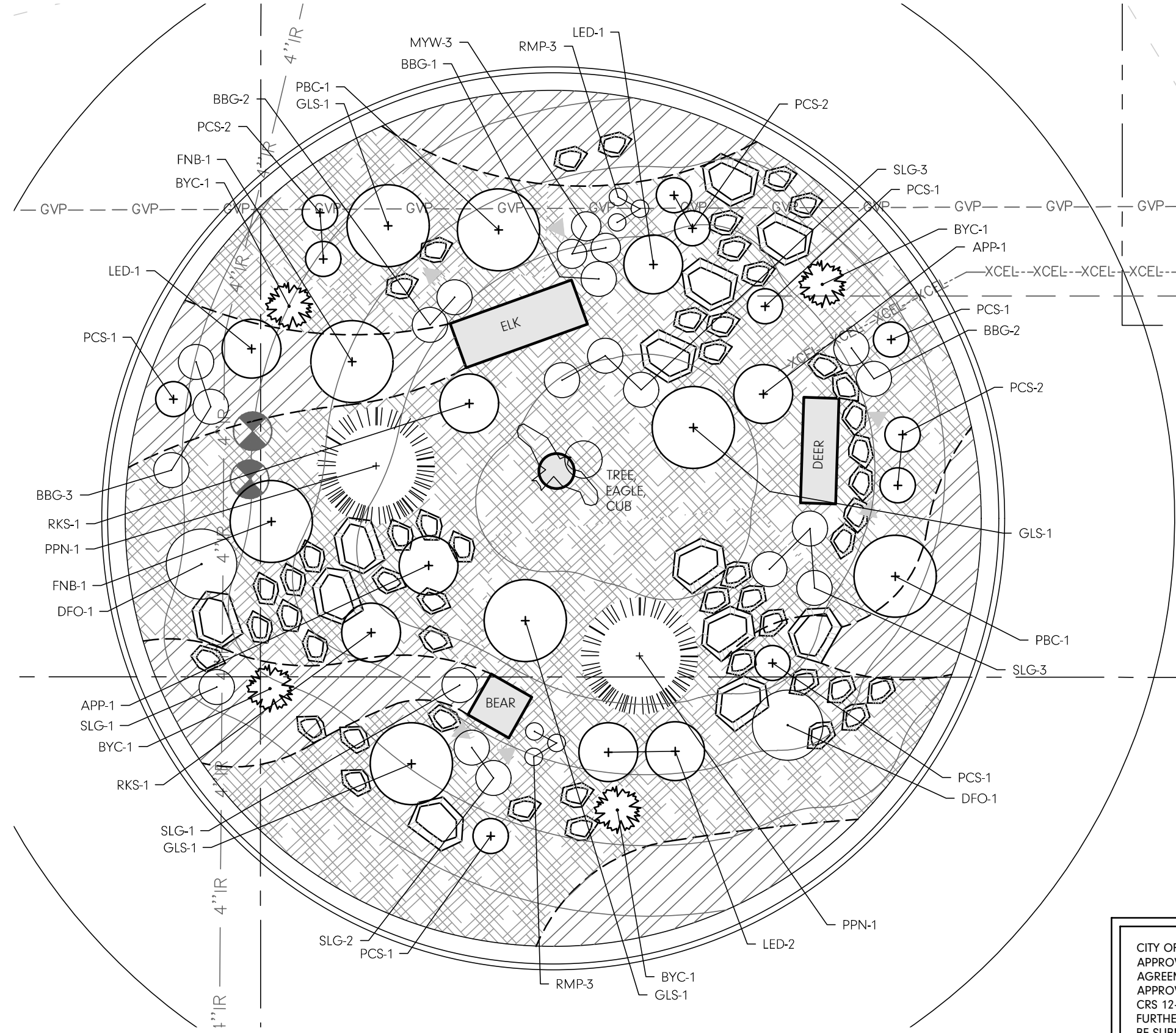
VALVE #	SIZE	ZONE TYPE	# OF EMITTERS	TREE DRIP RINGS	GAL/HR	GAL/MIN
#20	1"	TREE DRIP	—	2	54	0.9
#21	1"	SHRUB DRIP	151	—	151	2.52



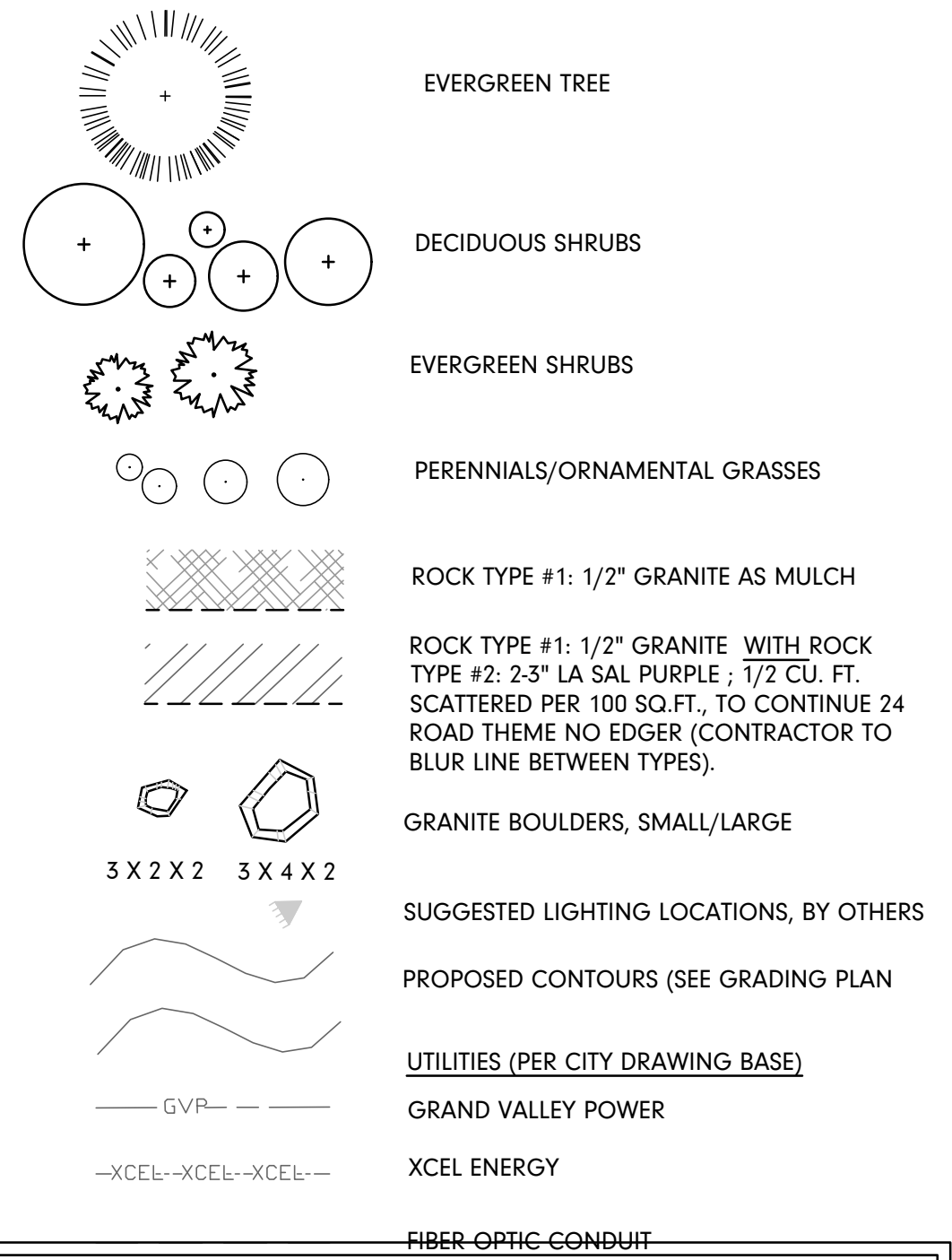
**24 & G ROUNDABOUT LANDSCAPE**  
IRRIGATION PLAN



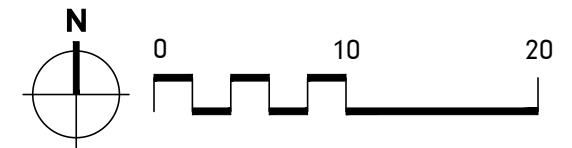
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### PLANTING LEGEND



CITY OF GRAND JUNCTION CODE AND COLORADO STATE LAW REQUIRE THAT ALL CHANGES TO THESE DRAWINGS MUST BE APPROVED BY THE LICENSED LANDSCAPE ARCHITECT, IN WRITING, PRIOR TO RELEASE OF THE DEVELOPMENT IMPROVEMENT AGREEMENT (DIA). ALL LANDSCAPE MATERIAL SUBSTITUTIONS AND/OR RELOCATIONS, BY THE CONTRACTOR OR OWNER MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. FAILURE TO DO SO IS CONSIDERED A CRIMINAL OFFENSE PER CRS 12-45. FURTHER MORE, THE CITY OF GRAND JUNCTION REQUIRES A FINAL INSPECTION LETTER BY A LANDSCAPE ARCHITECT MUST ALSO BE SUBMITTED AT TIME OF CERTIFICATE OF OCCUPANCY THAT THE LANDSCAPING HAS BEEN INSTALLED PER APPROVED PLAN.



# 24 & G ROUNDABOUT LANDSCAPE PLANTING PLAN



PLANT LIST

Qty Key Common Name Scientific Name Size Mature Height

Evergreen Trees					
2	PPN	Pinon Pine*	Pinus cembroides edulis	6'	10-15'

Deciduous Shrubs					
2	APP	Apache Plume	Fallugia paradoxa	5 gal	3-6'
2	FNB	Fern Bush	Chamaebatiaria millefolium	5 gal	4-7'
4	GLS	Gro Low Sumac	Rhus aromatica 'Gro-Low'	5 gal	1.5-3'
4	LED	Leadplant	Amorpha canescens	5 gal	2-3'
2	PBC	Pawnee Buttes Sand Cherry	Prunus besseyi 'Pawnee Buttes'	5 gal	1-2'
11	PCS	Powis Castle Sage	Artemisia 'Powis Castle'	5 gal	2-2.5'
2	RKS	Rock Spiraea	Holodiscus dumosus	5 gal	3-4'

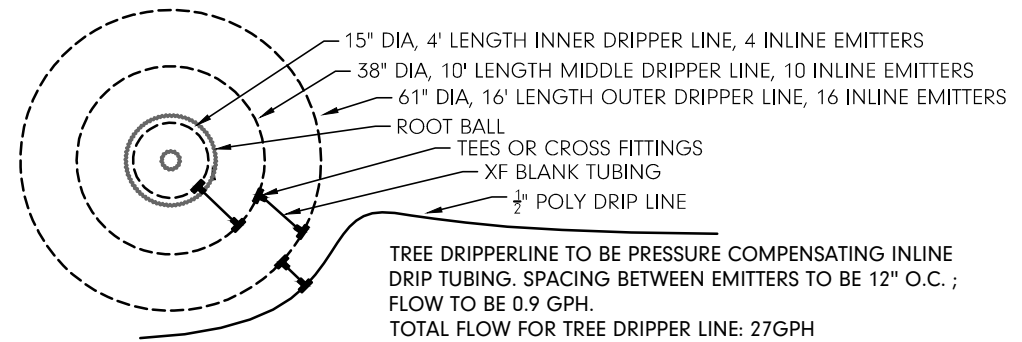
Evergreen Shrubs					
4	BYC	Banana Yucca	Yucca baccata	5 gal	2-4'

Perennials/Ground Covers/Ornamental Grasses					
8	BBG	Blond Ambition Blue Grama Grass	Bouteloua gracilis 'Blond Ambition'	1 gal	2-3'
2	DFO	Desert 4 O'Clock	Mirabilis multiflora	1 gal	1-2.5'
3	MYW	Moonshine Yarrow	Achillea millefolium 'Moonshine'	1 gal	1-2'
6	RMP	Rocky Mountain Penstemon	Penstemon strictus	1 gal	0.5-2'
10	SLG	Sand Love Grass	Eragrostis trichodes	1 gal	2-4'

NOTES:  
 1. PLANT GROWTH CHARACTERISTICS VARY DUE TO ENVIRONMENTAL CONDITIONS, THEREFORE A RANGE OF AVERAGE MATURE HEIGHTS ARE INDICATED.

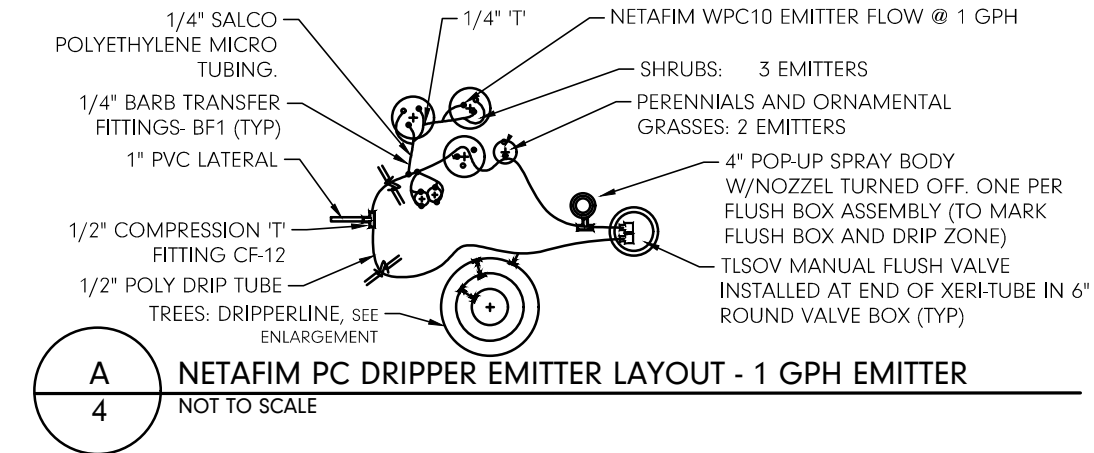
PLANTING NOTES

- CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- ALL LANDSCAPING AND IRRIGATION TO CONFORM TO CURRENT ASSOCIATED LANDSCAPE CONTRACTORS OF COLORADO STANDARDS AND SPECIFICATIONS.
- EQUAL PART MIXTURE OF ROUND-UP AND 2-4-D DILUTED AS PER MANUFACTURER'S RECOMMENDATIONS SHALL BE APPLIED TO ALL ACTIVELY GROWING WEEDS TWO WEEKS PRIOR TO ANY PLANTING OPERATIONS.
- CONTRACTOR SHALL INSTALL LANDSCAPE BOULDERS AT THE LOCATIONS SHOWN ON THIS PLAN. CONTRACTOR SHALL INSTALL LANDSCAPE BOULDERS AT THE LOCATIONS SHOWN ON THIS PLAN.
- ALL LANDSCAPE AREA TO RECEIVE 12 INCHES TOPSOIL AND SOIL AMENDMENT. ALL LANDSCAPE AREA TO RECEIVE 3 INCH DEPTH OF TYPE 1 OR TYPE 2 ROCK MULCH; NO WEED FABRIC.
- AREAS TO BE PLANTED (AS PER DRAWINGS) TO RECEIVE SOIL AMENDMENT. REMOVE UNSATISFACTORY MATERIAL (INCLUDING ROAD BASE, ASPHALT, CONCRETE AND TRASH) AND REMOVE FROM SITE. ALL LANDSCAPE AREAS THAT RECEIVE TOPSOIL TO ALSO RECEIVE 6 YDS/1000 S.F. SOIL AMENDMENT. SCARIFY ALL AREAS TO RECEIVE SOIL AMENDMENT TO A DEPTH OF 6".
- SOIL AMENDMENT IS TO CONSIST OF 50% GROUND WELL-AGED MANURE, 50% FINELY GROUND AND AGED WOOD CHIPS. AMENDMENT IS TO BE INCORPORATED WITH FERTILIZER BY TILLING AT THE RATE OF 6 CUBIC YARDS/1000 SF INTO ALL TOPSOIL AREAS.
- SOIL IS BE COMPACTED TO 85% MODIFIED PROCTOR (WHEEL ROLL) TO MINIMIZE SETTLING.
- NO WEED FABRIC IS TO BE USED ON THIS PROJECT.
- SHRUBS AND TREES ARE TO BE SPACED AS SCALED FROM THE PLANTING PLAN.
- MULCH MATERIAL FOR BEDS WITH PLANTINGS SHALL BE: ROCK TYPE 1 = 1/2" TAN GRANITE, ROCK TYPE 2 = 2-3 INCH LA SAL PURPLE TO BE USED WHERE SHOWN. ALL ROCK SHALL BE FREE OF TRASH, STICKS, ROOTS OR OTHER DEBRIS.
- CONTRACTOR IS TO GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF WORK.



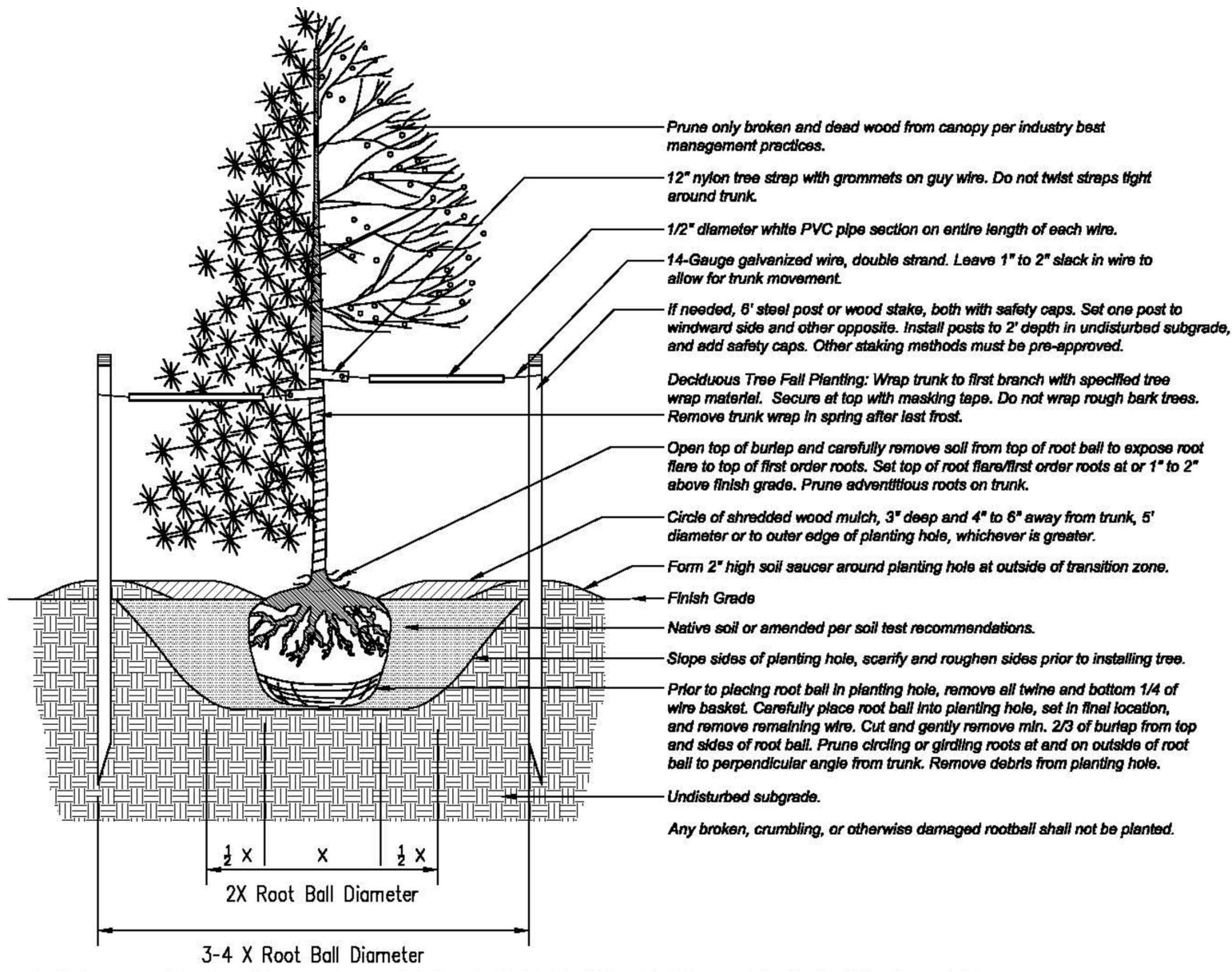
TREE DRIPPERLINE ENLARGEMENT

TUBING PLACEMENT AND LIMITS	EMITTER PLACEMENT	FLUSHBOX LOCATION
1/2" DISTRIBUTION TUBE: MAX. 200 GPH PER LENGTH (200 EMITTERS) LESS 27 GPH PER TREE. MAX. 200' LENGTH. EACH BRANCH TO END WITH FLUSH CAP IN 6" ROUND VALVE BOX. 1/4" DISTRIBUTION TUBE: MAX. 12 GPH PER LENGTH (12 EMITTERS). MAX. 10' LENGTH. CONNECTION WITH 1/2" TUBE TO BE 1/4" COUPLER, NOT PC DRIPPER. ALL TUBING TO BE PLACED BELOW WEED CONTROL FABRIC (WHERE FABRIC OCCURS). TUBING TO BE STAKED AT EMITTER AND AT MAX 5' INTERVALS WITH MIN. 8" STAPLES. 1/4" TUBING TO BE SALCO POLYETHYLENE MICRO TUBING.	ALL EMITTERS ARE TO BE PLACED AND STAKED AT PERIMETER OF ROOT BALL. EVENLY SPACE EMITTERS AROUND ROOT BALL <u>PERENNIALS AND ORNAMENTAL GRASSES:</u> TWO (2) PC DRIPPERS PER PLANT <u>SHRUBS:</u> THREE(3) PC DRIPPERS PER PLANT <u>TREES:</u> 3 DRIPPER LINE RINGS: 7-1/2", 19" & 30" FROM CENTER OF ROOTBALL, TUBE IS TECHLINE CV, 12" DRIPPER SPACING, 0.9 GPH INLINE EMITTERS, 27 GPH PER TREE	MINIMIZE NUMBER OF FLUSH BOXES. LOCATE ADJACENT TO WALKS OR DRIVES FOR MAINTENANCE ACCESS. INSTALL 1800 SPRAY W/NOZZLE CLOSED. SPRAY HEAD IS TO INDICATE WHEN ZONE IS ON AND LOCATION OF FLUSH BOX.



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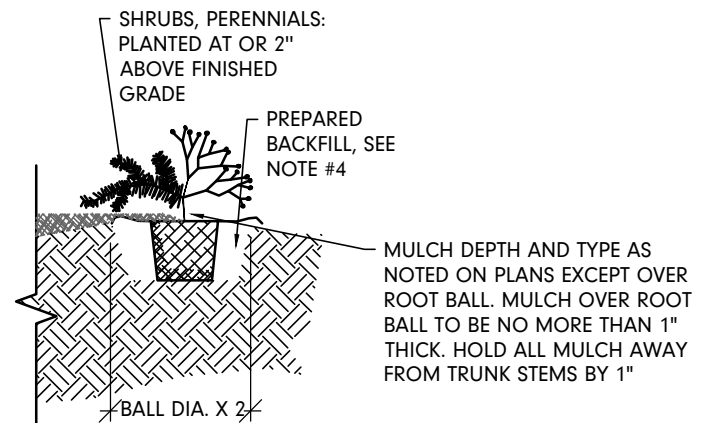


**A**  
5 PLANTING DETAIL - TREES  
NOT TO SCALE

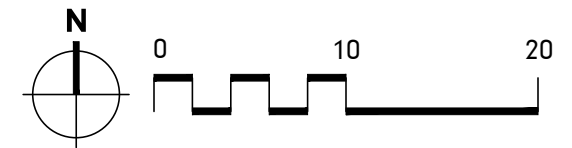
Trees planted upon park land, public property, or within the Public Right of Way (PRW) are subject to the following restrictions:

- Prior to digging, the Utility Notification Center of Colorado shall be contacted at 811 to locate underground utilities.
- A planting permit from the Grand Junction City Forester (GJCF) is required regardless of approved plans to ensure the City is available to inspect the planting of public trees.
- Tree planting shall not occur when daytime temperatures reach or exceed 90-degrees Fahrenheit, unless approved by GJCF.
- Only tree species approved by the GJCF shall be planted.
- Trees shall not be planted in tree lawns less than six feet wide unless authorized by the GJCF.
- Trees shall be centered in tree lawns and/or planting areas. Where sidewalks are not present, trees shall be located as designated by the GJCF.
- Unless authorized by the GJCF, trees shall be located:
  - Outside street intersection sight distance triangle, measured 30 (thirty) feet along the PRW in each direction from the corner.
  - Min. 10 (Ten) feet from alleys and driveways
  - Min. 20 (Twenty) feet from stop signs and curb ramps
  - Min. 25 (Twenty-five) feet from street lights
  - Min. 10 (Ten) feet from electric/gas/water lines, water meters/pits, and fire hydrants
  - Min. 15 (Fifteen) feet from small cell towers
- If overhead utility wires exist, only trees with an expected mature size that meet current clearance regulations may be planted.
- Tree spacing shall be based on projected mature canopy size and above restrictions, or as approved by the GJCF.
- All electric fixtures and utilities, including but not limited to outlets and lights, shall be located at outside perimeter of tree planting areas within hardscape. In tree lawns, fixtures shall be placed minimum 3 (three) feet radially from base of trunk.

NOTES:  
 1. ALL BEDS SHALL BE PITCHED TO DRAIN AT 3% MIN.  
 2. ALL BEDS TO RECEIVE WEED CONTROL FABRIC ON FINISHED GRADE UNDER MULCH UNLESS OTHERWISE NOTED.  
 3. BACKFILL MIX:  
 1/3 SOIL AMENDMENT  
 2/3 SOIL FROM PIT  
 INCORPORATE BIOSOL PLANTERS MIX, OR A MIX OF 50 LBS BIOSOL, 10 LBS HUMATE, 1 LB ALL PURPOSE MYCORRHIZAE AT THE FOLLOWING RATES:  
 1/2 CUP PER 1 GAL PERENNIAL  
 1 CUP PER 5 GAL SHRUB  
 2 CUPS PER 2" CALIPER TREE  
 MIX THOROUGHLY PRIOR TO BACKFILLING.  
 CONTRACTOR TO PROVIDE AND INSTALL PLANT FERTILIZER TABLETS HAVING AN NPK ANALYSIS OF 20-10-5. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.



**B**  
5 PLANTING DETAIL-SHRUBS, PERENNIALS AND ORNAMENTAL GRASSES  
NOT TO SCALE



# 24 & G ROUNDABOUT LANDSCAPE

## CONSTRUCTION DETAILS 2/2



## 328 Irrigation

### 1 General

#### 328400.011 Scope of Landscape Irrigation Work

Furnish all labor, equipment, appliances, materials and perform all operations required to complete irrigation system installation and other work as shown on the applicable drawings and as specified herein, guarantee and meet conditions of this Contract.

#### 328400.451 Job Supervision - Irrigation

All work specified herein shall be performed under the direct supervision of a superintendent thoroughly familiar with the work of this Section and who shall be at the Project site for the duration of the work of this Section.

#### 328400.461 Irrigation Installation Training

Drip irrigation installation will be preceded by instruction by Netafim to train the installer on the installation of the CV Techline. This training is to be arranged by the installer prior to any installation of this product. contact Kelly Keicher at 303-513-3738

#### 328400.521 Job Conditions - Non-Interruption of existing irrigated areas

Adjacent landscape served by existing mainlines that are slated to be relocated shall have continuous use. Construction of new and relocated mainlines shall be coordinated to not interfere watering schedules. Adjacent landscape irrigation will continue in operation during construction.

#### 328400.551 Substitute Products

Requests for substitution of products named in this section must be approved by the Owner's Representative one week prior to bid opening.

#### 328401.021 Layout of Lines & Levels

Before any installation operations are started, the site shall be completely staked out for the work of this Section by the Contractor. Pipes are not to be installed through tree root ball locations. All mains and valve locations shall be staked out for approval before installation by the Owners Representative.

#### 328401.031 Tolerances

Depth of main shall be 30" bury; laterals shall be eighteen (18") bury, depth at road crossings shall be 24". All road crossings shall be sleeved.

### 2 Products

#### 328424.222 Automatic Control Scrubber Valve

Automatic Control Valves are to be Rainbird PES-B Electric Remote Control Scrubber Irrigation Valves with PRS Dial Series Pressure Regulating of size indicated on drawings, or equal.

#### 328424.362 Isolation Gate Valve

Isolation valves (4") are to be 4" Mueller A-2360 Resilient Wedge Gate Valve, and shall be listed by NSF for use in potable water service.

#### 328424.382 Quick Coupler Valves

Quick coupler valves are to be Rainbird #33-D two piece assembly with 3/4" schedule. 80 PVC nipple of length to bring head 1" above finish grade. Marlex Street Ells are to be used for a swing joint assembly to main line.

### 328 Irrigation

- 328424.682 Pressure Regulating Module  
Pressure regulating valve to be Rainbird PRS-Dial or equal.
- 328424.702 Valve Boxes  
Super Jumbo box (2 valves max), or equal.
- 328425.102 Irrigation Pipe - Main Pressure Line  
Main Pressure Line pipe between HDPE and control valves shall be Class 200, solvent weld PVC, with PVC schedule 40 fittings, sized as shown on plans.
- 328425.142 Irrigation Pipe - Main Pressure Line, HDPE  
Main Pressure Line pipe shall be HDPE pipe, sized as shown on plans. See section 3311-00-13 for Specifications.
- 328425.202 Irrigation Pipe - Lateral Lines  
Pipe shall be PVC Class 160 with PVC Schedule 40 fittings, solvent weld, as detailed, sized as shown on the plan.
- 328428.412 Schedule 80 PVC sleeving  
Pipe for sleeve shall be schedule 80 PVC, sized as shown on drawings, of length to protrude from under concrete and/or asphalt a minimum 6".
- 328429.452 Pipe Thread Material  
All threaded pipe connections shall be made with Weld-on 87685 thread sealant shall be used, or equal.
- 328429.462 Solvent Weld Primer & Cement  
Solvent Weld Primer & Cement shall be only that which is recommended for use on pipe installed.
- 328449.882 Irrigation 2 wire Field Decoder  
Field decoder shall be Rainbird FD-101TURF. Contractor may use FD-102 for two valves in one location, or FD-104 for 4 valves in one location.
- 328452.132 Wire Connectors  
Wire connectors at electric control valves and all splices of irrigation controller wire in the field shall be made using "3M DBR-6" only.
- 328454.132 P7072 Decoder Cable  
Communication cable for irrigation system shall be P7072 Shielded Communication Cable. Connections are to be made with waterproof connectors.
- 328454.32 Conduit-Decoder Cable  
Furnish and install gray heavy wall Schedule 40 PVC conduit, rated and labeled for use with 90 C rated conductors (EPC), rigid, U.L. listed, meeting NEMA standard TC-2, Federal Specifications WC-1094A, U.L.-651, as manufactured by Baldwin, Carlon, Ethyl, Triangle, or equal. Pipe shall be 1"
- 328454.512 Surge Protection for 2 wire system  
Surge protection for 2 wire system shall be Rainbird LSP-1, or equal.
- 328460.522 In Line Drip Emitter Tubing - Netafim Techline CV  
to be Netafim Techline CV, Emitter flow rate and spacing are to be as of shown on drawings.

### 328 Irrigation

328460.522 Blank (No Emitter) Tubing - Netafim  
Drip Tubing with no emitters to be Netafim Techline with no emitters

328460.882 Flush Cap Assembly  
Rainbird CF-22 Compression flush cap to be installed at the end of all polyethylene laterals in Ametek 6 or 10" circular box with tan/brown C.V. lid Part #181108. Contractor is to include one 1804 Rainbird pop-up SAM spray head w/ closed nozzle spray head connected with swing pipe to one 1/2" irrigation lateral.

328460.932 Flush Cap  
Netafim TSOV valve is to be installed at the end of all xeri-tube laterals.

328460.952 Flush Cap Box - 6"  
Flush cap box to be Ametek 6" circular box with brown C.V. lid Part #181108.

#### 4 Execution

324010.44 Water Service Connection - irrigation, non-potable  
The Contractor shall tie into existing mainline where shown on drawing.

328424.354 Isolation Gate Valve  
Isolation valves are to be installed in mainline at locations shown on drawings. Contractor is to provide extension sleeving from valve box to valve location.

328424.384 Quick Coupler Valves  
Quick coupler valves are to be installed on swing pipe swing joint at location and grade as indicated on drawings and as per details. Installation in soft soils may require staking and tying quick coupler to stake. Drive stake to 12" below grade and tie with nylon tie.

328428.414 PVC sleeving  
Sleeving shall be installed in locations noted on drawings and at a depth of 30" at roadway crossings, 24" at other pavements (mainline) and 18" for lateral lines at other pavements. Sleeve ends are to protrude beyond pavements or concrete improvements a minimum of 6". Where changes in direction are necessary, the sleeve shall be bent to smoothly transition the change of direction. No fittings are to be used for direction changes. Ends are to be taped to prevent filling by backfill. Mark locations with lath and notation indicating "sleeve".

328440.44 Automatic Control Valves  
All control valves shall be installed as close as possible to the locations shown on the plan; any variances must be approved by the Owners Representative. Install valves, unions, reducers, pipes, wiring, etc. per detail. Control valves shall be installed in accordance with the manufacturer's recommendations. All valves shall have sufficient clearance from adjacent obstructions to provide accessibility for maintenance, including complete removal without removal of valve box. Valves are not to be located in flow line of swales or drainages.

328449.884 Irrigation 2 wire Field Decoder  
Field decoder shall be installed in line at valve locations as per manufacturer's directions

328452.024 Wire Connectors  
Wire connectors are to be installed as per manufacturers recommendation.



### 328 Irrigation

328454.134 P7072 Decoder Cable

Communication cable for irrigation system is to be installed in 1" schedule 80 conduit above the irrigation mainline with loops at valve locations allowing connections to be made in valve boxes. Splices are to be made in valve boxes only.

328454.44 Conduit-Decoder cable

Conduit shall be placed in same trench as irrigation pipe, above the pipe where possible. Make bends symmetrical using a standard hickey, conduit bender, or bending machine. Cut all conduits square and ream ends to remove burrs. Clean and dry all conduits and raceways thoroughly before conductors are pulled. Provide expansion couplings to prevent damage due to expansion. Do not install PVC conduits where exposed. Reference NEC (National Electrical Code) Table 300-5 for burial.

328454.514 Surge Protection for 2 wire system

Surge protection for 2 wire system shall be installed as per manufacturer's instructions at locations shown. Surge protection is provided if FD-401 Field Decoder is used.

328455.064 Grounding

All grounding of controllers and field decoders to comply with ASIC Guideline 100-2002 for Earth Grounding Electronic Equipment in Irrigation Systems and per Rainbird Irrigation requirements for grounding

328455.144 Trenching & Backfilling

Comply with Section 312000 as required.

328455.154 Trench Excavation

Trenches shall be cut to true line and grade. Over-excavation of trenches for piping shall require compacted backfill to bring bottom of trench up to grade. Provide for surface drainage during construction. De-water all excavations immediately.

328455.174 Pipe Trench Backfilling

Trenches for piping shall be carefully backfilled with non-swelling on-site soils exclusive of any organic materials, construction debris or other deleterious materials, free from clods of earth or stones larger than two inches (2") in maximum dimension, by depositing the backfill materials equally on both sides of the pipe in loose 8" layers and thoroughly compacting the backfill to a minimum 90% of the maximum dry density determined in accordance with ASHTO T180, Modified Proctor.

328456.044 Piping- general

Manufacturer's specifications covering installation of their material shall be followed. Underground lines up to 2" shall have minimum horizontal clearance of 2" of each other. No sprinkler lines shall be stacked vertically in a common trench. Lines shall have minimum horizontal clearance of 12" from the lines of other trades, and minimum 2" vertical clearance between lines crossing at 45° - 90°. Trenches for irrigation mainline shall be excavated so that the pipe shall drain uniformly toward drain valves deemed necessary to properly drain the system. Minimum grade of piping to drains shall be 3"/100'. When pipe laying is not in progress, or at end of each day, pipe ends shall be closed with tight plug or cap.

### 328 Irrigation

328460.524 In Line Drip Emitter Tubing - Netafim Techline CV Rings

Techline CV tubing to be installed in concentric rings as shown in detail and according to manufacturer, connected directly to poly lateral and spaced according to drawings. Tubing is to then be buried with 2" amended topsoil, then compacted with manual sod roller. Tubing is to be staked with 6" landscape fabric pins at all fittings and at minimum 4' on center. See Planting for topsoil specs.

328460.534 In Line Drip Emitter Tubing - Netafim Techline CV

Techline CV tubing to be installed in a 'grid' layout according to manufacturer following planting operations and fine grading. Surface is to be compacted with manual sod roller. Grid is to be spaced as shown in detail, and adjusted to insure watering of plan root ball. Grid is to be connected directly to poly lateral header, header connected to buried lateral line with swing pipe assembly. Test drip pattern in the presence of owner's representative prior to installation completion. Grid is to then be buried with 2" amended topsoil, then compacted with manual sod roller. Tubing is to be staked with 6" landscape fabric pins at all fittings and at minimum 4' on center. See Planting for topsoil specs.

328460.904 Flush Cap Assembly

Rainbird CF-22 Compression flush cap to be installed at the end of all polyethylene laterals in Ametek 10" circular box with black C.V. lid Part #181108. Flush Cap Assemblies are to be located adjacent to walks or lawn areas where possible for maintenance access.

328470.044 Irrigation Valve Control Wires

All control wires shall be placed carefully alongside and slightly below the water main where it will receive the greatest possible protection. Control wires not protected by the water main shall be laid in a suitable sized PVC conduit unless otherwise noted on the plans. Control wire shall have an eighteen (18") inch expansion loop at each valve and every 200' of wire. Where more than one control wire is located in the trench, the wires shall be taped together at 20' intervals to maintain orderly and efficient installation. Contractor shall provide an extra control wire at all manifolded valves. Contractor to avoid mid-line splices, but where necessary will adequately note location on the "as-builts".

328470.054 Irrigation Valve Control Wires

Control wires shall be placed carefully alongside and slightly below the water main where it will receive the greatest possible protection. Control wire not protected by the water main shall be laid in a suitable sized PVC conduit unless otherwise noted on the plans. Control wire shall have an eighteen (18") inch expansion loop at each valve and every 200' of wire. Contractor to avoid mid-line splices, but where necessary will adequately note location on the "as-builts".

## 5 Warranty

328400.815 As-Built Submittals

Contractor shall submit an as-built or record plan upon completion of work showing precise location of control valves, mains, drain valves, etc., and any changes in location of heads, piping, etc. to the Owner and their representative before final application for payment. Provide pdf of drawing(s).

### 328 Irrigation

#### 329380.55 Vandalism

Minor vandalism or other damage to the plantings or related work shall be the responsibility of the Contractor until all work receives Final Acceptance. Major vandalism or damage caused by others through no fault of the Contractor or his subcontractors shall be immediately brought to the attention of the Owners Representative who will be the sole judge as to the extent of such damage. Major damage is typically any damage over \$500.00 worth of materials and/or labor required to repair the damage. For the Contractor to be awarded additional monies under the provisions of "extra work" stated in the General Conditions, he shall have fully protected his work as specified herein. Any failure, however slight, of the Contractor to have protected his work shall be grounds to nullify any request for additional remuneration.

## 329 Planting

### 1 General

#### 329000.121 Scope of Landscape Work

Include labor, equipment, material, incidentals, for the completion of planting, boulder placement, lawn, edging, and mulch work shown on the Drawings, stated in the Specifications or otherwise required.

#### 329080.501 Stake Out Location of Landscape Work

The Contractor shall completely stake out the location of all trees, shrubs, and lawn area limits on the site for the approval of the Landscape Architect, making modifications as required.

#### 329301.081 Applicable Standards

U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act, American Association of Nurserymen, current edition of "American Standard for Nursery Stock". Published by the American Association of Nurserymen, Inc., Washington D.C. and/or Colorado State Law, whichever is greater.

#### 329301.101 Shipment and Delivery

No plant materials shall be delivered to the site more than 3 days before planting. Plants left unplanted for more than 3 days shall be subject to rejection by the Owners Representative. A suitable method of handling shall be employed to insure the careful, workmanlike delivery of all plants, especially heavy balled trees. The Contractor shall protect the stock in a temporary nursery at the project, protected from sun, drying winds and shaded, kept moist and protected with damp soil, moss or other acceptable material.

#### 329301.151 Notification of Delivery

The Landscape Contractor shall notify the General Contractor and Owners Representative a minimum of 2 days in advance of the delivery of the plant materials. Notification shall include the time and method of delivery.

#### 329301.181 Quality Control Submittals

Certificates of Inspection for Plants: All necessary State, Federal and other inspection certificates shall accompany the invoice for each shipment of plant materials as may be required by law, and showing source of origin. Certificates shall be filed with the Owners Representative prior to his acceptance of the material.

#### 329301.201 Plant Material Labeling

Durable, legible labels stating in weather-resistant ink indicating the correct plant name and size as specified on the plant list shall be securely attached to all plants, bundles or packages of plants of a single species and size, or plant container delivered to the planting site. Plants not properly labeled shall be subject to rejection by the Owners Representative.

#### 329301.211 Plant List

A list of purchased plants to be provided is shown on the Drawings.

### 329 Planting

329301.221 Plant Material Inspection

The Owners Representative reserves the right to reject at any time or place prior to acceptance, any and all materials which in their opinion fail to meet specifications. Inspection of materials is primarily for quality, size and variety, but other requirements are not waived even though visual inspection results in approval. Plants may be inspected where available, but inspected at the places of supply shall not preclude the right of rejection at the site. Rejected materials shall be promptly removed from the site. No installation shall occur prior to inspection and acceptance of all plant material.

329320.021 Plant Sizes

Requirements for the measurement follow the code for standards currently recommended by the American Association of Nurserymen, Inc. in the American Standard for Nursery Stock

329350.011 Planting Commencement

No planting work shall commence until the adjacent site improvements, drainage improvements, pavements, irrigation installation and finish grading is completed. No heavy trucking or moving of plant materials or equipment shall be permitted on newly completed pavements, sod or seeded areas. Further, the irrigation system shall have been tested in the presence of the Operator's Representative and be in operating order prior to any planting, seeding or sodding, with the exception of drip emitters, which shall be placed following planting.

329350.051 Weather Restrictions

No lawn or planting work shall take place during inclement weather or when the ground conditions are, in the opinion of the Owners Representative, not in a condition to be properly worked.

329350.151 Irrigation & Establishment Restrictions

No seeding or planting operations shall occur prior to April 15 nor later than September 30.

329381.011 Substitute Products

Requests for substitution of products named in this section must be approved by the Owner's Representative one week prior to bid opening.

## 2 Products

329223.012 Sod

Shall be 100% bluegrass or a mixture approved by Landscape Architect. Sod shall have a healthy root system, shall have been regularly watered, mowed, fertilized and weeded; be free from objectionable weed of grasses; have been from 5/8" min. to 1" max. thickness of soil adhering to root system, cut into strips 18" by 24" min. size when installed. It shall not be allowed to dry out, or sod with adhering soil which breaks, crumbles will not be accepted, and will not be accepted if stored for longer than 36 hours from time of cutting.

329223.502 Fertilizer for Sod Areas

A commercial fertilizer providing 6 pounds per 1000 sq. ft. "treble super phosphate" (0-46-0), and 1 pounds per 1000 sq. ft. nitrogen, shall be supplied, in original manufacturer's containers, with label showing composition intact, free-flowing and dry, in quantities necessary to apply over all sod areas.

### 329 Planting

329333.022 Fertilizer for Shrub Areas

A commercial fertilizer providing 2 pounds per 1000 sq. ft. Phosphate, and 1 pound per 1000 sq. ft. Potash, shall be supplied, in original manufacturer's containers, with label showing composition intact, free-flowing and dry, in quantities necessary to apply over all shrub bed areas.

329334.012 Biosol Soil Amendment

Biosol soil amendment shall be "Biosol Planters Kit" as manufactured by Rocky Mountain Bio Products, 10801 E 54th Avenue, Denver, CO 80239 (888)696-8960, (20 lb Biosol, 50 lb humate, and 1 lb all purpose mycorrhizae), or equal if approved by Owner's Representative prior to bidding.

329413.022 Concrete Edging

Concrete Edging for use as shrub bed borders shall be 6" x 4" fiber mesh reinforced extruded Mortar. Mortar shall consist of fine and course sands, 6 sacks Portland Cement per cubic yard, fiber mesh reinforcing as per manufacturers recommendations. Mix at least three minutes and not more than five minutes in mechanical batch mixer, with maximum amount of water to produce workable consistency.

329443.022 Fertilizer for Trees

Fertilizer shall be Agriform 20-10-5 tablets or equal.

329443.032 Insecticide Spray

Methoxychlor or similar insecticide.

329443.042 Tree Wrapping Material

Tree wrapping material shall be first quality 4" wide, bituminous impregnated tape, corrugated or crepe paper, brown in color, specifically manufactured for tree wrapping and having qualities to resist insect infestation.

329443.052 Tree Stakes

Standard "T" 6' high steel posts, dark green in color with safety caps or wood fence posts. Stakes for guying pines and spruce shall be 30" long (5' steel "T" posts cut in half)

329443.062 Protective Nylon Loops

1-1/2" wide (min.) for restraining tree in guying operations. Lengths as required.

329443.072 Guy Wire

14 gauge, double strand, pliable galvanized steel wire twisted to remove slack to each stake, and PVC Pipe section as shown in details for visibility. Leave 1" to 2" slack in wire to allow for trunk movement.

### 3 Materials

329113.013 Soil Amendment

50% Ground well-aged cow or chicken manure, or ground sheep manure, 50% finely ground and aged wood chip, with a proven analysis to verify organic content, PH, electro-conductivity, nitrogen, potassium, and phosphorus content. A sample of the material will be supplied to the Owner's Representative with an analysis.

### 329 Planting

329113.043 Imported Topsoil

Imported friable sandy loam; reasonably free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds, and foreign matter; electro-conductivity range 0 to 4 mmohs; containing a minimum of 4 percent and a maximum of 25 percent organic matter; Limit decaying matter to 2% percent of total content by volume. Clay loam or clay will not be accepted

329113.33 Backfill Material

Excavated material will be considered satisfactory for general backfill purposes. All backfill material shall be free from rubbish, vegetative matter, frozen materials or stones larger than six (6") inches in maximum dimension. Any material not suitable for backfill shall be stockpiled on site as designated on drawings or directed in the field.

329301.043 Container Grown Plants

Plants designated in various size and type containers in the plant list shall be of a reasonable age and state of development for the size container in which they are specified. They shall have been growing in their containers sufficiently long to develop a good sound root system capable of holding the soil intact after removal from the container, but not so long as to have become root bound.

329301.053 Balled Plants

Plants delivered as "B&B", balled and burlapped shall be adequately balled with firm, natural ball wrapped tightly with burlap. No plant shall be planted if the ball is cracked or broken either before or during the planting process. Any plant which is loose in the ball shall be removed from the site and another plant conforming to the specifications of the plant removed shall be planted in its place at the expense of the Contractor.

329301.103 Shrub Quality

All Plants shall conform to the Colorado Nursery Act. Shrubs shall have a well-developed branch structure with a vigorous root system typical of the size and species and be sound, healthy and vigorous plants free from visual defects, plant diseases and all forms of insect infestation until Final Acceptance. Unless noted, all plants shall be nursery-grown, meaning plants that have been growing in a nursery either lined out or containerized for a minimum of two growing seasons and have been root pruned according to acceptable nursery practice. All shall be freshly dug at the time of delivery, (Plants healed in or placed in cold storage for more than 9 months will not be accepted.) and shall have been grown under similar climatic conditions as that of the project's location prior to planting.

329301.223 Specifics for the Selection of Shade Trees, Part 1

1. Trees greater than one and one-half inches (1-1/2") caliper shall be able to stand erect without a supporting stake.
2. Trees shall have straight trunks with less than a five percent (5%) bow.
3. Branches shall be less than two-thirds (2/3) the trunk diameter.
4. Trees shall be healthy and have had adequate annual growth the previous two (2) growing seasons for that species. (See fact sheets on growth rates).
5. Trees shall be rooted into the root ball so that soil or media remains intact and trunk and root ball move as one when lifted, but not root bound. The trunk should bend when gently pushed and should not be loose so it pivots at or below the soil line.
6. Trees shall have no roots larger than one-fifth (1/5) the diameter of the trunk protruding from the grow bag or container.

### 329 Planting

329301.233 Specifics for the Selection of Shade Trees, Part 2

7. Trees shall have one dominant leader for the top of the tree with a viable terminal bud or shoot.
8. Trees shall have no vertical branches except for those cultivars reported to be fastigiated.
9. Trees shall have branches evenly distributed around the trunk and no branches shall be directly above another.
10. The largest branches shall be spaced at least six inches (6") apart except for those cultivars with characteristic multiple tops.
11. The tree canopy shall be mostly symmetrical and free of large voids. Clear trunk should be no more than 40% of tree height unless otherwise specified in the planting specifications.
12. If any of the above conditions are not met, trees may be rejected by the Owner.

329301.243 General Considerations for Plant Quality

Trees and shrubs will be inspected by the Owner prior to planting and rejected if damage or imperfections in development are noted to include: flush cuts or open injuries on the main trunk; trunk cankers; Loose or torn bark in excess of 10% of the circumference of the trunk or branch; Borer holes or boring dust in trunks or main branches; Branch attachments with the included bark; Co-dominate stems - trees only; Trees and Shrubs in violation of Rules and Regulations pertaining to Title 34, Article 26 of the Colorado Nursery Act; Damaged or incomplete graft unions; When in leaf, with more than five percent (5%) chlorotic leaves; When any root is greater than one-tenth (1/10th) the diameter of the trunk, circles more than one-third (1/3) the trunk and is in the top half of the root ball; Plants infested with colonies of other insect pests will be rejected or properly treated at the discretion of the Owner.

329401.013 Granite Rock Mulch -1/2"

Rock Mulch shall be 1/2" inch tan granite covering shrub beds. Rock mulch shall be free of trash, sticks or roots, Granite to be similar to buff-tan colored granite. Submit sample to Owner's Representative prior to construction.

329401.043 Granite Rock Mulch -1-1/2"

Rock Mulch shall be 1-1/2 inch granite covering shrub beds. Rock mulch shall be free of trash, sticks or roots. Granite to be buff-tan colored granite. Submit sample to Owner's Representative prior to construction.

329401.443 La Sal Purple Rock Mulch -2-3" for shrub bed berms

Rock Mulch shall be 2" to 3" inch "La Sal Purple" covering shrub beds. 1/2 Cubic Foot La Sal Purple to be selectively and randomly cast over the surface of berms where shown on plans, over the top of 1/2" Tan Granite to provide textural difference. Rock mulch shall be free of trash, sticks or roots, Submit sample to Owner's Representative prior to construction.

329460.083 Granite Boulders

Landscape boulders to of minimum dimensions as shown on drawings. Boulders shall be buried such that exposed rock surface depicts natural exposure of outcrop formation. Boulders are to be tan/gold granite. Exposed surface of installed landscape boulders shall not show machine caused scarring or breakage. Typical examples of this type of boulder can be seen at "The Rock Shop", 800 S 15th Street, Grand Junction. Contractor to submit sample to Owner's Representative prior to acquisition.



## 329 Planting

### 4 Execution

#### 329110.064 Installing Topsoil

Stockpile materials on site at locations indicated. Stockpile in sufficient quantities to meet project schedule and requirements. Separate differing materials with dividers or stockpile apart to prevent mixing. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

#### 329111.044 Landscape area excavation Procedure

Excavate areas to be planted (as per drawings) to a sufficient depth to receive amended soil and to remove unsatisfactory material (including road base, asphalt, concrete and trash) and remove from site.

#### 329113.124 Stockpiling Imported Topsoil

Stockpile materials on site at locations indicated by the Owner's Representative. Stockpile in sufficient quantities to meet project schedule and requirements. Separate differing materials with dividers or stockpile apart to prevent mixing. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

#### 329113.134 Backfill - Shrub Beds

Scarify (where directed on plans) areas to receive topsoil or backfill as designated on plans to a depth of 12". Contractor shall backfill designated shrub beds with specified soil to meet proposed grades. Soil is to be compacted to 85% modified proctor (wheel rolled) to minimize settling. Beds are to be filled over drip irrigation tubing to a depth of 2", and above adjacent edge of shrub bed, shaped to form mounded planting areas. Shrub bed perimeter is to be finished with 4:1 slopes from 2" below adjacent concrete to finish grade to form shallow trench to hold mulch. See shrub bed detail.

#### 329113.154 Soil Preparation

Contractor shall prepare the planting areas already backfilled with topsoil by applying soil amendment at a rate of 6 cu. yds. per 1000 sq. ft. over all planted areas., discing or rototilling, the soil to a depth of 8". After this has been done, all rocks bigger than 1" shall be picked up and removed from the site. Soil preparation is for top soiled planting areas only.

#### 329113.184 Topsoil Backfill - Shrub Beds

Contractor shall backfill excavated shrub beds with specified topsoil. Soil is to be compacted to 85% modified proctor (wheel rolled) to minimize settling. Beds are to be filled to a depth of 6" above adjacent edge of shrub bed, or to a height not to exceed slopes of 3:1, shaped to form mounded planting areas. Shrub bed perimeter is to be finished with 4:1 slopes from 2" below adjacent concrete to finish grade. Scarify all areas to receive topsoil to a depth of 6".

#### 329113.304 Fine Grading for Landscape areas

Remove any dikes used to facilitate watering. Smooth surface, contour to distribute irrigation to root ball. Form trench at all landscape edgers or pavements to accommodate mulch at depth specified. See details.

#### 329114.234 Cleanup of Topsoil Stockpile

Remove stockpile, leave area in a clean and neat condition. Grade site surface to prevent free standing surface water.

### 329 Planting

#### 329219.814 Irrigation of Lawn Areas

Within 12 hours after planting lawn, the sprinkler system shall be activated to moisten planted areas to a depth of 2". All areas shall be kept moistened by frequent light watering for 3 weeks, or until the Final Acceptance of the Project, and such watering shall be the responsibility of the Contractor until seeded areas are accepted by the Owner.

#### 329223.014 Sod

Perimeter of area to be sodded shall be graded to within 1/2" to 3/4" below adjacent pavements, edger, or foundations. Sod shall be laid on a firm, smoothly graded, and pre-moistened bed with tight joints so that no voids occur under or between strips. Joints shall be staggered perpendicular to the direction of flow (slope) in all drainage areas or steep slopes. Sod shall be watered immediately after each section of sod is laid. Operate sprinkler to soak all sod to a depth of 2", and maintain this moisture level for three (3) weeks. or until the Final Acceptance of the Project. Such watering shall be the responsibility of the Contractor until sodded areas are accepted by the Owner. In the event that sod dries or shrinks, a mixture of screened topsoil and bluegrass seed shall be brushed in the cracks and tamped flush. Excessively shrunk sod (over 3/4" shrinkage) shall be replaced.

#### 329223.504 Fertilizer for Sod Areas

Fertilizer is to be incorporated into the soil to a depth of 6". Once sod has been laid, apply at rate specified in 2.0 Products.

#### 329301.224 Tree Location conflicts with Underground Lines

The Contractor shall be responsible for damage to any underground utility, irrigation line or other improvements. In the event a pipe or line obstructs a plant location, the Contractor will notify the Owners Representative to receive a new plant location.

#### 329310.024 Layout of Plant Locations

Contractor is to stake out the location of all trees, shrubs, perennials, and lawn area limits, or place containerized shrubs and perennials for approval by Landscape Architect prior to planting. All planting stake locations shall be observed and approved by the Landscape Architect, prior to planting operations.

#### 329312.084 Planting Techniques - Part 1

1. Trees, shrubs and perennial flowers shall be in planting areas separate from turf areas.
  - a. In those instances where the Owner requires trees or shrubs planted in turf areas, the turf will be established prior to installation of trees or shrubs.
  - b. Trees and shrubs shall be planted a minimum of four inches (4") above the finished grade of the turf or mulched area based on their uppermost structural roots.
  - c. If the planting hole is inadvertently dug too deep, soil shall be added and compacted.
  - d. The width of the planting hole shall be a minimum of at least one and one-half times the diameter of the root ball, two times the diameter of the rootball where possible.
2. Trees and shrubs shall be planted with two (2) or more of the upper-most structural roots no more than two inches (2") below the surface of the root ball measured three to four inches (3-4") from the trunk (except as noted below).

### 329 Planting

#### 329312.094 Planting Techniques - Part 2

Soil shall be removed from the top of the root ball prior to planting to determine the actual depth of the structural roots. a. Hackberry (*Celtis occidentalis*), green ash (*Fraxinus americana*), red maple (*Acer rubrum*), little leaf linden (*Tilia cordata*), crabapples (*Malus spp.*) and poplars (*Populus spp.*) shall be planted with no more than one inch (1") of soil over the uppermost structural roots. b. Adventitious roots above the structural roots shall be removed. c. The presence of encircling roots shall be checked for and treated as in 9. below. d. The planting hole shall be dug two to four inches (2-4") shallower than the depth of the root ball (based on the location of the structural roots.) e. Soil shall be graded from the surrounding soil to near the top of the root ball to cover the exposed sides of the root ball. f. There shall be no landscape soil placed on top of the root ball.

#### 329312.104 Planting Techniques - Part 3

3. The top 12 to 18 inches (two or three levels) of wire basket shall be removed from the root ball. The bottom half of baskets more than about 40 inches in diameter can be left intact.  
4. All twine and wire at the base of the trunk shall be removed and disposed of offsite.  
5. All synthetic and plastic burlap shall be cut as far down the root ball as possible so soil along the side of the root ball is in direct contact with backfill soil. All synthetic and plastic burlap shall be removed from the site.  
6. Natural burlap shall be removed from the top of the ball and at least one-half (1/2) way down the side of the root ball. Burlap shall be removed from the site.  
7. Fertilizer shall not be added to the back-fill soil.  
8. Containers shall be removed from the root ball prior to planting. Containers shall be removed from the site and properly disposed of.

#### 329312.114 Planting Techniques - Part 4

9. Pot bound (root bound) trees and shrubs shall be avoided.  
a. There shall be no roots greater than 1/10 diameter of the trunk circling more than one-third the way around the top half of the root ball. There shall be no kinked roots greater than 1/5 the trunk diameter. Roots in violation can be cut and the tree accepted at the option of the Owner. b. If it is necessary to plant a pot bound tree or shrub, encircling roots shall be cut to prevent them from girdling the plant in the future. Three (3) or four (4) slices one inch (1") or two inches (2") deep shall be made from the bottom to the top of the root ball.  
10. Mulch shall be placed on the root ball to within 6 to 8 inches of the trunk or main stem(s), and no closer.

#### 329312.124 Planting Techniques - Part 5

11. The planting of clump aspen and other trees (i.e. two or more stems in one root ball) shall be avoided.  
a. If a clump effect is desired, separate trees shall be planted with their root balls touching.  
12. Trees and shrubs shall be moved by their root balls, not their trunks, in such a manner that trunk and branch damage shall be avoided.  
13. Trees and shrubs planted on slopes shall be set so the to-most root in the ball on the uphill side is even with the soil. The side of the root ball on the downhill side shall be well above the surrounding soil and a basin formed to retain water. Sufficient soil shall be applied to cover the sides of the root ball.

### 329 Planting

#### 329312.134 Planting Techniques - Part 6

14. A three inch (3") layer of mulch shall be applied around trees and shrubs to within six to eight (6-8") inches of the trunk or stem (s). A mulched area two feet (2') in diameter for each one inch (1") of tree trunk DBH (with a minimum diameter of eight feet (8') for trees), shall be maintained during the establishment period.

15. If staking is necessary it shall be accomplished using one of the following methods:

- a. Two or three wood dowels shall be driven through the edge of the root ball into the underlying soil for three gallon and smaller trees.
- b. One horizontal 2X2 shall be screwed or nailed to two 2X2's driven 12 inches into undisturbed soil on each side of the root ball. Two sets shall be needed for each root ball.
- c. Two or three (2-3) t-posts driven into a minimum of 12 inches of undisturbed soil.

#### 329312.144 Planting Techniques - Part 7

i. When two (2) posts are specified, these shall be placed on either side of the tree parallel to the prevalent wind direction.

ii. When three (3) posts are specified these shall be placed equidistant (120 degrees) around the tree.

iii. Stakes will be kept clear of branches to prevent rub damage.

iv. Guys shall be flagged with a conspicuous material and replaced as required by the Owner.

16. Feather growth on the lower portion of the trunk shall remain in place for one (1) year after planting.

#### 329312.154 Planting Techniques - Part 8

17. Pruning other than to correct structural problems or remove broken branches shall be avoided.

18. The trunks and large branches and foliage of all pines shall be sprayed with a pyrethrum (organic product), pyrethroid or similar insecticide prior to or within a day of planting by a qualified applicator.

a. A wettable powder formulation shall be used if available.

b. Phytotoxicity resulting from this treatment shall be the responsibility of the applicator.

#### 329312.204 Plant Pit Backfill

On-site soil shall be used for backfill (unless excavated soil is gravel) after being mixed with 1/3 part specified soil amendment. Gravel shall be replaced with topsoil.

#### 329333.034 Fertilizer for Shrub Areas

Fertilizer shall be spread at the rates noted in 2.0 Products, this Section. The area shall again be disced or rototilled at right angles to the first tillage, the shrub and seed beds shall be totally free from rock or clay clods over 1" diameter.

#### 329334.014 Biosol Soil Amendment

Biosol Planters Mix shall be incorporated at the following rates

- a. 1/2 cup per 1 gal Perennial
- b. 1 cup per 5 gal shrub
- c. 2 cups per 2" caliper of tree size of each tree.

#### 329343.104 Watering

All trees and shrubs shall be watered-in using a deep-watering device, immediately after planting, staking and guying. All planting shall be watered the same day it is planted.

### 329 Planting

329401.014 Preparation for Mulch

Perimeter of Shrub Beds shall be graded 3" below top of curbs, walks, edger (see detail), or any other grade level improvements for receiving rock or wood chip mulch. Planted area of shrub bed shall remain at the same grade or higher than adjacent pavements or lawn areas to insure adequate drainage of shrub beds.

329401.014 Installation of Rock Mulch

Place rock in all areas shown to receive mulch on drawings. Spread carefully and evenly to a minimum depth of 3" on areas shown on drawing.

329413.024 Concrete Edging

Concrete Edging shall be extruded into a trench which allows the top of curbing to be 1/2"-1" above adjacent lawn grade. Lines are to be straight, and curbs to be single radius curves with adjoining lines tangent to curve. Curbing installed not in line, grade, or proper curve will be removed and replaced at Contractor expense.

329413.554 Drip Tube Topsoil Backfill - Shrub Beds

Scarify (where directed on plans) areas to receive topsoil to a depth of 12". Contractor shall backfill designated shrub beds with specified amended topsoil to meet proposed grades. Soil is to be compacted to 85% modified proctor (wheel rolled) to minimize settling. Beds are to be filled over drip irrigation tubing to a depth of 2", and above adjacent edge of shrub bed, shaped to form mounded planting areas. Shrub bed perimeter is to be finished with 4:1 slopes from 2" below adjacent concrete to finish grade to form shallow trench to hold mulch. See shrub bed detail.

329443.024 Fertilizer for Trees

Use 4 (four) 21 gram tablets per tree, 7 (seven) 10 gram tablets per tree. Distribute fertilizer tablets evenly at 6" depth in tree well around root ball. Complete backfilling procedure

329443.044 Tree Wrapping Material

All deciduous tree trunks shall be wrapped after October 1, with wrapping material overlapping one and one-half (1 1/2") inches wound from ground line to the second branch, and securely taped at five places, including the top, middle and bottom. Wrap is to be removed the following spring.

329443.054 Staking and Guying

Deciduous trees - place two 6' long steel fence posts at 180° driven vertically into firm soil inside of steel edger tree ring with blade on tree side, run double strand of wire securely through nylon strap around trunk at minimum 1/3 height of tree and back to post, twist to remove slack. Evergreen trees 6' high and larger - Place three 30" long steel post stakes at 120° around tree, drive into firm soil at angle toward tree, run double strand of wire securely through nylon strap around trunk and guy twist to remove slack.

329460.074 Boulders

Boulders are to be placed with the intent of depicting natural formations and to provide retainage of soil where indicated on drawings. The nature of the selected rock will allow the cut side to be placed down, exposing the natural surface. Backfill following placement, compact.

329 Planting

5 Warranty

329223.015 Maintenance Period for Lawn Areas (sod)

The maintenance period shall begin immediately after each area is sodded and continue for thirty days or until final acceptance, whichever is longer. During this time the Contractor shall be responsible for watering, mowing, spraying, weeding, repair of areas damaged by erosion, wind, fire or other causes. Such areas shall be repaired to reestablish the condition and grade of the soil prior to application of the netting or mulch and shall be refertilized and resodded, as directed. After 30 days or until final acceptance of the entire project (whichever is longer), maintenance shall become the responsibility of Owner. The Owner's Representative will direct the Contractor on what sod areas need to be replaced at the final walk-through.

329223.025 Final Acceptance for Lawn Areas

The sodded area shall be accepted on the basis of having uniform live growth over the entire sodded area. Acceptable uniform live growth shall be defined as when scattered dead or brown spots, not greater than one (1) sq. ft., do not exceed five (5%) percent of the sodded area. Gaps created by shrinkage of sod strips shall not be readily visible. Dead or brown spots greater than (1) sq. ft. shall be replaced by the contractor at no cost to the Owner.

329310.015 Protection and Maintenance of Plant Materials

All planting shall be protected and maintained until final acceptance of all work. Maintenance shall include watering, weeding, cultivating, mulching, insect control (through spraying, biological control, or whatever method is recommended by the Tri River Extension Service), tightening and repairs of guys, removal of dead branches, resetting plants to proper grade or upright position, and other necessary operations.

329380.025 Replacement

All replacement planting is to be executed within ten (10) days of notice to replace such plants. Replacement of planting is to be in accordance with the original specifications and its cost considered to be included in the bid price. All areas damaged by tree or shrub planting or replacement operations are to be fully restored to their original condition as specified.

329380.055 Final Inspection and Acceptance

Inspection of the work to determine completion of contract, exclusive of the possible replacement of plants, will be made by the Owners Representative at the conclusion of construction operations. The condition of all planting will be noted and a determination made by the Owners Representative whether maintenance shall continue in any part. Contractor will be notified of acceptance of the work or any deficiencies in the requirements for completion. Plants must be in excellent and vigorous conditions. Excessively pruned trees and shrubs which, in the opinion of the Owners Representative, are no longer excellent representatives of their species shall be replaced prior to Final Acceptance.