



Purchasing Division

Invitation for Bid

IFB-4861-21-DH
Lorey Drive Improvements Project

Responses Due:

January 15, 2021 prior to 3:00pm

Accepting Electronic Responses Only

Responses Only Submitted Through the Rocky Mountain E-Purchasing System (RMEPS)

<https://www.rockymountainbidsystem.com/default.asp>

(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 issue prior to the response deadline. 800-835-4603)

IMPORTANT NOTICE:

Due to the recent developments with increased COVID-19 cases in Mesa County, public in-person bid openings are temporarily being suspended. Bid openings will still take place on their designated date and time virtually, and bid tabulations will still be posted for public view/access. Once the crisis has passed, public in-person bid openings will resume as normal. Attached is the virtual link and information to attend the bid opening. Public may addend through the link, or via phone.

Purchasing Representative:

Duane Hoff Jr., Senior Buyer

duaneh@gjcity.org

970-244-1545

This document has been developed specifically to solicit competitive responses for this solicitation, and may not be the same as previous City of Grand Junction solicitations. All vendors are urged to thoroughly review this solicitation prior to responding. Submittal by **FAX, EMAIL or HARD COPY IS NOT ACCEPTABLE** for this solicitation.

Invitation for Bids

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1. Instructions to Bidders

- 1.1. **Purpose:** The City of Grand Junction is soliciting competitive bids from qualified and interested companies for all labor, equipment, and materials required to complete the Lorey Drive improvements project . All dimensions and scope of work should be verified by Contractors prior to submission of bids.

IFB Questions:

Duane Hoff Jr., Senior Buyer
duaneh@gjcity.org

The City would like to remind all Contractors, Sub-Contractors, Vendors, Suppliers, Manufacturers, Service Providers, etc. that (with the exception of Pre-Bid or Site Visit Meetings) all questions, inquiries, comments, or communication pertaining to any formal solicitation (whether process, specifications, scope, etc.) must be directed (in writing) to the Purchasing Agent assigned to the project, or Purchasing Division. Direct communication with the City assigned Project Managers/Engineers is not appropriate for public procurement, and may result in disqualification.

- 1.2. **Mandatory Site Visit Meeting:** Prospective bidders are required to attend a mandatory site visit meeting on Tuesday, January 5 at 2:00pm. Meeting location shall be at the west end of the project site, located north of West Lake Park, at intersection of Lorey Drive and Ella Street. The purpose of this visit will be to inspect and to clarify the contents of this Invitation for Bids (IFB).
- 1.3. **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 his authorized representative.
- 1.4. **Procurement Process:** Procurement processes shall be governed by the most current version of the City of Grand Junction [Purchasing Policy and Procedure Manual](#).
- 1.5. **Submission:** Each bid shall be submitted in electronic format only, and only through the Rocky Mountain E-Purchasing website (<https://www.rockymountainbidssystem.com/default.asp>). *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 <http://www.gjcity.org/business-and-economic-development/bids/> for details. (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 issue prior to the response deadline. **800-835-4603**)

Please join Solicitation Opening, IFB-4861-21-DH, Lorey Drive Improvements Project on GoToConnect from your computer using the Chrome browser.
<https://my.jive.com/meet/126276653>

You can also dial in using your phone.

US: (571) 317-3116

Access Code: 126-276-653

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

The Offeror 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 Bid price shall be equal to the sum of all extended amount prices. When an item in the Price Bid Schedule provides a choice to be made by the Offeror, Offeror'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 Bid.

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

Bids 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.

Bids 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 Offeror's Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Contractor's Bid Form.

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

- 1.8. Exclusions:** No oral, telephonic, emailed, or facsimile bid will be considered
- 1.9. Contract Documents:** The complete IFB and bidder's response compose the Contract Documents. Copies of bid documents can be obtained from the City Purchasing website, <http://www.gjcity.org/business-and-economic-development/bids/> .
- 1.10. Additional Documents:** The July 2010 edition of the "City Standard Contract Documents for Capital Improvements Construction", Plans, Specifications and other Bid Documents are available for review or download on the Public Works &

Planning/Engineering page at www.gjcity.org. Electronic copies may be obtained on a CD format at the Department of Public Works and Planning at City Hall.

1.11. Definitions and Terms: See Article I, Section 3 of the General Contract Conditions in the *Standard Contract Documents for Capital Improvements Construction*.

1.12. Examination of Specifications: Bidders shall thoroughly examine and be familiar with the project Statement of Work. The failure or omission of any Offeror to receive or examine any form, addendum, or other document shall in no way relieve any Offeror from any obligation with respect to his bid. The submission of a bid shall be taken as evidence of compliance with this section. Prior to submitting a bid, each Offeror shall, at a minimum:

- a. Examine the *Contract Documents* thoroughly;
- b. Visit the site to familiarize themselves 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 Bidder'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 Offeror access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of a Bid. It shall be the Offeror'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 (including without limitation, surface, subsurface and underground utilities) at or contiguous to the site or otherwise which may affect cost, progress or performance of the work and which the Offeror deems necessary to determine its Bid for performing the work in accordance with the time, price and other terms and conditions of the Contract Documents. Location of any excavation or boring made by Offeror shall be subject to prior approval of Owner and applicable agencies. Offeror shall fill all holes, restore all pavements to match the existing structural section and shall clean up and restore the site to its former condition upon completion of such exploration. The Owner reserves the right to require the Offeror to execute an access agreement with the Owner prior to accessing the site.

The lands upon which the Work is to be performed, rights of way, and access thereto, and other lands designated for use by Contractor in performing the Work, are identified on the Drawings.

Information and data reflected in the *Contract Documents* with respect to underground utilities at or contiguous to the site are based upon information and data furnished to

the Owner and the Engineer by the owners of such underground utilities or others, and the Owner does not assume responsibility for the accuracy or completeness thereof, unless it is expressly provided otherwise in the *Contract Documents*.

By submission of a Bid, the Offeror shall be conclusively presumed to represent that the Offeror has complied with every requirement of these Instructions to Bidders, 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.

- 1.13. **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.
- 1.14. **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 <http://www.gjcity.org/business-and-economic-development/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.
- 1.15. **Taxes:** The Owner is exempt from State retail and Federal tax. The bid price must be net, exclusive of taxes.
- 1.16. **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. Bids shall reflect this method of accounting for sales and use taxes on materials, fixtures and equipment.
- 1.17. **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 Bidder, upon request of the Purchasing Representative, agrees to an extension.
- 1.18. **Exceptions and Substitutions:** Bidders taking exception to the specifications and/or scope of work shall do so at their own risk. The Owner reserves the right to accept or reject any or all substitutions or alternatives. When offering substitutions and/or alternatives, Bidder must state these exceptions in the section pertaining to that area. Exception/substitution, if accepted, must meet or exceed the stated intent and/or specifications and/or scope of work. The absence of such a list shall indicate that the Bidder has not taken exceptions, and if awarded a contract, shall hold the Bidder responsible to perform in strict accordance with the specifications and/or scope of work contained herein.
- 1.19. **Collusion Clause:** Each bidder by submitting a bid 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 bids shall be rejected if there is evidence or reason for believing that collusion exists among bidders. The Owner may, or may not, accept future bids for the same services or commodities from participants in such collusion.

- 1.20. Disqualification of Bidders:** A Bid will not be accepted from, nor shall a Contract be awarded to, any person, firm, 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.

Bidders may be required to submit satisfactory evidence that they are responsible, have a practical knowledge of the project bid upon and that they have 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 Bidder and Bid:

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

- 1.21. Public Disclosure Record:** If the bidder has knowledge of their employee(s) or sub-contractors having an immediate family relationship with a City employee or elected official, the bidder must provide the Purchasing Representative with the name(s) of these individuals. These individuals are required to file an acceptable "Public Disclosure Record", a statement of financial interest, before conducting business with the City.

2. General Contract Conditions for Construction Projects

- 2.1. The Contract:** This Invitation for Bid, 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 (City) and Contractor. City will provide the contract. By executing the contract, the Contractor represents that he/she has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents. The Contract Documents are complementary, and what is required by any one, shall be as binding as if required by all. The intention of the documents is to include all labor, materials, equipment and other items necessary for the proper execution and completion of the scope of work as defined in the technical specifications and drawings contained

herein. All drawings, specifications and copies furnished by the City are, and shall remain, City property. They are not to be used on any other project, and with the exception of one contract set for each party to the contract, are to be returned to the owner on request at the completion of the work.

- 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 his 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 himself 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 his reasonable opinion, he considers it necessary or advisable to insure the proper implementation of the intent of the Contract Documents, he 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 their 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 his 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 he 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 his authorized representative.
- 2.7. Award of Sub-Contractors & Other Contracts for Portions of the Work:** Contractor shall submit with their bid 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 their 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 their 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. Quantities of Work and Unit Price:** Materials or quantities stated as unit price items in the Bid are supplied only to give an indication of the general scope of the Work, and are as such, estimates only. The Owner does not expressly or by implication agree that the actual amount of Work or material will correspond therewith, and reserves the right after award to increase or decrease the quantity of any unit item of the Work without a change in the unit price except as set forth in Article VIII, Section 70 of the *General Contract Conditions*. The City also reserves the right to make changes in the Work (including the right to delete any bid item in its entirety or add additional bid items) as set forth in Article VIII, Sections 69 through 71 of the *General Contract Conditions*.
- 2.9. 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 Bids unless the Offeror submits a written request for approval to the City Purchasing Division at least ten (10) days prior to the date for receipt of Bids. 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 Offeror 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 Bids, such approval will be set forth in an Addendum. Offerors shall not rely upon approvals made in any other manner.
- 2.10. Supervision and Construction Procedures:** The Contractor shall supervise and direct the work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work under the contract.
- 2.11. 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 his defective work.

- 2.12. 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 bearing on the performance of the work. If the Contractor observes that any of the Contract Documents are at variance in any respect, he shall promptly notify the Owner in writing, and any necessary changes shall be adjusted by approximate modification. 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, he shall assume full responsibility and shall bear all costs attributable.
- 2.13. Responsibility for Those Performing the Work:** The Contractor shall be responsible to the Owner for the acts and omissions of all his employees and all sub-contractors, their agents and employees, and all other persons performing any of the work under a contract with the Contractor.
- 2.14. 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.
- 2.15. Cleanup:** The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of work he shall remove all his waste materials and rubbish from and about the project, as well as all his tools, construction equipment, machinery and surplus materials.
- 2.16. Insurance:** The Contractor shall secure and maintain such insurance policies as will provide the coverage and contain other provisions specified in the General Contract Conditions, or as modified in the Special Contract Conditions.

The Contractor shall file a copy of the policies or Certificates of Insurance acceptable to the City with the Engineer within ten (10) Calendar Days after issuance of the Notice of Award. These Certificates of Insurance shall contain a provision that coverage afforded under the policies shall not be canceled unless at least thirty (30) Calendar Days prior written notice has been given to the City.

- 2.17. 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 cost which may be obtained against the Owner growing out of such injury or damages.

- 2.18. Miscellaneous Conditions: Material Availability:** Contractors must accept responsibility for verification of material availability, production schedules, and other pertinent data prior to submission of bid. It is the responsibility of the bidder to notify the Owner immediately if materials specified are discontinued, replaced, or not available for an extended period of time. **OSHA Standards:** All bidders agree and warrant that services 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 services do not conform to OSHA standards, the Owner may require the services to be redone at no additional expense to the Owner.
- 2.19. 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 Bidder 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 Bid 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.
- 2.20. 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.
- 2.21. 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 he 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.
- 2.22. Bid Bond:** Each Bid shall as a guaranty of good faith on the part of the Bidder be accompanied by a Bid Guaranty consisting of: a certified or cashier's check drawn on an approved national bank or trust company in the state of Colorado, and made payable without condition to the City; or a **Bid Bond** written by an approved corporate surety in favor of the City. The amount of the Bid Guaranty shall not be less than 5% of the total Bid amount. Once a Bid is accepted and a Contract is awarded, the apparent successful bidder has ten calendar days to enter into a contractor in the form prescribed and to furnish the bonds with a legally responsible and approved surety. Failure to do so will result in forfeiture of the Bid Guaranty to the City as Liquidated Damages.

Each bidder shall guaranty its total bid price for a period of sixty (60) Calendar Days from the date of the bid opening.

- 2.23. Performance & Payment Bonds:** Contractor shall furnish a Performance and a Payment Bond, each in an amount at least equal to that specified for the contract amount as security for the faithful performance and payment of all Contractor's obligations under the Contract Documents. These bonds shall remain in effect for the duration of the Warranty Period (as specified in the Special Conditions). Contractor shall also furnish other bonds that may be required by the Special Conditions. All bonds shall be in the forms prescribed by the Contract Documents and be executed by such sureties as (1) are licensed to conduct business in the State of Colorado and (2) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff, Bureau of Accounts, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the Authority Act. If the surety on any bond furnished by the Contractor is declared bankrupt, or becomes insolvent, or its rights to do business in Colorado are terminated, or it ceases to meet the requirements of clauses (1) and (2) of this section, Contractor shall within five (5) days thereafter substitute another bond and surety, both of which shall be acceptable to the City.
- 2.24. Retention:** The Owner will deduct money from the partial payments in amounts considered necessary to protect the interest of the Owner and will retain this money until after completion of the entire contract. The amount to be retained from partial payments will be five (5) percent of the value of the completed work, and not greater than five (5) percent of the amount of the Contract. When the retainage has reached five (5) percent of the amount of the Contract no further retainage will be made and this amount will be retained until such time as final payment is made.
- 2.25. Liquidated Damages for Failure to Enter Into Contract:** Should the Successful Bidder fail or refuse to enter into the Contract within ten Calendar Days from the issuance of the Notice of Award, the City shall be entitled to collect the amount of such Bidder's Bid Guaranty as Liquidated Damages, not as a penalty but in consideration of the mutual release by the City and the Successful Bidder of all claims arising from the City's issuance of the Notice of Award and the Successful Bidder's failure to enter into the Contract and the costs to award the Contract to any other Bidder, to readvertise, or otherwise dispose of the Work as the City may determine best serves its interest.
- 2.26. Liquidated Damages for Failure to Meet Project Completion Schedule:** If the Contractor does not achieve Final Completion by the required date, whether by neglect, refusal or any other reason, the parties agree and stipulate that the Contractor shall pay liquidated damages to the City for each such day that final completion is late. As provided elsewhere, this provision does not apply for delays caused by the City. The date for Final Completion may be extended in writing by the Owner.

The Contractor agrees that as a part of the consideration for the City's awarding of this Contract liquidated damages in the daily amount of **\$900.00** is reasonable and necessary to pay for the actual damages resulting from such delay. The parties agree that the real costs and injury to the City for such delay include hard to quantify items such as: additional engineering, inspection and oversight by the City and its agents; additional contract administration; inability to apply the efforts of those employees to the other work of the City; perceived inefficiency of the City; citizens having to deal with the construction

and the Work, rather than having the benefit of a completed Work, on time; inconvenience to the public; loss of reputation and community standing for the City during times when such things are very important and very difficult to maintain.

The Contractor must complete the Work and achieve final completion included under the Bid Schedule in the number of consecutive calendar days after the City gives is written Notice to Proceed. When the Contractor considers the entire Work ready for its intended use, Contractor shall certify in writing that the Work is fully complete. Final Completion date is the date by which the Contractor shall have fully completed all clean-up, and all items that were identified by the City in the inspection for final completion. Unless otherwise stated in the Special Conditions, for purposes of this liquidated damages clause, the Work shall not be finished and the Contract time shall continue to accrue until the City gives its written Final Acceptance.

If the Contractor shall fail to pay said liquidated damages promptly upon demand thereof after having failed to achieve Final Completion on time, the City shall first look to any retainage or other funds from which to pay said liquidated damages; if retainage or other liquid funds are not available to pay said liquidated damages amounts, the Surety on the Contractor's Performance Bond and Payment Bond shall pay such liquidated damages. In addition, the City may withhold all, or any part of, such liquidated damages from any payment otherwise due the Contractor.

Liquidated damages as provided do not include any sums to reimburse the City for extra costs which the City may become obligated to pay on other contracts which were delayed or extended because of the Contractor's failure to complete the Work within the Contract Time. Should the City incur additional costs because of delays or extensions to other contracts resulting from the Contractor's failure of timely performance, the Contractor agrees to pay these costs that the City incurs because of the Contractor's delay, and these payments are separate from and in addition to any liquidated damages.

The Contractor agrees that the City may use its own forces or hire other parties to obtain Final Completion of the work if the time of completion has elapsed and the Contractor is not diligently pursuing completion. In addition to the Liquidated Damages provided for, the Contractor agrees to reimburse the City for all expenses thus incurred.

2.27. 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.

2.28. 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, he shall restore, at his 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.

- 2.29. 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.
- 2.30. 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, he 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 precede 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.
- 2.31. 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.
- 2.32. 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.
- 2.33. 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 competed. The Contractor shall bear all costs of correcting such rejected work, including the cost of the Owner's additional services 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 discover 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, he 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.

- 2.34. Amendment:** No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All amendments to the contract shall be made in writing by the Owner.
- 2.35. Assignment:** The Contractor shall not sell, assign, transfer or convey any contract resulting from this IFB, in whole or in part, without the prior written approval from the Owner.
- 2.36. Compliance with Laws:** Bids must comply with all Federal, State, County and local laws governing or covering this type of service and the fulfillment of all ADA (Americans with Disabilities Act) requirements.
- 2.37. 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.
- 2.38. Conflict of Interest:** No public official and/or City/County employee shall have interest in any contract resulting from this IFB.
- 2.39. Contract Termination:** This contract shall remain in effect until any of the following occurs: (1) contract expires; (2) completion of services; (3) acceptance of services 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.
- 2.40. Employment Discrimination:** During the performance of any services per agreement with the Owner, the Contractor, by submitting a Bid, agrees to the following conditions:
- 2.40.1.** The Contractor shall 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.
- 2.40.2.** The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, shall state that such Contractor is an Equal Opportunity Employer.

- 2.40.3.** 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.
- 2.41. 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.
- 2.42. Immigration Reform and Control Act of 1986 and Immigration Compliance:** The Offeror certifies that it does not and will not during the performance of the contract employ illegal alien workers or otherwise violate the provisions of the Federal Immigration Reform and Control Act of 1986 and/or the immigration compliance requirements of State of Colorado C.R.S. § 8-17.5-101, *et.seq.* (House Bill 06-1343).
- 2.43. Ethics:** The Contractor shall not accept or offer gifts or anything of value nor enter into any business arrangement with any employee, official, or agent of the Owner.
- 2.44. Failure to Deliver:** In the event of failure of the Contractor to deliver services in accordance with the contract terms and conditions, the Owner, after due oral or written notice, may procure the services from other sources and hold the Contractor responsible for any costs resulting in additional purchase and administrative services. This remedy shall be in addition to any other remedies that the Owner may have.
- 2.45. 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 at any time in accordance with its terms.
- 2.46. 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.
- 2.47. 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 Tax or any other amounts for benefits to the Contractor. Further, the Owner shall not provide to the Contractor any insurance coverage or other benefits, including Workers' Compensation, normally provided by the Owner for its employees.
- 2.48. Nonconforming Terms and Conditions:** A bid that includes terms and conditions that do not conform to the terms and conditions of this Invitation for Bid is subject to rejection as non-responsive. The Owner reserves the right to permit the Contractor to withdraw nonconforming terms and conditions from its bid 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 Bid 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 Bids or irregularities of any kind which may tend to make the Bid 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 Subcontractors used in the Bid preparation as may be required in the Solicitation Documents;
- g. Submission of a Bid 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 Bid with any other bid or contract; and
- i. Failure to calculate Bid prices as described herein.

2.49. Evaluation of Bids and Offerors: The Owner reserves the right to:

- reject any and all Bids,
- waive any and all informalities,
- take into account any prompt payment discounts offered by Bidder,
- negotiate final terms with the Successful Bidder,
- 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 Bids.

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 Bids.

The Owner may consider the qualifications and experience of Subcontractors 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 Subcontractors 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 Bid and to establish the responsibility, qualifications and financial ability of the Offeror, proposed Subcontractors 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 Offeror shall furnish the Owner all information and data requested by the Owner to determine the ability of the Offeror to perform the Work. The Owner reserves the right to reject the Bid if the evidence submitted by, or investigation of such Offeror fails to satisfy the Owner that such Offeror is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein.

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

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

If the Contract is to be awarded, it will be awarded to the Offeror 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 Bid Schedules or alternates, either in whole or in part.

2.50. Award of Contract: Unless otherwise indicated, a single award will be made for all the bid items in an individual bid schedule. In the event that the Work is contained in more than one Bid Schedule, the City may award Schedules individually or in combination. In the case of two Bid Schedules which are alternative to each other, only one of such alternative Schedules will be awarded. Within forty-five (45) Calendar Days of Bid Opening, the City will issue a Notice of Award to the Successful Bidder 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 Bidder 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 Bidder and the City and the Successful Bidder shall have no rights at law or in equity until the Contract has been duly executed by the City.

The Successful Bidder'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 Bid Guaranty. The award of Contract may then be made to the next qualified Bidder in the same manner as previously prescribed.

- 2.51. Ownership:** All plans, prints, designs, concepts, etc., shall become the property of the Owner.
- 2.52. 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.
- 2.53. 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 IFB.
- 2.54. Remedies:** The Contractor and Owner agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.
- 2.55. 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.
- 2.56. Expenses:** Expenses incurred in preparation, submission and presentation of this IFB are the responsibility of the company and cannot be charged to the Owner.
- 2.57. Sovereign Immunity:** The Owner specifically reserves its right to sovereign immunity pursuant to Colorado State Law as a defense to any action arising in conjunction to this agreement.
- 2.58. 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 Statutes 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.
- 2.59. 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 Bid. The quantities furnished in this bid document are for only 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 their own awards on their respective Purchase Orders through their purchasing office or use their 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 their specific delivery and invoicing instructions.

- 2.60. 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).

2.60.1. "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 moneys.

3. Statement of Work

- 3.1. GENERAL:** The City of Grand Junction is soliciting competitive bids from qualified and interested companies for all labor, equipment, and materials required to perform the Lorey Drive street improvement project. All dimensions and scope of work should be verified by Contractors prior to submission of bids.

NOTE: The descriptions of the pay items listed in the Price Bid Schedule for this Project may not agree with those listed in the Standard Specifications. Payment for all Work performed, as required in the Contract Documents, will be in accordance with the items and units listed in the Price Bid Schedule.

The performance of the Work for this Project shall conform to the General Contract conditions presented in the City of Grand Junction's Standard Contract Documents for Capital Improvements Construction, revised July 2010, except as specifically modified or supplemented herein or on the Construction Drawings.

3.2. PROJECT DESCRIPTION: This project generally consists of the improvements to a portion of Lorey Drive generally located between 1st Street and Ella Street. It includes demolition of sidewalk, curb and gutter, and asphalt, as well as the new construction of sidewalk, curb and gutter, storm drain improvements, ADA ramps, and the construction of a new asphalt pavement section and overlay. All dimensions and scope of work should be verified by Contractors prior to submission of bids.

3.3. SPECIAL CONDITIONS & PROVISIONS:

3.3.1 Mandatory Site Visit Meeting: Prospective bidders are required to attend a mandatory site visit meeting on Tuesday, January 5 at 2:00pm. Meeting location shall be at the west end of the project site, located north of West Lake Park, at intersection of Lorey Drive and Ella Street. The purpose of this visit will be to inspect and to clarify the contents of this Invitation for Bids (IFB).

3.3.2 QUESTIONS REGARDING SOLICIATION PROCESS/SCOPE OF WORK:

Duane Hoff Jr., Senior Buyer
City of Grand Junction
duaneh@gjcity.org

3.3.3 Project Manager: The Project Manager for the Project is Eric Mocko, Project Engineer, who can be reached at (970)256-4017. 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
Department of Public Works and Planning
Attn: Eric Mocko, Project Manager
250 North Fifth Street
Grand Junction, CO 81501

3.3.4 Affirmative Action: The Contractor is not required to submit a written Affirmative Action Program for the Project.

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 services.

3.3.7 Contract: A binding contract shall consist of: (1) the IFB and any amendments thereto, (2) the bidder's response (bid) to the IFB, (3) clarification of the bid, if any, and (4) the City's Purchasing Department's acceptance of the bid 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 bidder and the City Purchasing Division or by a modified Purchase Order prior to the effective date of such modification. The bidder 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 45 Calendar Days from the starting date specified in the Notice to Proceed.

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 Monday – Friday between the hours of 8:00 AM to 5:00 PM.

3.3.10 Licenses and Permits: Contractor is responsible for obtaining all necessary licenses and permits required for Construction, at Contractor's expense. See Section 2.12. Contractor shall supply to Owner all copies of finalized permits.

3.3.11 Permits: The following permits are required for the Project and will be obtained by the City at no cost to the Contractor:

None

The following permits are required for the Project and shall be obtained and paid for by the Contractor, with the costs included in the total bid price for the Project:

None

3.3.12 City Furnished Materials: The City will furnish the following materials for the Project:

- Door-hanger notices informing residents of the upcoming milling, overlay, or concrete work, planned dates of the work, and parking restrictions. These shall be hung on doors at least two, but not more than 7 days prior to the work at each location. In the event that door hangers are not distributed as per these special conditions and a vehicle needs to be removed from the project site the Contractor shall be responsible for the costs associated with the relocation of the vehicle.
- Damaged or outdated manhole ring and covers and Water Valve boxes and lids that need to be replaced. The City will furnish the above mentioned. The Contractor shall be responsible for picking up the materials from Castings Inc.

3.3.13 Project Newsletters: A newsletter for the Project will be prepared and distributed by the City, as necessary. It will include general information about the Project including interruptions in utility services, street closures, parking restrictions, project schedule, and the names and telephone numbers of the contacts for the City and Contractor. The newsletter will be mailed approximately one week before the Contractor commences work.

The Contractor will be responsible for notifying all businesses and / or residents located adjacent to the work. Door hanger notifications shall be distributed at least two (2) working days prior to the day the work is scheduled to begin.

3.3.14 Project Sign: Project signs, if any, will be furnished and installed by the City.

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

3.3.16 Stockpiling Materials and Equipment: All stockpiling/storage shall be in accordance with General Contract Condition Section 51.

3.3.17 Traffic Control: The Contractor shall provide and maintain traffic control in accordance with the approved Traffic Control Plan and the Manual on Uniform Traffic Control Devices. A Traffic Control Plan shall be prepared by the Contractor and reviewed by the City two days prior to the pre-construction meeting.

3.3.18 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.

3.3.19 Quality Control Testing: Contractor/Supplier shall perform Quality Control (QC) testing on the Asphalt. The Contractor shall provide QC throughout the Contract, with the use of their own QC Technicians or the use of a certified laboratory. In accordance with Section 401.06.3 of the City of Grand Junction Standard Specifications for Road

and Bridge Construction, results of all QC tests shall be submitted to the Project Engineer and the City's Quality Assurance (QA) Technician within 4 hours of the time of sampling. Failure to do so may require that paving be suspended until all sampling results have been received, reviewed, and approved. The Contractor shall supply QC Lab personnel for night work for comparison of test data. If lab personnel is not supplied paving operations will be suspended until one is available. QC Field personnel shall remain on site during the duration of the paving operation or until in-place density are met.

The Contractor/Supplier shall perform QC testing on all concrete. The City will perform QA testing for concrete.

The Contractor, at their own discretion, may elect to forgo the soils QC field testing (in-place soils density) for placement of Embankment and Aggregate Base Course. QA testing for these items will be performed by the City, and laboratory results for submittal purposes will be provided by the contractor. However, if a sufficient number of failed test results are observed by the City and/or it's QA testing representatives, written notification will be provided to the contractor, and back payment to the City for failed location re-tests will be required.

3.3.20 Schedule of Submittals: Contractor shall deliver these submittals at least two days prior to the pre-construction meeting:

- Traffic Control Plans
- Project Schedule
- Concrete Mix Design
- Class 6 Base Course
- Asphalt Mix Design

3.3.21 Uranium Mill Tailings: It is anticipated that radioactive mill tailings will not be encountered on this Project.

3.3.22 Fugitive Petroleum or Other Contamination: It is anticipated that soil contamination from fugitive petroleum or other contaminants will not be encountered with the Project.

3.3.23 Excess Material: All excess materials shall be disposed in accordance with General Contract Condition Section 50. All asphalt millings shall be delivered to the City Storage Yard located adjacent to the City Cemetery at 2620 Legacy Way, and become the property of the City of Grand Junction.

3.3.24 Existing Utilities and Structures: Utilities were not potholed during design of this project. The location of existing utilities and structures shown on the Plans is approximate with the information gathered during design. It is the responsibility of the Contractor to pothole/locate and protect all structures and utilities in accordance with General Contract Condition Section 37.

3.3.25 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.

3.3.26 Survey: The Contractor shall give the City survey crew a minimum of 72 hours' notice for all requested survey.

3.3.27 Work to be Performed by the City (Prior to Construction):

- None

3.3.28 Existing Concrete Sidewalks, Pans, Fillets, Curbs and Gutters: The existing sidewalks, pans, fillets, curb and gutter are in good serviceable condition. In most instances the installation of new sidewalk and pavement will be adjacent to existing concrete. The Contractor will need to protect all concrete adjacent to construction. If the concrete is damaged during construction the Contractor will be responsible for its replacement at no cost to the City. The Contractor, the City Project Inspector, and/or the City Project Manager will walk and record any concrete that is deemed to be damaged before construction has started.

3.3.29 ACI Concrete and Flatwork Finisher and Technician: Hand finishing concrete will be permitted only when performed under the direct supervision of a craftsman holding the following certificate: ACI Concrete Flatwork Finisher and Technician (ACICFFT) or other Flatwork Finisher certification program approved by the City Engineering Manager.

3.3.30 Tack Coat: Tack Coat will be required between the existing asphalt and the leveling asphalt, existing asphalt and new overlay, and between leveling asphalt and new overlay asphalt. The tack coat shall meet the requirements of Section 407 of the *Standard Specifications for Road and Bridge Construction*, as modified, herein. The cost of the tack coat will be considered incidental to the work and will not be paid for separately.

3.3.31 Temporary Pavement Marking Tape: The Contractor shall be responsible for furnishing and placing temporary pavement marking tape prior to the final roller pass. Pavement marking tape shall be placed on the seams of the new asphalt as determined by the record of existing striping or new striping locations per provided project plans. The cost of the marking tape and labor to install will be considered incidental to the work and will not be paid for separately.

3.3.32 Transverse Milling: Butt joints (Transverse Milling) shall be placed in all locations where new asphalt will be joined to existing pavement. The location and width of all butt joints will be designated by the Project Engineer or his representative.

3.3.33 Manholes and Water Valves: It shall be the contractors' responsibility to accurately record and adjust all manholes, valve boxes and survey monuments to final grade

3.4. SCOPE OF WORK:

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION:

The *City of Grand Junction Standard Specifications for Road and Bridge Construction* are hereby modified or supplemented for this Project by the following modifications to *The Standard Specifications for Road and Bridge Construction*, State Department of Highways, Division of Highways, State of Colorado:

SP-1 SECTION 202 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Section 202 of the Standard Specifications is hereby revised for this project as follows:

Subsection 202.12, add the following:

Locations of saw cuts shall be determined and directed by the Construction Inspector or the Engineer. Saw cuts shall be incidental to work.

SP-2 SECTION 208 – EROSION CONTROL

For inlet protection along street sections, the only approved inlet protections shall be a filter sock.

Add the following to this subsection:

208.05(n) Add the Following:

Concrete Washout Structure:

Water for clean-up of equipment used in the mixing or distribution of concrete shall not be discharged to any storm water facilities, drain ways, or deposited into any open fields. The waste water used shall either be wasted on an open excavation area or in an onsite detention facility for future disposal.

Subsection 208.08 Payment for Best Management Practices.

The disposal of wash water shall be considered incidental to the concrete and will not be measured for or paid for separately.

Add the following to this subsection:

<u>Pay Item</u>	<u>Pay Unit</u>
Erosion Control (Complete In Place)	Lump Sum

SP-3 SECTION 401 – PLANT MIX PAVEMENTS - GENERAL

**REVISION OF SECTION 401
PLANT MIX PAVEMENTS**

Section 401 of the Standard Specifications are hereby revised for this project as follows:

401.01 Description.

Add the following:

This work shall consist of providing a Hot Mix Asphalt (HMA) to be placed as shown on the plans, or as directed by the Owner. The Contractor shall be responsible for Process Control (PC) of the HMA; including the design, and control of the quality of the material incorporated into the project.

401.02 Composition of Mixtures.

Delete subparagraph (a) *Mix Design* and replace with the following:

A Job Mix Formula (JMF) design shall be submitted for each mixture required, at least 10 calendar days prior to placing any mix on the project, for acceptance by the Owner. JMF's previously approved by CDOT within the past six months may be utilized. The JMF design shall be determined using AASHTO T-312 or CP-L 5115 for the Method of Mixture Design. Grading ST, SX, and S shall be designed using 100mm molds. The job mix gradation shall be wholly within the Master Range Table in subsection 703.04 before the tolerances shown in Section 401 are applied.

Designs shall be developed and performed in a materials laboratory that meets the requirements set forth by AASHTO Materials Reference Laboratory (AMRL) for all testing procedures. The design shall be stamped and signed by a Professional Engineer licensed in the State of Colorado. In addition, the Contractor shall submit, as part of the mixture design, laboratory data documents to verify the following:

- Gradation, specific gravity, source and description of individual aggregate and properties, and the final blend.
- Aggregate physical properties.
- Source and Grade of the Performance Graded Binder.
- Proposed Design Job Mix: aggregate and additive blending, final gradation, optimum binder content.
- Mixing and compaction temperatures used.
- Mixture properties shall be determined with a minimum of four binder contents.

The JMF for each mixture shall establish a single percentage of aggregate passing each required sieve size, a single percentage of asphalt cement to be added to the aggregate, and a single temperature for the mixture at the discharge point of the plant.

The Owner reserves the right to verify the asphalt supplier's mix design for each JMF design utilizing materials produced and stockpiled. The asphalt supplier shall provide, at no cost, a sufficient quantity of each aggregate, mineral filler, Recycled Asphalt Pavement (RAP), and additive for the required laboratory tests, as well as all Certificates of Conformance/ Compliance at any time on any material used. The Asphalt Supplier shall provide copies of quality control testing results during the production of HMA used within one business day from the sampling date.

Mixture design of HMA shall meet the requirements of Table 403-1 and Table 403-2 in the Revision to Section 403. For mixes requiring a design gyration of 100 (ESALs greater than 3 million) the Project Special Conditions should be used. This gyration is not recommended for the majority of roads within Mesa County.

Delete subparagraph (b) *Mixtures Furnished to the Project* and replace with the following:

Production verification shall occur prior to, or during, the start of the project. Volumetric properties of the mix shall be verified by LabCAT Level C Certified Technicians. If the mix was produced for another project within the last 90 days, data from that project can be submitted for verification. All mixtures furnished for the project shall conform within the ranges of tolerance listed in Table 401.02A. The mix verification test reports shall be submitted to the Owner prior to mix placement.

TABLE
401.02A
Production Mix
Tolerances

<u>Property</u>	<u>Tolerance</u>
<u>Asphalt Cement Content</u>	<u>± 0.3%</u>
<u>VMA</u>	<u>± 1.2%</u>
<u>Air Voids</u>	<u>± 1.2%</u>

Verification testing for binder content, gradation and physical properties shall be performed at the frequencies listed in Table 401.23-1.

There shall be no substitutions of materials allowed during production, unless approved in advance by the Owner. All substitutions will require checkpoint verification. If the checkpoint differs from the Job Mix Formula (JMF), a new mix design will be required. Upon request of the Owner, the binder grade may be changed by one available binder grade level without requiring a new mix design.

Should a change in the source of any material used in the production of HMA (aggregate, mineral filler, lime, or performance graded asphalt binder) occur, a one point verification test (at optimum binder content) of the mix must be performed to verify that the applicable criteria shown on Table 403-1 (HMA) and Table 403-2 (VMA) of Revision to Section 403 are still met. If this testing shows noncompliance, the Contractor shall establish a new job mix design and obtain approval by the Owner before the new HMA is used.

Add the following new subparagraphs:

(c) *Reclaimed Asphalt Pavement (RAP)*. RAP shall be allowed in HMA up to a maximum binder replacement of 23 percent, unless otherwise specified in the contract, and provided that all the specifications for the HMA are met. Fine Aggregate Angularity requirements shall apply only to the virgin fraction of the fine aggregate. RAP shall be of uniform quality and gradation with a maximum size no greater than the nominal aggregate size of the mix. RAP shall not contain clay balls, vegetable matter, or other deleterious substances.

The Contractor shall have an approved mix design for the amount of RAP to be used. The AC content of the RAP utilized in the Contractor RAP mix design shall be the average AC content determined in accordance with 1B or 1C, below, or alternatively, a minimum of five samples of the Contractors RAP stockpile may be sampled and the average AC content of the RAP be determined using AASHTO T-164, Method A or B, or in accordance with 1C below. The Contractor shall determine the total binder replaced by the binder in the RAP pursuant to the following equation:

$$\text{Total Binder Replaced} = (A \times B) \times 100/E$$

Where:

A = RAP % Binder Content *

B = RAP % in Mix *

E = Total Effective Binder Content *

* in decimal format (i.e. 2% is 0.02)

The Total Binder Replaced by the binder in the RAP shall not exceed 23 percent of the effective binder content of either the mix design or the produced mix.

The Contractor shall have an approved Quality Control (QC) Plan that details how the RAP will be processed and controlled. The QC plan shall address the following:

1. RAP Processing Techniques. This requires a schematic diagram and narrative that explains the processing (crushing, screening, and rejecting) and stockpile operation for this specific project.
2. Control of RAP Asphalt Binder Content (AASHTO T-164, Method A or B). RAP Asphalt Binder Content may also be determined in accordance with CP-L 5120, provided an RAP AC content correction factor is determined through correlation testing with AASHTO T-164, Method A or B. The correction factor shall be determined by performing correlation testing on the first five samples of the RAP AC content, then at a frequency of one for every five AC content tests thereafter. The correction factor shall be determined by calculating the average difference in AC content between CP-L 5120 and AASHTO T-164, Method A or B, and applying the correction to the AC content determined in accordance with CP-L 5120 :
Frequency: 1 per 1000 tons of processed RAP material (minimum five tests)
3. (Alternate) The Contractor may propose a RAP asphalt content correction factor to be used in conjunction with CP-L 5120. The proposed CP-L 5120 RAP asphalt content correction factor shall be used with all RAP asphalt contents tested for the mixture design and quality control sampling and testing. The methodology of the proposed CP-L 5120 RAP asphalt content correction factor shall be outlined in detail in the approved RAP QC Plan. At a minimum, the proposed CP-L 5120 correction factor shall identify the principal source locations of the RAP aggregate, gradation of the material tested, and specific ignition oven serial number used in all the RAP asphalt content testing. The RAP source locations, material gradation, and specific equipment used shall substantiate the CP-L 5120 asphalt content correction factor used for the testing. The substantiation must be from data gathered from historical information or specific asphalt content correction data obtained from tests performed on similar virgin aggregate sources, virgin material gradations, and the specific equipment used.
4. Control of RAP Gradation (CP31 or AASHTO T-30):
Frequency: 1 per 1000 tons of processed RAP material (minimum three tests, sampling from belt feed and not stockpile)
5. Process Control Charts shall be maintained for binder content and each screen listed in Table 401.2C, during addition of any RAP material to the stockpile. The Contractor shall maintain separate control charts for each RAP stockpile. The control charts shall be displayed and shall be made available, along with RAP AC extraction testing laboratory reports to the Engineer upon request

The processed RAP must be 100 percent passing the 31.5 mm (1¼ inch) sieve. The aggregate obtained from the processed RAP shall be 100 percent passing the 25.0 mm (1 inch) sieve. The aggregate and binder obtained from the processed RAP shall be uniform in all the measured parameters in accordance with the following:

**Table 401.2C
RAP Binder & Aggregate Uniformity Tolerances**

Element	Standard Deviation
Binder Content	0.5
% Passing 3/4"	4.0
% Passing 1/2"	4.0
% Passing 3/8"	4.0
% Passing #4	4.0
% Passing #8	4.0
% Passing #30	3.0
% Passing #200	1.5

(d) *Warm Mix Asphalt (WMA) Technology.* The Contractor may choose to use a WMA Technology that is included on the CDOT approved products list (<https://www.codot.gov/business/apl/asphalt-warm-mix.html>).

WMA technologies (additive or foaming) used shall be identified on the mix design, indicating usage as a workability additive and/or anti-strip additive. WMA shall be submitted and approved by the Owner for use on a project.

The addition of WMA additives during production, including foaming, shall be controlled by a calibrated metering system interlocked with the plant's controls per the manufacturers' recommendation. Additives may be added at the asphalt terminal at the dosage rate recommended by the WMA technology provider. The foaming process mixes water and binder to create microscopic steam bubbles. Typical water injection rate is $\leq 2\%$ of binder flow rate or per manufacturers' recommendation.

(e) *Anti-Strip Additives.* Anti-Strip shall be added into the HMA. Anti-Strip agents may be liquids (added to the binder), lime (added to the aggregates) or other products, and shall be submitted for approval by the Owner.

The minimum value for Tensile Strength Ratio (TSR) tested in accordance with Table 401.21-1 shall be 80% for the mix design and 70% during production.

There are various types of liquid Anti-Strips. Amine and Organo-silane type liquid Anti-Strip additives are physically mixed with the asphalt binder. Liquid Anti-Strip agents shall be added per the manufactures recommendations. Typical product dosages are provided in Table 401.2E-1.

**TABLE 401.2E-1
Liquid Anti-Strip Dosage Rates**

Type	Typical Dosage Rate
Amine	0.4% to 0.8%

Organo-silane	0.05% to 0.15%
---------------	----------------

WMA chemical products which display Anti-Stripping characteristics will be classified, and identified on the mix design, as a liquid Anti-Strip additive.

When a liquid Anti-Strip additive is used, the Contractor shall include the following information with the mix design submission:

- Information on the type of liquid Anti-Strip additive to be supplied, including product name, product manufacturer/supplier
- Additive rate
- TSR values for the treated mixes
- The proposed method for incorporating the additive into the plant produced mix

401.03 Aggregates.

Add the following:

The percentage of fractured faces shall be as shown in Table 403.1 of the Revision to Section 403.

Grading ST (3/8" nominal) mixes may be used for leveling, maintenance, bike paths, sidewalks and thin lift overlays. Grading SX (1/2" nominal) mixes shall be used on top and bottom lifts and for patching. Grading S (3/4" nominal) mixes may be used for bottom lifts.

401.05 Hydrated Lime.

Add the following:

When used in the HMA, hydrated lime shall be added at the rate of 1% by dry weight of the aggregate and shall be included in the amount of material passing the No. 200 sieve.

401.06 Asphalt Cement.

Revise the second paragraph to read as follows:

The asphalt cement shall meet the applicable requirements of subsection 702.01.

Add the following:

The Contractor shall provide to the Owner acceptable 'Certifications of Compliance' of each applicable asphalt binder grade from the supplier. Should testing or certificate show nonconformance with the specifications, the asphalt binder may be rejected. When production begins, the Contractor shall, upon request, provide to the Owner a one quart can of each specified asphalt binder for analysis. Additionally, the Contractor shall provide the refinery test results that pertain to the asphalt binders used during production.

Based on climatic conditions and reliability, binder grades approved for use in Mesa County are as follows in Table 401.06A-1:

**TABLE
401.06A-1
Recommended Performance Graded
Binders**

Condition	Non-modified Binder	Modified Binder
Free flowing traffic loads and 300,000 to 1 million 18K ESAL	PG 64-22	
Free flowing traffic loads and 300,000 to 1 million 18K ESAL, plus above 6000 elevation	PG 58-28	
Slow moving or standing trucks, major street intersections and/or 10,000,000 18K ESAL		PG 76-28 (top lift only)

Binder grades other than those shown above shall not be used unless the proposed binder and the mix design are approved in writing by the OWNER. The asphalt cement shall meet the requirements of subsection 702.01

401.07 Weather Limitations and Placement Temperatures.

Revise as follows:

Surface temperatures shall be used to determine placement of APM. APM produced with documented WMA will be allowed a reduction in minimum surface temperatures for placement as provided in Table 401.07A-1. Ambient temperatures and other weather conditions shall be considered prior to placement.

**TABLE 401.07A-1
Minimum Surface Temperatures for placement of APM**

Compacted Layer Thickness (in.)	Minimum Surface Temperature (°F)			
	Top Layer		Layers Below the Top Layer	
Product	APM	with WMA	APM	with WMA
<1½	60	50	50	40
1½ - <3	50	45	40	35
3 or more	45	40	35	35

If the Contractor modifies the placement and compaction processes when ambient temperatures are below minimum surface temperatures in Table 401.07A-1, they shall demonstrate to the Owner the required in-place density has been achieved. APM cooling software such as PaveCool, or MultiCool can be used to determine placement and compaction times available.

401.08 Asphalt Mixing Plant.

Delete the last paragraph of the subsection.

401.09 Hauling Equipment.

Add the following:

The Owner may reject any HMA which demonstrates it has been contaminated from a petroleum distillate release agent. The Owner may reject any uncovered HMA which demonstrates it has been impacted by contamination and/or weather.

401.10 Asphalt Pavers.

Delete the twelve paragraph and replace with the following:

Contractor shall submit for and receive approval of the screed control devices to be utilized on the paver prior to use for placing HMA on the project.

Add the following:

A Material Transfer Vehicle (MTV) or Material Transfer Device (MTD) may be required for placement of the HMA when specified in the contract documents. The MTV shall be a self-propelled unit with on board storage of material. An MTD is a non-self-propelled unit. Both MTV and MTD are capable of receiving material from trucks or from the ground, transferring the material from the unit to a paver hopper insert via a conveyor system.

401.11 Tack Coat.

Delete and replace with the following:

A tack coat shall be applied between pavement course and to all existing concrete and asphalt surfaces per Section 407. Tack coat is considered incidental to the cost of the HMA.

401.15 Mixing.

Add the following:

If a WMA technology (additive or foaming) is used, the discharge temperatures may be lowered during production at the discretion of the Contractor provided all specifications are achieved. Mix design is to indicate revised allowable discharge temperatures with WMA usage.

401.16 Spreading and Finishing.

Revise as follows:

Joints in the top layer of new pavement shall be located on lane lines unless otherwise shown on the plans. Longitudinal joints shall be minimized with wide paving pulls. Transverse joints shall be formed by cutting back on the previous run to expose the full depth of the course. Tack coat material

shall be applied to contact surfaces of all joints before additional mixture is placed against the previously compacted material.

401.17 Compaction.

Revise as follows:

Equipment used for compaction of the HMA will be at the discretion of the Contractor. The number, weight, and type of rollers furnished shall be sufficient to obtain the required density and surface texture.

All joints shall be compacted to 92% of maximum theoretical specific gravity (Rice), taken six inches offset from the joint. The allowable variance shall be $\pm 2\%$. Joint density will be determined using nuclear density equipment.

Delete paragraphs six through eight, and paragraphs eleven to the end of the subsection and replace with the following:

Cores may be used to verify compaction results. The Contractor shall core the pavement, as required by the Owner; in accordance with AASHTO T 230, Method B, or for field calibration of nuclear density equipment in accordance with the ASTM D 2950. At a minimum, cores for nuclear density equipment correlation shall be taken at the beginning of placement of each project or change of mixture materials or gradation, unless otherwise approved by the Engineer. If the correlation cores were produced for another project within the last 90 days, data from that project can be submitted for verification, if no change in materials or gradation has occurred. When cores are used, the Contractor shall provide all labor and equipment for the coring and repair of the holes.

Along forms, curbs, headers, walls, and all other places not accessible to the rollers, the mixture shall meet all project compaction specifications. Any mixture that is defective, shall be corrected to meet the project specifications at the expense of the Contractor.

401.20 Surface Smoothness.

Delete and replace with the following:

The finish transverse and longitudinal surface elevation of the pavement shall be measured using a 10-foot straightedge. Surface smoothness shall be verified following the finish roller pass. Surface variation shall not exceed 3/16 inch in 10 feet for full lane width paving. For patching, the variation shall not exceed 3/8 inch in 10 feet. The final pavement surface shall not vary from the specified cross section by more than one inch at any point. Transverse measurements for variations shall exclude breaks in the crown sections. If the surface tolerance exceeds 3/16" across transverse joints, measured in at least three locations, the Contractor shall make corrections to the joint before proceeding. All corrections shall be made at the Contractor's expense.

The final surface pavement adjacent to curb and gutter shall be finished from 1/8-inch to 3/8- inches above the lip for catch curb and shall not extend above the lip for spill curb.

The Contractor shall adjust all manholes, valve boxes, and survey range boxes 1/8 to 1/4- inch below final grade and adjusted to match the slope of the roadway. Valve boxes and manholes are to be maintained fully accessible at all times for emergency and maintenance operations. The cost of

adjusting valve boxes, manholes, and survey range boxes shall be included in the work, unless otherwise specified. The Contractor shall be responsible for any cost incurred by the Owner to provide access to the covered manholes or valve boxes. Final adjustment of all utility access points shall be completed within seven days of from the time the HMA was placed.

Add the following new subsections:

401.23 Testing and Inspection

The Contractor shall assume full responsibility for controlling all operations and processes to meet the Specifications. The Contractor shall perform all tests necessary for process control purposes on all elements at the frequency listed in Table 401.23-1. The Contractor shall maintain a log of all process control testing. Test results that have sampling or testing errors shall not be used. Process control testing shall be performed at the expense of the Contractor.

Laboratories shall be accredited by AASHTO Materials Reference Laboratory (AMRL) for the tests being performed. Technicians obtaining samples and conducting compaction tests must have a LabCAT Level A certification. Technicians conducting tests of asphalt content and gradation must have a LabCAT Level B certification. Technicians performing volumetric testing must have a LabCAT Level C certification. Equivalent NICET certification for all technicians is acceptable.

When requested by the Owner, the Contractor shall submit a quality control plan that addresses production, sampling, testing, and qualifications of testing personnel, timing, and methods for making adjustments to meet the specifications. The Contractor will provide a process or schedule for making corrections for material that was placed but does not meet specifications as well as obtain a follow up sample immediately after corrective actions are taken to assess the adequacy of the corrections. In the event the follow-up process control sample also fails to meet Specification requirements; the Contractor shall cease production of the asphalt mixture until the problem is adequately resolved to the satisfaction of the Owner.

**TABLE
401.23-1
Minimum Materials Sampling and Testing
for Process Control and Owners
Acceptance**

Test	Standard	Minimum Frequency
Sampling	AASHTO T168, ASTM D 979 and ASTM D3665, CP 41	1/1000 tons or fraction thereof (not less than one test per day)
In-Place Density	AASHTO T 166, T 238, T 230, CP 81 (nuclear), CP 44 (coring)	One test for each 250 lineal feet per lane and one test per 1,000 lineal feet of joint per lift
Thickness (Core) (when called for in Project specs.)	ASTM D3549	One test for each 1000 lineal feet per lane
Air Voids & VMA	CP-L 5115 A.I. SP-2	1/1000 tons or fraction thereof (not less than one test per day)
Gradation	AASHTO T 27/T 11, CP 31	1/1000 tons or fraction thereof (not less than one test per day)
Hveem/Marshall Stability As Applicable	CP-L 5016	One per project per mix used
Binder Content	CP-L 5120, AASHTO T 164 or other methods agreed upon between Owner and Contractor	1/1000 tons or fraction thereof (not less than one test per day)
Maximum Theoretical Specific Gravity (Rice)	AASHTO T 209 (Rice), CP-L 51	1/1000 tons or fraction thereof (not less than one test per day)
Lottman Stripping, TSR & Dry Density	CP-L 5109	One per project per mix used.

Field control testing of dense graded asphalt mixes for the above tests shall meet the requirements of Table 403-1 and Table 403-2 in the Revision to Section 403.

401.24 Acceptance

If any materials furnished, or work performed, fails to meet the specification requirements, such deficiencies shall be documented and reported to the Owner. Copies of all process control tests shall be delivered to the Owner within one business day. Test results that cannot be completed within one day shall be provided to the Owner no later than three days after the sample was obtained.

Owners Acceptance (OA) test results, if any, and/or Process Control (PC) test results will be evaluated to determine acceptability. If the Contractor does not meet the project specifications, but acceptable work has been produced, the Owner shall determine the extent of the work to be accepted. If the Owner determines the work is not acceptable, the Contractor shall correct the work, as approved by the Owner, at the expense of the Contractor.

SP-4 SECTION 403 – HOT MIX ASPHALT

**REVISION OF SECTION 403
HOT MIX ASPHALT**

Section 403 of the Standard Specifications is hereby revised for this project as follows:

403.02 Materials

Delete and replace with the following:

The materials shall conform to the requirements of subsections 401.2 of the Revised Section 401 above.

The design mix for hot mix asphalt (HMA) shall conform to the following Table 403-1 and Table 403-2:

**Table 403-1
Mixture Properties for Hot Mix Asphalt**

Property	Test Method	Value
Air Voids, percent at: N (design)	AASHTO T-132, CPL 5115	3.0 – 4.0
Lab Compaction (Revolutions): N (design)	CPL 5115	75
Hveem Stability, (Grading ST, SX & S only)	CPL 5106	28 min.
Aggregate Retained on the 4.75 mm (No. 4) Sieve for S, SX and SG, and on the 2.36mm (No. 8) Sieve for ST and SF with at least 2 Mechanically Induced fractured faces	CP 45	60% min.
Accelerated Moisture Susceptibility Tensile Strength Ratio (Lottman)(for S & SX mixes)	AASHTO T-283 Method B, CPL 5109 Method B	80 min.
Minimum Dry Split Tensile Strength, kPa (psi)	CPL 5109 Method B	205 (30) min.
Voids in the Mineral Aggregate (VMA) % minimum	CP 48, AI-SP2	See Table 403-2
Voids Filled with Asphalt (VFA)	AI MS-2	65-80%
Dust to Asphalt Ratio: Fine Gradation	CP 50	0.6 – 1.2
Coarse Gradation		0.8 – 1.6

Property	Test Method	Value
<p>Note: AI MS-2 = Asphalt Institute Manual Series 2</p> <p>Note: Mixes with gradations having less than 40% passing the 4.75 mm (No. 4) sieve shall be approached with caution because of constructability problems.</p> <p>Note: Gradations for mixes with a nominal maximum aggregate size of one-inch or larger are considered a coarse gradation if they pass below the maximum density line at the #4 screen.</p> <p>Gradations for mixes with a nominal maximum aggregate size of 3/4" to 3/8" are considered a coarse gradation if they pass below the maximum density line at the #8 screen.</p> <p>Gradations for mixes with a nominal maximum aggregate size of #4 or smaller are considered a coarse gradation if they pass below the maximum density line at the #16 screen.</p>		

Table 403-2
Minimum Voids in Mineral Aggregate (VMA)

Nominal Maximum Size*, mm (inches)	***Design Air Voids **		
	3.5%	4.0%	4.5%
37.5 (1½)	11.6	11.7	11.8
25.0 (1)	12.6	12.7	12.8
19.0 (¾)	13.6	13.7	13.8
12.5 (½)	14.6	14.7	14.8
9.5 (¾)	15.6	15.7	15.8
4.75 (No. 4)	16.6	16.7	16.8
<p>* The Nominal Maximum Size is defined as one sieve larger than the first sieve to retain more than 10%.</p> <p>** Interpolate specified VMA values for design air voids between those listed.</p> <p>*** Extrapolate specified VMA values for production air voids beyond those listed.</p>			

403.03 Construction Requirements

Delete the first paragraph and replace with the following:

The construction requirements shall be as prescribed in subsections 401.3 through 401.14 of the Revised Section 401 above.

403.04 Method of Measurement

Delete and replace with the following:

Hot Mix Asphalt will be measured by the ton or the square yard. Batch weights will not be permitted as a method of measurement when measured by the ton. The tonnage shall be the weight used in the accepted pavement.

403.05 Basis of Payment

Delete and replace with the following:

The accepted quantities of hot mix asphalt will be paid for in accordance with subsection 401.22, at the contract unit price per ton or square yard for the asphalt mixture.

Payment will be made under:

Pay Item	Pay Unit
Hot Mix Asphalt (Grading __)(PG __)	Ton
Hot Mix Asphalt (Grading __)(PG __)	Square Yard
Hot Mix Asphalt (Patching)	Square Yard

Aggregate, asphalt cement, asphalt recycling agent, additives, hydrated lime, tack coat, and all other work necessary to complete each hot mix asphalt items will not be paid for separately but shall be included in the unit price bid.

Excavation, preparation, and tack coat of areas to be patched will not be measured and paid for separately, but shall be included in the work.

SP-5 SECTION 601 – STRUCTURAL CONCRETE

Section 601 of the Standard Specifications is hereby revised for this project as follows:

Subsection 601.02, Classification:

CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS:

- 4,500 PSI Compressive at 28 Days
- 6% air \pm 1.5%
- Slump 4", Loads exceeding 4 ½" shall be rejected
- Maximum Water Cement Ratio no greater than 0.45.

Subsection 601.06, Batching:

This CDOT Specification has been added to this Project:

The Contractor shall furnish a batch ticket (delivery ticket) with each load for all concrete. Concrete delivered without a batch ticket containing complete information as specified shall be rejected. The Contractor shall collect and complete the batch ticket at the placement site and deliver all batch tickets to the Engineer or his representative at the end of each day. The

Engineer or his representative shall have access to the batch tickets at any time during the placement. The following information shall be provided on each ticket:

1. Suppliers name and date
2. Truck number
3. Project name and location
4. Concrete class and designation number
5. Cubic yards batched
6. Type brand and amount of each admixture
7. Type, brand, and amount of cement and fly ash
8. Weights of fine and course aggregates
9. Moisture of fine and course aggregates
10. Gallons of batch water

The contractor shall add the following information to the batch ticket at time of placement:

1. Gallons of water added by the truck operator.
2. Number of revolutions of the drum for mixing
3. Discharge time

SP-6 SECTION 608 – CURBS, GUTTERS, SIDEWALKS, AND TRAILS

Section 608 of the Standard Specifications is hereby revised for this project as follows:

Subsections 608.06, Basis of Payment shall include the following:

The Contract Unit Price for the various concrete items shall be full compensation for all equipment, labor, materials, and incidentals required for the complete installation. Incidental items include subgrade compaction, cutting and removal of asphalt in areas where concrete will be installed; removal of existing concrete, disposal of excavated and removed materials; furnishing, placement and compaction of Aggregate Base Course; forming, furnishing and placement, finishing, curing and protection of the concrete; reinforcing steel and joint filler.

SP-7 SECTION 630 - CONSTRUCTION ZONE TRAFFIC CONTROL

Subsection 630.09, Traffic Control Plan, shall include the following:

The following guidelines and limitations shall apply to the traffic control:

1. Two-way traffic shall be maintained on all streets (unless otherwise approved).
2. Concrete activities shall be coordinated so that concrete trucks and other vehicles do not block the traffic lanes.
3. All incidental costs shall be included in the original contract price for the project.
4. Sidewalks that are obstructed or under construction shall be barricaded, as required for pedestrian safety.

Subsection 630.14, Method of Measurement, shall include the following:

Distribution of door-hanger notices to all businesses and / or residents located adjacent to the overlay work will not be paid for separately but shall be included in the pay item for Traffic Control (Complete in Place). The City will provide the door hangers for distribution.

3.5. Attachments:

Appendix A: Project Submittal Form
Appendix B: Construction Drawings

3.6. Contractor Bid Documents: For Contractor's convenience, the following is a list of forms/items to be submitted with the Contractor's bid 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 Bid Form**
- **Price Bid Schedule**
- **Bid Bond**

3.7. IFB TENTATIVE TIME SCHEDULE:

Invitation For Bids available	December 22, 2020
Mandatory Site Visit Meeting	January 5, 2021
Inquiry deadline, no questions after this date	January 8, 2021
Addendum Posted	January 11, 2021
Submittal deadline for proposals	January 15, 2021
City Council Approval	February 3, 2021
Notice of Award & Contract execution	February 4, 2021
Bonding & Insurance Cert due	February 10, 2021
Preconstruction meeting	February 11, 2021
Work begins no later than	Upon Receipt of Notice to Proceed
Final Completion	45 Calendar Days from Notice to Proceed
Holidays:	February 15, 2021

4. Contractor's Bid Form

Bid Date: _____

Project: IFB-4861-21-DH "Lorey Drive Improvements Project"

Bidding Company: _____

Name of Authorized Agent: _____

Email _____

Telephone _____ **Address** _____

City _____ **State** _____ **Zip** _____

The undersigned Bidder, in compliance with the Invitation for Bids, having examined the Instruction to Bidders, 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 Bid 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 Bidders, 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 the bid proposal have not knowingly been disclosed with another provider and will not be prior to award.

- Prices in this bid 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 firm to submit a bid proposal for the purpose of restricting competition.
- The individual signing this bid proposal certifies they are a legal agent of the offeror, authorized to represent the offeror 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. 98-903544. 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 bid award.

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 Bidder 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: _____

Bid Schedule: Lorey Drive

Contractor: _____

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
1	108.2	12" Irrigation Pipe (C-900 PVC)	22.	LF	\$ _____	\$ _____
2	108.2	24" Irrigation Pipe (CMP)	19.	LF	\$ _____	\$ _____
3	108.2	Storm Drain Pipe - 12" RCP	79.	LF	\$ _____	\$ _____
4	108.5	Connect to Existing Irrigation Pipe	3.	EA	\$ _____	\$ _____
5	108.5	Connect to Existing Storm Drain Manhole	1.	EA	\$ _____	\$ _____
6	108.6	Storm Drain Manhole (48" I.D.)	1.	EA	\$ _____	\$ _____
7	108.6	Storm Drain - Double Curb Opening Inlet	1.	EA	\$ _____	\$ _____
8	202	Asphalt Removal (Planing)(Thickness Varies)	239.	SY	\$ _____	\$ _____
9	202	Adjust Sanitary Manhole	1.	EA	\$ _____	\$ _____
10	202	Remove and Reuse Irrigation Manhole	1.	EA	\$ _____	\$ _____
11	206	Structure Backfill (Flow-Fill)	12.	CY	\$ _____	\$ _____
12	208	Erosion Control (Complete In Place)	Lump Sum		---	\$ _____
13	212	Landscaping	Lump Sum		---	\$ _____
14	304	Aggregate Base Course (Class 6) (12" Thickness)	780.	Tons	\$ _____	\$ _____
15	306	Subgrade Reconditioning (12" Deep)	2,340.	SY	\$ _____	\$ _____
16	304	Aggregate Base Course (Class 6) - Shoulder Edging Gravel	15.	Tons	\$ _____	\$ _____
17	401	Hot Mix Asphalt (2" thick Overlay) (Grading SX-75, Binder Grade 64-22)	30.	Tons	\$ _____	\$ _____
18	401	Hot Mix Asphalt (5" thick) (Grading SX-75, Binder Grade 64-22)	420.	Tons	\$ _____	\$ _____
19	401	Hot Mix Asphalt (Patching -Thickness Varies) (Grading SX-75, Binder Grade 64-22)	150.	Tons	\$ _____	\$ _____
20	608	Monolithic Curb, Gutter, Sidewalk (7' Wide) - To Include 6" of Class 6 Aggregate Base Course	85.	LF	\$ _____	\$ _____
21	608	Monolithic Curb, Gutter, Sidewalk (7' Wide - Driveway Section - 8" Thick) - To Include 6" of Class 6 Aggregate Base Course	33.	LF	\$ _____	\$ _____

Bid Schedule: Lorey Drive

Contractor: _____

Item No.	CDOT, City Ref.	Description	Quantity	Units	Unit Price	Total Price
22	608	Concrete Curb Ramp - ADA Alternate Curb Return with Cast Iron Wet Set ADA Detectible Mat - To Include 6" of Class 6 Aggregate Base Course	12.	SY	\$ _____	\$ _____
23	620	Sanitary Facility		Lump Sum	---	\$ _____
24	625	Construction Surveying		Lump Sum	---	\$ _____
25	626	Mobilization		Lump Sum	---	\$ _____
26	627	Pavement Marking Paint	1.	LS	\$ _____	\$ _____
27	627	Preformed Thermoplastic Pavement Markings	85.	SF	\$ _____	\$ _____
28	630	Traffic Control (Complete In Place)		Lump Sum	---	\$ _____
29	630	Flagging	1,260.	HRs	\$ _____	\$ _____
MCR		Minor Contract Revisions		---	---	<u>\$ 15,000.00</u>

Bid Amount: \$ _____

Bid Amount: _____

dollars

The undersigned Bidder proposes to subcontract the following portion of Work:

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

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

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

Appendix A
Project Submittal Form

PROJECT SUBMITTAL FORM

PROJECT: **Lorey Drive**

CONTRACTOR:

PROJECT ENGINEER: Eric Mocko

Description	Date Received	Resubmittal Requested	Resubmittal Received	Date Accepted
-------------	---------------	-----------------------	----------------------	---------------

STREET CONSTRUCTION

Asphalt mix designs				
Base course gradation, Proctor curve				
Concrete Mix Designs				

EROSION CONTROL / STORMWATER MANAGEMENT

Inlet Protection				
Concrete Washout				

PERMITS, PLANS, OTHER

Traffic Control Plan				
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Appendix B

Construction Drawings



CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

LOREY DRIVE

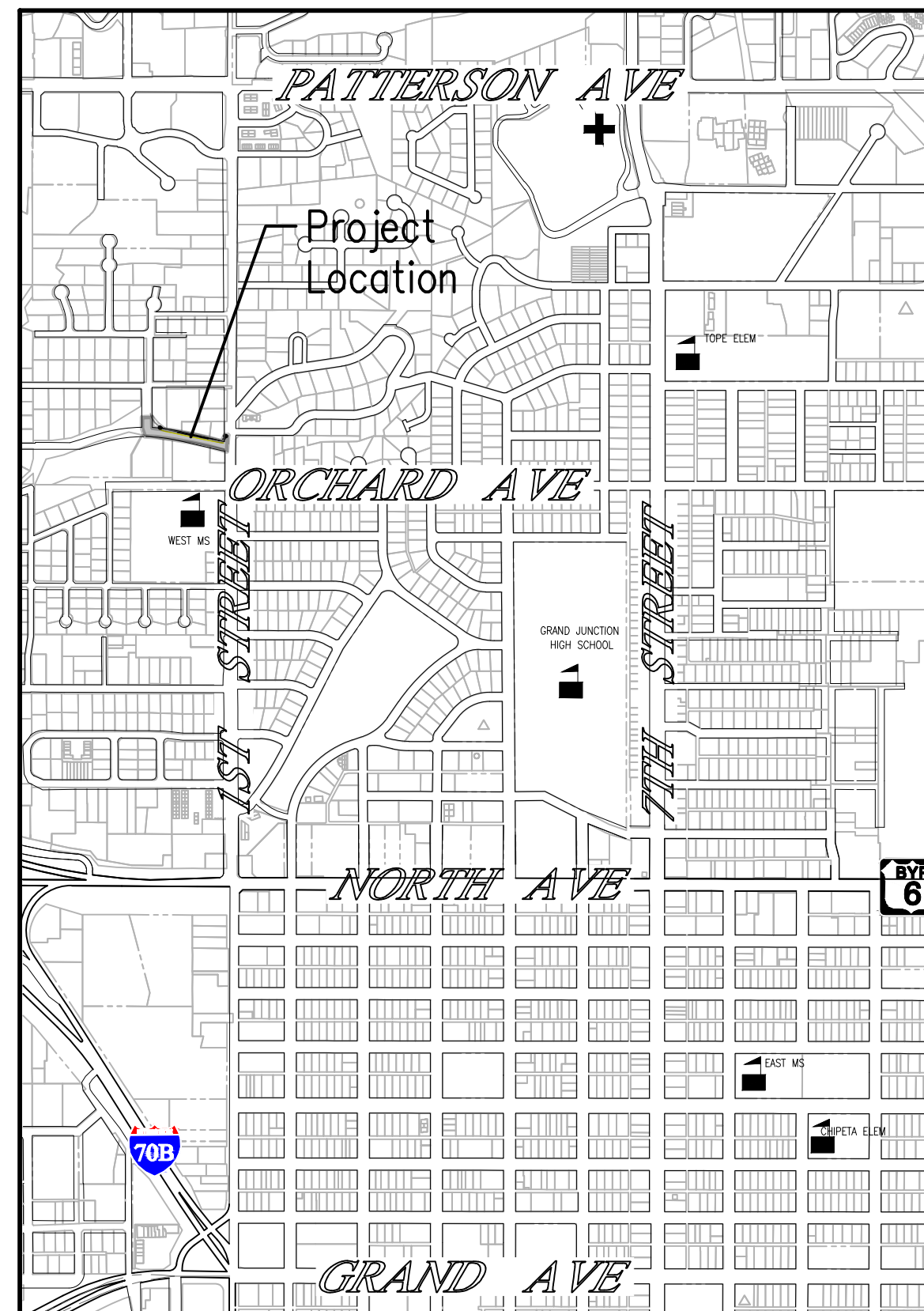
250 North 5th Street
Grand Junction, Colorado

CONSTRUCTION PLANS

Prepared for:

CITY OF GRAND JUNCTION

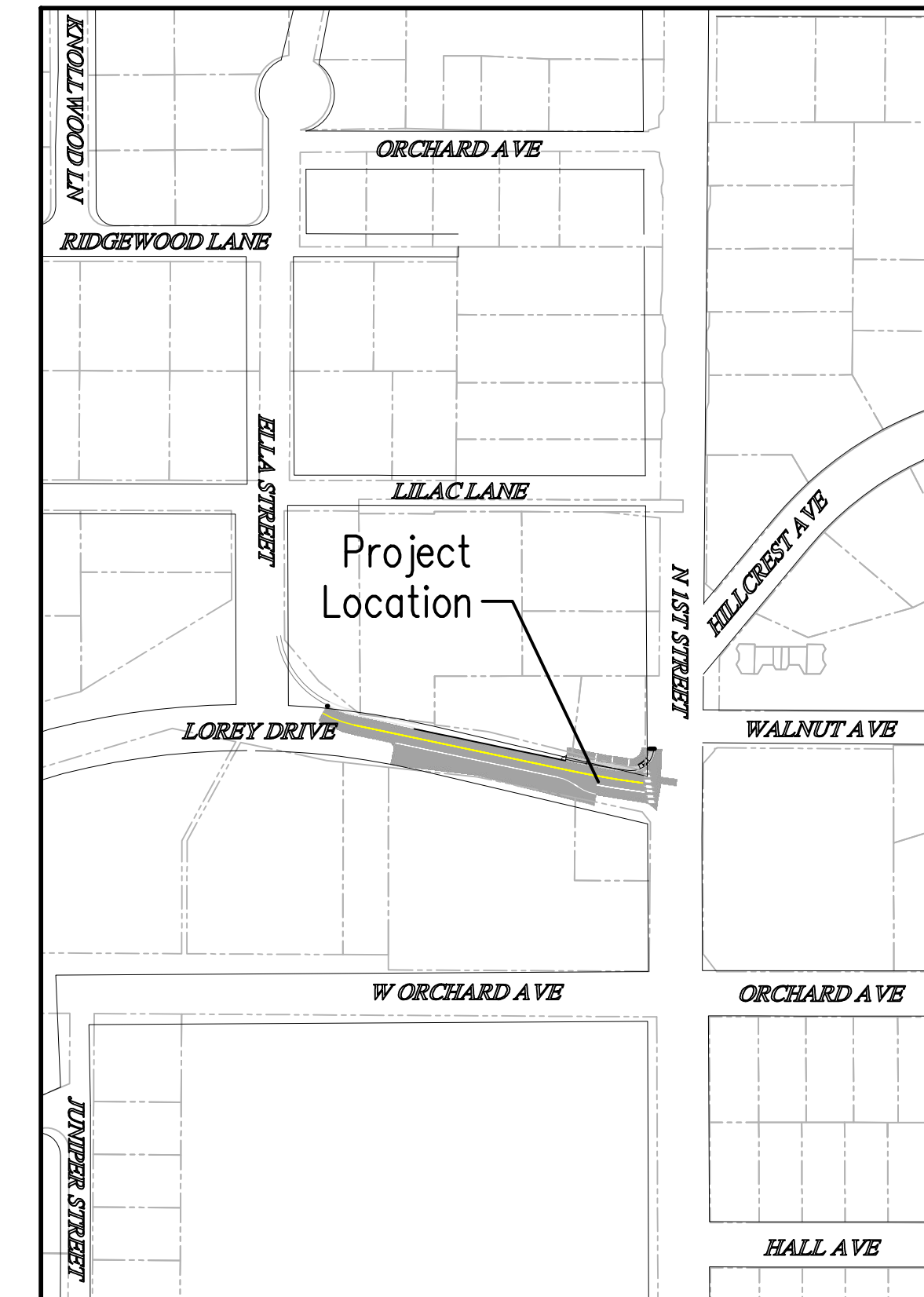
City Project #F1814



PROJECT LOCATION MAP
(1" = 1000')

Sheet List Table

C0	COVER SHEET
C1	LEGEND
C2	GENERAL NOTES
C3	STORMWATER CONTROL MEASURES PLAN
C4	DEMOLITION PLAN
C5	STORM PLAN & PROFILE
C6	IRRIGATION PLAN & PROFILE
C7	ROAD TYPICAL SECTIONS
C8-C10	ROAD PLAN & PROFILE
C11-C12	ROAD CROSS SECTIONS



PROJECT OVERVIEW
(1" = 200')

DESIGN TEAM CONTACTS

OWNER/DEVELOPER:
CITY OF GRAND JUNCTION

250 N. 5th Street
Grand Junction, CO 81506

CIVIL:
RIVER CITY CONSULTANTS, INC.
Jeff Mace
744 Horizon Ct, Suite 110
Grand Junction, CO 81506
970.241.4722
jmace@rccwest.com

SURVEY:
RIVER CITY CONSULTANTS, INC.
Alec Thomas
744 Horizon Ct, Suite 110
Grand Junction, CO 81506
970.241.4722
athomas@rccwest.com

UTILITY CONTACTS

SEWER	CITY OF GRAND JUNCTION	970-245-6378
WATER	CITY OF GRAND JUNCTION	970-244-1579
ELECTRIC	XCEL ENERGY	970-242-2626
GAS	XCEL ENERGY	970-242-2626
PHONE	CENTURY LINK	970-244-4311
CABLE	CHARTER	970-697-1222
IRRIGATION	GRAND VALLEY IRRIGATION	970-242-2762
MESA COUNTY STORMWATER	ROBERT HALE	970-255-5073

Project Benchmark
SET PK NAIL
SW OF INTERSECTION OF
1ST STREET & LOREY DRIVE
Northing: 42355.676
Easting: 893331.289
Elevation: 4610.03
Datum Source: MCLCS Zone "GVA" (NAVD 88)

 <small>744 Horizon Court, Suite 110 Grand Junction, CO 81506 www.rccwest.com Phone: 970.241.4722 Fax: 970.241.4561</small>	DATE ISSUED: 27.FEB.2020 PROJECT #: 1108-006	DRAWN BY: JMM CHECKED BY: IDG
	CITY OF GRAND JUNCTION LOREY DRIVE COVER SHEET	
CO		

REVISIONS

NO.	DATE	DESCRIPTION
1	03.NOV.2020	Revised per Comments from City Engineer

BY: JMM

LEGEND

	TOE OF SLOPE		EXISTING MANHOLE
	TOP OF SLOPE		EXISTING MANHOLE
	EDGE OF WATER		EXISTING MANHOLE
	100-YR FLOOD LIMITS		EXISTING MANHOLE
	500-YR FLOOD LIMITS		EXISTING MANHOLE
	FLOODWAY LIMITS		PROPOSED MANHOLE
	EDGE OF WETLANDS		PROPOSED MANHOLE
	TREE MASS AREA		PROPOSED MANHOLE
	EDGE OF ASPHALT		PROPOSED MANHOLE
	EDGE OF CONCRETE		PROPOSED SERVICES
	EDGE OF GRAVEL		PROPOSED SERVICES
	FLOWLINE		PROPOSED SERVICES
	RAILROAD		CLEANOUTS
	BUILDING		CLEANOUTS
	BUILDING OVERHANG		INLETS
	WIRE FENCE		FIRE HYDRANT/BLOWOFF/METER
	CHAIN FENCE		WELL/YARD HYDRANT/BOX
	GATE		VALVE/CAP/THRUST BLOCK
	WOOD FENCE		BOX/PUMP/VALVE
	GUARDRAIL		ROOF DRAIN/VENT PIPE/PEDESTAL
	EXISTING MAJOR CONTOUR		UTILITY BOXES
	EXISTING MINOR CONTOUR		UTILITY PEDESTALS
	EXISTING CABLE TV		UTILITY PEDESTALS
	EXISTING COMM DUCT		METERS
	EXISTING ELECTRIC		UTILITY MARKER/TRANSFORMER/VALVE
	EXISTING FIBER OPTIC		UTILITY MARKER/TRANSFORMER/VALVE
	EXISTING GAS		UTILITY MARKER/TRANSFORMER/VALVE
	EXISTING IRRIGATION		MONITOR WELL/BOREHOLE/POTHOLE
	EXISTING OVERHEAD ELECTRIC		DECID TREE/CONIF TREE/SHRUB
	EXISTING OVERHEAD TELEPHONE		DECID TREE/CONIF TREE/SHRUB
	EXISTING STORM DRAIN		UTILTY POLE/GUY WIRE/GUY POLE
	EXISTING SANITARY SEWER		UTILTY POLE/GUY WIRE/GUY POLE
	EXISTING SEWER FORCE MAIN		INTERSECTION SIGN/SIGN/DELINEATOR
	EXISTING TELEPHONE		INTERSECTION SIGN/SIGN/DELINEATOR
	EXISTING UNKNOWN UTILITY		BOLLARD/LIGHT/MAILBOX
	EXISTING WATER		BOLLARD/LIGHT/MAILBOX
	CUT EXTENTS		PROPOSED ASPHALT
	FILL EXTENTS		PROPOSED ASPHALT
	PROPOSED DEMOLITION OR REMOVAL		PROPOSED ASPHALT
	DRAINAGE FLOWLINE		PROPOSED CONCRETE
	PROPOSED PARCEL BOUNDARY		PROPOSED CONCRETE
	PROPOSED EASEMENT		PROPOSED GRAVEL
	PROPOSED LOT LINE		PROPOSED GRAVEL
	PROPOSED RIGHT OF WAY		PROPOSED BUILDING
	PROPOSED SETBACK		PROPOSED BUILDING
	PROPOSED TRACT		PROPOSED DEMOLITION/REMOVAL
	PROPOSED STRIPING		PROPOSED DEMOLITION/REMOVAL
	MILLING LIMITS		PROPOSED MILLING
	SAWCUT LINE		PROPOSED MILLING
	PROPOSED MAJOR CONTOUR		PROPOSED RIPRAP
	PROPOSED MINOR CONTOUR		PROPOSED RIPRAP
	COMMON UTILITIES		PROPOSED VEGETATION
	IRRIGATION LINE		PROPOSED VEGETATION
	IRRIGATION SERVICE LINE		PROPOSED WALL
	STORM DRAIN LINE (WITH FLOW DIRECTION)		PROPOSED WALL
	SANITARY SEWER LINE (WITH FLOW DIRECTION)		PROPOSED TRUNCATED DOMES
	SANITARY SEWER FORCE MAIN LINE		PROPOSED TRUNCATED DOMES
	SANITARY SEWER SERVICE LINE		PROPOSED CGS (CATCH/SPILL)
	WATER LINE		PROPOSED CGS (CATCH/SPILL)
	WATER SERVICE LINE		PROPOSED CGS (CATCH/SPILL)
	TRAFFIC FLOW DIRECTION		TRAFFIC FLOW DIRECTION

LIST OF ABBREVIATIONS

ABC	AGGREGATE BASE COURSE	MCGS	MOUNTABLE CURB, GUTTER, & SIDEWALK
ABP	ALIGNMENT BEGINNING POINT	MCSM	MESA COUNTY SURVEY MARKER
AC	ACRE	MDS	MAXIMUM DESIGN SPEED
ADJ	ADJACENT	MH	MANHOLE
AEP	ALIGNMENT END POINT	MIN	MINIMUM
AL	ALIGNMENT	MPE	MULTI-PURPOSE EASEMENT
BFS	BEGIN FULL SUPERELEVATION	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL NORTHING
BLDG	BUILDING	N	COORDINATE
BLM	BUREAU OF LAND MANAGEMENT	NO	NUMBER
BM	BENCHMARK	NTS	NOT TO SCALE
BNC	BEGIN NORMAL CROWN	OHP	OVERALL HIGH POINT
BOC	BACK OF CURB	OLP	OVERALL LOW POINT
BOW	BACK OF WALK	PC	POINT OF CURVATURE
BVCE	BEGINNING VERTICAL CURVE ELEVATION	PCC	POINT OF COMPOUND CURVATURE
BVCS	BEGINNING VERTICAL CURVE STATION	PI	POINT OF INTERSECTION
CBC	CONCRETE BOX CULVERT	PL	PROPERTY LINE
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION	PLS	PROFESSIONAL LICENSED SURVEYOR
CGS	CURB, GUTTER & SIDEWALK	PR	PROPOSED
CL	CENTER LINE OR CLASS	PRC	POINT OF REVERSE CURVATURE
CMP	CORRUGATED METAL PIPE	PRELIM	PRELIMINARY
CY	CUBIC YARD	PT	POINT OF TANGENCY
E	EASTING COORDINATE	PVC	POLYVINYL CHLORIDE
EA	EACH	PVI	POINT OF VERTICAL INTERSECTION
EFS	END FULL SUPERELEVATION	R	RADIUS
ECTC	ELECTRIC, GAS, TELEPHONE, CABLE	RC	REVERSE CROWN
EL	ELEVATION	RCC	RIVER CITY CONSULTANTS, INC.
ELEC	ELECTRIC	RCP	REINFORCED CONCRETE PIPE
ELEV	ELEVATION	REQ'D	REQUIRED
ENC	END NORMAL CROWN	RIM	RIM ELEVATION
EOA	EDGE OF ASPHALT	RoW	RIGHT OF WAY
EOP	EDGE OF PAVEMENT	SAN	SANITARY SEWER
ER	END OF RADIUS	SDMH	STORM DRAIN MANHOLE
ESMT	EASEMENT	SF	SQUARE FEET
EVCE	END OF VERTICAL CURVE ELEVATION	SH	STATE HIGHWAY
EVCS	END OF VERTICAL CURVE STATION	SHLDR	SHOULDER
EX	EXISTING	SSMH	SANITARY SEWER MANHOLE
FDC	FIRE DEPARTMENT CONNECTION	STA	STATION
FES	FLARED END SECTION	STR	STRUCTURE
FFE	FINISHED FLOOR ELEVATION	STRM	STORM DRAIN
FG	FINISHED GRADE	SY	SQUARE YARD
FH	FIRE HYDRANT	TAN	LENGTH OF TANGENT
FL	FLOW LINE	TBC	TOP BACK CURB
GB	GRADE BREAK	TCE	TEMPORARY CONSTRUCTION EASEMENT
GV	GATE VALVE	TFC	TOP FACE CURB
HDPE	HIGH DENSITY POLYETHYLENE	TOC	TOP OF CURB
HOA	HOME OWNERS ASSOCIATION	TOP	TOP OF PIPE
HP	HIGH POINT	TW	TOP OF WALL
INC.	INCORPORATED	TYP	TYPICAL
INV	INVERT	VC	VERTICAL CURVE
IRR	IRRIGATION	VPC	VERTICAL POINT OF CURVATURE
K	DESIGN COEFFICIENT	VPI	VERTICAL POINT OF INTERSECTION
L	LENGTH	VPT	VERTICAL POINT OF TANGENCY
LC	LEVEL CROWN	WSEL	WATER SURFACE ELEVATION
LF	LINEAR FEET	WQCV	WATER QUALITY CAPTURE VOLUME
LP	LOW POINT	WTR	WATER
LS	LUMP SUM	Δ	CENTRAL ANGLE (DELTA)
LVC	LENGTH OF VERTICAL CURVE		
MAX	MAXIMUM		
MC&G	MOUNTABLE CURB & GUTTER		

MCLCS ZONE "GVA"
 TRANSVERSE MERCATOR PROJECTION
 Point of Origin (SN01) and Central Meridian:
 Latitude: 39°06'22.72756"N
 Longitude: 108°32'01.43463"W
 Northing: 50,000FT
 Easting: 100,000FT
 Scale Factor: 1.000218181798
 Project/Scale Factor Height: 4644FT(NAVD88)

ACCEPTANCE BLOCK	
ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE	
Ute Water	Date
ACCEPTANCE BLOCK	
The City of Grand Junction review constitutes general compliance with the City's Development Standards, subject to these plans being sealed, signed, and dated by the Professional of Record. Review by the City does not constitute approval of the plan design. The City neither accepts nor assumes any liability for errors or omissions. Errors in the design or calculations remain the responsibility of the Professional of Record. Construction must commence within one year from the date of plan signature.	
City Development Engineer	Date

<p>UNCC 800.922.1987 www.uncc.org</p>	<p>811 Know what's below. Call before you dig.</p>	<p>Project Benchmark SET PK NAIL SW OF INTERSECTION OF 1ST STREET & LOREY DRIVE</p> <p>Northing: 42355.676 Easting: 893331.289 Elevation: 4610.03 Datum Source: MCLCS Zone "GVA" (NAVD 88)</p>	<p style="text-align: center;">REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>03.NOV.2020</td> <td>Revised per Comments from City Engineer</td> <td>JMM</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				NO.	DATE	DESCRIPTION	BY	1	03.NOV.2020	Revised per Comments from City Engineer	JMM																		<p>744 Horizon Court, Suite 110 Grand Junction, CO 81506 www.rccwest.com Phone: 970.241.4722 Fax: 970.241.9841</p>	<p style="text-align: center;">CITY OF GRAND JUNCTION</p> <p style="text-align: center;">LOREY DRIVE</p>	
			NO.	DATE	DESCRIPTION	BY																												
1	03.NOV.2020	Revised per Comments from City Engineer	JMM																															
<p>CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.</p>	<p>PROJECT # 1108-006 DATE ISSUED: 27.FEB.2020</p> <p>DRAWN BY: JMM HORIZ: N/A CHECKED BY: IDG VERT: N/A</p>	<p style="text-align: center;">LEGEND</p>	<p style="text-align: center;">C1</p>																															

GENERAL CONSTRUCTION NOTES

- Contractor shall contact Eric Mocko, City of Grand Junction Project Engineer, at (970) 256-4017, a minimum in 72 hours in advance, for a pre-construction meeting prior beginning work.
- All boundary line-work, project control, underground utility locations, and topographic survey data shown hereon was provided by River City Consultants, Inc. Locations of underground utilities as shown hereon are based on visible evidence from above ground structures, markings by the respective utility companies and/or their locator services, and drawings provided by the utility companies. No excavations were made during this survey to determine exact locations and depths of underground utilities and structures. Actual locations may vary from those as shown hereon and additional underground utilities may exist. Existence and locations of all underground utilities and structures should be verified prior to any construction on this property.
- Contractor shall give 48 hour notice to all authorized inspectors, superintendents, or person in charge of public and private utilities affected by his operations prior to commencement of work. Contractor shall assure himself that all construction permits have been obtained prior to commencement of work. All permits obtainable by the Contractor are required to be obtained at the Contractor's expense.
- The Contractor shall limit construction activities to those areas within the project limits of disturbance and/or toes of slopes as shown on the plans and cross sections. Any disturbance beyond these limits shall be restored to the original condition by the contractor at the contractor's expense. Construction activities in addition to normal construction procedure shall include the parking of vehicles or equipment, disposal of debris or any other action which could alter the existing conditions. The contractor shall not stockpile or store equipment within 30 feet of the edge of traveled way during the project, unless protected by temporary barrier or existing guardrail.
- All satisfactory excess excavation from either utility or street construction shall be spread uniformly across the lots as directed by the Owner or his designated representative. All unsatisfactory or waste material including vegetation, roots, concrete, rocks, or other debris, shall be hauled from the project by the Contractor at the Contractor's expense.
- All road construction and related work, all materials, performance, and quality of work, shall conform to the requirements of the City of Grand Junction Standard Specifications.
- All utility installations are to be performed in accordance with the technical specifications of the City of Grand Junction. All water and sewer lines must be tested and approved prior to street construction. All waterlines are to be constructed in accordance with the technical specifications of Ute Water District.
- All sign fabrication and installation shall conform to the Manual on Uniform Traffic Control Devices (MUTCD) and City of Grand Junction standards.

PAVING CONSTRUCTION NOTES

- All road widths, and radii are to flowline unless noted otherwise. Any "spot" design elevations are to flowline unless otherwise noted.
- The top of existing ground or the top of areas cut to final grade are to be scarified, brought to the optimal water content, and recompacted to 95% of AASHTO T99, or T180, as applicable, before placing fill or before base is placed.
- Contractor is to protect existing utilities and appurtenances. Manholes, drainage inlets, utility lines, etc., damaged, covered or filled with dirt or debris by the Contractor shall be cleaned and repaired or replaced at no expense to the Owner.
- Where proposed pavement is to match existing pavement, sawcut the existing pavement 1 foot back from the existing edge of and remove pavement. From the sawcut line, mill existing pavement half existing pavement depth (or a minimum of 2 inches), a width of 2 feet. Existing surface is to be tack-coated before new pavement is placed. See T-Lock detail, sheet C2.
- Include backing of curb and gutter and/or sidewalk with native fill material per the typical roadway section in the unit price bid for embankment.

TESTING NOTES

- Contractor shall familiarize themselves with the geotechnical testing requirements of the City of Grand Junction. It shall be the responsibility of the Contractor to contact the Testing Firm 24 hours in advance of the need for testing, and to verify that the appropriate number of tests have been taken. The results of the required types of tests and number of passing tests shall be furnished to the Engineer for verification before final acceptance by the Owner will be granted. All failing tests shall be brought to the immediate attention of the Engineer and re-tests shall be performed until passing results are obtained. All utility lines, including service lines, falling within the Public right-of-way or the Public easements shall be tested. Payment of testing shall be paid for by the City of Grand Junction.
- Only materials on which a proctor and accurate nuclear density test can be performed are approved for utility trench backfill, unless otherwise approved by the Engineer.
- Backfilling of trenches without testing during the backfill operation is strongly discouraged and will result in removal and replacement of backfill back to the last documented passing test.

BACKFILLING PIPE AND STRUCTURE NOTES

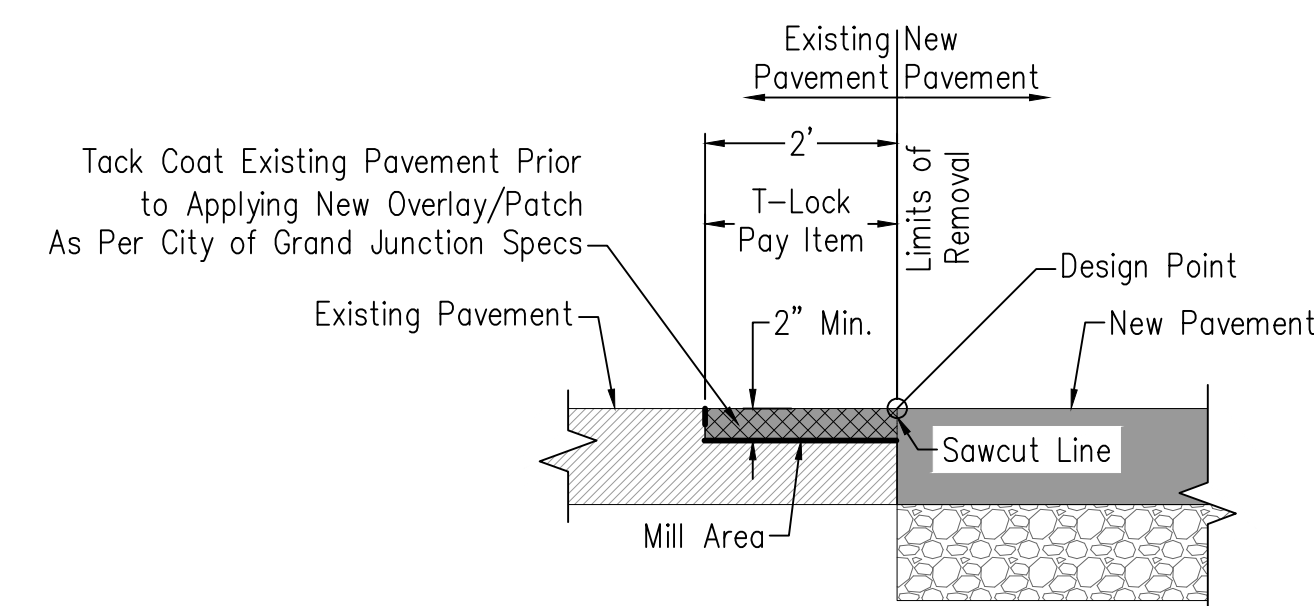
- Unless otherwise specified or approved by the Engineer, all backfill material shall be well graded native or import material, placed with moisture-density control in accordance with ASTM D2321. All backfill material shall be adjusted to within two percent (2%) of the optimum moisture content prior to its placement in the trench. Jetting or water soaking trenches to achieve compaction of the backfill will not be permitted except when: 1) soil sample tests show that the backfill and excavated trench materials consist of gravel or other granular material having less than 15 percent by weight passing a No. 200 sieve; and 2) the Engineer has given written approval prior to water soaking.
- A minimum of 24 inches of compacted backfill shall be placed over the top of all polyvinyl chloride (PVC) and polyethylene (PE) pipe before vehicles or heavy equipment are allowed to pass over the pipe. Less cover may be allowed only where flow-fill or other approved material is used for the initial backfill above the pipe spring line. Flow-fill shall meet the requirements of Section 206.02(a) of the Standard Specifications for Road and Bridge Construction.
- During initial backfilling, the Contractor shall take all necessary precautions to prevent movement or distortion of the pipe or structure being backfilled. Pipe haunch backfill material shall be placed and compacted in even lifts on both sides of the conduit to six (6) inches above the top of the pipe. Above the bedding and haunch material, earth backfill material shall be placed full width in uniform layers not more than twelve (12) inches thick. Each layer shall be compacted to the required density with approved mechanical or hand tamping equipment. Hydro-hammers or other heavy compaction equipment shall not be used unless approved by the City Engineer. No hydro-hammer shall be used for compaction with less than 48 inches of cover over the pipe.
- Surface water from any source shall be prevented from entering the excavation. No additional payment or extension of contract time will be made to the contractor due to saturated or unstable conditions caused by surface water entering the excavation.
- All backfill shall be frequently tested, per the City of Grand Junction Standard Contract Documents. If any portion of the backfill placed fails to meet the minimum density specified, the failing area shall be defined by additional tests, if necessary, and the material in the designated area shall be removed and replaced to the required density at the Contractor's expense.
- If full-time inspection is provided during the backfilling operation by a WAQTC or NICET Level 2 certified technician, and sufficient initial testing has been performed to demonstrate that the methodology being used achieves the required results, then the frequency of compaction testing may be reduced as shown in Table 101, per the City of Grand Junction Standard Contract Documents. The methodology shall be verified for each soil type or trench condition encountered.
- It shall be the Contractor's responsibility to make necessary excavations and to provide safe access into the excavations in accordance with OSHA Standards in order to accommodate compaction tests at all locations designated by the Inspector or authorized Technician.
- Failed compaction tests shall be immediately reported to the Inspector and the Contractor. A summary report of all compaction test results, including retests of failed tests and a test location map or other approved location format shall be submitted to the Project Engineer and to the Contractor.
- Manholes, storm inlet boxes and other concrete structures shall not be backfilled until the concrete and mortar therein has attained a minimum compressive strength of 2000 psi and can sufficiently support the loads imposed by the backfill. Backfill shall consist of approved materials uniformly distributed in layers brought up equally on all sides of the structure. Each layer of backfill shall not exceed 8 inches before compacting to the required density and before successive layers are placed. Each layer shall be compacted to not less than ninety-five percent (95%) of the maximum density determined in accordance with AASHTO T-99 or 90% of the maximum density in determined accordance with AASHTO T-180 as determined by the Engineer. All backfill placed within two (2) feet measured horizontally from any structure shall be compacted with hand operated mechanical equipment.

TRENCH CONSTRUCTION NOTES

- All trenches shall be compacted according to the recommendations in the Geotechnical Report. Contractor shall be required to perform all compaction tests through a certified soils lab.
- Trenches shall be kept free of water during pipe laying operations by draining, pumping or other approved methods. The water level shall be maintained at least six (6) inches below the trench bottom throughout the placement of bedding, pipe laying, joining and backfilling operations. The dewatering shall be carried out so that it does not destroy or weaken the strength of the soil under or along the side of the trench. Watertight plugs shall be installed in the ends of all water and sewer lines when the trench is not being dewatered. Surface water from any source shall be prevented from entering the trench excavation. No additional payment will be made to the Contractor due to an unstable trench or pipe foundation conditions caused by surface water entering the trench.
- All trenches shall be properly braced, sheeted or otherwise supported to provide safe working conditions and protection of the work, workers and adjacent property. Bracing, trench shields and sheeting shall conform to the recommendations in the Occupational Safety and Health Standards for Construction (OSHA). Unless otherwise approved, all trench support materials shall be removed in a manner that will prevent caving of the sides and movement or other damage to the pipe.
- The length of open trench shall be kept to a minimum and shall not exceed the length necessary to accommodate pipe laying and backfilling operations unless otherwise approved by the Engineer. The Contractor shall be responsible for covering or barricading unattended trenches and excavations as necessary for protection of the public and the work. All trenches and excavations shall be backfilled at the end of each work day, unless otherwise shown on the plans or approved by the Engineer. The end of a trench may be left open overnight if the entire perimeter of the excavation is fenced, lighted and barricaded with construction equipment and/or Jersey barriers. No traffic lane shall be blocked by an open excavation, piece of equipment or other obstruction without a proper lane closure, road closure or other approved traffic control.

STORM DRAIN CONSTRUCTION NOTES

- All Reinforced Concrete storm drain pipe shall conform to ASTM Standard Specifications, C-76, Class III unless otherwise noted.
- All polyvinyl chloride (PVC) pipe and fittings shall conform to ASTM Standard Specifications, D3034 and F679, SDR-35 unless otherwise noted.
- All High Density Polyethylene (HDPE) pipe and fittings to conform to the following:
12 inch to 36 inch shall meet ASSHTO M294, and
42 inch to 48 inch shall meet ASSHTO MP6.
- All 30 inch and larger HDPE pipe shall be covered to top of pipe with Class 6 base course.

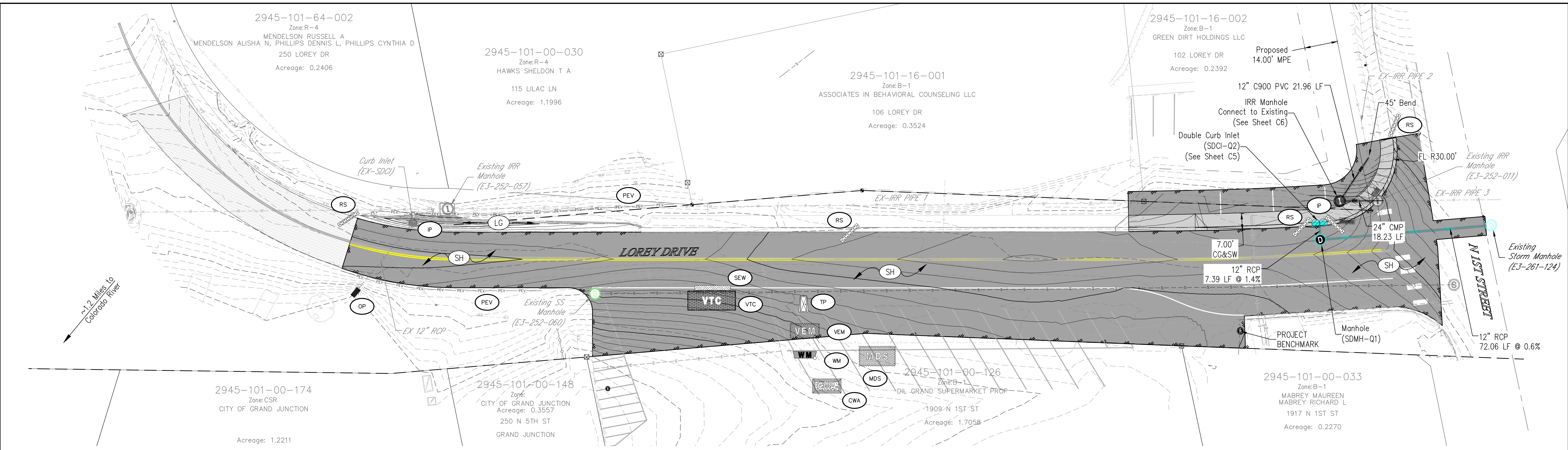


T-LOCK DETAIL

N.T.S.

ACCEPTANCE BLOCK ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE	
Ute Water	Date
ACCEPTANCE BLOCK <small>The City of Grand Junction review constitutes general compliance with the City's Development Standards, subject to these plans being sealed, signed, and dated by the Professional of Record. Review by the City does not constitute approval of the plan design. The City neither accepts nor assumes any liability for errors or omissions. Errors in the design or calculations remain the responsibility of the Professional of Record. Construction must commence within one year from the date of plan signature.</small>	
City Development Engineer	Date

	<p>Project Benchmark SET PK NAIL SW OF INTERSECTION OF 1ST STREET & LOREY DRIVE</p> <p>Northing: 42355.676 Easting: 893331.289 Elevation: 4610.03 Datum Source: MCLCS Zone "GVA" (NAVD 88)</p>	<table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>20.NOV.2020</td> <td>Revised per Comments from City Engineer</td> <td>JMM</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION	BY	1	20.NOV.2020	Revised per Comments from City Engineer	JMM																			<p align="center">CITY OF GRAND JUNCTION</p> <p align="center">LOREY DRIVE</p>	
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<p>PROJECT # 1108-006 DATE ISSUED: 27.FEB.2020</p> <p>DRAWN BY: JMM HORIZ: N/A</p> <p>CHECKED BY: IDG VERT: N/A</p>	<p align="center">GENERAL NOTES</p> <p align="center" style="font-size: 2em;">C2</p>																													



STORMWATER CONTROL MEASURES LEGEND

Installation details and maintenance guidelines for the above erosion control measures can be found in the written Construction Stormwater Management Plan for this project, CDOT standards, on Denver's Urban Drainage and Flood Control District website, and various manufacturer's websites. Variations from these standards shall be approved by the Qualified Stormwater Manager prior to installation. This list is not considered complete or absolute, additional methods can and should be added to this plan if required. This CSWMP should be kept current and modified appropriately by the Qualified Stormwater Manager based on actual field conditions and the Contractor's means and methods.

- | | | | |
|--|-----------------------------------|--|-------------------------------------|
| | CWA CONCRETE WASHOUT AREA | | RR RIPRAP |
| | DP DETENTION POND | | RS ROCK SOCK |
| | ED/DS EARTHEN DIKE/DRAINAGE SWALE | | SH SURFACE HARDENING |
| | IP INLET PROTECTION | | SEW STABILIZED ENTRY WAY |
| | OP OUTLET PROTECTION | | TP TOILETS (PORTABLE) |
| | MDS MATERIALS DELIVERY & STORAGE | | VB VEGETATIVE BUFFER |
| | LG LAND GRADING | | VTC VEHICLE TRACKING CONTROL |
| | PEV PROTECT EXISTING VEGETATION | | VEM VEHICLE EQUIPMENT & MAINTENANCE |
| | RV REVEGETATION | | WM WASTE MANAGEMENT |
| | | | SP STOCKPILE MANAGEMENT |

GENERAL NOTES

- Qualified Stormwater Manager (Local Contact)
Name: _____ Phone: _____
- Refer to the written construction stormwater management plan for stormwater control measure details and additional information.
- Stormwater control measures shown are schematic only. adjustments may be necessary to fit actual field conditions.
- The project area is equal to the estimated total area of disturbance which is approximately 0.5 acres.
- At all times during construction, erosion and sediment control shall be maintained by the contractor.
- Erosion control measures shall be installed as the work (grading) progresses.
- Negative impacts to downstream areas (or receiving waters) caused by earthwork and/or construction to be monitored and corrected by the contractor.
- The first stormwater control measures to be installed on the site shall be construction fence, markers, or other approved means of defining the limits of construction.
- Natural vegetation shall be retained and protected wherever possible. exposure of soil to erosion by removal or disturbance of vegetation shall be limited to the area required for immediate construction operations.
- All construction traffic must enter/exit the site through the CSWMP-approved access points.

SITE DESCRIPTION

- The project location is Lorey Drive just west of the intersection of 1st Street and Lorey Drive. In more legal terms, it is located in the Northeast 1/4 of Section 10, Township 1 South, Range 1 West of the Ute Meridian, Mesa County, Colorado.
- Stormwater from this site will be discharged from the site through a series of existing ditches, culverts, and other drainage features. Drainage for this area generally flows northeast to southwest.
- The receiving body of water is the Colorado River, approximately 1.2 miles southwest of the project site.
- Construction activity will consist of, in the following order: site marking, establishment of perimeter stormwater control measures, site clearing, topsoil removal and stockpiling, installation of utilities, roads, and buildings, landscaping, and final seeding. intermediate stormwater control measures will be installed and maintained throughout construction as required by the contractor's means and methods.
- The primary contaminant of concern for this project is sediment. The proposed erosion controls have been selected and placed to mitigate the potential for sediment transport from the project area.
- Existing vegetation on the project area consists of native grass and shrubs. Undisturbed portions of the project area are approximately 50% vegetated.
- The 100-year runoff Rational coefficients for this project are 0.52 for undeveloped areas and 0.58 for developed areas.

EROSION CONTROL MEASURES (PERFORMANCE STANDARDS)

- The general requirements for erosion control work shall be as follows:
- Any grading shall be conducted in such a manner to effectively reduce accelerated soil erosion and resulting sedimentation.
 - All grading shall be designed, constructed, and completed to minimize the size and duration of exposed (unvegetated) area.
 - Sediment caused by accelerated soil erosion shall be captured and removed from runoff water prior to leaving the site.
 - Any temporary or permanent facility designed and constructed for the conveyance of water around, through, or from the graded area shall be designed to limit the water flow to a non-erosive velocity.
 - Temporary soil erosion control facilities shall be removed and areas graded and stabilized with permanent soil erosion control measures.
 - All stormwater control measures will be in place prior to any major earthwork.

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DURING CONSTRUCTION (TEMPORARY MEASURES)

- Material stockpiles shall be bermed around their perimeter to prevent runoff pollution.
- Place wattles and/or berm down gradient of disturbed areas and stockpiles.
- Compact soil and topsoil to the requirements as stated in the Geotechnical recommendations and finish grade to elevations shown on the site plan. Eliminate any low spots prior to final stabilization.
- Contractor shall have a water truck made available to assist in controlling moisture content and dust and wind erosion.
- Soils that will be stockpiled for more than thirty (30) days shall be seeded and mulched within fourteen (14) days of stockpile construction. No stockpiles shall be placed within one hundred (100) feet of a drainage way unless approved by the CSWMP Administrator.
- The cleaning of concrete delivery truck chutes is restricted to approved concrete wash out locations on the job site. The discharge of water containing waste concrete to the storm system is prohibited. All concrete waste shall be properly cleaned up and disposed at an appropriate location.

AFTER CONSTRUCTION (PERMANENT MEASURES)

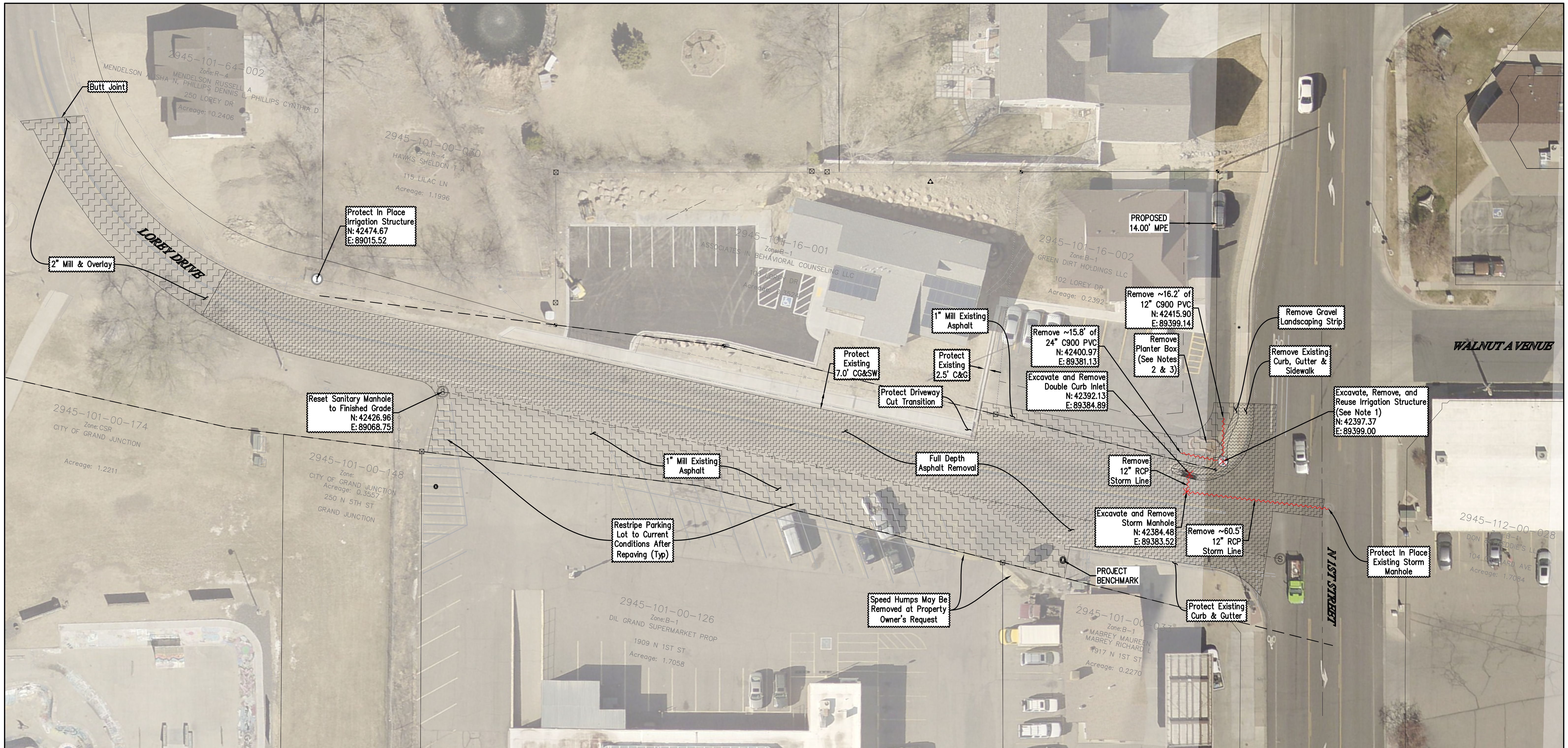
- All areas disturbed by construction activities shall be paved, landscaped, or revegetated with a certified weed-free native seed mix appropriate for site soils and conditions. these areas shall be maintained until a vegetative cover of at least 70% of pre-construction conditions exists. if necessary, additional topsoil, seed, mulch, and/or fertilizer should be applied to establish said vegetative cover.

MAINTENANCE





- All erosion control measures should be inspected to determine if repairs or sediment removal is necessary. The maximum time between inspections shall be 14 days.
- Erosion control measures are also to be inspected within 48 hours of a storm that produces moderate runoff or moderate snow melt.
- Repairs or modifications to the erosion control measures shall be completed immediately. Repairs and modifications shall be documented (what, why, & when).
- Silt and sediment shall be removed if there is a risk of sediment bypassing the erosion control feature. Specifically, sediment buildup shall not exceed 1/3 the height of any check dam or berm (including inlet protection), 1/2 the height of a wattle, or when sediment within a sediment basin gets within 6 inches of the outlet invert.
- When the temporary measures are to be removed, any silt and sediment deposits shall be removed and spread evenly in open areas and seeded as necessary.

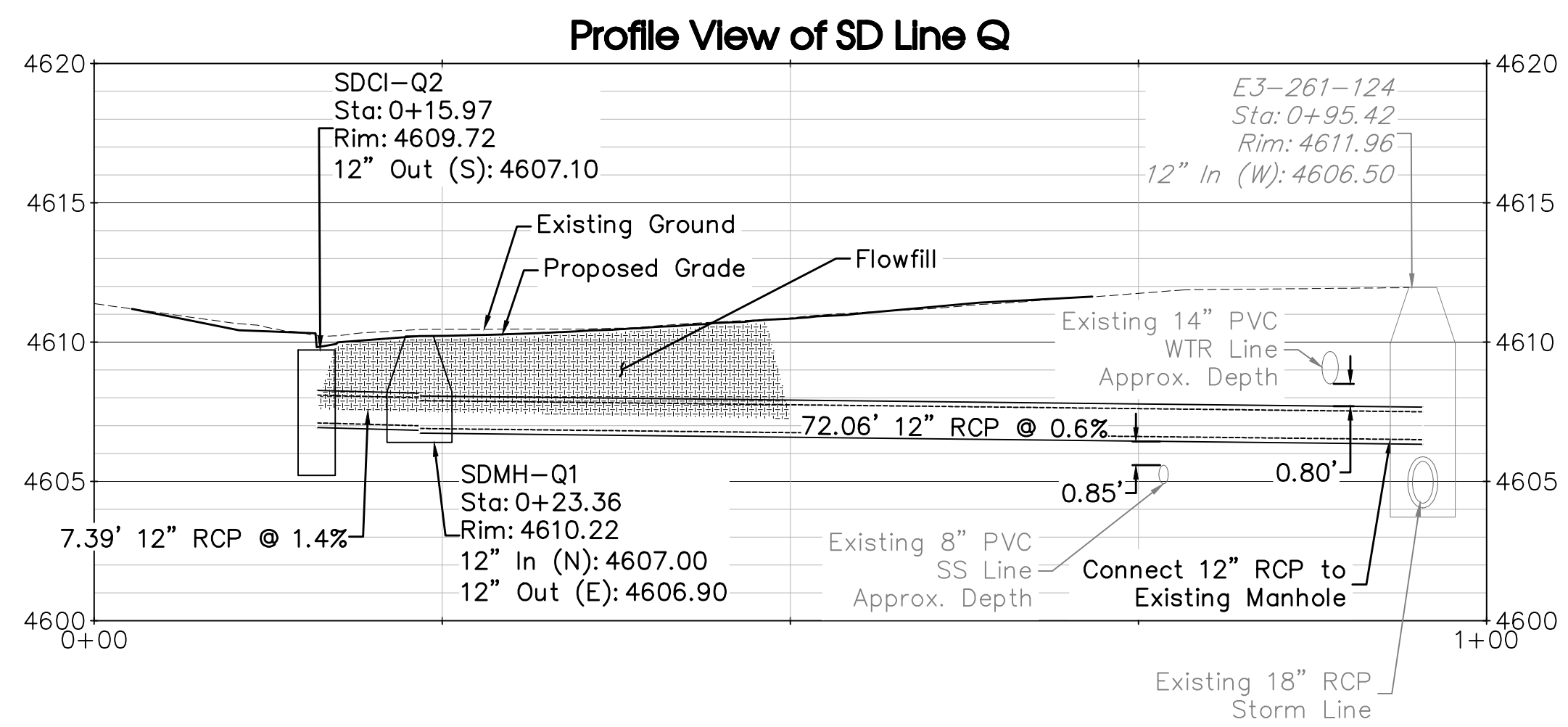
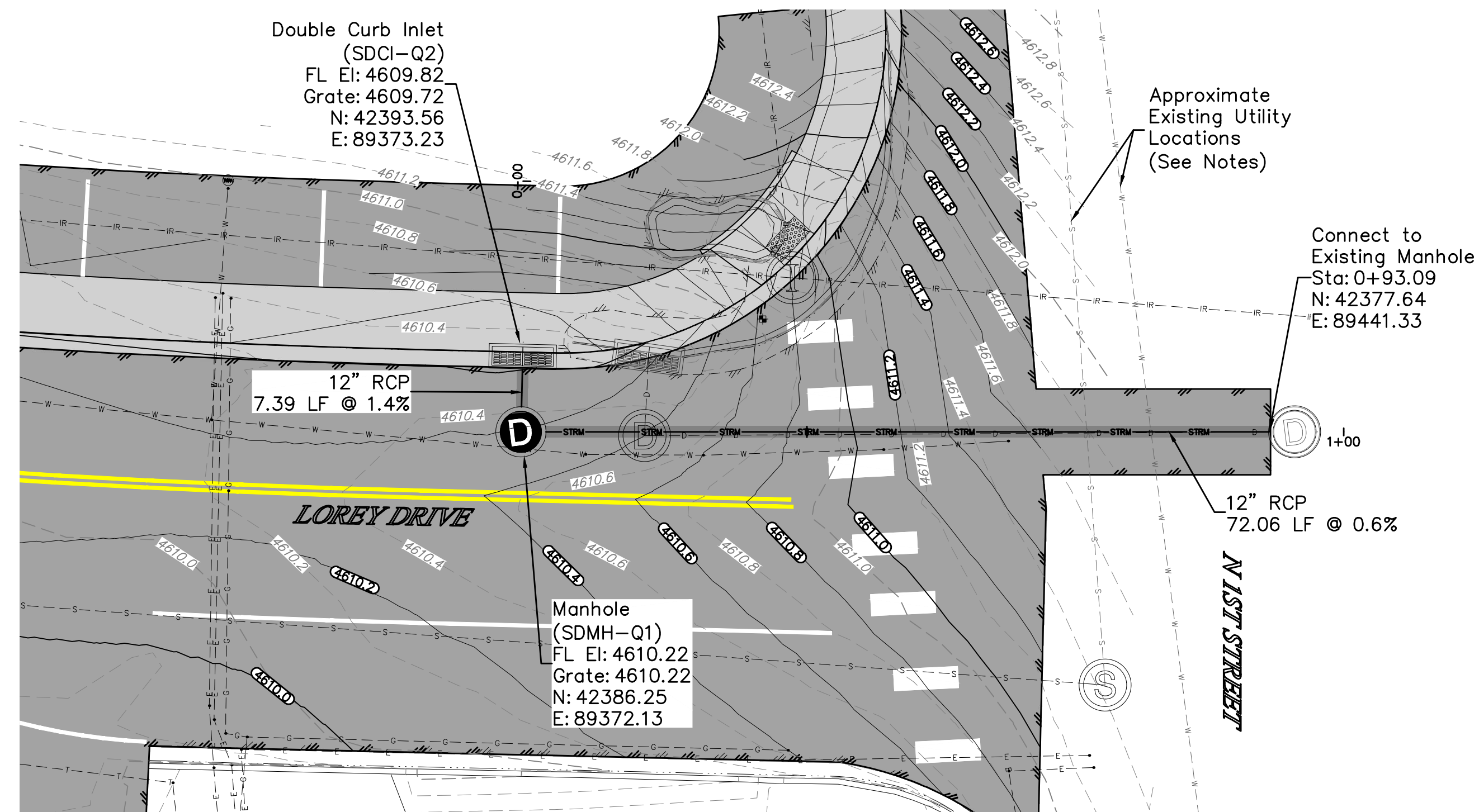
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City Development Engineer _____ Date _____

<p>UNCC 811 Know what's below. Call before you dig. 800.922.1987 www.uncc.org</p>	<p>Project Benchmark SET PK NAIL SW OF INTERSECTION OF 1ST STREET & LOREY DRIVE</p> <p>Northing: 42355.676 Easting: 893331.289 Elevation: 4610.03 Datum Source: MCLCS Zone "GVA" (NAVD 88)</p>	<p>SCALE 0 20 40 FEET CONTOUR INTERVAL = 0.2 FOOT ORIGINAL SHEET SIZE: 22 x 34</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>03.NOV.2020</td> <td>Revised per Comments from City Engineer</td> <td>JMM</td> </tr> </tbody> </table>			NO.	DATE	DESCRIPTION	BY	1	03.NOV.2020	Revised per Comments from City Engineer	JMM	<p>35518 2/17/20 PROFESSIONAL ENGINEER</p>	<p>RIVER CITY CONSULTANTS 744 Horizon Court, Suite 110 Grand Junction, CO 81508 www.rccwest.com Phone: 970.241.4722 Fax: 970.241.9841</p>	<p>CITY OF GRAND JUNCTION Lorey Drive STORMWATER CONTROL MEASURES PLAN</p>	
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- NOTES:**
- Existing Irrigation Structure (E3-252-011) may be reused at property owner's request if Contractor finds that this structure is reusable. If Contractor determines that this structure is not reusable then it shall be removed and disposed of properly.
 - Planter Box shall be removed and reclaimed for future use at Property Owner's request.
 - Preserve Irrigation connection with 10" cast iron cleanout, model #C08030CI.

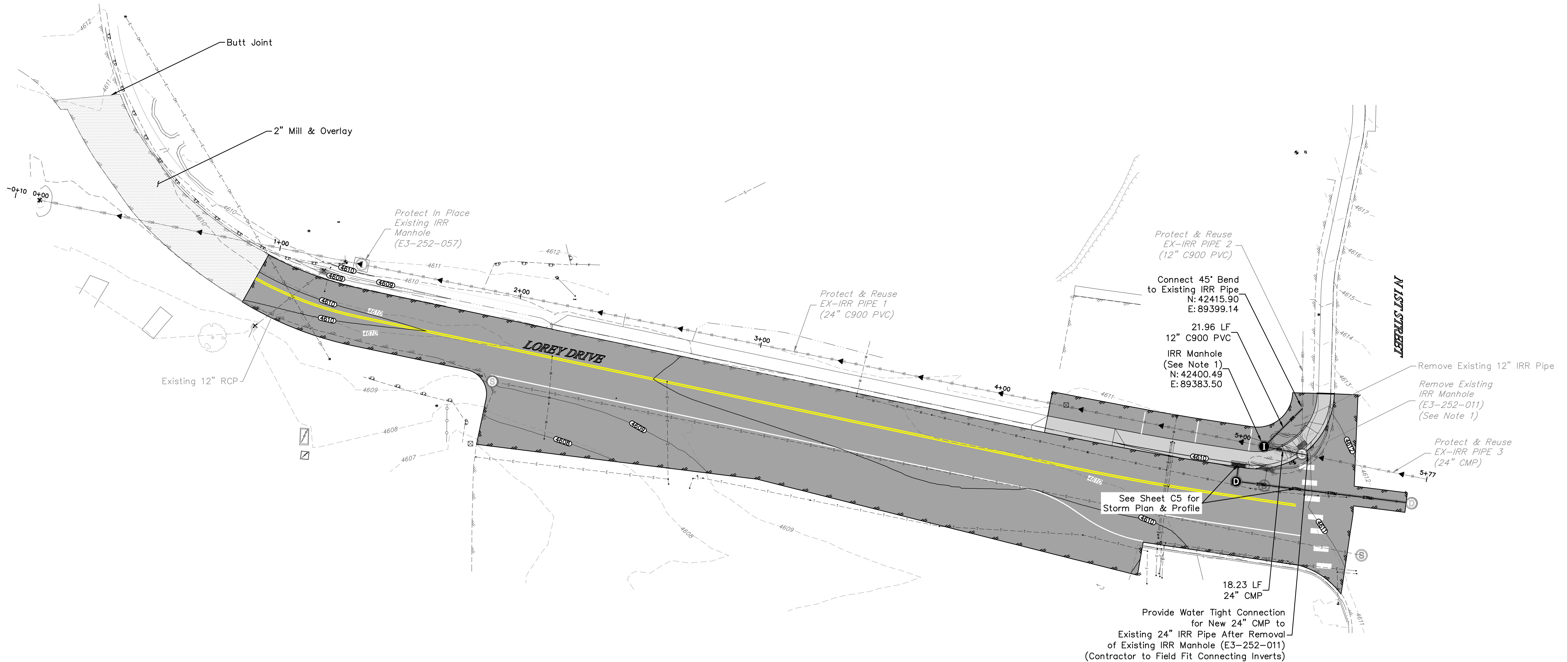
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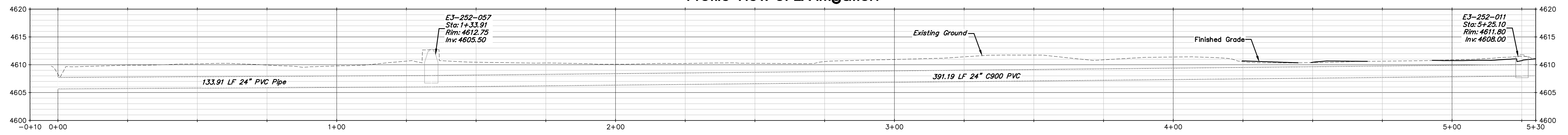
NOTES:

- Proposed SD Line Q crosses existing SS and WTR lines as shown. Horizontal and vertical information for these existing utilities is taken from City of GJ GIS website and asbuilt drawings provided by the City, and is approximate only. Contractor to verify depth and location of these utility crossing locations and shall notify Engineer of any discrepancies.

<p>UNCC 800.922.1987 www.uncc.org</p>	<p>811 Know what's below. Call before you dig.</p>	<p>Project Benchmark SET PK NAIL SW OF INTERSECTION OF 1ST STREET & LOREY DRIVE</p> <p>Northing: 42355.676 Easting: 893331.289 Elevation: 4610.03 Datum Source: MCLCS Zone "GVA" (NAVD 88)</p>	<p>SCALE 0 10 20 FEET CONTOUR INTERVAL = 0.2 FOOT ORIGINAL SHEET SIZE: 22 x 34</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: center;">REVISIONS</th> </tr> <tr> <th style="width: 5%;">NO.</th> <th style="width: 10%;">DATE</th> <th style="width: 75%;">DESCRIPTION</th> <th style="width: 10%;">BY</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">03.NOV.2020</td> <td style="text-align: center;">Revised per Comments from City Engineer</td> <td style="text-align: center;">JMM</td> </tr> </tbody> </table>	REVISIONS				NO.	DATE	DESCRIPTION	BY	1	03.NOV.2020	Revised per Comments from City Engineer	JMM		<p>744 Horizon Court, Suite 110 Grand Junction, CO 81506 www.rcwest.com Phone: 970.241.4722 Fax: 970.241.9841</p>	<p>CITY OF GRAND JUNCTION</p> <p>Lorey Drive</p> <p>STORM PLAN & PROFILE</p>
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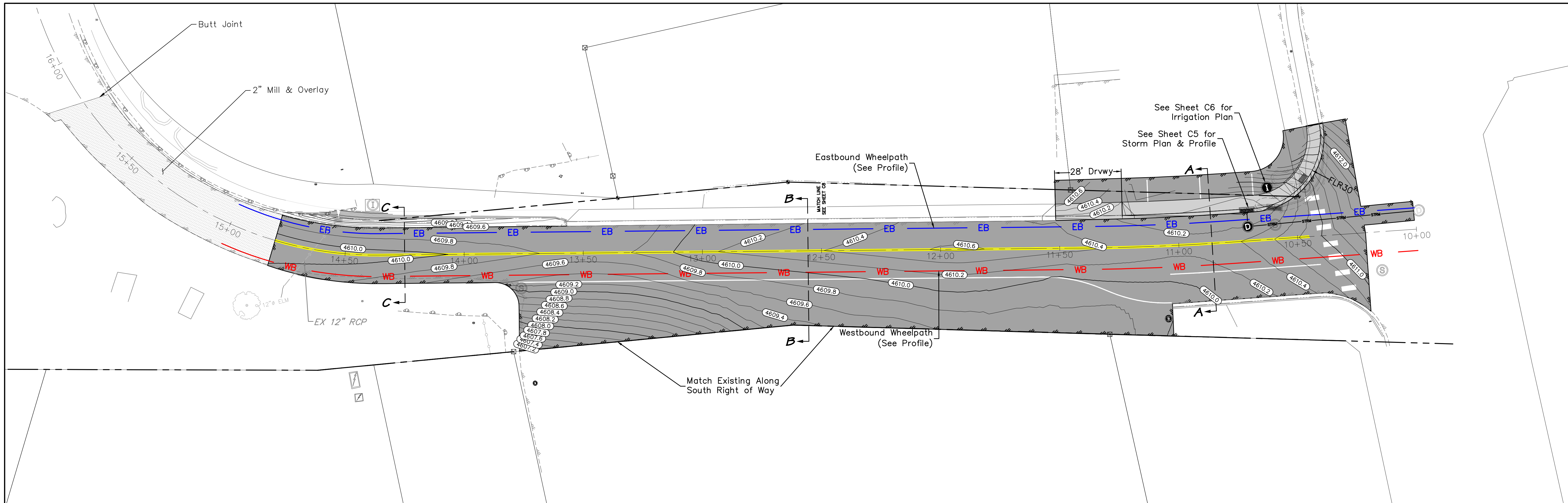


Profile View of EX-Irrigation

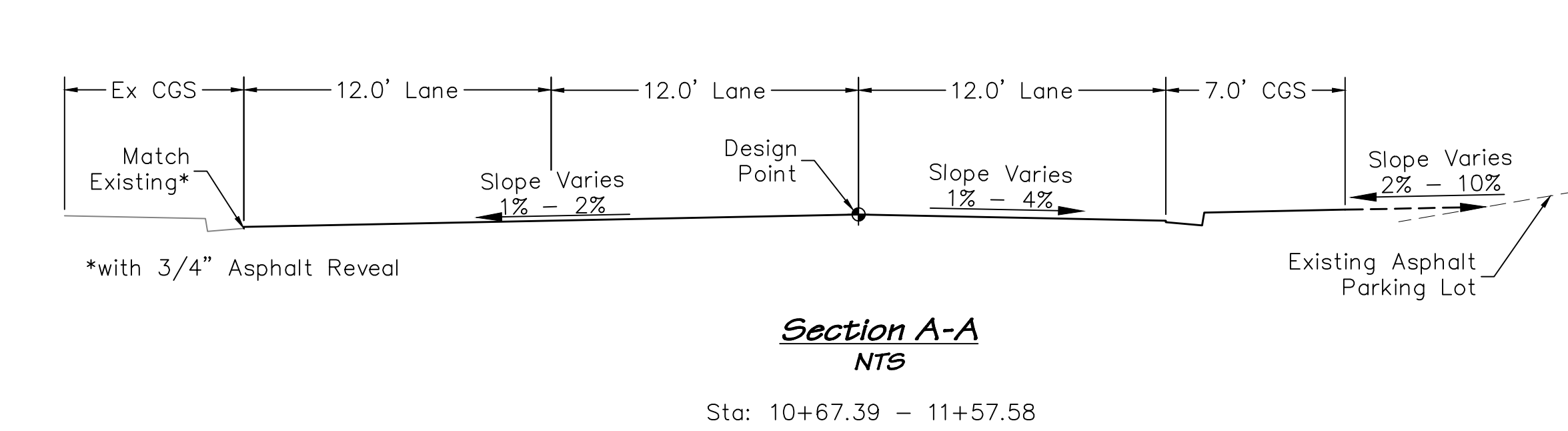
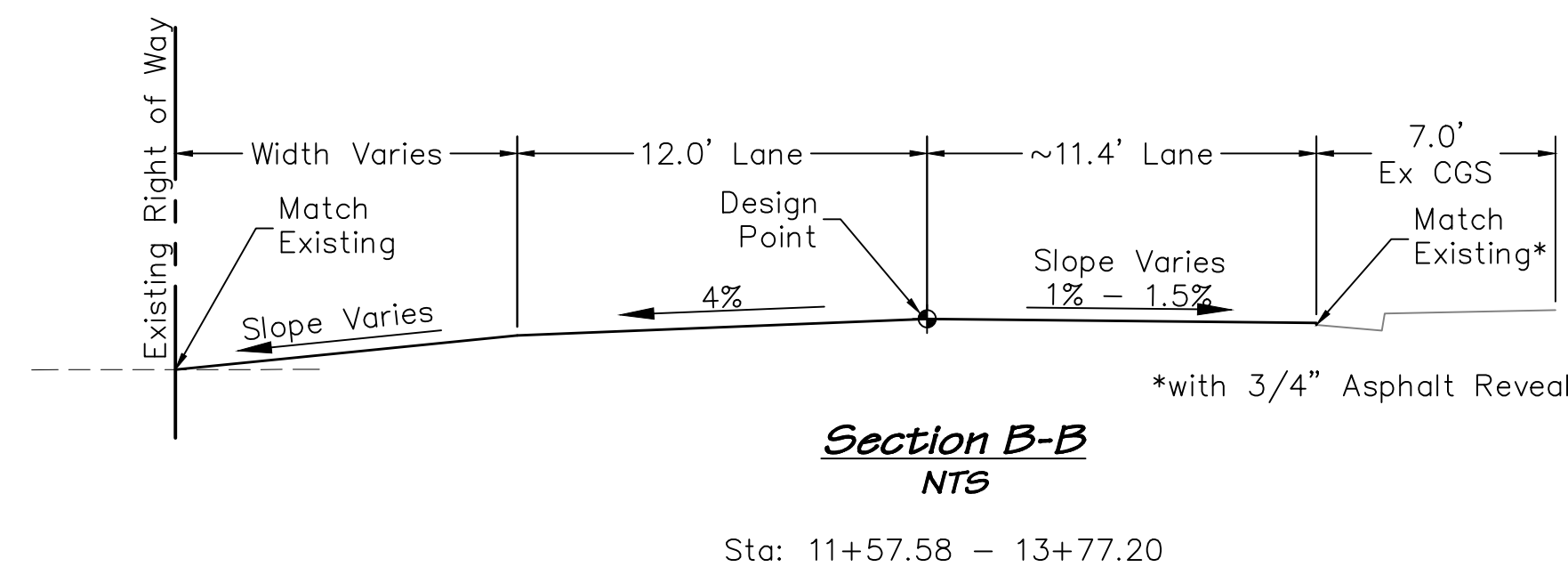
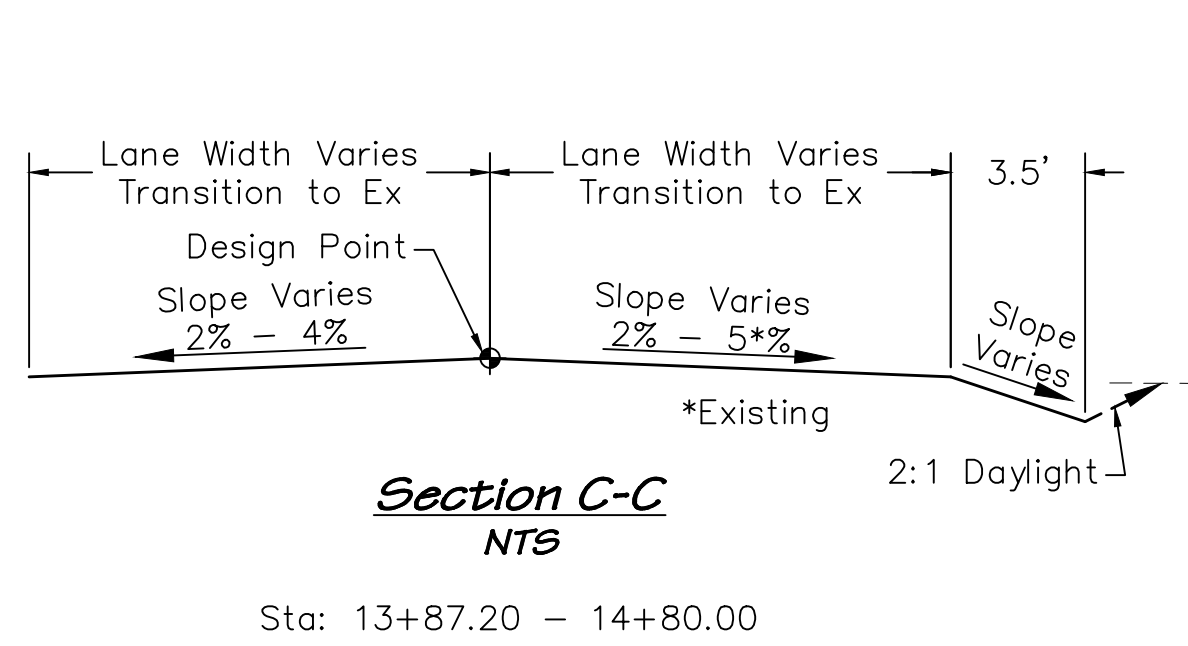
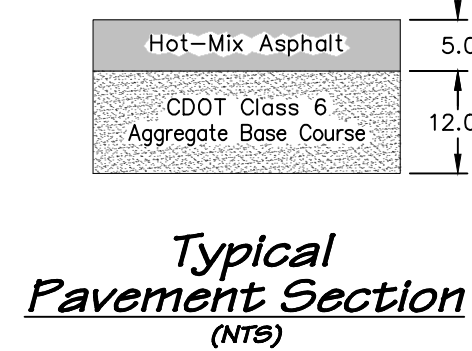
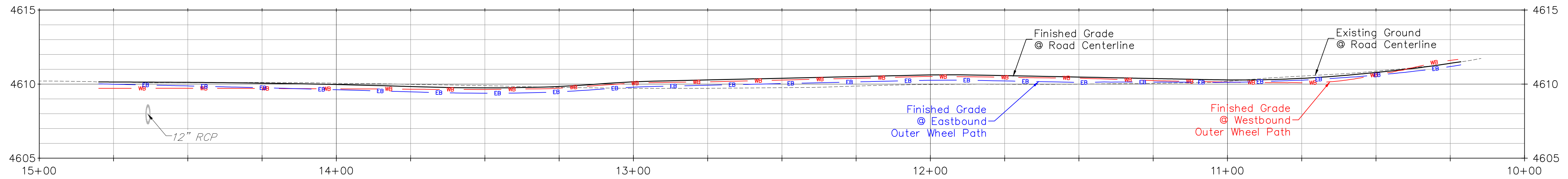


- NOTES:
- Existing Irrigation Structure (E3-252-011) may be reused at property owner's request for the Proposed IRR Manhole, if Contractor finds that this structure is reusable. Should the Contractor determine that this structure is not reusable, then it shall be removed and disposed of properly, and a new structure shall be installed.
 - Refer to City Standard Drawings and Specifications for Installation of Irrigation Pipes and Structures.

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Profile View of LOREY DRIVE CL



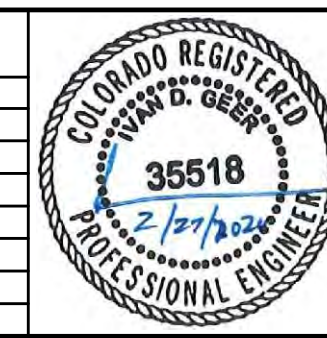
- NOTE:
1. Typical Sections are viewed from left-to-right looking up-station (West).
 2. Pavement Typical Section shall match existing and adhere to City of GJ Standards and Specifications.

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Datum Source: MCLCS Zone "GVA" (NAVD 88)

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(IN FEET)
CONTOUR INTERVAL = 0.2FOOT
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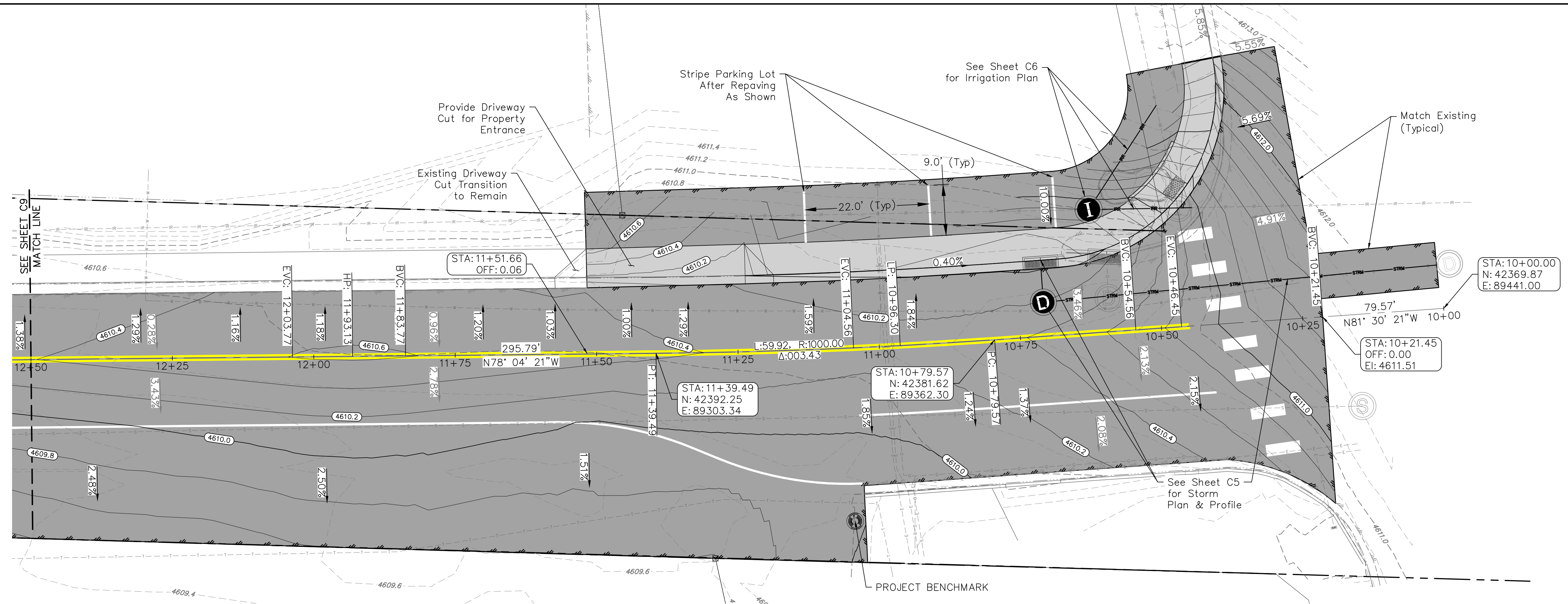
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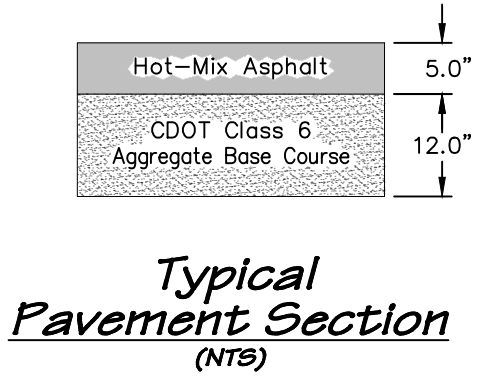
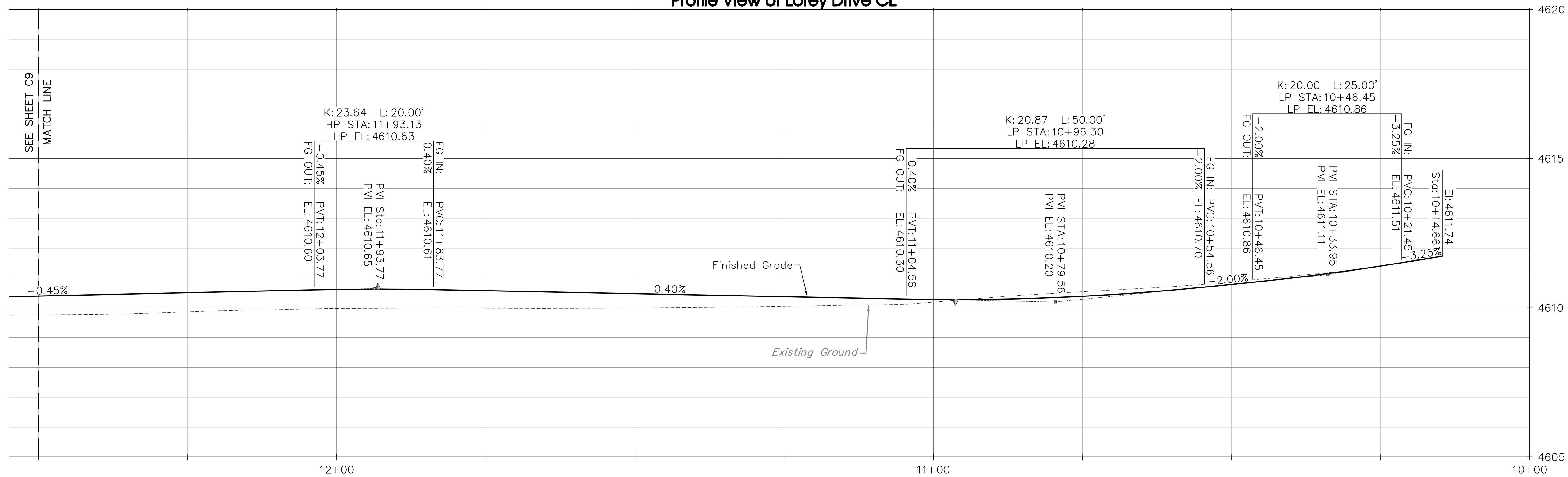
RIVER CITY CONSULTANTS
744 Horizon Court, Suite 110
Grand Junction, CO 81506
Phone: 970.241.4722
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PROJECT #: 1108-006
DATE ISSUED: 27.FEB.2020
DRAWN BY: JMM
CHECKED BY: IDG
HORIZ: AS SHOWN
VERT: AS SHOWN

CITY OF GRAND JUNCTION
Lorey Drive
ROAD TYPICAL SECTIONS (& WHEELPATH PROFILE)
C7



Profile View of Lorey Drive CL



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Project Benchmark
SET PK NAIL
SW OF INTERSECTION OF
1ST STREET & LOREY DRIVE
Northing: 42355.676
Easting: 893331.289
Elevation: 4610.03
Datum Source: MCLCS Zone "GVA" (NAVD 88)

SCALE
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(IN FEET)
CONTOUR INTERVAL = 0.2FOOT
ORIGINAL SHEET SIZE: 22 x 34

NO.	DATE	DESCRIPTION	BY
1	03.NOV.2020	Revised per Comments from City Engineer	JMM



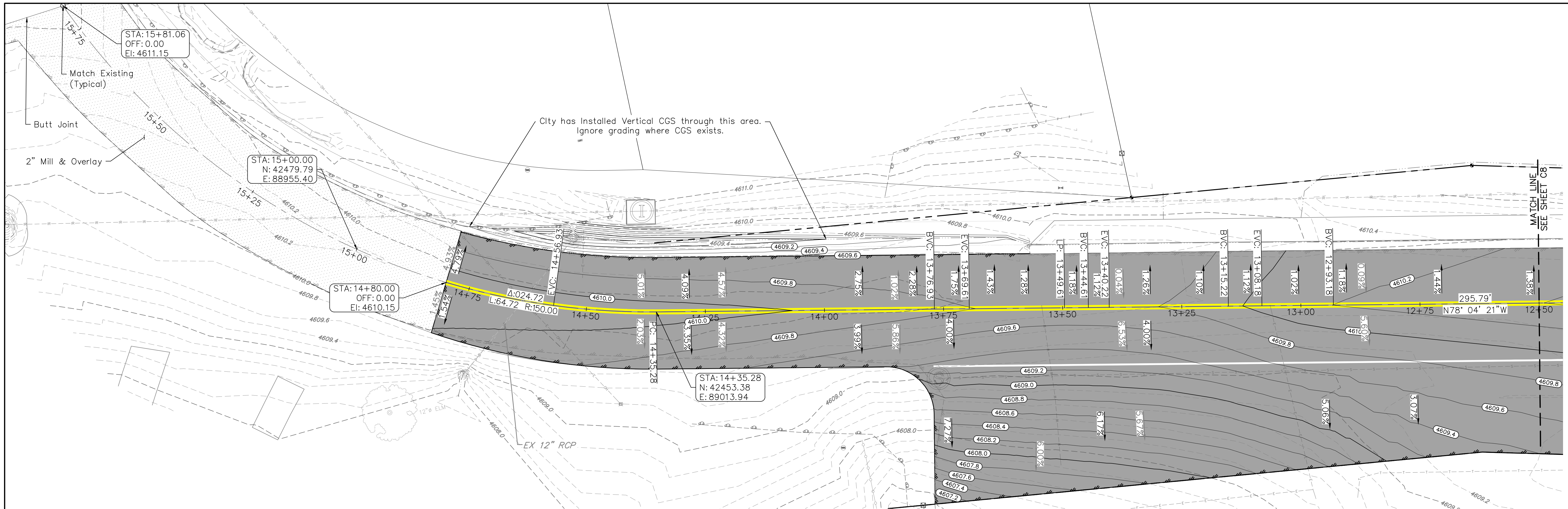
RIVER CITY CONSULTANTS
744 Horizon Court, Suite 110
Grand Junction, CO 81506
Phone: 970.241.4722
Fax: 970.241.8841
www.rcowest.com

PROJECT #: 1108-006
DATE ISSUED: 27.FEB.2020
DRAWN BY: JMM
CHECKED BY: JMM
HORIZ: AS SHOWN
VERT: AS SHOWN

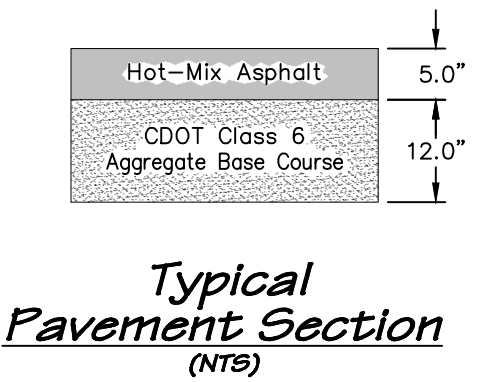
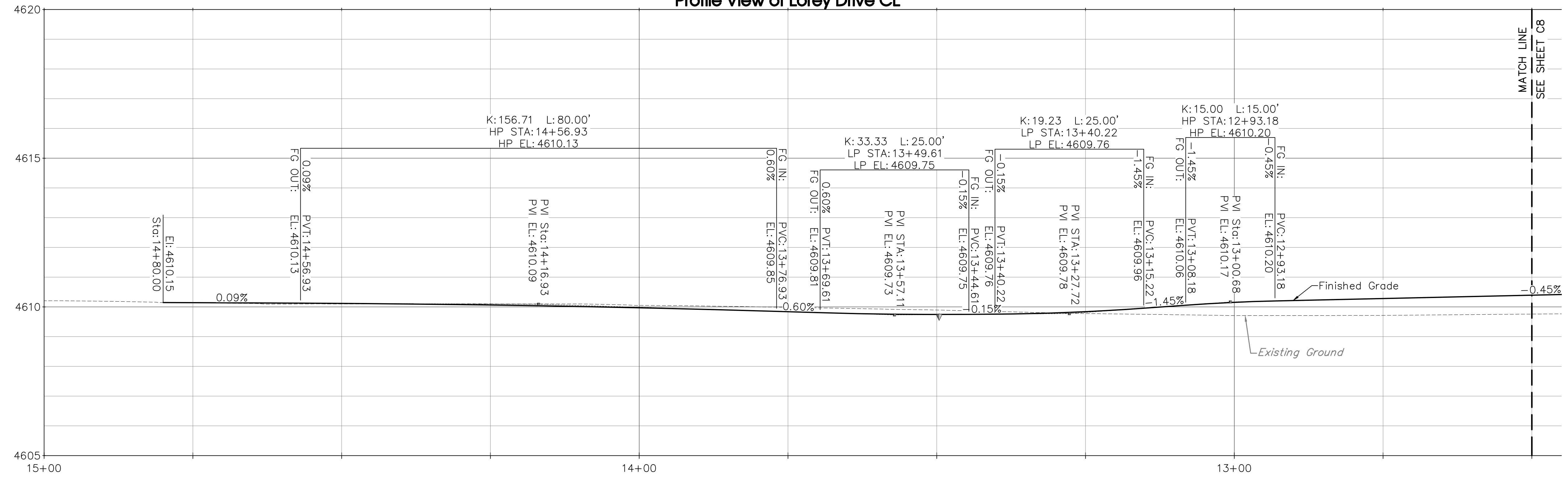
CITY OF GRAND JUNCTION
Lorey Drive
ROAD PLAN & PROFILE
Lorey Drive Centerline (Sta: 10+00 - 12+50)

C8

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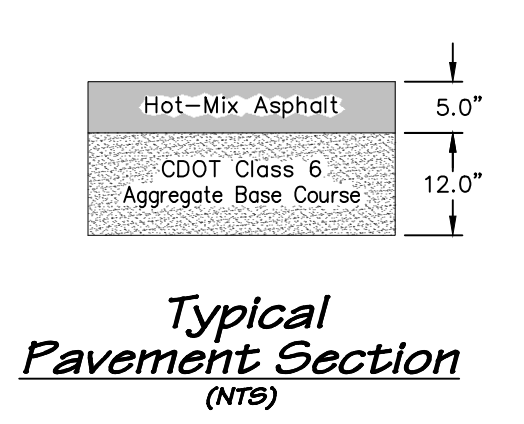
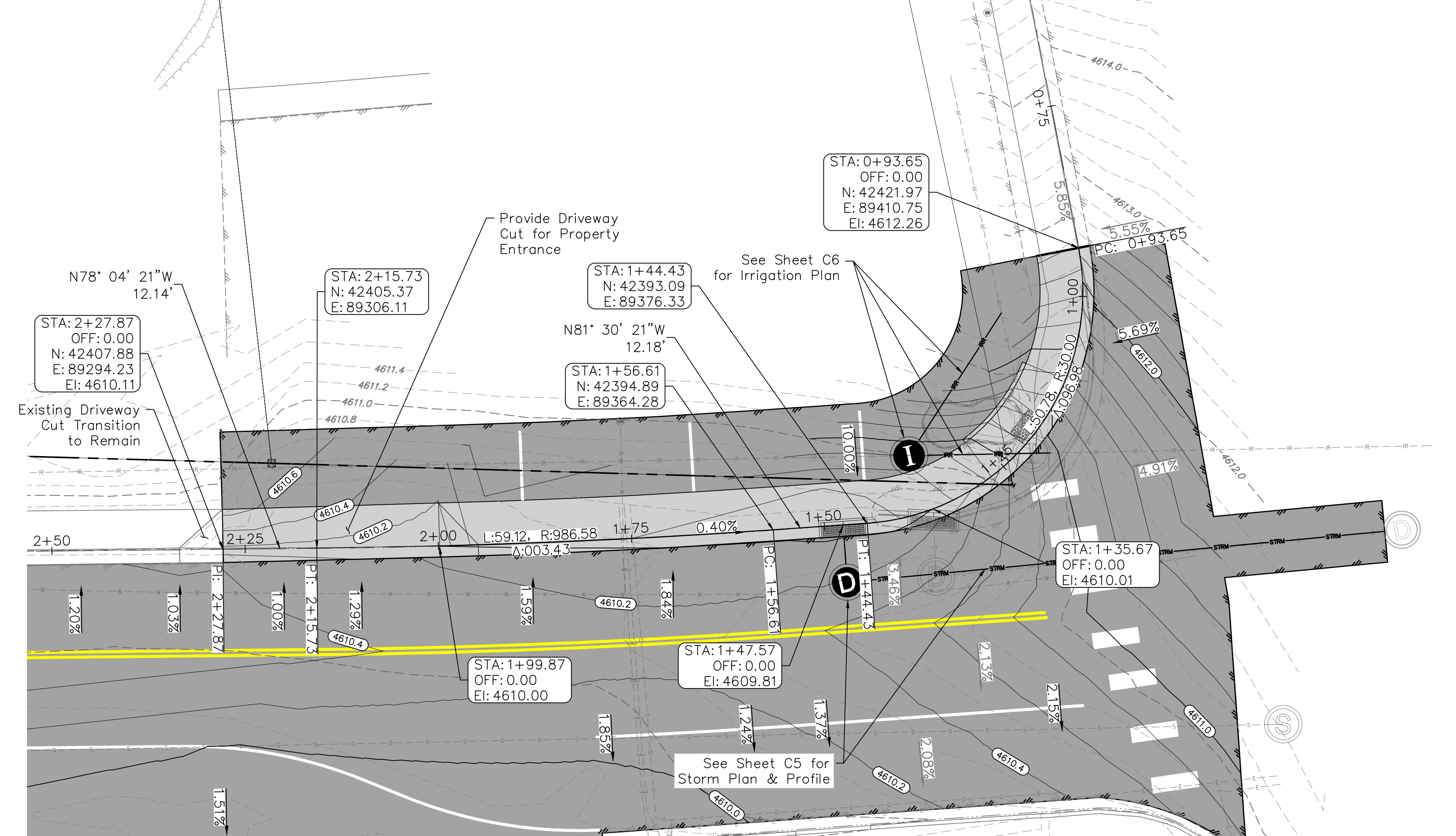
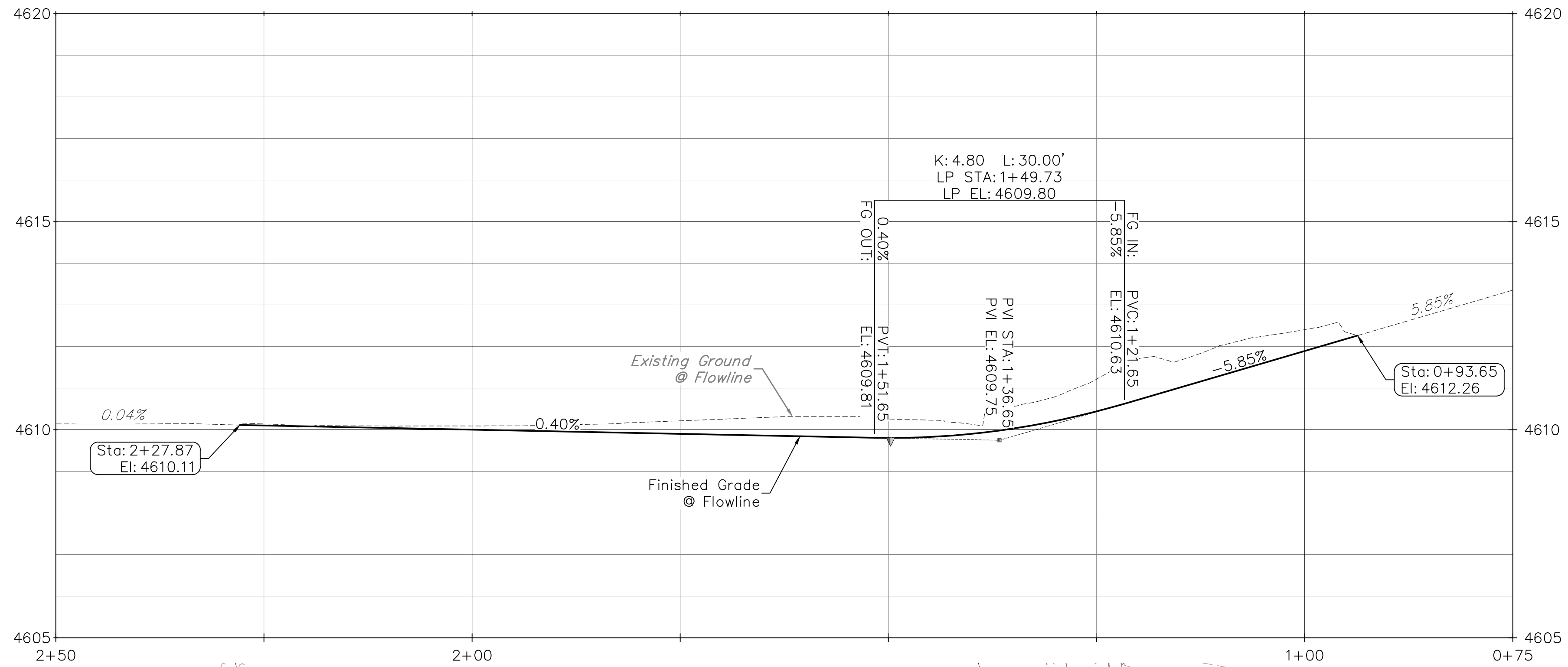


Profile View of Lorey Drive CL

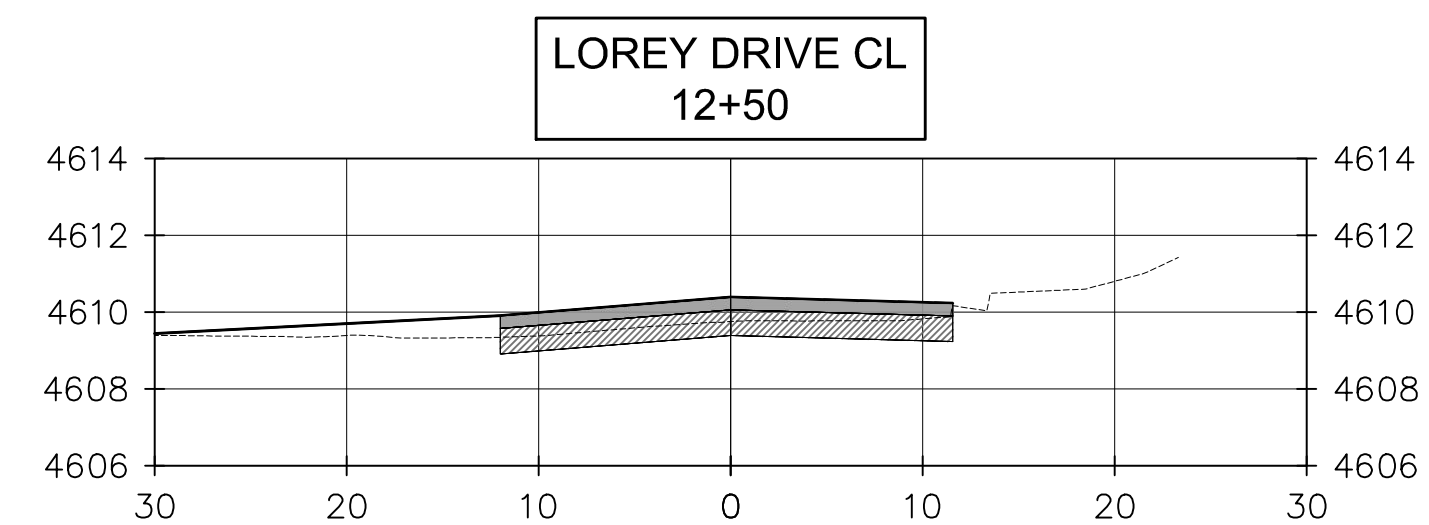
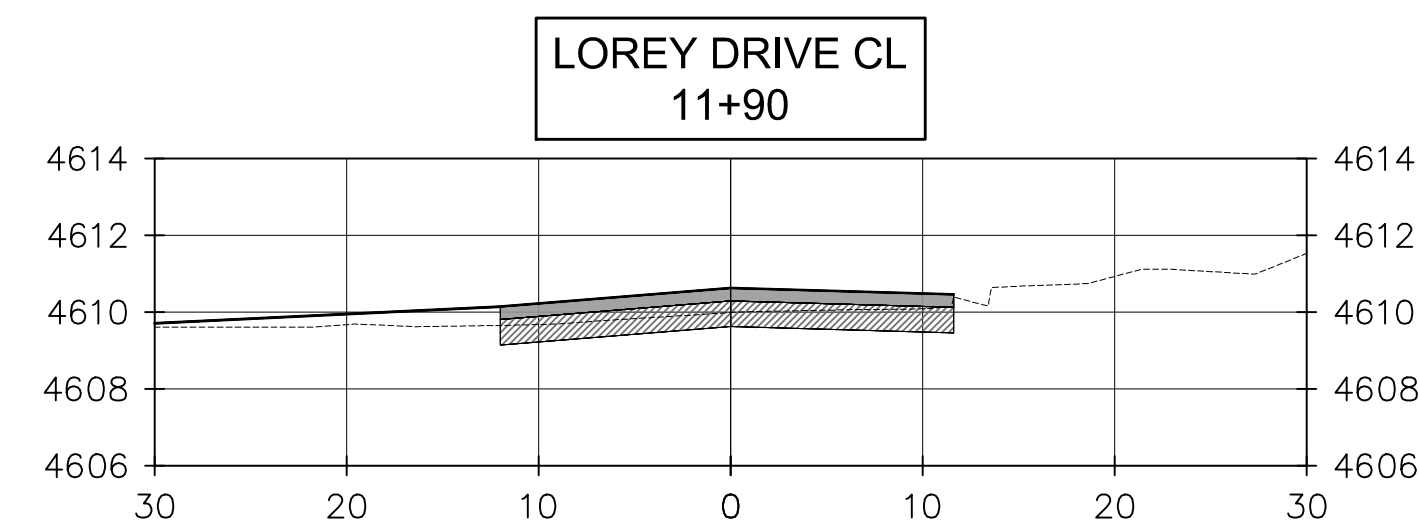
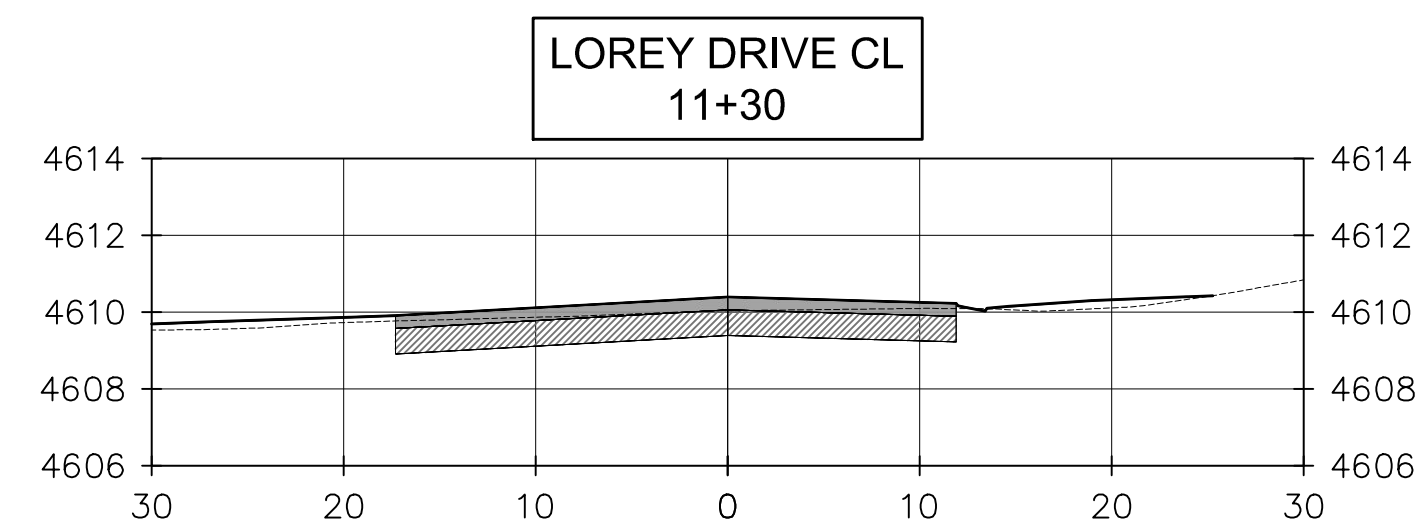
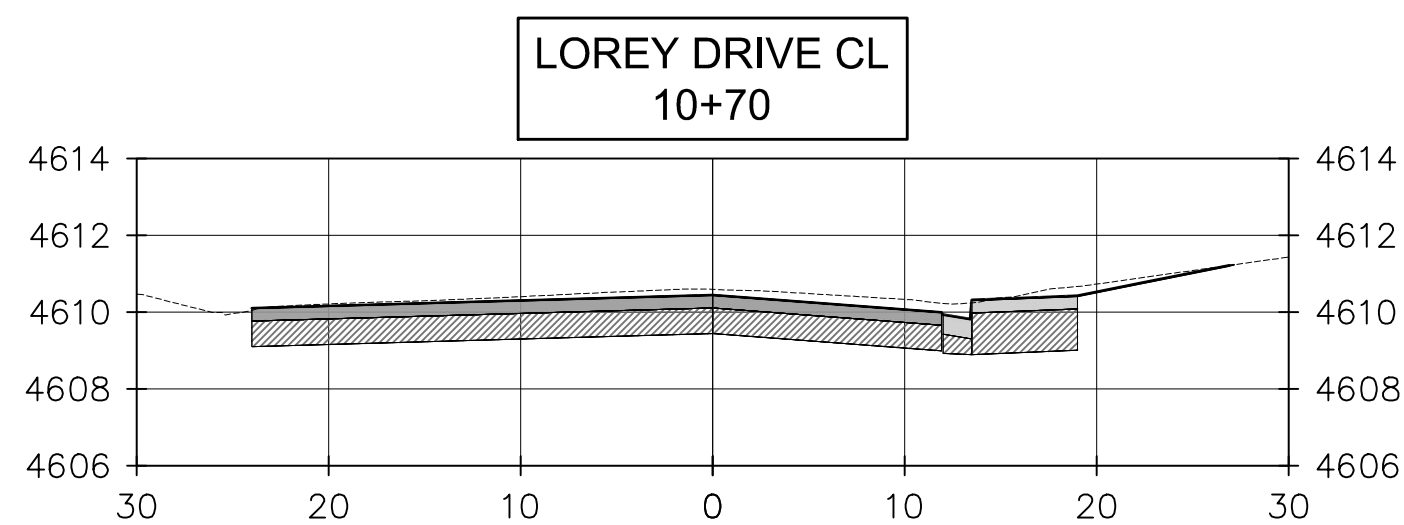
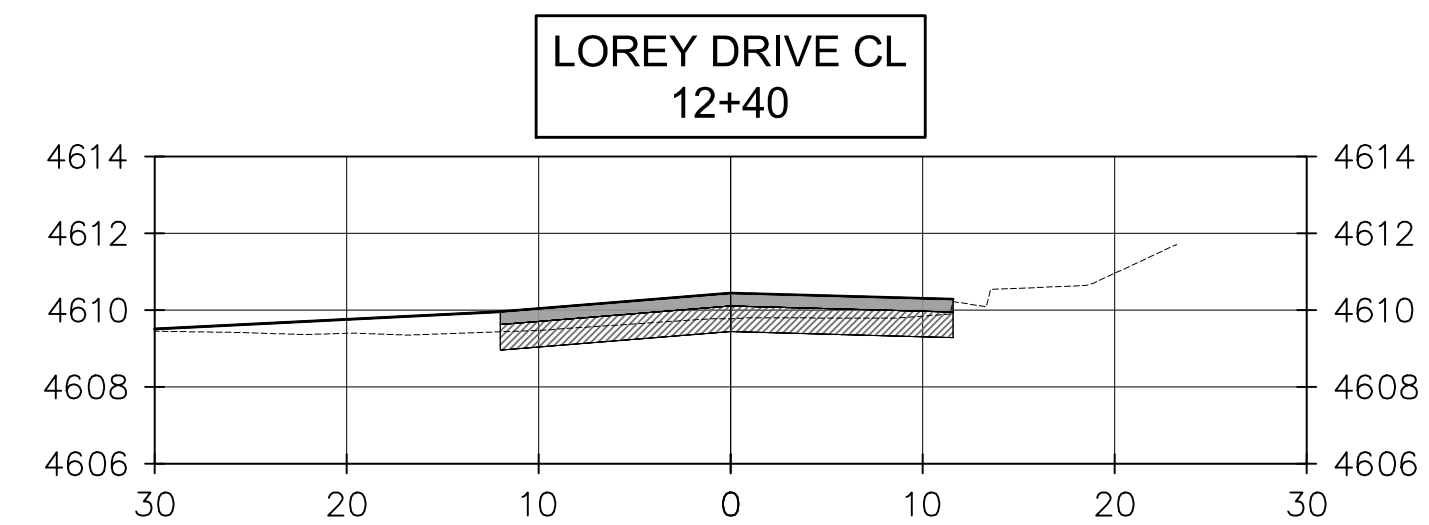
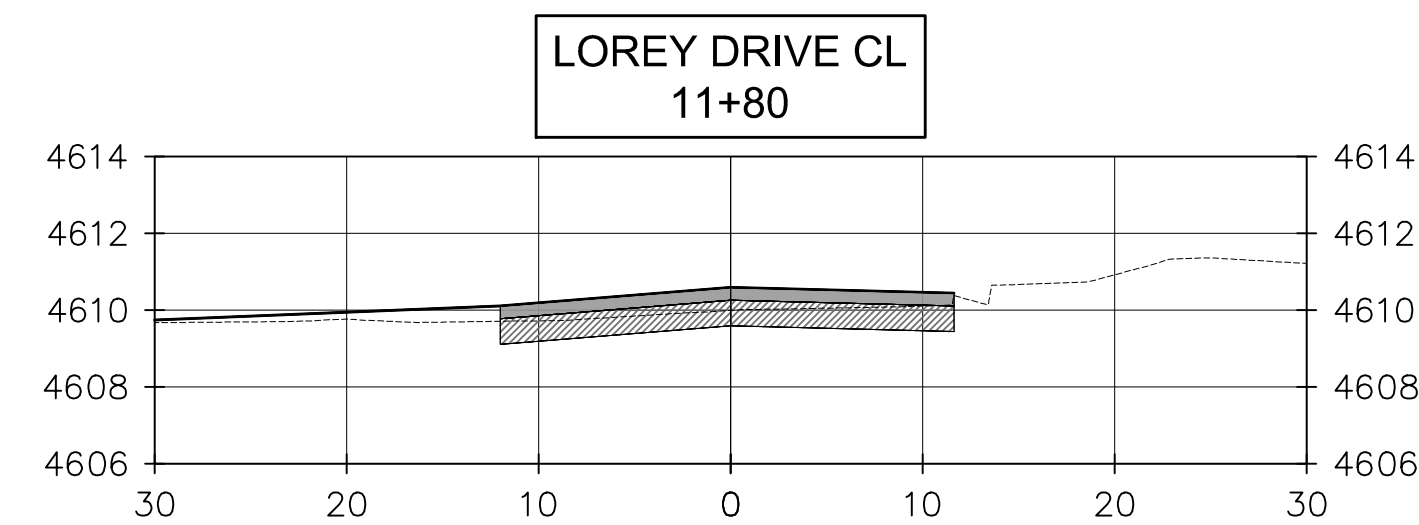
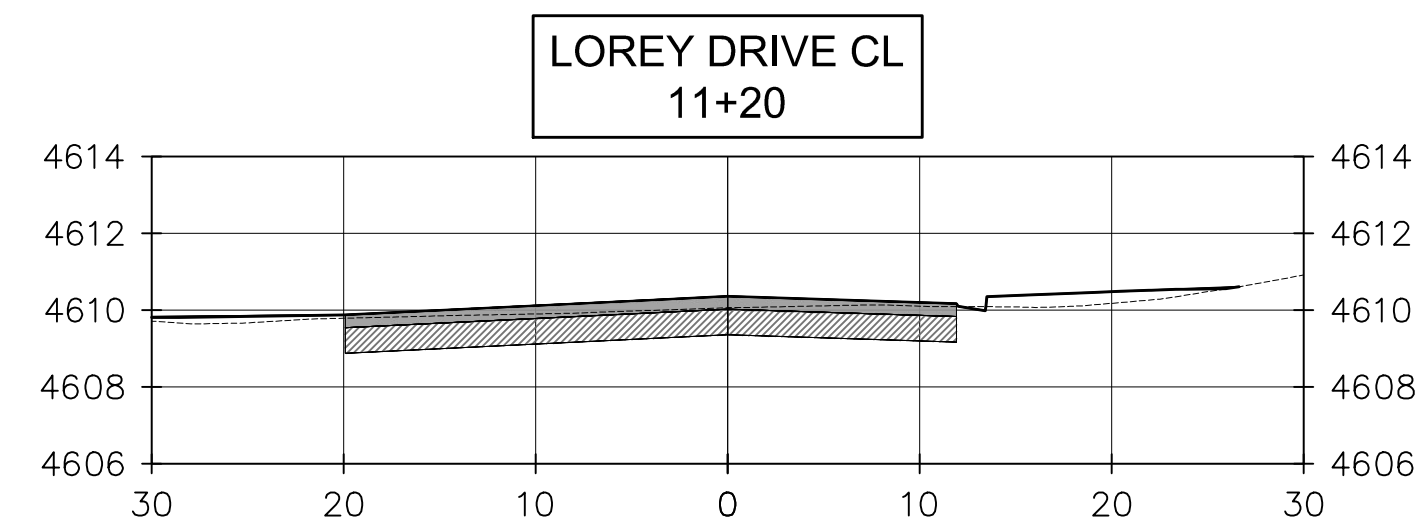
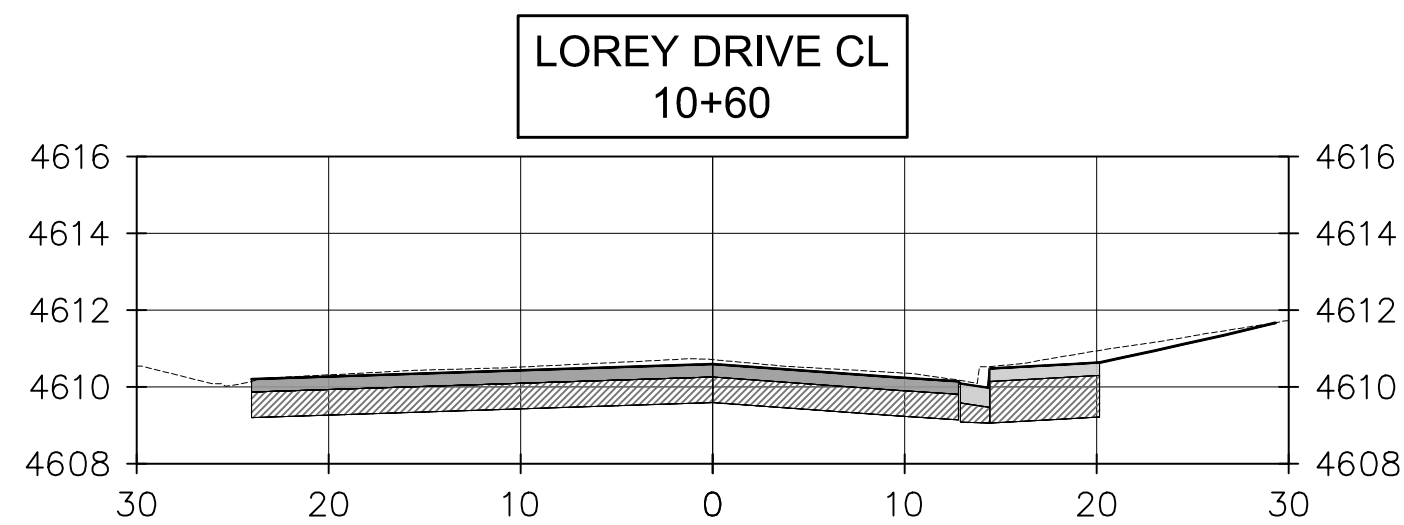
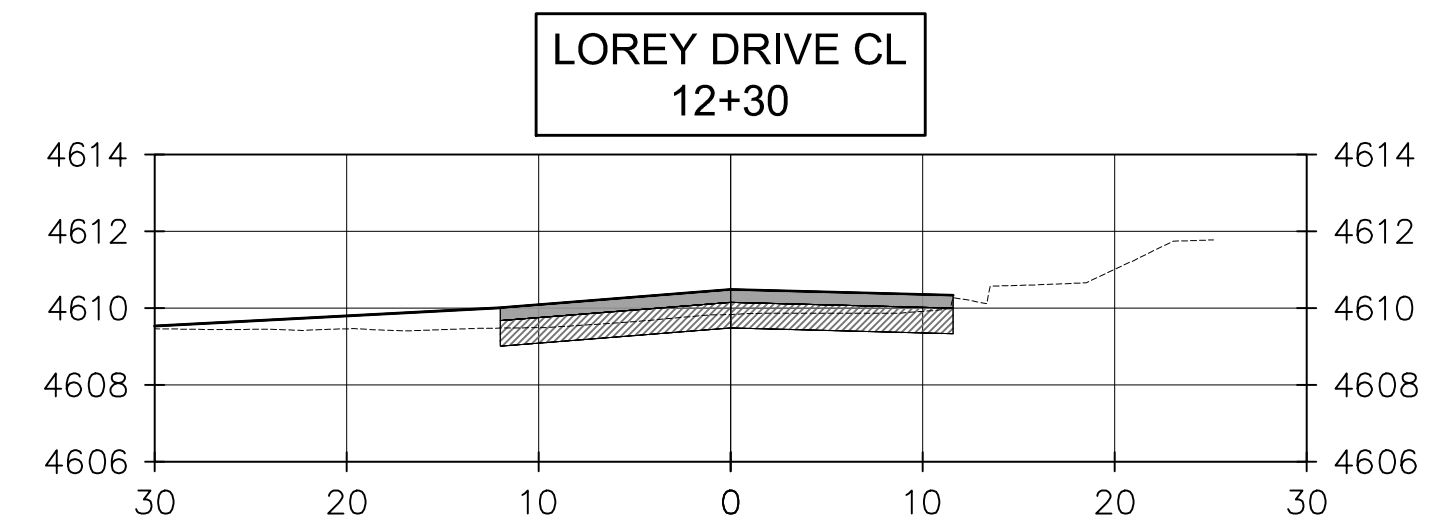
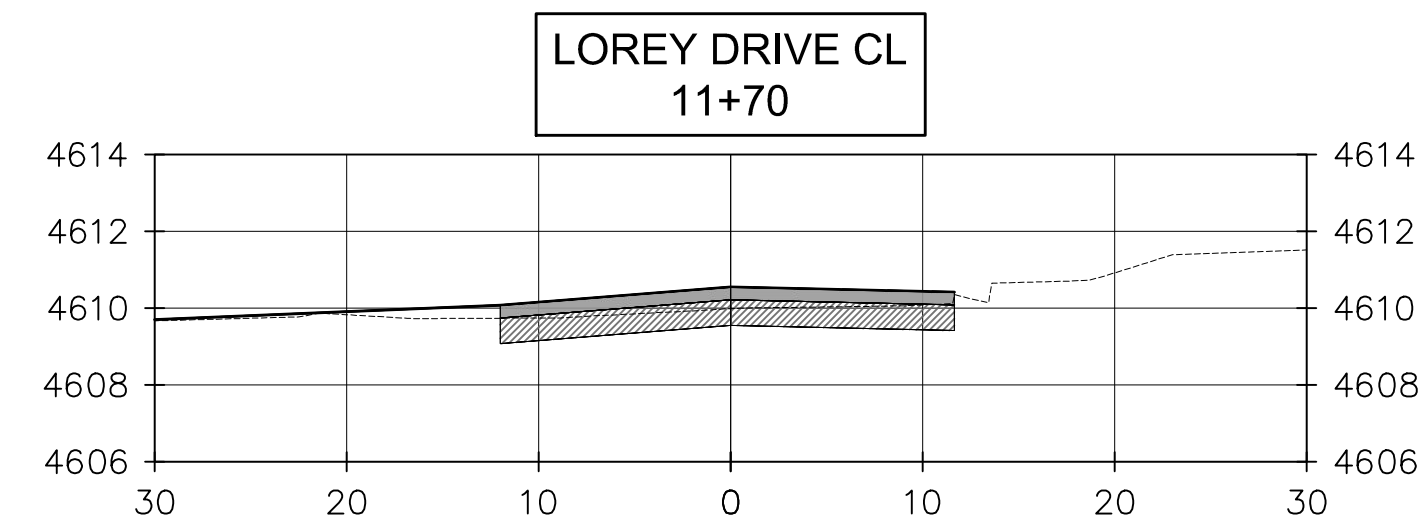
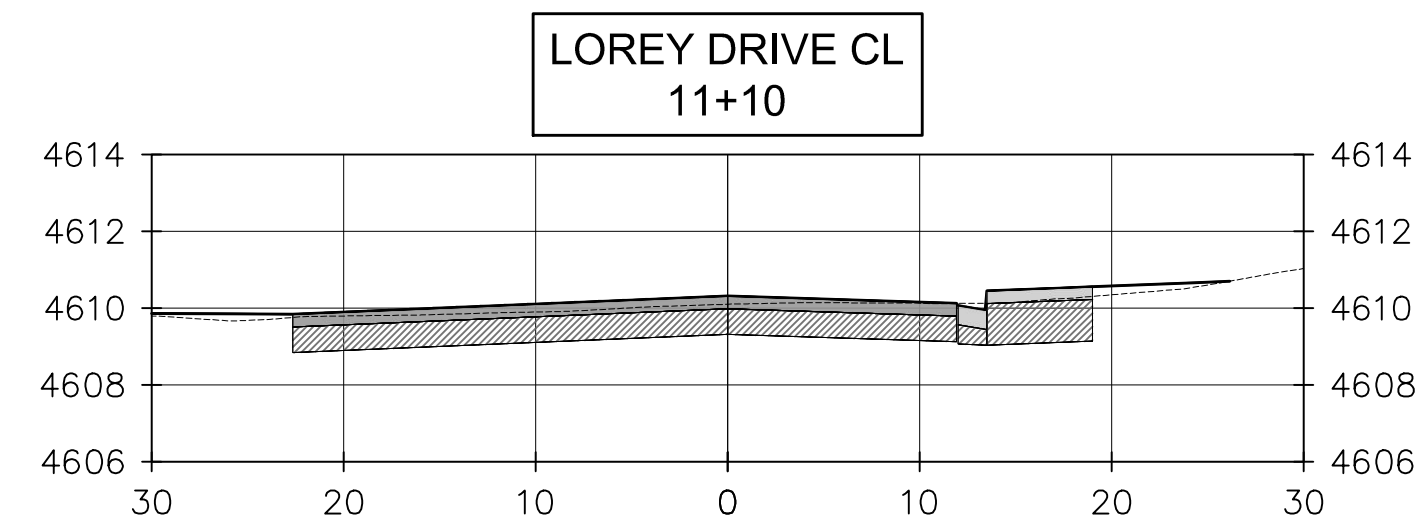
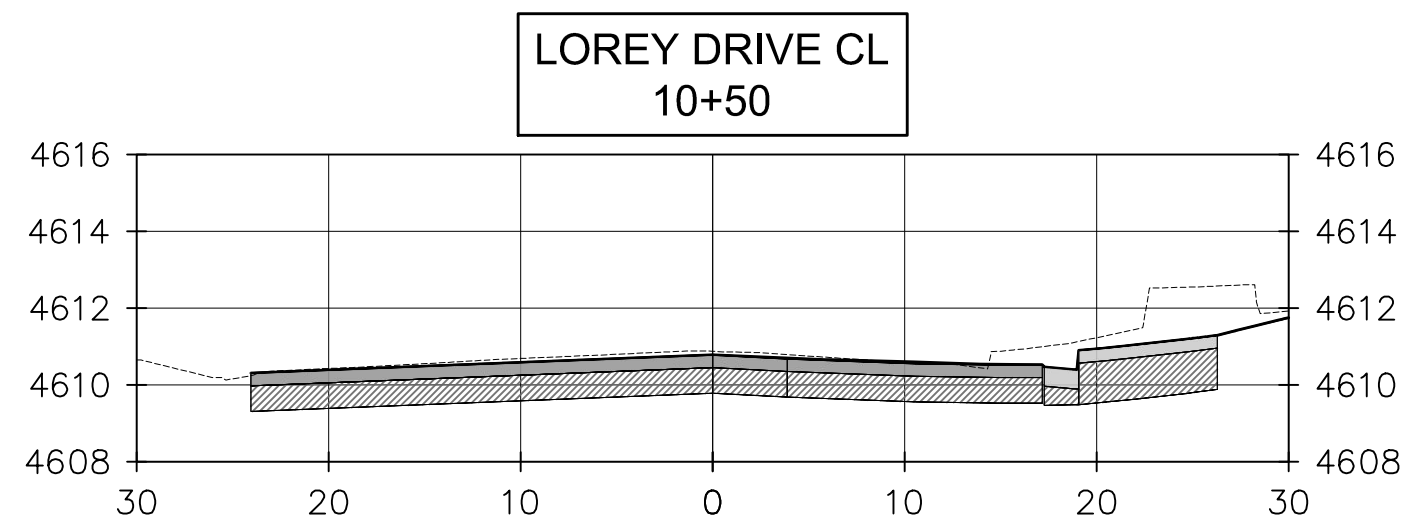
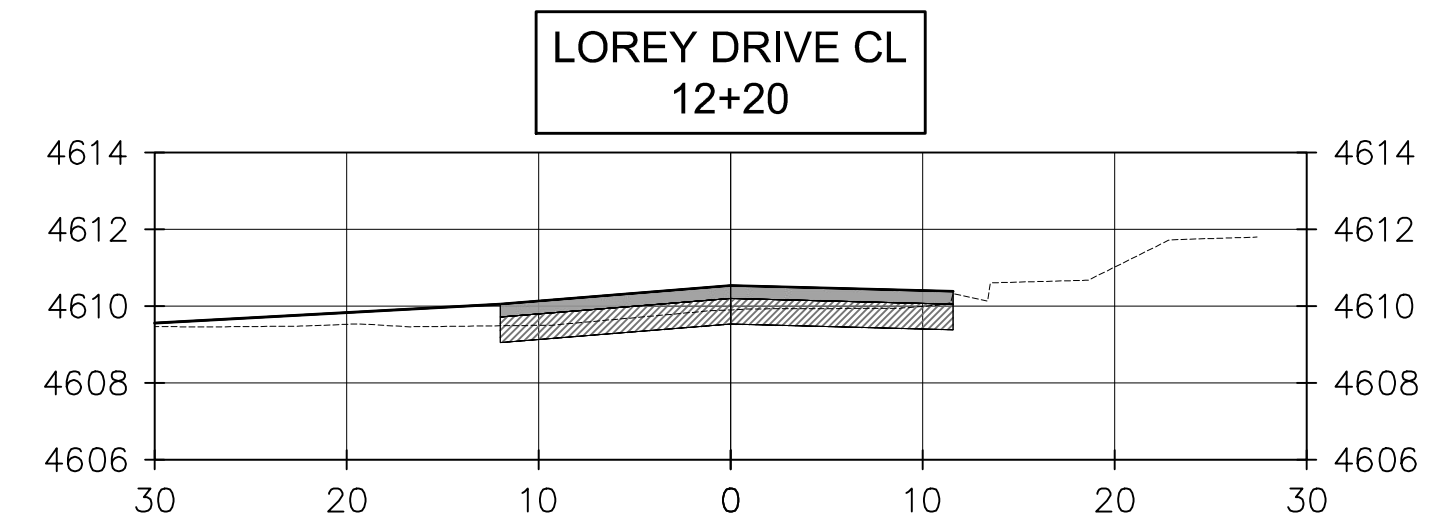
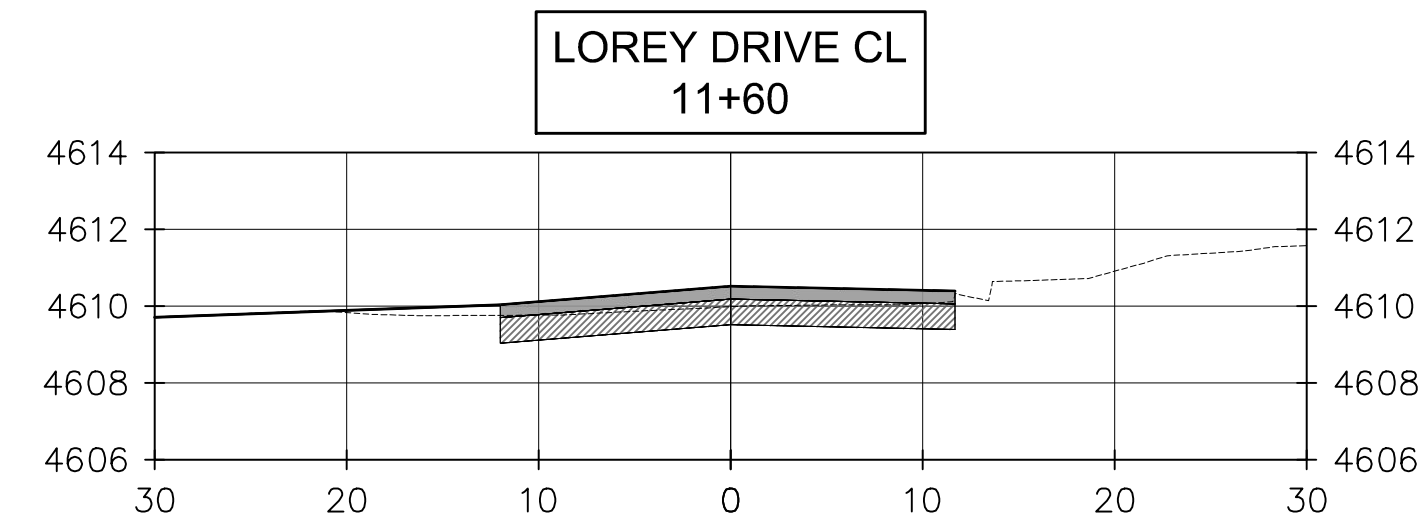
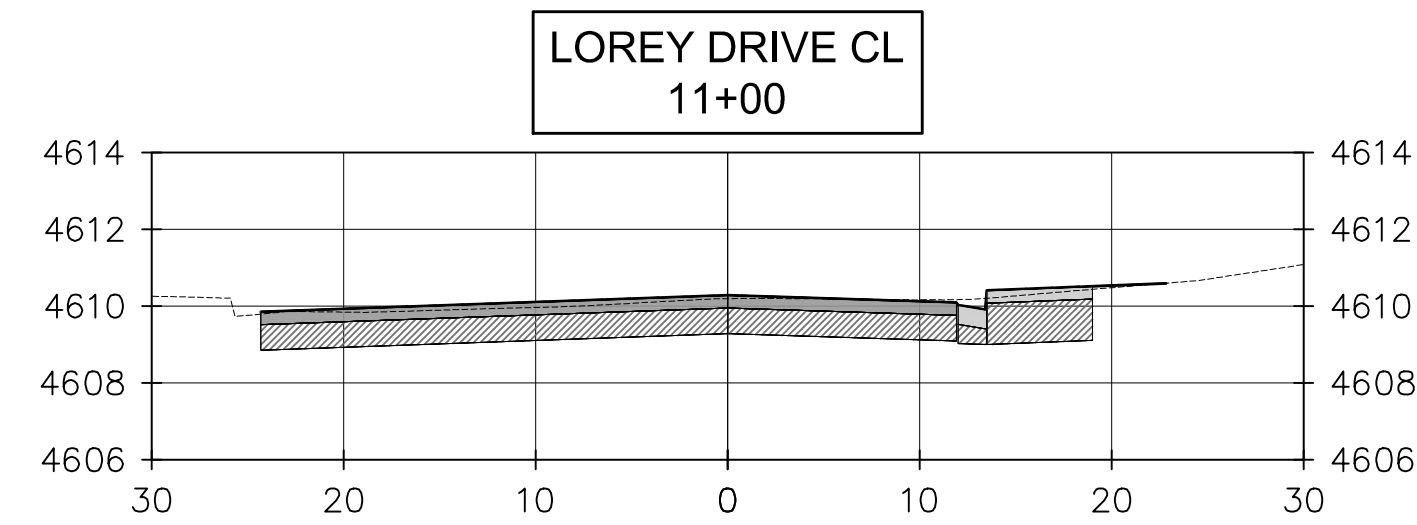
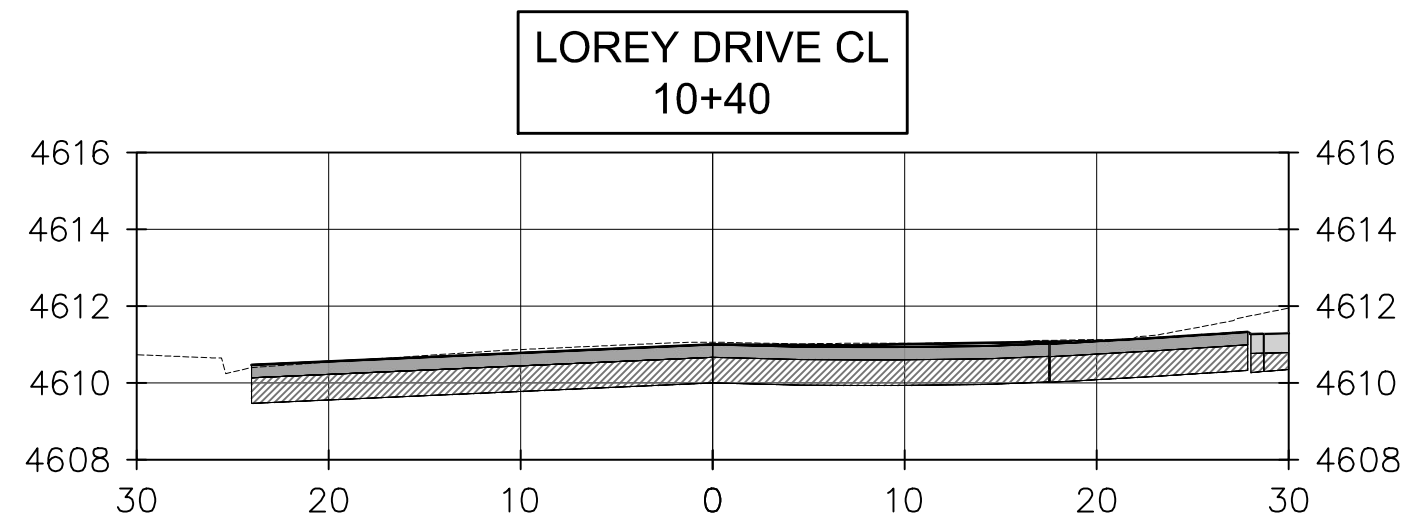
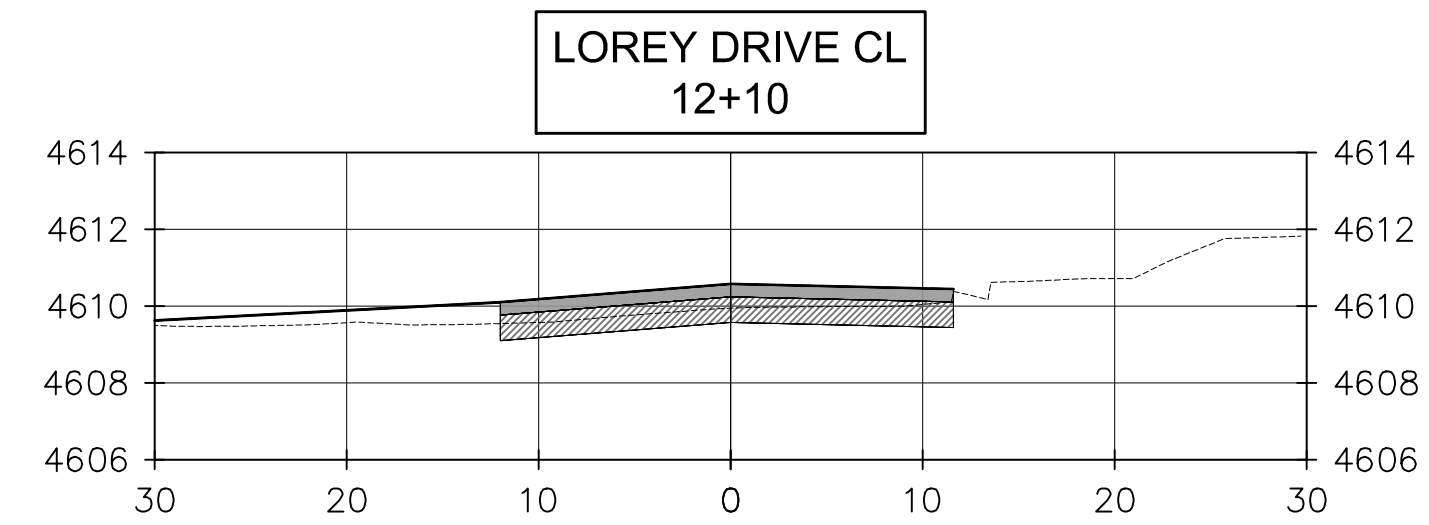
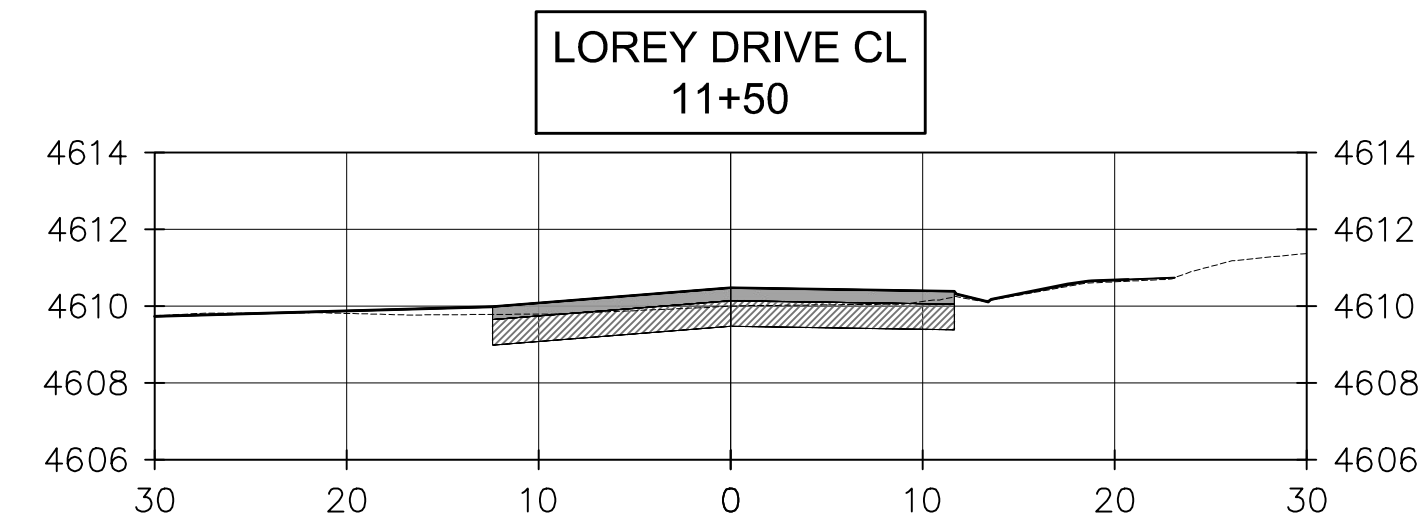
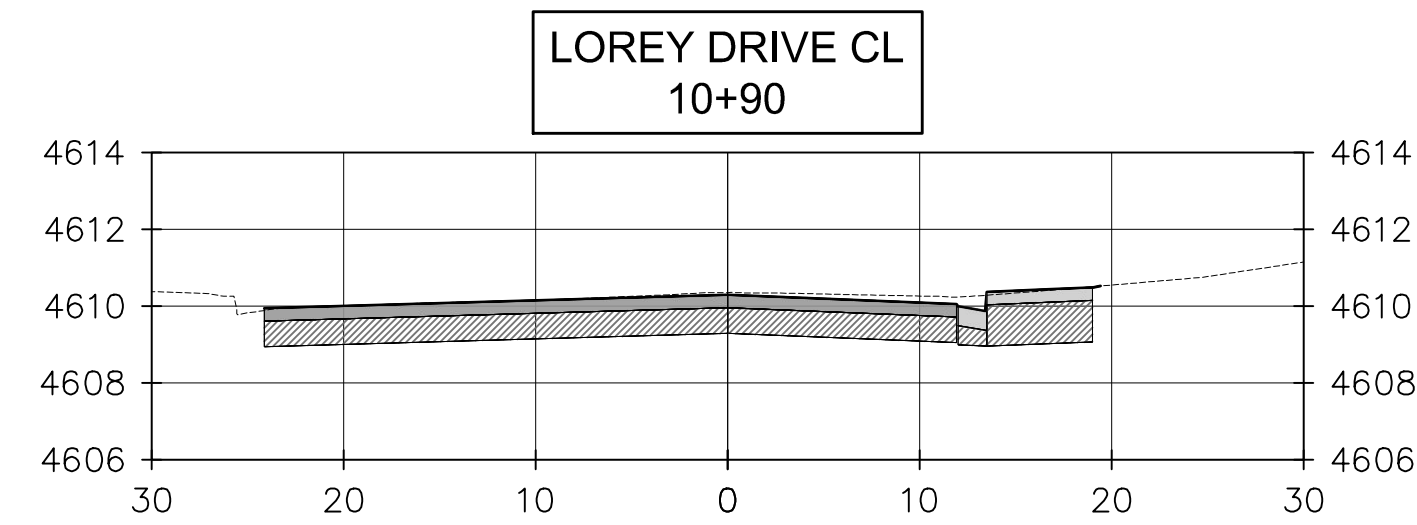
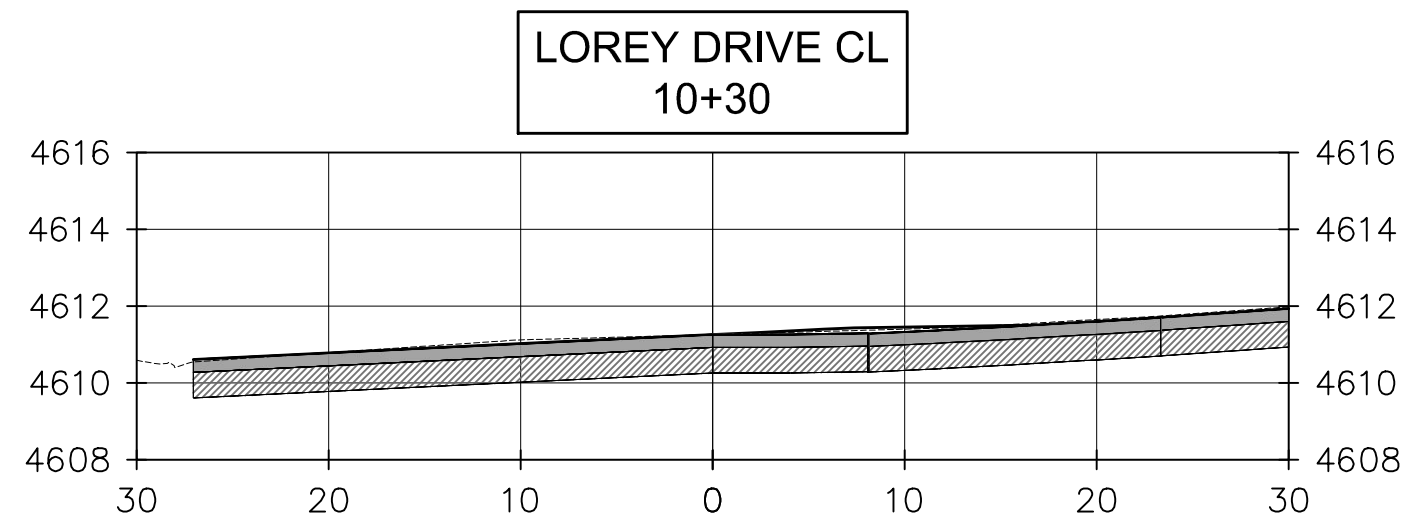
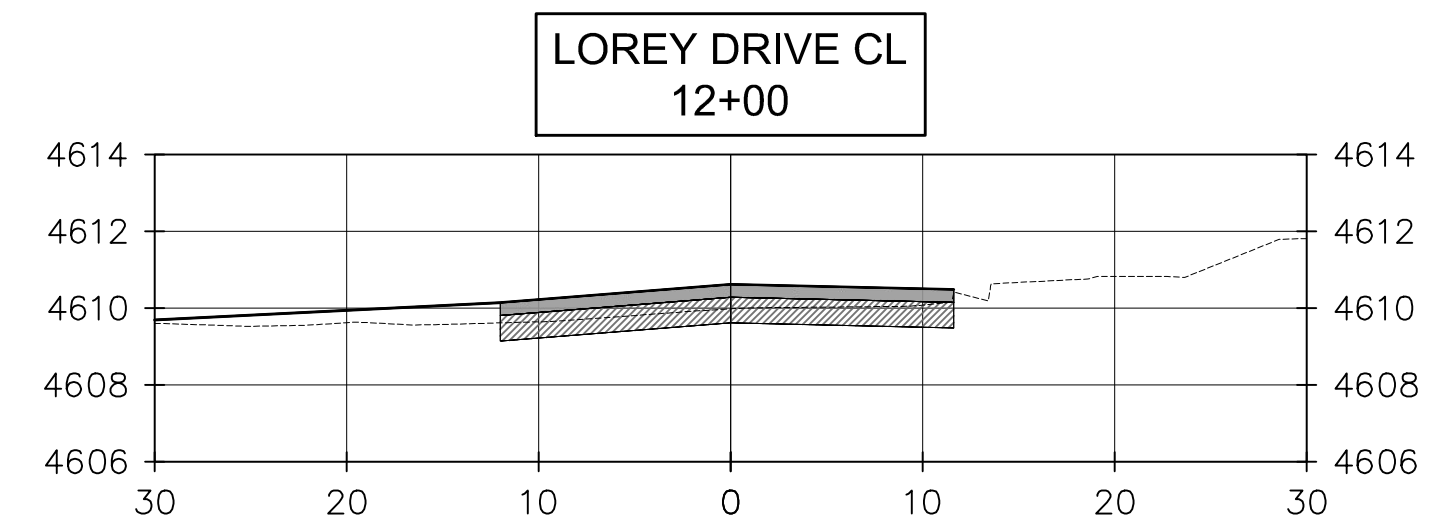
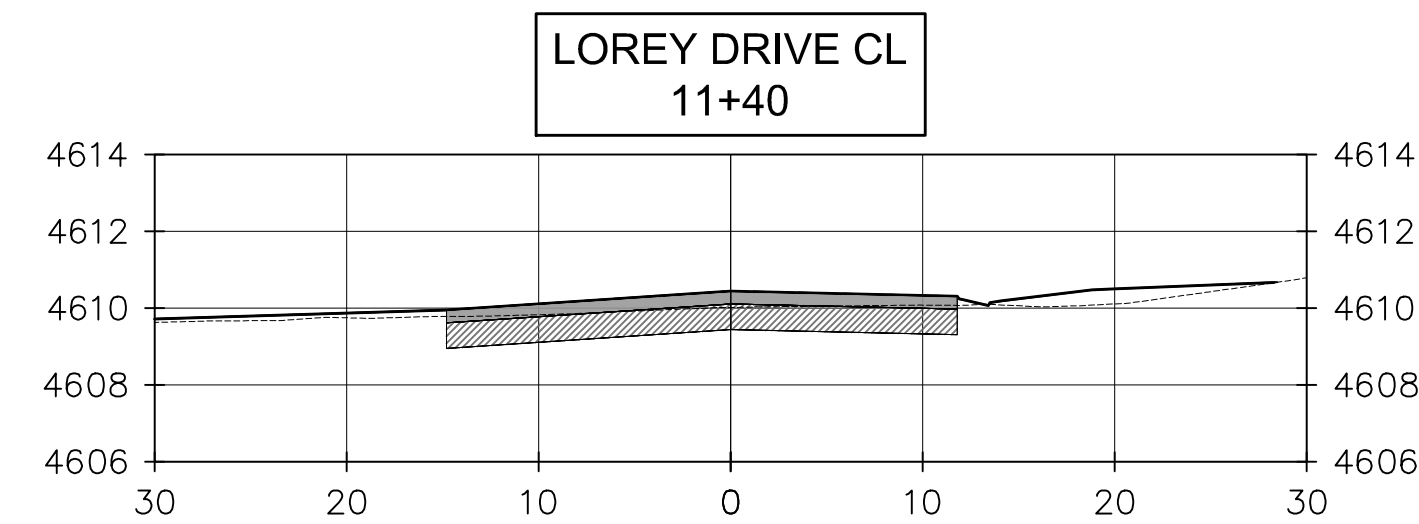
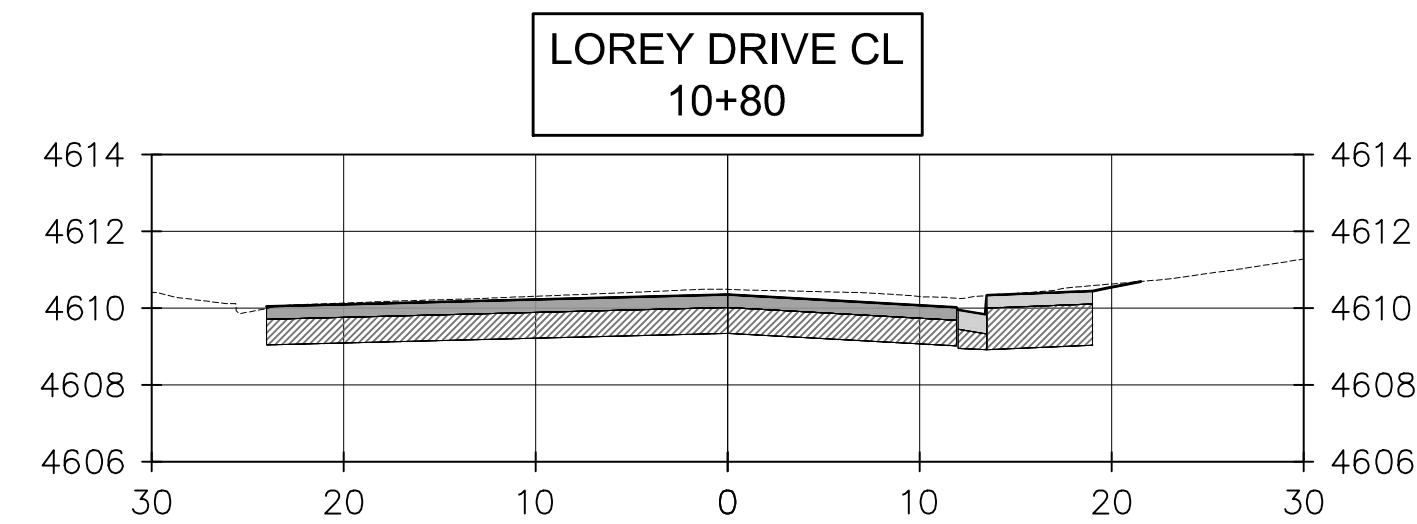
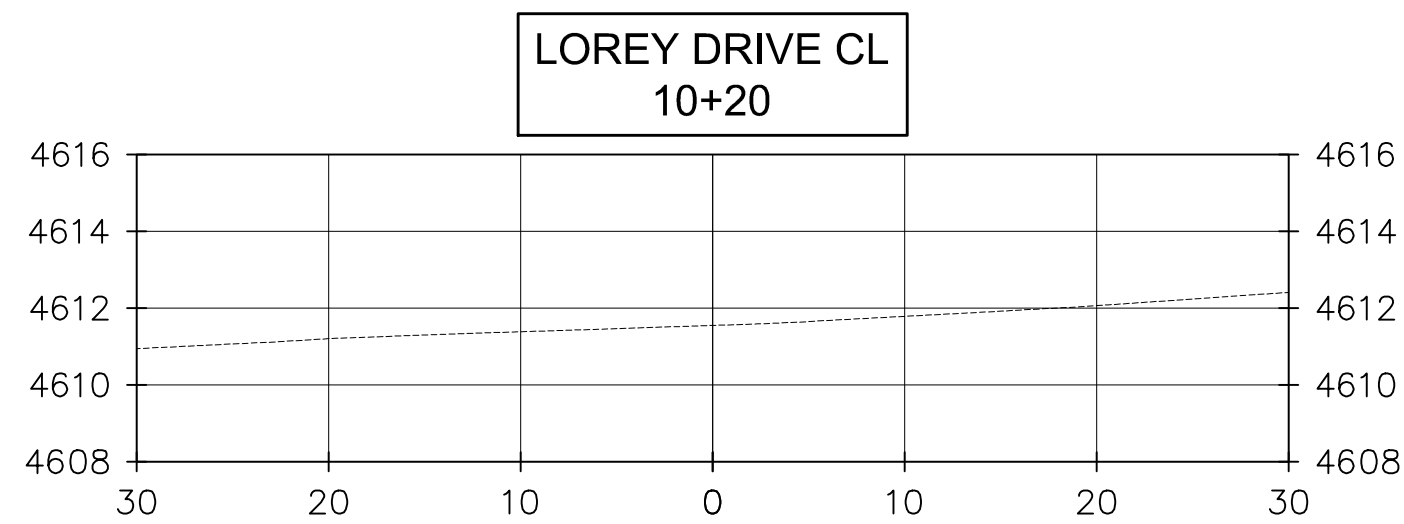


<p>811 Know what's below. Call before you dig.</p> <p>UNCC 800.922.1987 www.uncc.org CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.</p>	<p>Project Benchmark SET PK NAIL SW OF INTERSECTION OF 1ST STREET & LOREY DRIVE</p> <p>Northing: 42355.676 Easting: 893331.289 Elevation: 4610.03 Datum Source: MCLCS Zone "GVA" (NAVD 88)</p>	<p>SCALE</p> <p>(IN FEET) CONTOUR INTERVAL = 0.2FOOT ORIGINAL SHEET SIZE: 22 x 34</p>	<table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>03.NOV.2020</td> <td>Revised per Comments from City Engineer</td> <td>JMM</td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION	BY	1	03.NOV.2020	Revised per Comments from City Engineer	JMM		<p>RIVER CITY CONSULTANTS</p> <p>744 Horizon Court, Suite 110 Grand Junction, CO 81506 www.rcwest.com Phone: 970.241.4722 Fax: 970.241.8841</p>	<p>CITY OF GRAND JUNCTION</p> <p>Lorey Drive</p> <p>ROAD PLAN & PROFILE Lorey Drive Centerline (Sta: 12+50 - 15+00)</p>
			NO.	DATE	DESCRIPTION	BY								
1	03.NOV.2020	Revised per Comments from City Engineer	JMM											
<p>PROJECT #: 1108-006 DRAWN BY: JMM CHECKED BY: IDG</p>	<p>DATE ISSUED: 27.FEB.2020 HORIZ: AS SHOWN VERT: AS SHOWN</p>	<p>C9</p>												

Profile View of NORTH FLOWLINE DESIGN

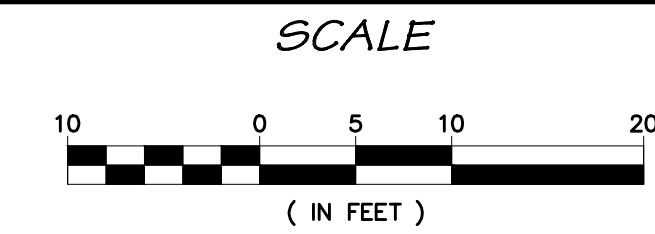


		<p>Project Benchmark SET PK NAIL SW OF INTERSECTION OF 1ST STREET & LOREY DRIVE</p> <p>Northing: 42355.676 Easting: 89331.289 Elevation: 4610.03 Datum Source: MCLCS Zone "GVA" (NAVD 88)</p>	<p>SCALE</p> <p>(IN FEET) CONTOUR INTERVAL = 0.2FOOT ORIGINAL SHEET SIZE: 22 x 34</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>03.NOV.2020</td> <td>Revised per Comments from City Engineer</td> <td>JMM</td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION	BY	1	03.NOV.2020	Revised per Comments from City Engineer	JMM		<p>RIVER CITY CONSULTANTS</p> <p>744 Horizon Court, Suite 110 Grand Junction, CO 81506 www.rcwest.com Phone: 970.241.4722 Fax: 970.241.8841</p> <p>PROJECT #: 1108-006 DATE ISSUED: 27.FEB.2020 DRAWN BY: JMM CHECKED BY: IDG HORIZ: AS SHOWN VERT: AS SHOWN</p>	<p>CITY OF GRAND JUNCTION</p> <p><i>Lorey Drive</i></p> <p>ROAD PLAN & PROFILE</p>	<p>C10</p>
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REVISIONS		
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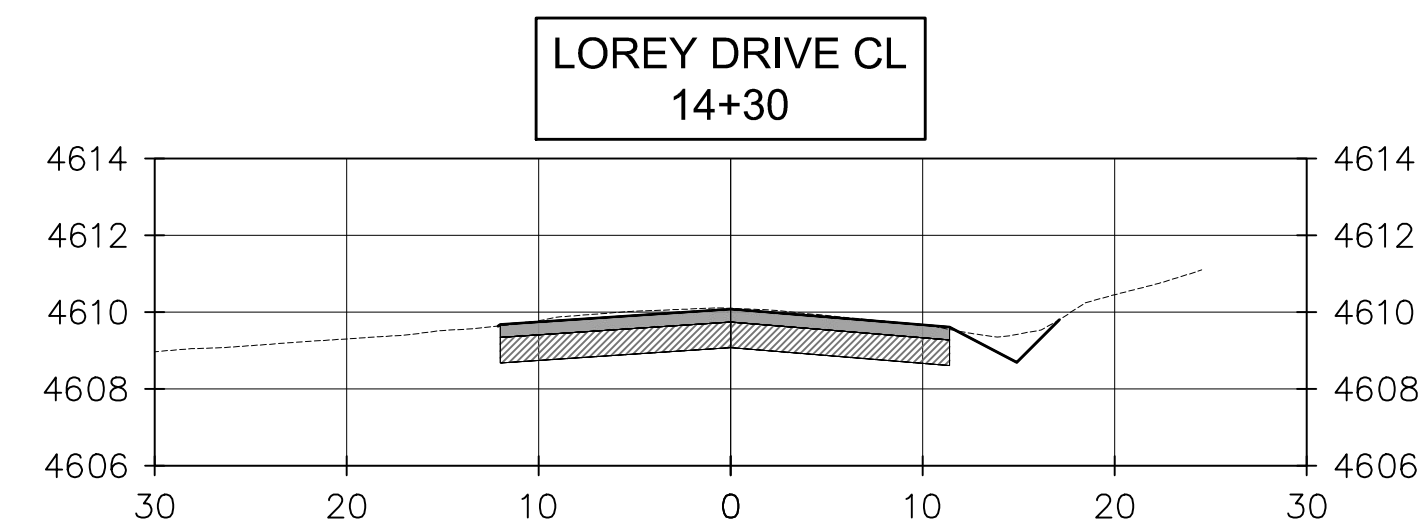
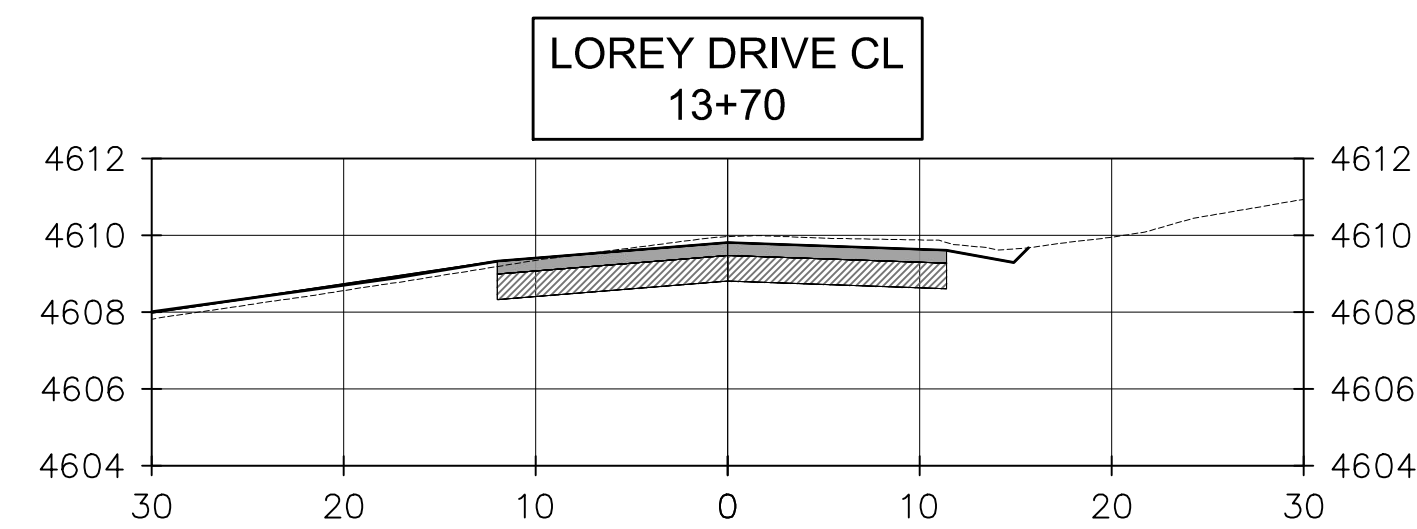
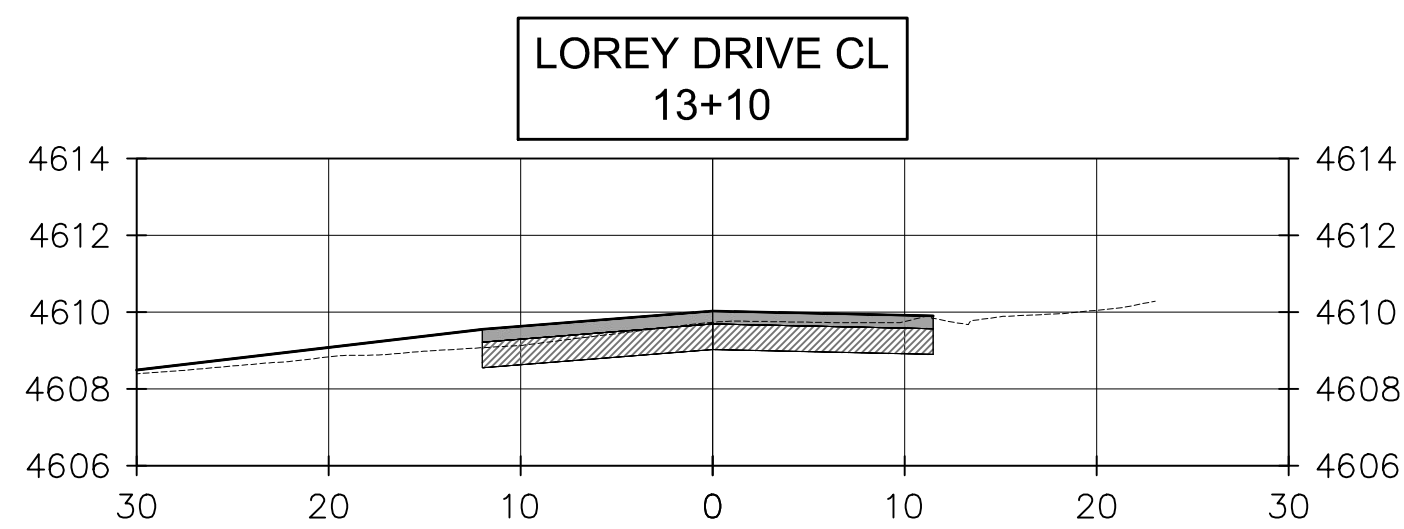
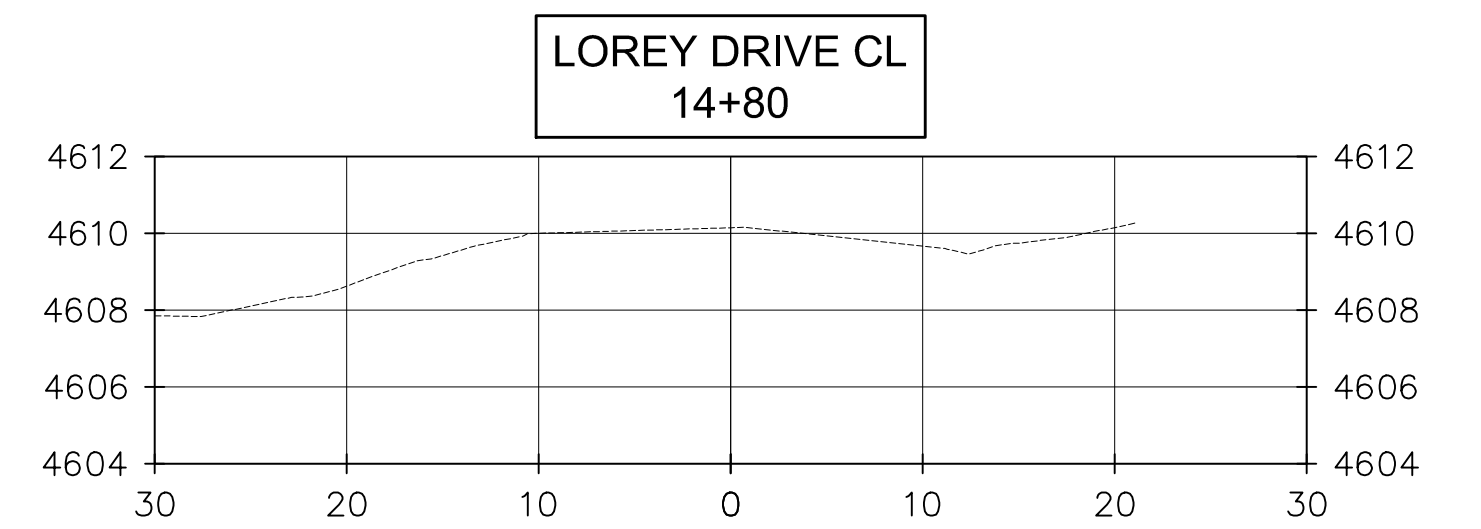
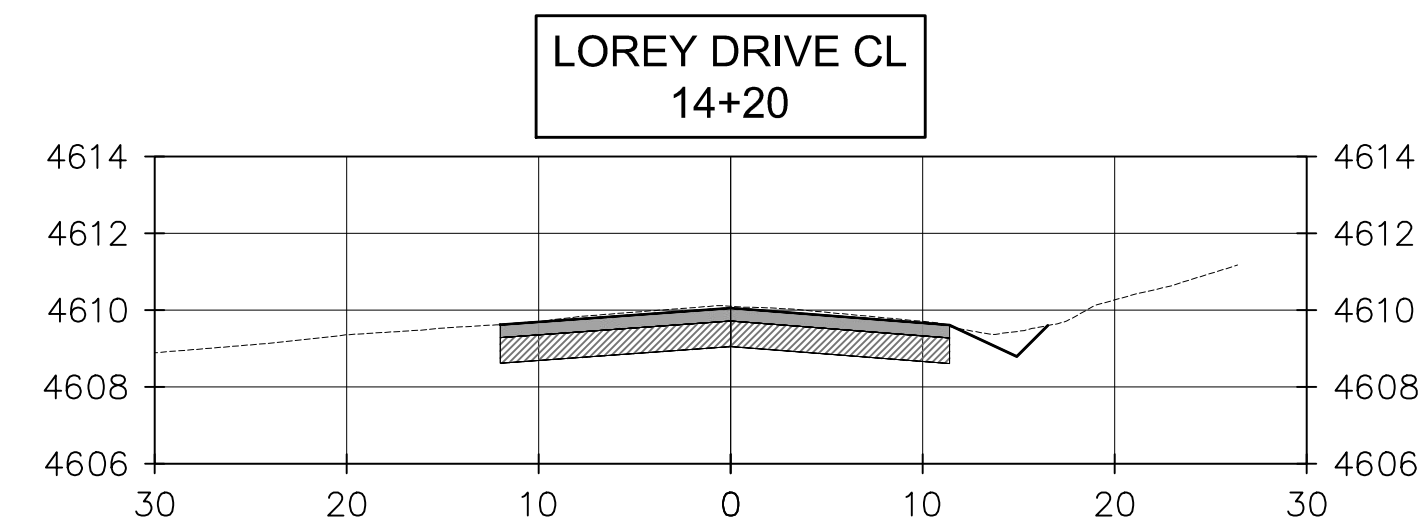
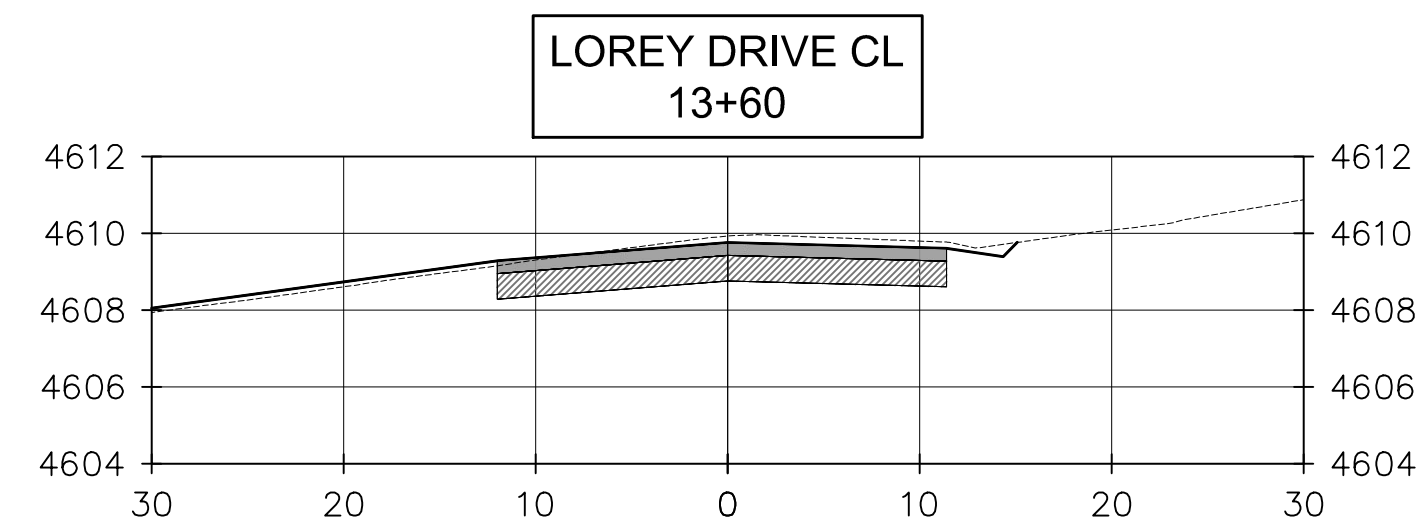
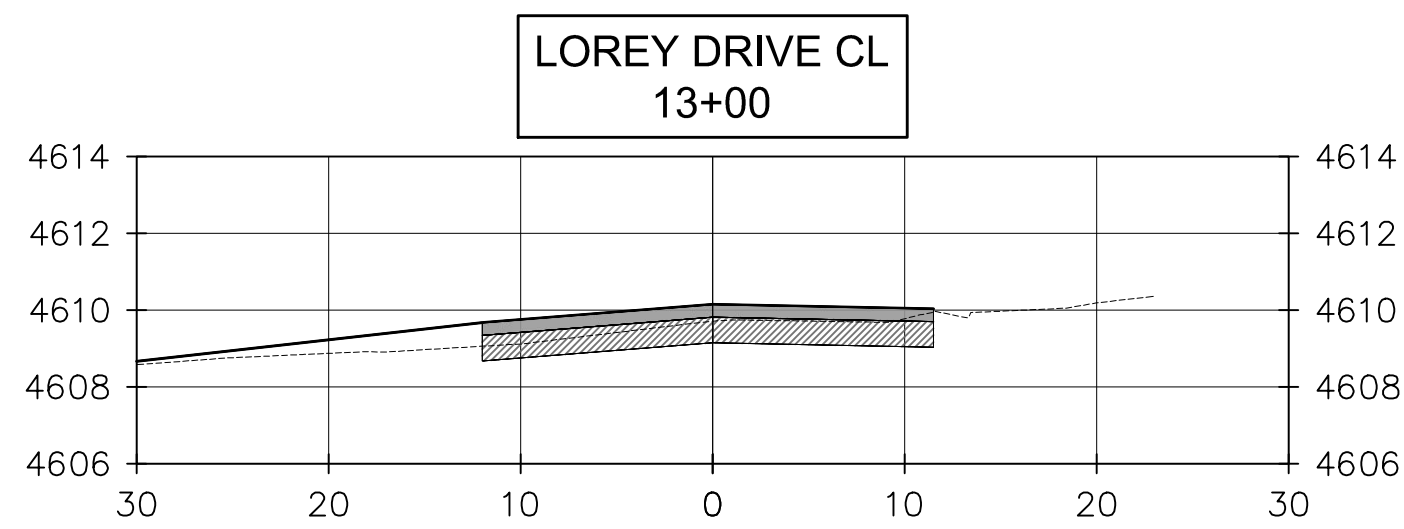
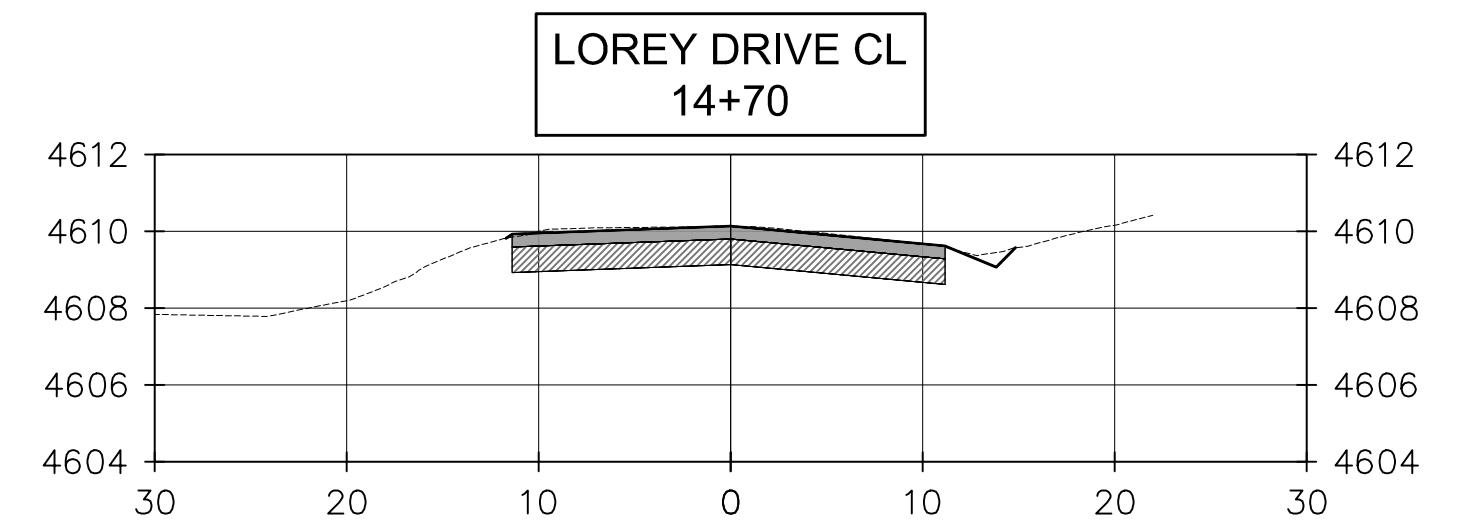
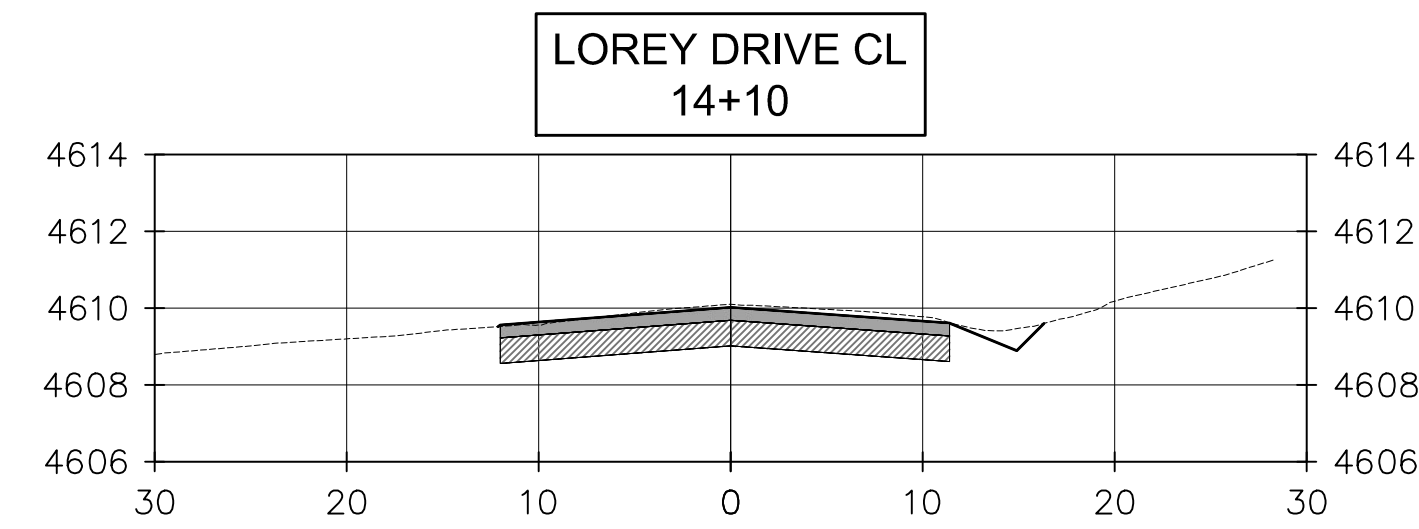
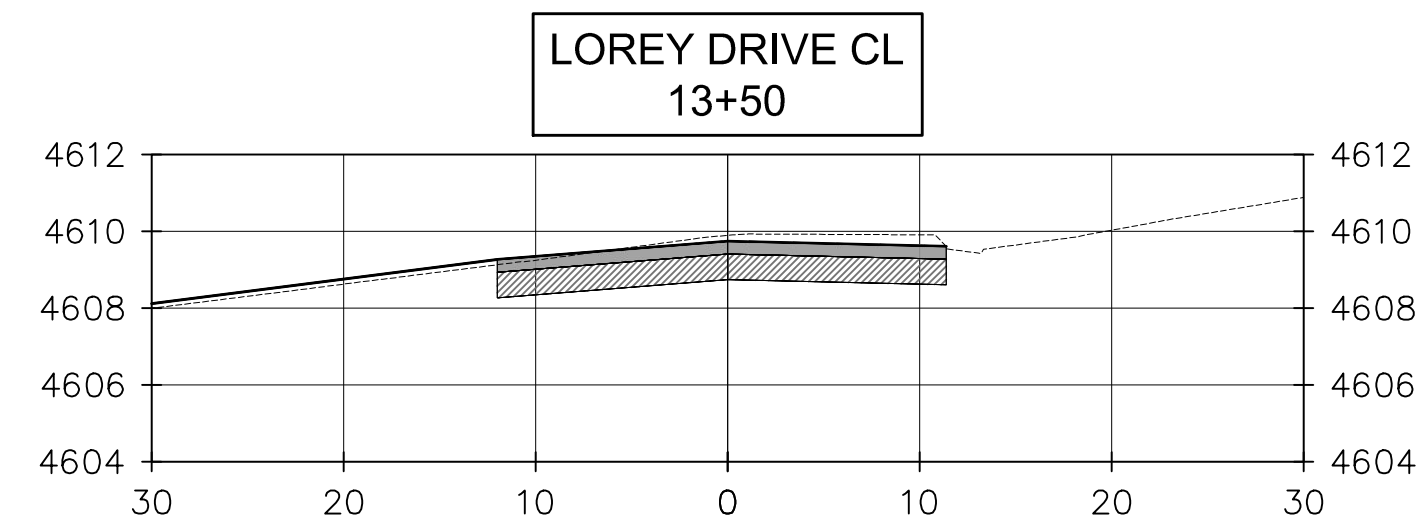
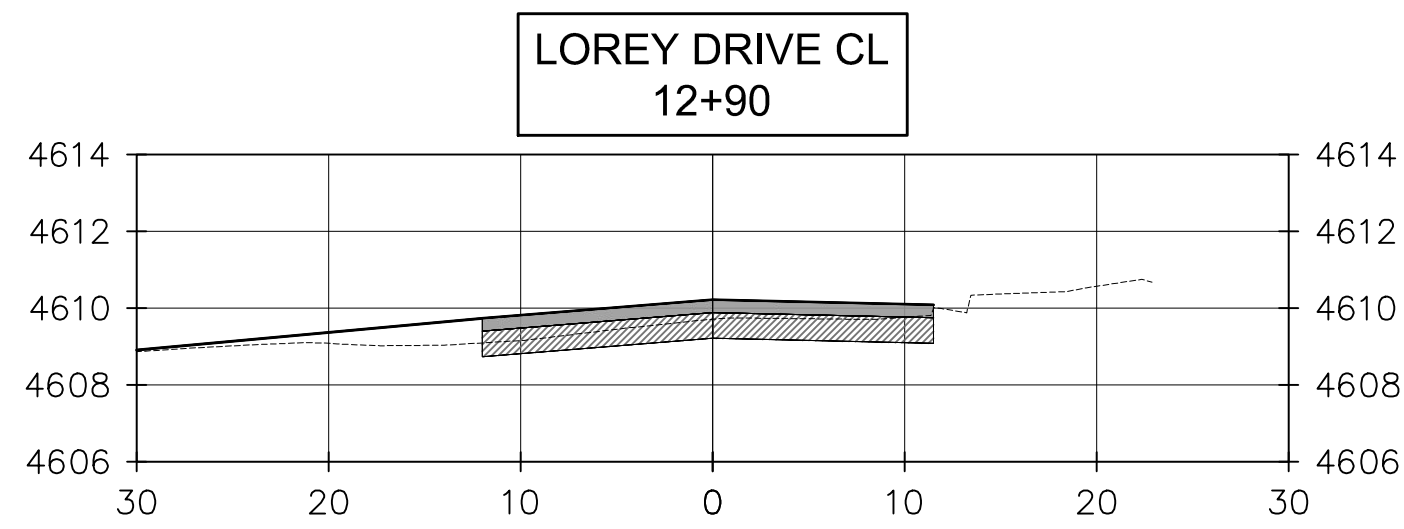
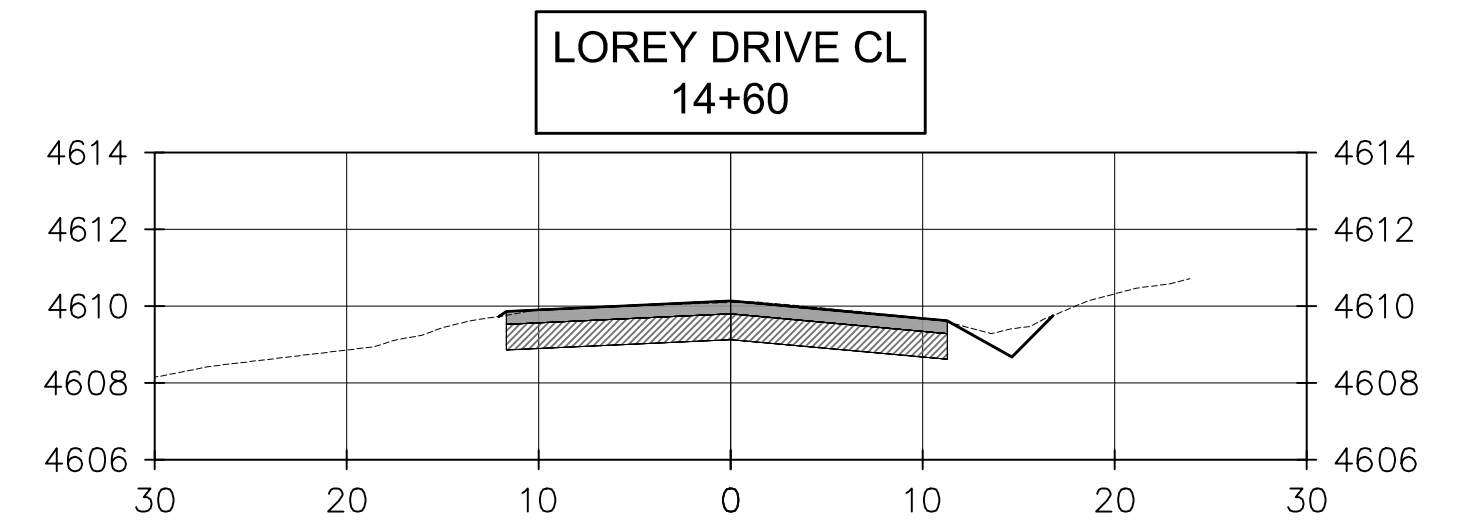
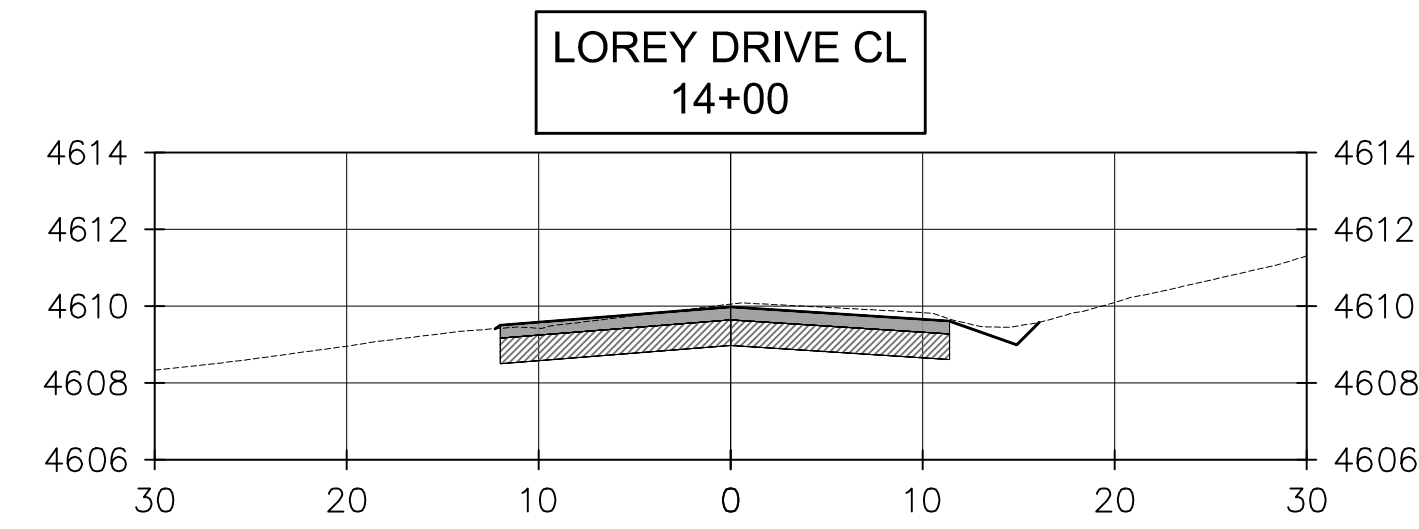
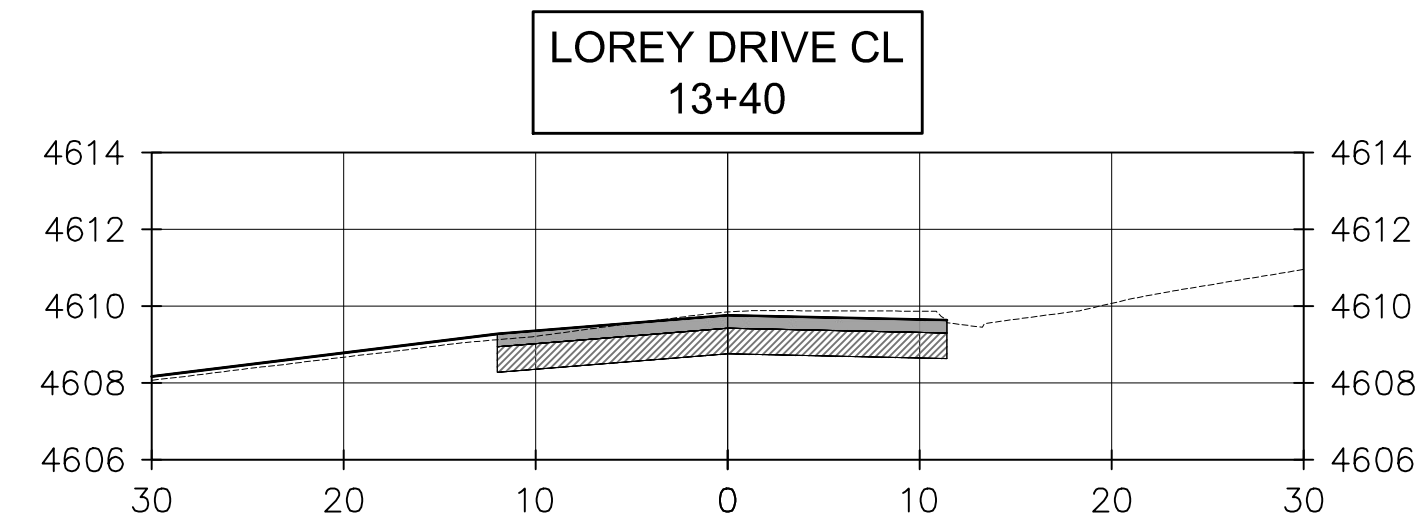
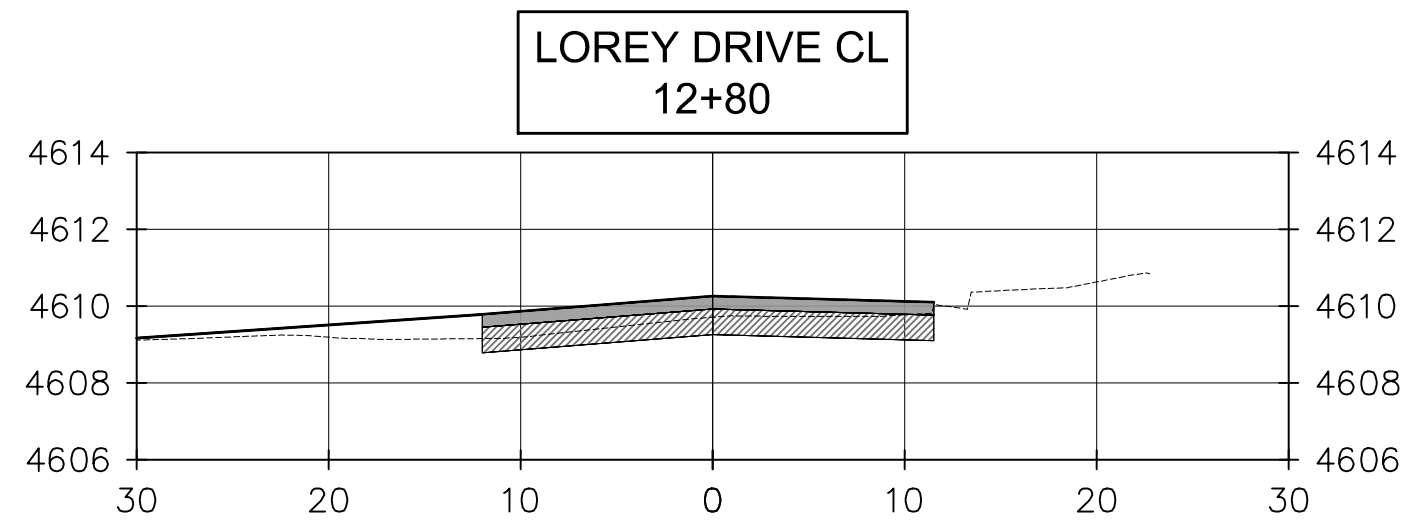
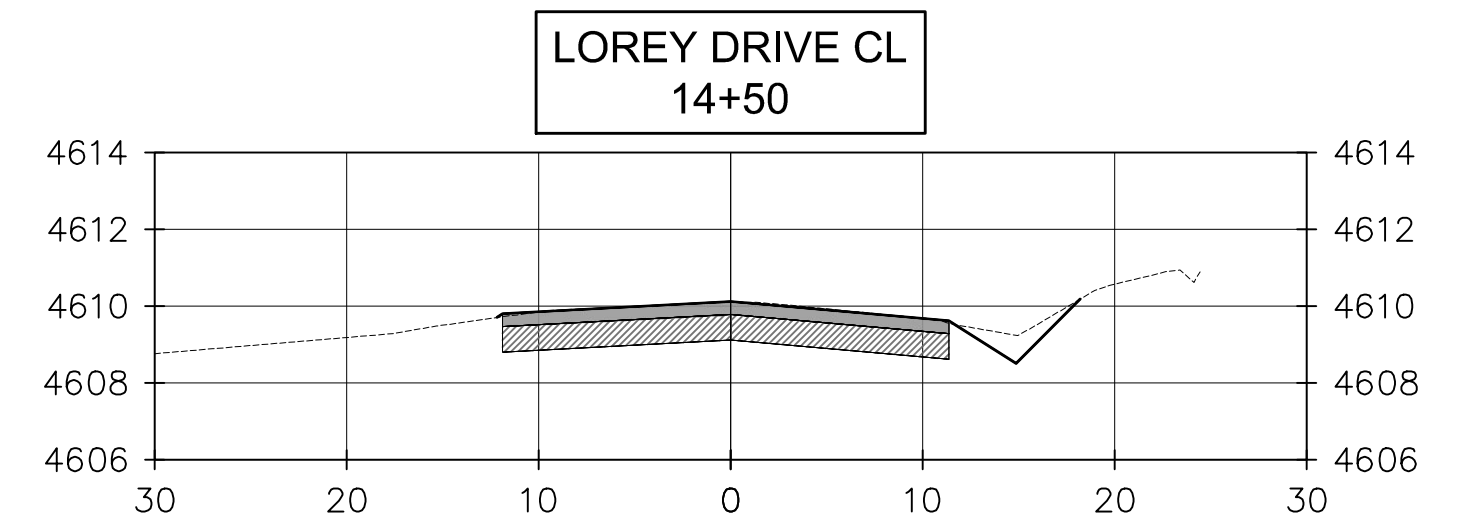
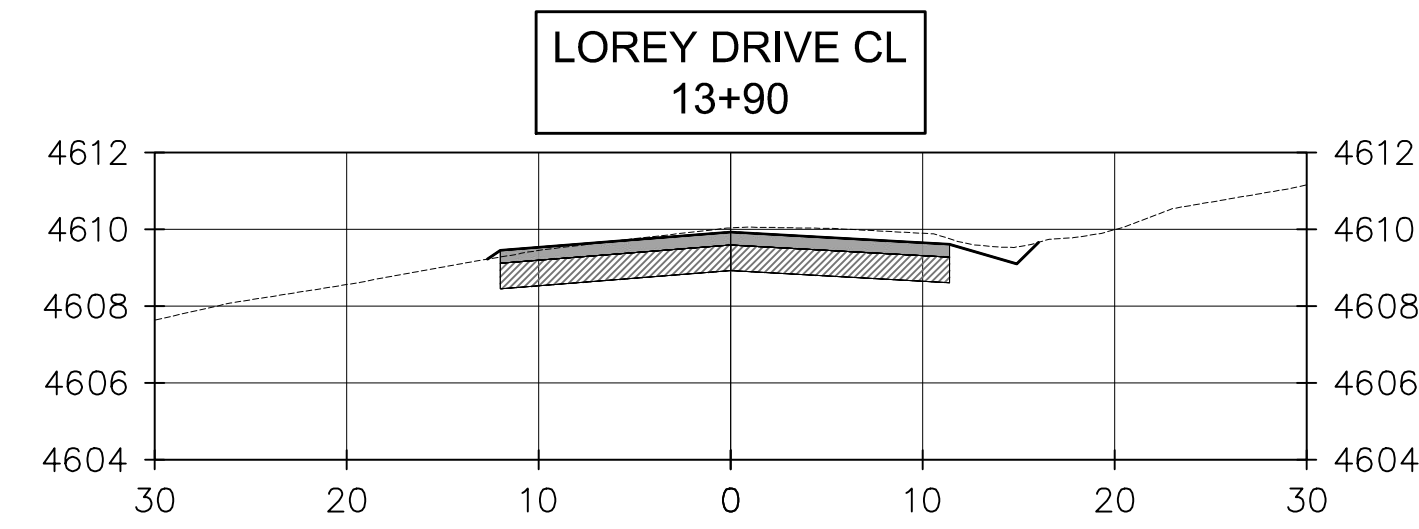
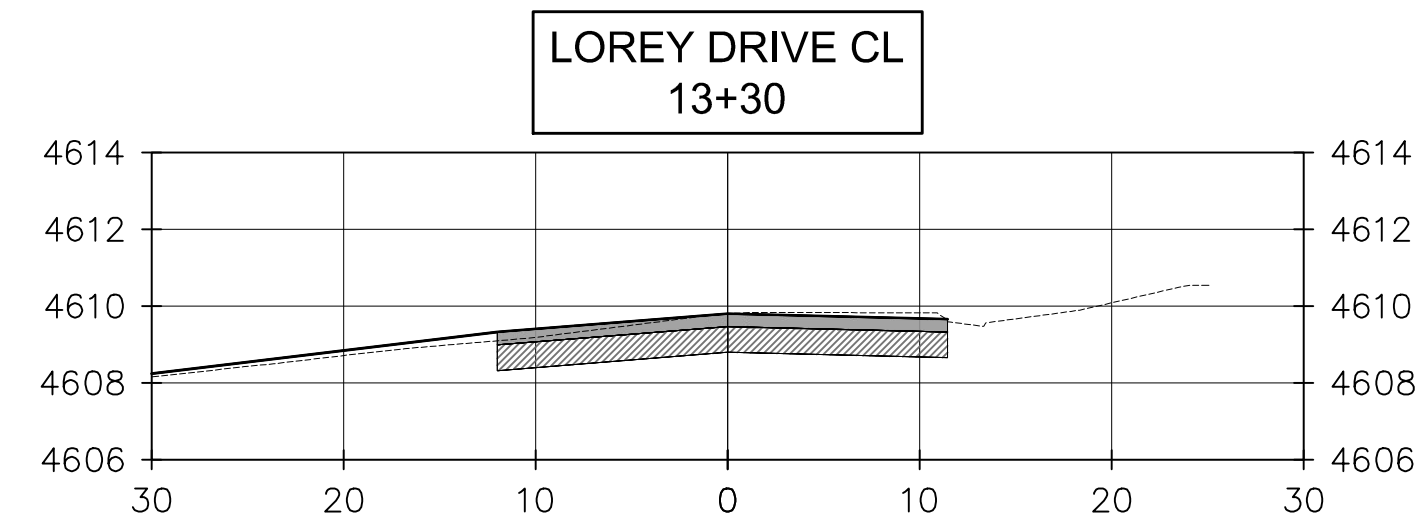
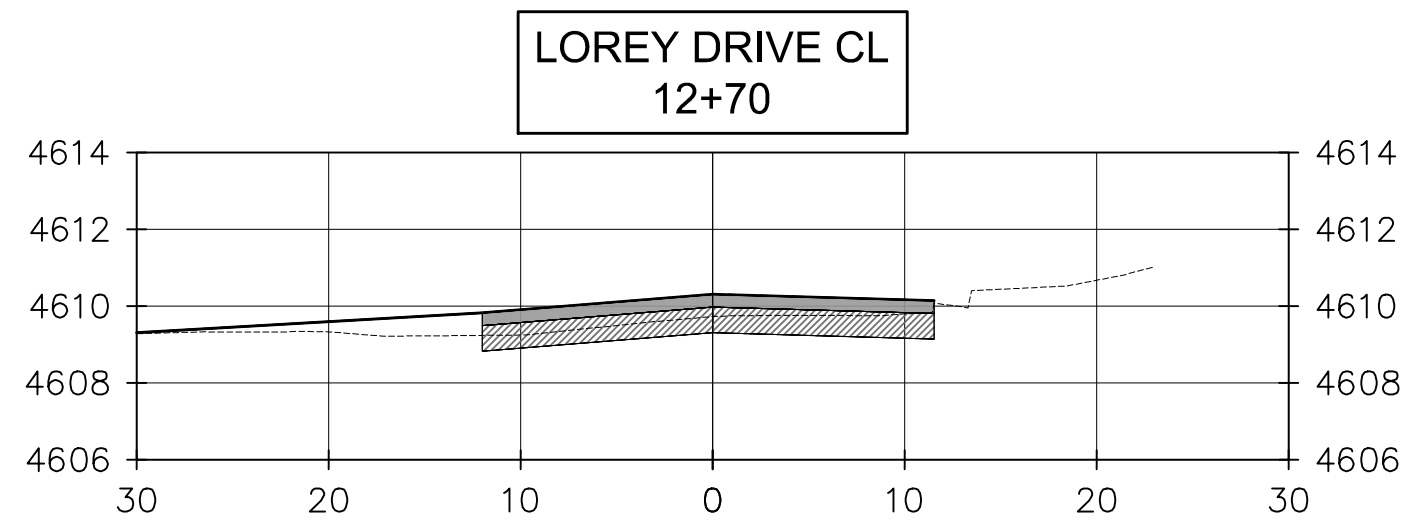
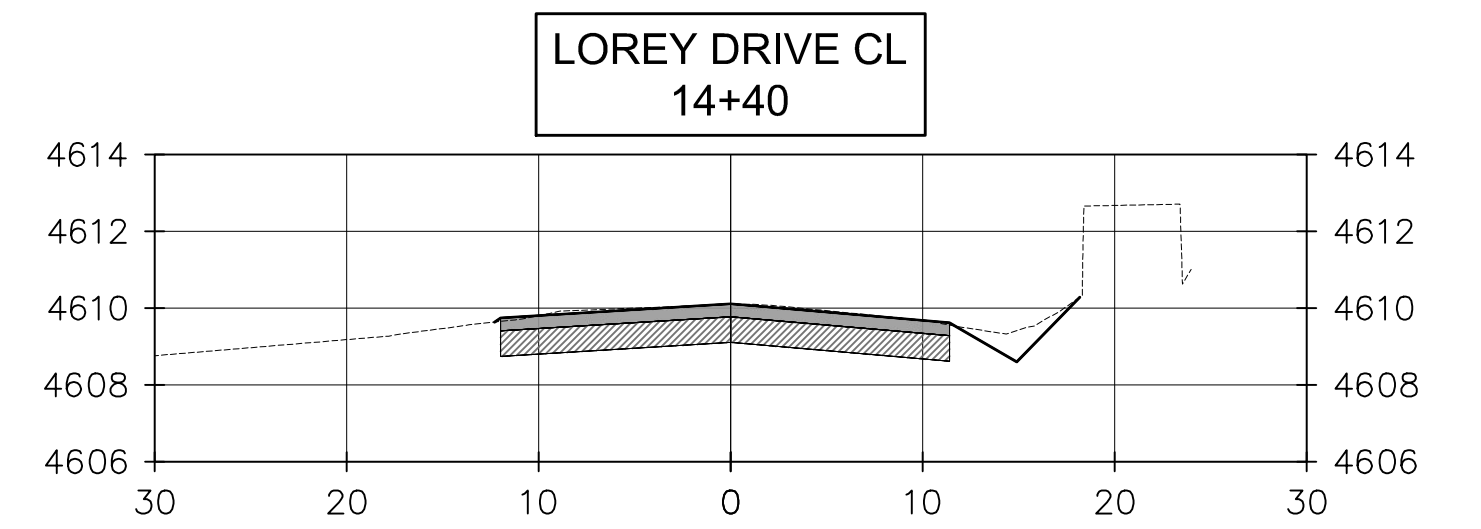
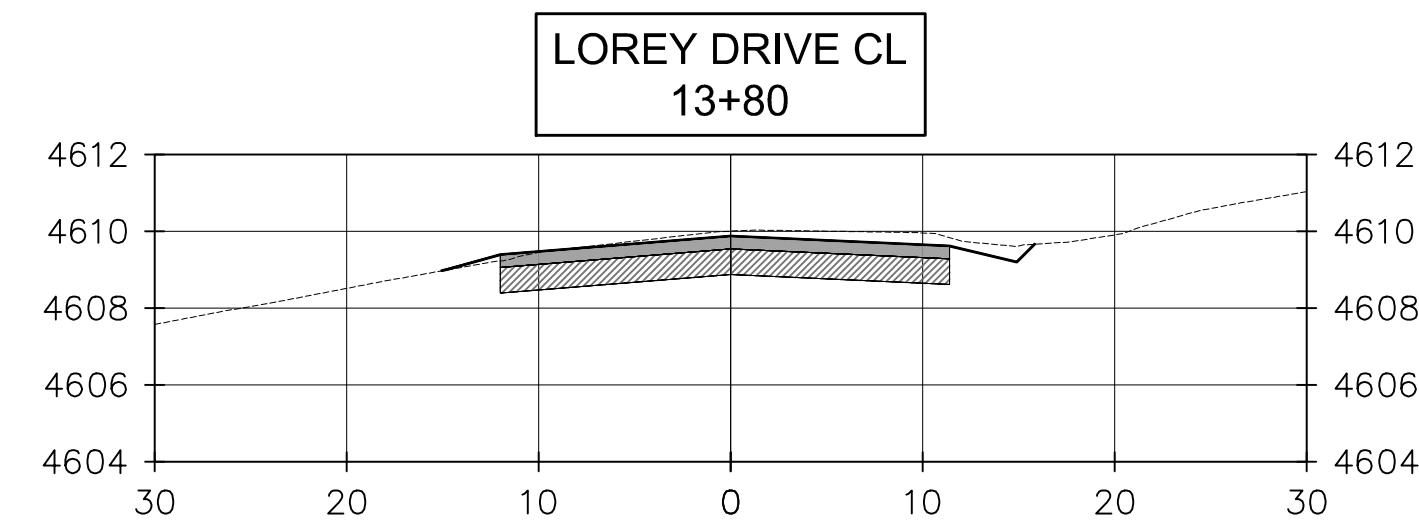
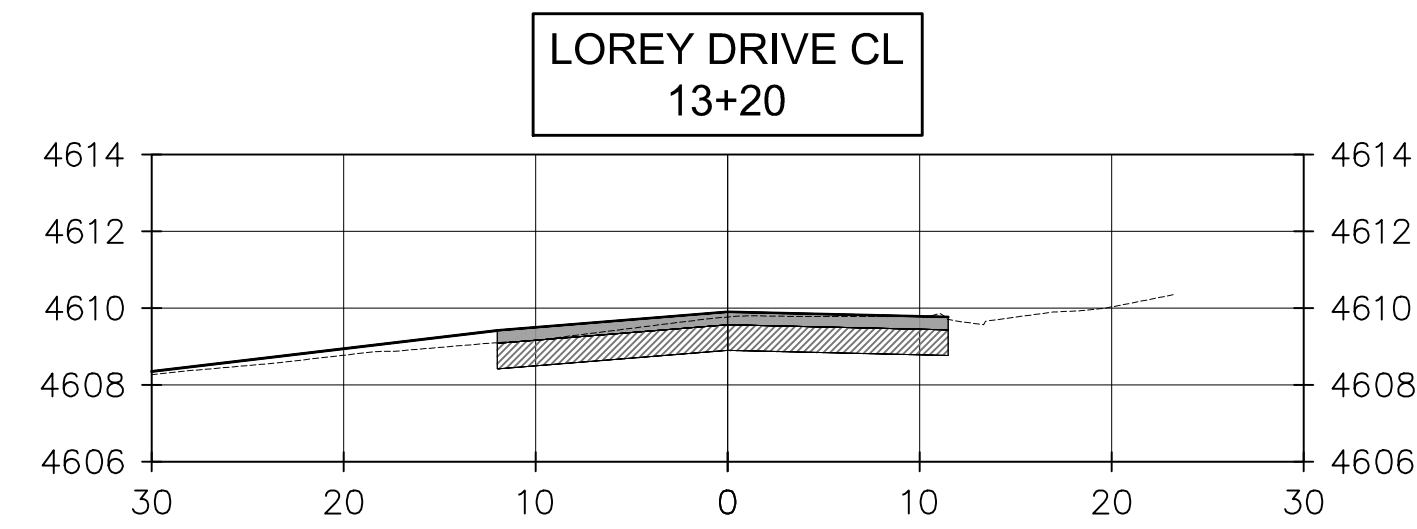
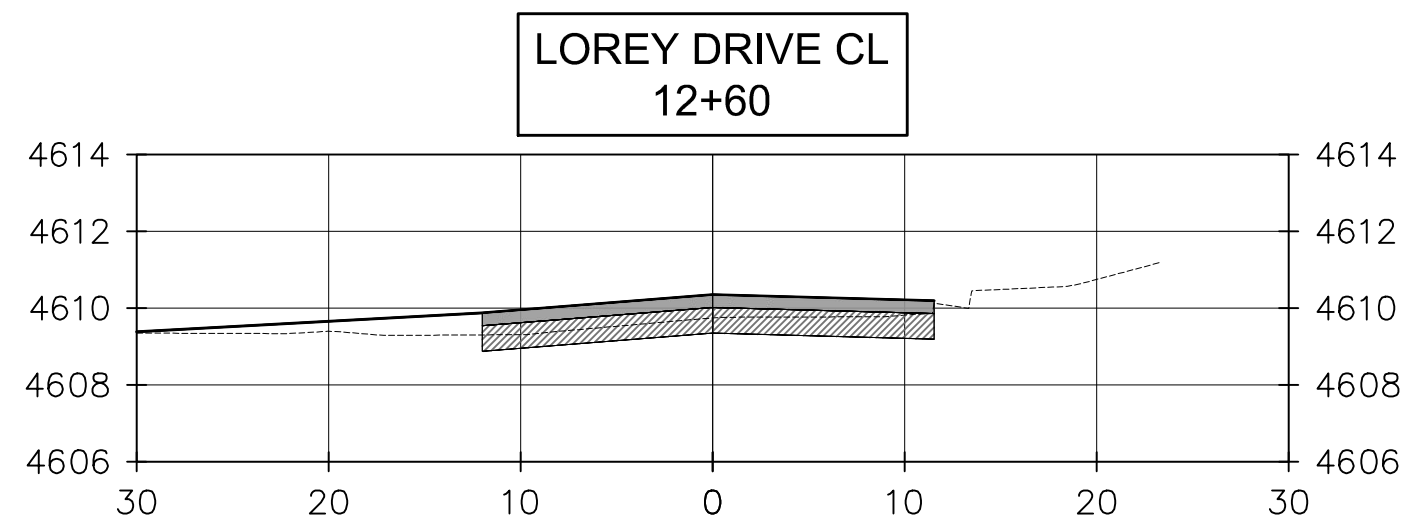
RIVER CITY CONSULTANTS
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 DRAWN BY: JMM HORIZ: AS SHOWN
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CITY OF GRAND JUNCTION
 Lorey Drive
 ROAD CROSS SECTIONS
 Lorey Drive Centerline (Sta: 10+20 - 12+50)

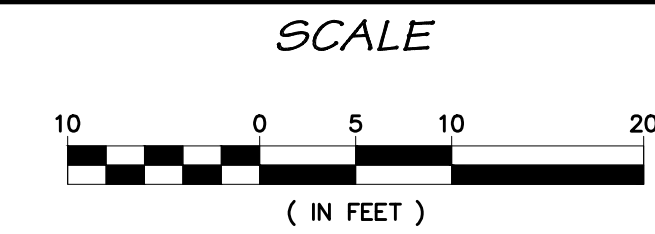
C11

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811
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CHECKED BY: IDG
HORIZ: AS SHOWN
VERT: AS SHOWN

CITY OF GRAND JUNCTION
Lorey Drive
ROAD CROSS SECTIONS
Lorey Drive Centerline (Sta: 12+60 - 14+80)

C12

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