



CITY COUNCIL

WORKSHOP AND REGULAR MEETING AGENDA

June 7, 2023
7:00 PM
202 Railroad Avenue, Rifle, CO

7:00 PM - Regular Meeting

- 1. Call to Order**
- 2. Pledge of Allegiance**
- 3. Roll Call**
- 4. Public Comment** *(maximum time permitted for Public Comment is 3 minutes per person)
- 5. Consent Agenda**
 - 5.a.** Consider Minutes of the May 17, 2023, Regular Meeting
 - 5.b.** Consider Approval of the 2023-2025 City Strategic Plan
 - 5.c.** Consider Liquor License Renewal for Rifle Tequila's dba Tequila's
 - 5.d.** Consider Modification of Premises for Capitol Deli, Inc. dba Capitol Deli
 - 5.e.** Consider Liquor License Renewal for Western Slope Chicken, LLC dba Wingchesters
 - 5.f.** Consider Resolution No. 14, Series of 2023 - Terminating the Declaration of Emergency for COVID
 - 5.g.** Consider Resolution No. 16 Series of 2023 - Resolution of Substantial Compliance for Ecodwellings Fritzlan Annexation
- 6. Regular Agenda**
 - 6.a.** Consider Declaring IT Equipment Surplus
 - 6.b.** Consider Appointment to the Parks and Recreation Advisory Board
 - 6.c.** Consider Resolution No. 15, Series of 2023 - Adopting an Electronic Participation Policy
 - 6.d.** Consider Approval of Annual cost for Garfield County Emergency Communications Authority Invoice

- 6.e.** Consider Approval of Contract with Martinez Western Constructors for Construction Services on the 2023 Waterline Restraint Rehabilitation
- 6.f.** Consider Approval of Contract with Martinez Western Constructors for Construction Services on the Railroad and 5th Street Intersection Improvements
- 6.g.** Consider Resolution No. 17, Series 2023 - Resolution to allow the manager to sign and approve expenditures required for the CDOT Grant for the Gateway Improvement Project

7. Administrative Reports

- 7.a.** Report to City Manager

8. Comments from Mayor and Council

9. Adjournment



Agenda Item #5.a.

Agenda Item Name:

Consider Minutes of the May 17, 2023, Regular Meeting

Presenter:

Misty Williams, City Clerk

Item Description:

Consider Minutes of the May 17, 2023, Regular Meeting

Recommended Action:

Move to approve the minutes of the May 17, 2023, City Council Regular Meeting

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

Minutes of the May 17, 2023, Regular Meeting

Notification Requirements:

N/A

Prepared By:

Alexis Ramirez, Deputy City Clerk

Attachments:

1. 05.17.2023 DRAFT Minutes



RIFLE CITY COUNCIL

REGULAR MEETING

May 17, 2023

7:00 p.m.

202 Railroad Avenue, Rifle, CO

CALL TO ORDER & ROLL CALL

A regular meeting of the Rifle City Council was called to order at 7:00 p.m. by Mayor Ed Green.

Present at Roll Call:

Councilor Joe Carpenter, Councilor Alicia Gresley, Mayor Ed Green, Councilor Brian Condie, Councilor Chris Bornholdt, Councilor Clint Hostettler, and Councilor Sean Strode.

Others Present:

City Manager Tommy Klein, City Clerk Misty Williams, City Attorney Jim Neu, Rifle Community Television (RCTV) Salvador Tovar-Guzman, Chief of Police Debra Funston, Parks and Recreation Director Austin Rickstrew, Design Concepts Representative Shanen Weber, Glen Ault, Joanne Nelson, Bill Nelson, Terry Davis, Trudy Lowery, Cheryl Chandler, Shannon Kyle, John Hottenstein, Calvin Sheets, Seth Meyers, Cecelia Uber, Chase Kyriss, Andrew Lee, Mark Hayez, Harold Martinez, Gary Brown, Vick Zee, Rod Zee, Leslie Smith, Matthew Starr and Klaton Costanzo.

PUBLIC COMMENT

No public comment was heard.

CONSENT AGENDA – CONSIDER APPROVING THE FOLLOWING ITEMS:

- A. Consider Minutes of the April 19, 2023, Regular Meeting
- B. Consider Minutes of the May 3, 2023, Regular Meeting
- C. Consider Liquor License Renewal for Thai Chili Bistro, Inc. dba Thai Chili Bistro
- D. Consider Liquor License Renewal for Imperio Mexican Restaurant, LLC dba Imperio Mexican Restaurant
- E. Consider Buy-Back of Columbarium Space
- F. Consider Proclamation Recognizing National Police Week
- G. Consider Approving Letter to the Colorado Department of Transportation (CDOT) Addressing Traffic & Roadway Concerns
- H. Consider Ordinance No. 11, Series of 2023 – Amending Code for Excavations within Right-of-Way and Providing Additional and Supplemental Information to the Public Works Manual – 2nd Reading.

Councilor Sean Strode moved to approve Consent Agenda Item A, B, C, D, E, F, G, and H; seconded by Councilor Alicia Gresley.

Roll Call: Yes - Ed Green, Brian Condie, Clint Hostettler, Alicia Gresley, Joe Carpenter, Chris Bornholdt, and Sean Strode.

No – None.

PRESENTATION

Present Proclamation Recognizing National Police Week

Mayor Ed Green read the Proclamation Recognizing National Police Week.

May 14 - 20, 2023, is the 61st Anniversary of the National Police Week.

“To recognize National Police Week 2023 and to honor the service and sacrifice of those law enforcement officers killed in the line of duty while protecting our communities and safeguarding our democracy.”

Chief of Police Debra Funston stated the Rifle Police Department initiated the National Police Week on Monday May 14th, 2023 by having a Flag Raising Ceremony to pause and honor those who made the ultimate sacrifice in the line of duty accompanied by the Honor Guard of the Colorado River Fire Rescue Team, Garfield County Sheriff, Glenwood Springs Police Department and the Colorado State Patrol.

Receive Presentation of Rifle Mountain Park and Rose Hill Cemetery Master Plan

Parks and Recreation Director Austin Rickstrew and Design Concepts Representative Shanen Weber presented the Rifle Mountain Park and Rose Hill Cemetery Master Plan. Design Concepts created a phased approach for the build-out of each location. There were four phases presented from \$252,950.00 to \$367,500.00 for the Rifle Mountain Park. Phase 1- 4 included improvements to the community house, ADA/asphalt parking, campsite refurbishment, signage, and landscape. There were six phases between \$67,500.00 - \$292,750.00 presented for the Rose Hill Cemetery. Phase 1- 6 included improvements to the Veterans Memorial, Memorial Grove, cremation internment, additional columbariums, landscape, site furnishings, concrete trails, ornamental fencing, entry and exit features.

Additional changes were suggested by council during the workshop session that will be reviewed in a new master plan.

REGULAR AGENDA

Consider Purchase of a Wide Area Mower

Parks and Recreation Director Austin Rickstrew presented a request to consider purchase of a Wide Area Mower. Current Jacobsen 311T is reaching the end of its useful life. Staff solicited an RFP for a new Wide Area Mower and four responses were received. A bid from L.L. Johnson Distributing Co. was received for a Toro 4000D mower in the amount of \$90,967.97. The bid also included a unit to be used in the event the Jacobsen 311T breaks down and the new unit arrives in 2024 at no additional cost. L.L. Johnson Distributing Co. has guaranteed the original bid price quoted. Staff recommends the purchase of the Wide Area Mower from L.L. Johnson Distributing Co. as it came in lower than the foreseen budgeted amount.

Councilor Clint Hostettler moved to approve the purchase of a new wide area mower from L.L. Johnson Distributing Co. in the amount of \$90,968.00; seconded by Councilor Chris Bornholt.

Roll Call: Yes - Sean Strode, Brian Condie, Joe Carpenter, Chris Bornholdt, Clint Hostettler, Alicia Gresley and Ed Green.

No – None.

Report to City Manager

Reports were heard from City Manager Tommy Klein and Chief of Police Debra Funston.

Comments from Mayor and Council

Comments were heard from Councilor Alicia Gresley, Councilor Sean Strode and Councilor Joe Carpenter.

Adjournment

Meeting adjourned at 7:33 p.m.

Misty Williams
City Clerk

Ed Green
Mayor



Agenda Item #5.b.

Agenda Item Name:

Consider Approval of the 2023-2025 City Strategic Plan

Presenter:

Tommy Klein, City Manager

Item Description:

Consider Approval of 2023-2025 City Strategic Plan

Recommended Action:

Move to approve the City of Rifle 2023-2025 Strategic Plan.

Fiscal Impact:

None

Operational Impact:

The plan will guide future operations of our organization.

Prior Board Motions:

None

Background Information:

The strategic plan was reviewed in a workshop held on May 17, 2023. Edits to the draft have been made and we are presenting the final document for your consideration.

Executive Summary:

Please see the memo.

Notification Requirements:

None

Prepared By:

Misty Williams, City Clerk

Attachments:

1. 2023-2025 Strat Plan Memo



MEMORANDUM

TO: HONORABLE MAYOR AND COUNCIL
FROM: TOMMY KLEIN
DATE: JUNE 6, 2023
RE: ADOPTION OF STRATEGIC PLAN

The City of Rifle Home Rule Charter requires Council and department heads to meet annually for strategic planning. On March 31 and April 1 of 2023, we fulfilled this obligation. Mr. Patrick Ibarra of The Mejorando Group facilitated the planning.

A report was produced by the manager for your consideration. If Council is happy with the document, we ask that you vote to adopt the 2023-2025 Strategic Plan.



Agenda Item #5.c.

Agenda Item Name:

Consider Liquor License Renewal for Rifle Tequila's dba Tequila's

Presenter:

Misty Williams, City Clerk

Item Description:

Hotel & Restaurant Liquor License Renewal for Rifle Tequila's dba Tequila's

Recommended Action:

I move to approve the Liquor License Renewal application for Rifle Tequila's dba Tequila's

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

None

Background Information:

Rifle Tequila's dba Tequila's located at 800 Airport Road, Suite 3, Rifle, CO has submitted a Hotel & Restaurant Liquor License Renewal Application.

The application is complete and the appropriate fees have been paid.

Executive Summary:

None

Notification Requirements:

None

Prepared By:

Alexis Ramirez, Deputy City Clerk

Attachments:

1. REDACTED - Tequila's Renewal

Submit to Local Licensing Authority

Fees Due	
Annual Renewal Application Fee	\$ 50.00
Renewal Fee	500.00
Storage Permit \$100 X _____	\$
Sidewalk Service Area \$75.00	\$
Additional Optional Premise Hotel & Restaurant \$100 X _____	\$
Related Facility - Campus Liquor Complex \$160.00 per facility	\$
Amount Due/Paid	\$ 550.00

Make check payable to: Colorado Department of Revenue. The State may convert your check to a one-time electronic banking transaction. Your bank account may be debited as early as the same day received by the State. If converted, your check will not be returned. If your check is rejected due to insufficient or uncollected funds, the Department may collect the payment amount directly from your banking account electronically.

Retail Liquor or Fermented Malt Beverage License Renewal Application

Please verify & update all information below

Return to city or county licensing authority by due date

Licensee Name Rifle Tequila's, Inc.			Doing Business As Name (DBA) Tequila's		
Liquor License # 03-06318	License Type H&R	Sales Tax License Number 31534539	Expiration Date 5/17/2023	Due Date	
Business Address 800 Airport Rd. Suite 3 Rifle, CO 81650				Phone Number 970-665-9082	
Mailing Address 800 Airport Rd. Suite 3 Rifle, CO			Email tequilasrifle9082@hotmail		
Operating Manager Pedro Gomez	Date of Birth	Home Address	Phone Number 970-319-9381		
1. Do you have legal possession of the premises at the street address above? ☒ Yes ☐ No Are the premises owned or rented? ☐ Owned ☒ Rented* *If rented, expiration date of lease _____					
2. Are you renewing a storage permit, additional optional premises, sidewalk service area, or related facility? If yes, please see the table in upper right hand corner and include all fees due. ☐ Yes ☒ No					
3a. Are you renewing a takeout and/or delivery permit? (Note: must hold a qualifying license type and be authorized for takeout and/or delivery license privileges) ☐ Yes ☒ No					
3b. If so, which are you renewing? ☐ Delivery ☐ Takeout ☐ Both Takeout and Delivery					
4a. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant, been found in final order of a tax agency to be delinquent in the payment of any state or local taxes, penalties, or interest related to a business? ☐ Yes ☒ No					
4b. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant failed to pay any fees or surcharges imposed pursuant to section 44-3-503, C.R.S.? ☐ Yes ☒ No					
5. Since the date of filing of the last application, has there been any change in financial interest (new notes, loans, owners, etc.) or organizational structure (addition or deletion of officers, directors, managing members or general partners)? If yes, explain in detail and attach a listing of all liquor businesses in which these new lenders, owners (other than licensed financial institutions), officers, directors, managing members, or general partners are materially interested. ☐ Yes ☒ No					
6. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been convicted of a crime? If yes, attach a detailed explanation. ☐ Yes ☒ No					

7. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been denied an alcohol beverage license, had an alcohol beverage license suspended or revoked, or had interest in any entity that had an alcohol beverage license denied, suspended or revoked? If yes, attach a detailed explanation. ☐ Yes ☒ No
8. Does the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) have a direct or indirect interest in any other Colorado liquor license, including loans to or from any licensee or interest in a loan to any licensee? If yes, attach a detailed explanation. ☐ Yes ☒ No

Affirmation & Consent

I declare under penalty of perjury in the second degree that this application and all attachments are true, correct and complete to the best of my knowledge.

Type or Print Name of Applicant/Authorized Agent of Business	Title
Pedro Gomez	Manager
Signature	Date
Pedro Gomez	5/15/23

Report & Approval of City or County Licensing Authority

The foregoing application has been examined and the premises, business conducted and character of the applicant are satisfactory, and we do hereby report that such license, if granted, will comply with the provisions of Title 44, Articles 4 and 3, C.R.S., and Liquor Rules.

Therefore this application is approved.

Local Licensing Authority For		Date
Signature	Title	Attest

Tax Check Authorization, Waiver, and Request to Release Information

I, Pedro Gomez am signing this Tax Check Authorization, Waiver and Request to Release Information (hereinafter "Waiver") on behalf of Rifle Tequila's Inc dba Tequila's (the "Applicant/Licensee") to permit the Colorado Department of Revenue and any other state or local taxing authority to release information and documentation that may otherwise be confidential, as provided below. If I am signing this Waiver for someone other than myself, including on behalf of a business entity, I certify that I have the authority to execute this Waiver on behalf of the Applicant/Licensee.

The Executive Director of the Colorado Department of Revenue is the State Licensing Authority, and oversees the Colorado Liquor Enforcement Division as his or her agents, clerks, and employees. The information and documentation obtained pursuant to this Waiver may be used in connection with the Applicant/Licensee's liquor license application and ongoing licensure by the state and local licensing authorities. The Colorado Liquor Code, section 44-3-101, et seq. ("Liquor Code"), and the Colorado Liquor Rules, 1 CCR 203-2 ("Liquor Rules"), require compliance with certain tax obligations, and set forth the investigative, disciplinary and licensure actions the state and local licensing authorities may take for violations of the Liquor Code and Liquor Rules, including failure to meet tax reporting and payment obligations.

The Waiver is made pursuant to section 39-21-113(4), C.R.S., and any other law, regulation, resolution or ordinance concerning the confidentiality of tax information, or any document, report or return filed in connection with state or local taxes. This Waiver shall be valid until the expiration or revocation of a license, or until both the state and local licensing authorities take final action to approve or deny any application(s) for the renewal of the license, whichever is later. Applicant/Licensee agrees to execute a new waiver for each subsequent licensing period in connection with the renewal of any license, if requested.

By signing below, Applicant/Licensee requests that the Colorado Department of Revenue and any other state or local taxing authority or agency in the possession of tax documents or information, release information and documentation to the Colorado Liquor Enforcement Division, and is duly authorized employees, to act as the Applicant's/Licensee's duly authorized representative under section 39-21-113(4), C.R.S., solely to allow the state and local licensing authorities, and their duly authorized employees, to investigate compliance with the Liquor Code and Liquor Rules. Applicant/Licensee authorizes the state and local licensing authorities, their duly authorized employees, and their legal representatives, to use the information and documentation obtained using this Waiver in any administrative or judicial action regarding the application or license.

Name (Individual/Business) <u>Rifle Tequila's, Inc. dba Tequila's</u>		Social Security Number/Tax Identification Number _____	
Address <u>800 Airport Road Suite 3</u>			
City <u>Rifle</u>		State <u>CO</u>	Zip <u>81650</u>
Home Phone Number <u>970-319-9381</u>		Business/Work Phone Number <u>970-665-9082</u>	
Printed name of person signing on behalf of the Applicant/Licensee <u>Pedro Gomez</u>			
Applicant/Licensee's Signature (Signature authorizing the disclosure of confidential tax information) <u>X Pedro Gomez</u>			Date signed <u>5/15/23</u>
Privacy Act Statement Providing your Social Security Number is voluntary and no right, benefit or privilege provided by law will be denied as a result of refusal to disclose it. § 7 of Privacy Act, 5 USCS § 552a (note).			



Agenda Item #5.d.

Agenda Item Name:

Consider Modification of Premises for Capitol Deli, Inc. dba Capitol Deli

Presenter:

Misty Williams, City Clerk

Item Description:

Consider Modification of Premises for Capitol Deli, Inc. dba Capitol Deli

Recommended Action:

I move to approve the Modification of Premises for Capitol Deli, Inc. dba Capitol Deli

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

None

Background Information:

Capitol Deli, Inc. dba Capitol Deli located at 851 Railroad Avenue, Rifle, CO has submitted a Modification of Premises Application.

The application is complete and the appropriate fees have been paid.

The patio area on the north side of Capitol Deli is already included in the licensed premises for serving alcohol. The Modification of Premises would increase the size of the patio to include the east end of the building and would make it a permanent part of their licensed premise. The patio will be fully enclosed and not accessible from the sidewalk that runs adjacent to the building.

Executive Summary:

None

Notification Requirements:

None

Prepared By:

Misty Williams, City Clerk

Attachments:

1. Modification of Premises - Capitol Deli

Permit Application and Report of Changes

All Answers Must Be Printed in Black Ink or Typewritten

1. Applicant is a ☒ Corporation ☐ Individual ☐ Partnership ☐ Limited Liability Company		License Number	
2. Name of Licensee Capitol Deli, Inc		3. Trade Name of Establishment (DBA) Capitol Deli	
4. Address of Premises (specify exact location of premises) 851 Railroad Ave		5. Business Email Address	
City Rifle	County GARFIELD	State CO	ZIP 81650
Business Phone Number 9706659647			
SELECT THE APPROPRIATE SECTION BELOW AND PROCEED TO THE INSTRUCTIONS ON PAGE 2.			
Section A – Manager Reg/Change		Section C	
☐ Manager's Registration (Hotel & Restr.) \$75.00 ☐ Manager's Registration (Tavern) \$75.00 ☐ Manager's Registration (Lodging & Entertainment) \$75.00 ☐ Change of Manager (Other Licenses pursuant to section 44-3-301(8), C.R.S.) NO FEE		☐ Retail Warehouse Storage Permit (ea) \$100.00 ☐ Wholesale Branch House Permit (ea) \$100.00 ☐ Change Corp. or Trade Name Permit (ea) \$50.00 ☐ Change Location Permit (ea) \$150.00 ☐ Winery/Limited Winery Noncontiguous or Primary Manufacturing Location Change \$150.00 ☒ Change, Alter or Modify Premises \$150.00 x Total Fee: ☐ Addition of Optional Premises to Existing H/R \$100.00 x Total Fee: ☐ Addition of Related Facility to an Existing Resort or Campus Liquor Complex \$160.00 x Total Fee: ☐ Campus Liquor Complex Designation No Fee ☐ Sidewalk Service Area \$75.00	
Section B – Duplicate License			
☐ Duplicate License \$50.00			

Do Not Write in This Space – For Department of Revenue Use Only		
Date License Issued	License Account Number	Period
The State may convert your check to a one time electronic banking transaction. Your bank account may be debited as early as the same day received by the State. If converted, your check will not be returned. If your check is rejected due to insufficient or uncollected funds, the Department of Revenue may collect the payment amount directly from your bank account electronically.		TOTAL AMOUNT DUE \$.00

Instruction Sheet

For All Sections, Complete Questions 1-5 Located on Page 1

☐ **Section A**

To Register or Change Managers, check the appropriate box in section A and complete question 9 on page 4. Proceed to the Oath of Applicant for signature. Submit to State Licensing Authority for approval.

☐ **Section B**

For a Duplicate license, be sure to include the liquor license number in section B on page 1 and proceed to page 5 for Oath of Applicant signature.

☒ **Section C**

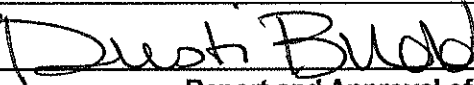
Check the appropriate box in section C and proceed below.

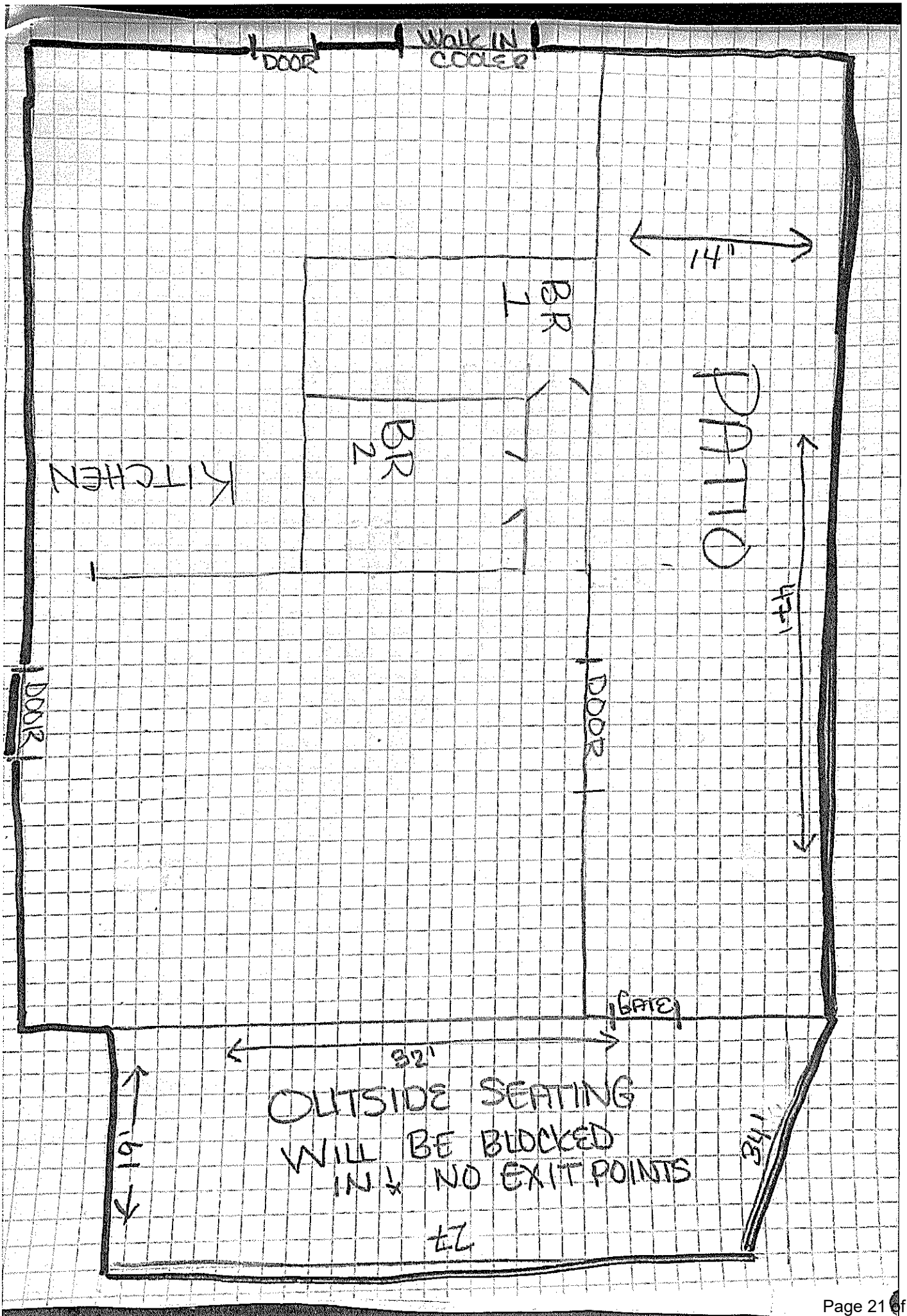
- 1) **For a Retail Warehouse Storage Permit**, go to page 3 complete question 5 (be sure to check the appropriate box). Submit the necessary information and proceed to page 5 for Oath of Applicant signature. Submit to State Licensing Authority for approval.
- 2) **For a Wholesale Branch House Permit**, go to page 3 and complete question 5 (be sure to check the appropriate box). Submit the necessary information and proceed to page 5 for Oath of Applicant signature. Submit to State Licensing Authority for approval.
- 3) **To Change Trade Name or Corporation Name**, go to page 3 and complete question 6 (be sure to check the appropriate box). Submit the necessary information and proceed to page 5 for Oath of Applicant signature. Retail Liquor License submit to Local Liquor Licensing Authority (City or County). Manufacturer, Wholesaler and Importer's Liquor Licenses submit to State Liquor Licensing Authority.
- ✓ 4) **To modify Premise, or add Sidewalk Service Area**, go to page 4 and complete question 10. Submit the necessary information and proceed to page 5 for Oath of Applicant signature. Retail Liquor License submit to Local Liquor Licensing Authority (City or County). Manufacturer, Wholesaler and Importer's Liquor Licenses submit to State Liquor Licensing Authority.
- 5) **For Optional Premises** go to page 4 and complete question 10. Submit the necessary information and proceed to page 5 for Oath of Applicant signature. Retail Liquor License submit to Local Liquor Licensing Authority (City or County).
- 6) **To Change Location**, go to page 3 and complete question 7. Submit the necessary information and proceed to page 5 for Oath of Applicant signature. Retail Liquor License submit to Local Liquor Licensing Authority (City or County). Manufacturer, Wholesaler and Importer's Liquor Licenses submit to State Liquor Licensing Authority.
- 7) **Winery/Limited Winery Noncontiguous or Primary Manufacturing Location Change**, go to page 4, and complete question 8. Use this section to make a current Noncontiguous Manufacturing Location into a Primary Manufacturing Location, or a Primary Manufacturing Location into a Noncontiguous Manufacturing Location. To be eligible for a Winery/Limited Winery Noncontiguous or Primary Manufacturing Location Change, you must be a Colorado state licensed manufacturer of vinous liquor pursuant to section 44-3-402 or 44-3-403, C.R.S.
- 8) **Campus Liquor Complex Designation**, go to page 5 and complete question 11. Submit the necessary information and proceed to page 5 for Oath of Applicant signature.
- 9) **To add another Related Facility** to an existing Resort or Campus Liquor Complex, go to page 5 and complete question 12.

Storage Permit	5. Retail Warehouse Storage Permit or a Wholesalers Branch House Permit ☐ Retail Warehouse Permit for: ☐ On-Premises Licensee (Taverns, Restaurants etc.) ☐ Off-Premises Licensee (Liquor stores) ☐ Wholesalers Branch House Permit Address of storage premise: _____ City _____, County _____ ZIP _____ Attach a deed/lease or rental agreement for the storage premises. Attach a detailed diagram of the storage premises.				
Change Trade Name or Corporate Name	6. Change of Trade Name or Corporation Name ☐ Change of Trade name/DBA only ☐ Corporate Name Change (Attach the following supporting documents) 1. Certificate of Amendment filed with the Secretary of State, or 2. Statement of Change filed with the Secretary of State, <u>and</u> 3. Minutes of Corporate meeting, Limited Liability Members meeting, Partnership agreement. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 50%;">Old Trade Name</td><td style="width: 50%;">New Trade Name</td></tr> <tr> <td>Old Corporate Name</td><td>New Corporate Name</td></tr> </table>	Old Trade Name	New Trade Name	Old Corporate Name	New Corporate Name
Old Trade Name	New Trade Name				
Old Corporate Name	New Corporate Name				
Change of Location	7. Change of Location NOTE TO RETAIL LICENSEES: An application to change location has a local application fee of \$750 payable to your local licensing authority. You may only change location within the same jurisdiction as the original license that was issued. Pursuant to 44-3-311(1) C.R.S. Your application must be on file with the local authority thirty (30) days before a public hearing can be held. Date filed with Local Authority _____ Date of Hearing _____ (a) Address of current premises _____ City _____ County _____ ZIP _____ (b) Address of proposed New Premises (Attach copy of the deed or lease that establishes possession of the premises by the licensee) Address _____ City _____ County _____ ZIP _____ (c) New mailing address if applicable. Address _____ City _____ County _____ State _____ ZIP _____ (d) Attach detailed diagram of the premises showing where the alcohol beverages will be stored, served, possessed or consumed. Include kitchen area(s) for hotel and restaurants.				

Winery/Limited Winery Noncontiguous or Primary Manufacturing Location Change	8. Winery/Limited Winery Noncontiguous or Primary Manufacturing Location Change Select the option that applies to your situation: ☐ Make a current Primary Manufacturing Location (Location 1) into a Noncontiguous Location (Location 2); or ☐ Make a current Noncontiguous Manufacturing Location (Location 1) into a Primary Manufacturing Location (Location 2). (a) Address of Location 1: _____ City _____ County _____ ZIP _____ (b) Address of Location 2: _____ City _____ County _____ ZIP _____
Change of Manager	9. Change of Manager or to Register the Manager of a Tavern, Hotel and Restaurant, Lodging & Entertainment liquor license or licenses pursuant to section 44-3-301(8), C.R.S. (a) Change of Manager (attach Individual History DR 8404-I H/R, Tavern and Lodging & Entertainment only) Former manager's name _____ New manager's name _____ (b) Date of Employment _____ Has manager ever managed a liquor licensed establishment?..... ☐ Yes ☐ No Does manager have a financial interest in any other liquor licensed establishment? ☐ Yes ☐ No If yes, give name and location of establishment _____
Modify Premises or Addition of Optional Premises, Related Facility, or Sidewalk Service Area	10. Modification of Premises, Addition of an Optional Premises, Addition of Related Facility, or Addition of a Sidewalk Service Area NOTE: Licensees may not modify or add to their licensed premises until approved by state and local authorities. (a) Describe change proposed <u>Would like to expand liq license to cover side yard. for a new</u> (b) If the modification is temporary, when will the proposed change: Start _____ (mo/day/year) End _____ (mo/day/year) NOTE: THE TOTAL STATE FEE FOR TEMPORARY MODIFICATION IS \$300.00 (c) Will the proposed change result in the licensed premises now being located within 500 feet of any public or private school that meets compulsory education requirements of Colorado law, or the principal campus of any college, university or seminary? (If yes, explain in detail and describe any exemptions that apply) ☐ Yes ☐ No (d) Is the proposed change in compliance with local building and zoning laws? ☐ Yes ☐ No (e) If this modification is for an additional Hotel and Restaurant Optional Premises has the local authority authorized by resolution or ordinance the issuance of optional premises? ☐ Yes ☐ No (f) Attach a diagram of the current licensed premises and a diagram of the proposed changes for the licensed premises. (g) Attach any existing lease that is revised due to the modification. (h) For the addition of a Sidewalk Service Area per Regulation 47-302(A)(4), 1 C.C.R. 203-2, include documentation received from the local governing body authorizing use of the sidewalk. Documentation may include but is not limited to a statement of use, permit, easement, or other legal permissions.

Campus Liquor Complex Designation	11. Campus Liquor Complex Designation An institution of higher education or a person who contracts with the institution to provide food services (a) I wish to designate my existing _____ Liquor License # _____ to a Campus Liquor Complex ☐ Yes ☐ No
Additional Related Facility	12. Additional Related Facility To add a Related Facility to an existing Resort or Campus Liquor Complex, include the name of the Related Facility and include the address and an outlined drawing of the Related Facility Premises. (a) Address of Related Facility _____ (b) Outlined diagram provided ☐ Yes ☐ No

Oath of Applicant		
I declare under penalty of perjury in the second degree that I have read the foregoing application and all attachments thereto, and that all information therein is true, correct, and complete to the best of my knowledge		
Signature 	Print name and Title Dusti Budd / CEO	Date 2/20/23
Report and Approval of LOCAL Licensing Authority (CITY / COUNTY)		
The foregoing application has been examined and the premises, business conducted and character of the applicant is satisfactory, and we do report that such permit, if granted, will comply with the applicable provisions of Title 44, Articles 4 and 3, C.R.S., as amended. Therefore, This Application is Approved.		
Local Licensing Authority (City or County)		Date filed with Local Authority
Signature	Title	Date
Report of STATE Licensing Authority		
The foregoing has been examined and complies with the filing requirements of Title 44, Article 3, C.R.S., as amended.		
Signature	Title	Date





Agenda Item #5.e.

Agenda Item Name:

Consider Liquor License Renewal for Western Slope Chicken, LLC dba Wingchesters

Presenter:

Misty Williams, City Clerk

Item Description:

Hotel & Restaurant Liquor License Renewal for Western Slope Chicken, LLC dba Wingchesters

Recommended Action:

I move to approve the Liquor License Renewal application for Western Slope Chicken, LLC dba Wingchesters

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

None

Background Information:

Western Slope Chicken, LLC dba Wingchesters located at 717 Taughenbaugh Boulevard, Rifle, CO has submitted a Hotel & Restaurant Liquor License Renewal Application.

The application is complete and the appropriate fees have been paid.

Executive Summary:

None

Notification Requirements:

None

Prepared By:

Alexis Ramirez, Deputy City Clerk

Attachments:

1. REDACTED - Wingchester Renewal

Submit to Local Licensing Authority

**WINGCHESTERS
 PO BOX 733
 Gypsum CO 81637**

Fees Due	
Renewal Fee	550.00
Storage Permit \$100 X _____	\$
Sidewalk Service Area \$75.00	\$
Additional Optional Premise Hotel & Restaurant \$100 X _____	\$
Related Facility - Campus Liquor Complex \$160.00 per facility	\$
Amount Due/Paid	\$ 550.00

Make check payable to: Colorado Department of Revenue. The State may convert your check to a one-time electronic banking transaction. Your bank account may be debited as early as the same day received by the State. If converted, your check will not be returned. If your check is rejected due to insufficient or uncollected funds, the Department may collect the payment amount directly from your banking account electronically.

Colorado Beer and Wine License Renewal Application

Please verify & update all information below

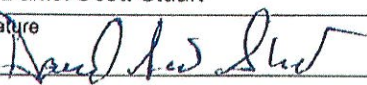
Return to city or county licensing authority by due date

Licensee Name WESTERN SLOPE CHICKEN LLC		Doing Business As Name (DBA) WINGCHESTERS	
Liquor License # 03-08342	License Type Hotel & Restaurant (city)		
Sales Tax License Number 30778054	Expiration Date 08/03/2023	Due Date 08/19/2023	
Business Address 717 TAUGHENBAUGH BLVD Rifle CO 81650			Phone Number 9706256111
Mailing Address PO BOX 733 Gypsum CO 81637		Email dsstuart@cshold.com	
Operating Manager Santiago Pacheco-Burgos	Date of Birth	Home Address	Phone Number
1. Do you have legal possession of the premises at the street address above? ☐ Yes ☐ No Are the premises owned or rented? ☐ Owned ☒ Rented* *If rented, expiration date of lease <u>04/30/2037</u>			
2. Are you renewing a storage permit, additional optional premises, sidewalk service area, or related facility? If yes, please see the table in upper right hand corner and include all fees due. ☐ Yes ☒ No			
3a. Are you renewing a takeout and/or delivery permit? (Note: must hold a qualifying license type and be authorized for takeout and/or delivery license privileges) ☐ Yes ☒ No			
3b. If so, which are you renewing? ☐ Delivery ☐ Takeout ☐ Both Takeout and Delivery			
4a. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant, been found in final order of a tax agency to be delinquent in the payment of any state or local taxes, penalties, or interest related to a business? ☐ Yes ☒ No			
4b. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant failed to pay any fees or surcharges imposed pursuant to section 44-3-503, C.R.S.? ☐ Yes ☒ No			
5. Since the date of filing of the last application, has there been any change in financial interest (new notes, loans, owners, etc.) or organizational structure (addition or deletion of officers, directors, managing members or general partners)? If yes, explain in detail and attach a listing of all liquor businesses in which these new lenders, owners (other than licensed financial institutions), officers, directors, managing members, or general partners are materially interested. ☐ Yes ☒ No			
6. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been convicted of a crime? If yes, attach a detailed explanation. ☐ Yes ☒ No			

7. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been denied an alcohol beverage license, had an alcohol beverage license suspended or revoked, or had interest in any entity that had an alcohol beverage license denied, suspended or revoked? If yes, attach a detailed explanation. ☐ Yes ☒ No
8. Does the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) have a direct or indirect interest in any other Colorado liquor license, including loans to or from any licensee or interest in a loan to any licensee? If yes, attach a detailed explanation. ☐ Yes ☒ No

Affirmation & Consent

I declare under penalty of perjury in the second degree that this application and all attachments are true, correct and complete to the best of my knowledge.

Type or Print Name of Applicant/Authorized Agent of Business Daniel Scott Stuart	Title LLC Manager
Signature 	Date 05/09/2023

Report & Approval of City or County Licensing Authority

The foregoing application has been examined and the premises, business conducted and character of the applicant are satisfactory, and we do hereby report that such license, if granted, will comply with the provisions of Title 44, Articles 4 and 3, C.R.S., and Liquor Rules.

Therefore this application is approved.

Local Licensing Authority For		Date
Signature	Title	Attest

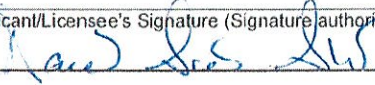
Tax Check Authorization, Waiver, and Request to Release Information

I, Daniel Scott Stuart am signing this Tax Check Authorization, Waiver and Request to Release Information (hereinafter "Waiver") on behalf of Western Slope Chicken LLC (the "Applicant/Licensee") to permit the Colorado Department of Revenue and any other state or local taxing authority to release information and documentation that may otherwise be confidential, as provided below. If I am signing this Waiver for someone other than myself, including on behalf of a business entity, I certify that I have the authority to execute this Waiver on behalf of the Applicant/Licensee.

The Executive Director of the Colorado Department of Revenue is the State Licensing Authority, and oversees the Colorado Liquor Enforcement Division as his or her agents, clerks, and employees. The information and documentation obtained pursuant to this Waiver may be used in connection with the Applicant/Licensee's liquor license application and ongoing licensure by the state and local licensing authorities. The Colorado Liquor Code, section 44-3-101. et seq. ("Liquor Code"), and the Colorado Liquor Rules, 1 CCR 203-2 ("Liquor Rules"), require compliance with certain tax obligations, and set forth the investigative, disciplinary and licensure actions the state and local licensing authorities may take for violations of the Liquor Code and Liquor Rules, including failure to meet tax reporting and payment obligations.

The Waiver is made pursuant to section 39-21-113(4), C.R.S., and any other law, regulation, resolution or ordinance concerning the confidentiality of tax information, or any document, report or return filed in connection with state or local taxes. This Waiver shall be valid until the expiration or revocation of a license, or until both the state and local licensing authorities take final action to approve or deny any application(s) for the renewal of the license, whichever is later. Applicant/Licensee agrees to execute a new waiver for each subsequent licensing period in connection with the renewal of any license, if requested.

By signing below, Applicant/Licensee requests that the Colorado Department of Revenue and any other state or local taxing authority or agency in the possession of tax documents or information, release information and documentation to the Colorado Liquor Enforcement Division, and is duly authorized employees, to act as the Applicant's/Licensee's duly authorized representative under section 39-21-113(4), C.R.S., solely to allow the state and local licensing authorities, and their duly authorized employees, to investigate compliance with the Liquor Code and Liquor Rules. Applicant/Licensee authorizes the state and local licensing authorities, their duly authorized employees, and their legal representatives, to use the information and documentation obtained using this Waiver in any administrative or judicial action regarding the application or license.

Name (Individual/Business) Western Slope Chicken LLC		Social Security Number/Tax Identification Number	
Address PO Box 733			
City Gypsum		State CO	Zip 81637
Home Phone Number 970-524-9537		Business/Work Phone Number 970-625-6111	
Printed name of person signing on behalf of the Applicant/Licensee Daniel Scott Stuart			
Applicant/Licensee's Signature (Signature authorizing the disclosure of confidential tax information) 			Date signed 05/30/2023
Privacy Act Statement Providing your Social Security Number is voluntary and no right, benefit or privilege provided by law will be denied as a result of refusal to disclose it. § 7 of Privacy Act, 5 USCS § 552a (note).			



Agenda Item #5.f.

Agenda Item Name:

Consider Resolution No. 14, Series of 2023 - Terminating the Declaration of Emergency for COVID

Presenter:

James S. Neu, City Attorney

Item Description:

Consider Resolution No. 14, Series of 2023 - Terminating the Declaration of Emergency for COVID

Recommended Action:

Move to approve Resolution No. 14, Series of 2023 - Terminating the Declaration of Emergency for COVID

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

Resolution No. 7, Series of 2020 was approved on March 18, 2020

Background Information:

On March 18, 2020, at a regular City Council meeting, Resolution No. 7, Series of 2020 was passed. The resolution declared a Local Disaster Emergency pursuant to C.R.S. § 24-33.5-709 to enable responsive measures to the COVID-19 pandemic and accompanying hardships on the community.

Resolution No. 14, Series of 2023 would terminate the declaration of emergency for COVID.

Executive Summary:

See background.

Notification Requirements:

None

Prepared By:

Misty Williams, City Clerk

Attachments:

1. Resolution No. 14-Declaration Terminating COVID-19 Emergency

**CITY OF RIFLE, COLORADO
RESOLUTION NO. 14
SERIES OF 2023**

A RESOLUTION OF THE CITY COUNCIL FOR THE CITY OF RIFLE, COLORADO,
TERMINATING THE COVID-19 LOCAL DISASTER EMERGENCY.

WHEREAS, by Resolution No. 7, Series of 2020 the City of Rifle (the “City”) declared a Local Disaster Emergency pursuant to C.R.S. § 24-33.5-709 to enable responsive measures to the COVID-19 pandemic and accompanying hardships on the community; and

WHEREAS, the COVID-19 pandemic has abated and normal functioning of governments, including the City, has resumed; and

WHEREAS, the Board finds it proper to terminate the Local Disaster Emergency declaration.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RIFLE, COLORADO THAT:

Section 1. Incorporation of Recitals. The above recitals are hereby incorporated as findings by the City of Rifle.

Section 2. Termination of Local Disaster Emergency. The City Council hereby terminates the Local Disaster Emergency declared under Resolution No. 7, Series of 2020 effective June 8, 2023.

THIS RESOLUTION was read, passed, and adopted by the Rifle City Council at a regular meeting held this 7th day of June 2023.

CITY OF RIFLE, COLORADO

By _____
Mayor

ATTEST:

City Clerk



Agenda Item #5.g.

Agenda Item Name:

Consider Resolution No. 16 Series of 2023 - Resolution of Substantial Compliance for Ecodwellings Fritzlan Annexation

Presenter:

Patrick Waller, Planning Director

Item Description:

Resolution of Substantial Compliance for Ecodwellings Annexation

Recommended Action:

Move to Approve Resolution No. 16, Series of 2023 - Resolution of Substantial Compliance for Ecodwellings Fritzlan Annexation

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

City Council previously denied an Annexation request for this parcel earlier in the year

Background Information:

The applicant is applying to annex the subject property into the City of Rifle. The Resolution of Substantial Compliance is the first step in the annexation process.

Executive Summary:

The Resolution of Substantial Compliance is required by Colorado State Statute to begin the Annexation Process. The Resolution only provides a representation from the applicant that they meet State Statute requirements to request an annexation into the City. The Planning Commission meeting on this application is scheduled for June 27, 2023 and the City Council public hearing is scheduled for July 19.

Notification Requirements:

No additional notice required

Prepared By:

Patrick Waller, Planning Director

Attachments:

1. Resolution No. 16-Fritzlan Annexation Petition-Substantial Compliance

**CITY OF RIFLE, COLORADO
RESOLUTION NO. 16
SERIES OF 2023**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIFLE,
COLORADO, FINDING THE FRITZLAN ANNEXATION PETITION TO BE IN
SUBSTANTIAL COMPLIANCE WITH STATE STATUTES AND SETTING A
PUBLIC HEARING ON SAID PETITION.

WHEREAS, in May 2023, Eco Dwelling, LLC filed with the City Clerk of the City of Rifle, Colorado, a petition and request that the City Council of the City of Rifle, Colorado, commence proceedings to annex to the City of Rifle a certain unincorporated tract of land located in the County of Garfield, State of Colorado, known as the Fritzlan Annexation described on Exhibit A, attached hereto and incorporated herein by reference; and

WHEREAS, the City planning staff advised the Council that after a review of the annexation Petition and map, staff determined that the Petition and map are in substantial compliance with the state statutes, as required by C.R.S. §31-12-107; and

WHEREAS, the Petition alleges as follows:

1. It is desirable and necessary that the territory described above be annexed to the City of Rifle, Colorado.

2. The requirements of C.R.S. §31-12-104, as amended, exist or have been met, including without limitation the following:

- A. Not less than 1/6th of the perimeter of the area proposed to be annexed is contiguous with the City of Rifle, Colorado.
- B. A community of interest exists between the area proposed to be annexed and the City of Rifle, Colorado.
- C. The area proposed to be annexed is urban or will be urbanized in the near future.
- D. The area proposed to be annexed is integrated with or is capable of being integrated with the City of Rifle, Colorado.

3. The requirements of C.R.S. §31-12-105, as amended, exist or have been met, including without limitation the following:

- A. In establishing the boundaries of the area proposed to be annexed, no land held in identical ownership, whether consisting of one tract or parcel of real estate or two or more contiguous tracts or parcels of real estate:

- (1) has been divided into separate parts or parcels without the written consent

of the landowner or landowners thereof.

- (2) comprising twenty (20) acres or more (which together with buildings and improvements situated thereon having a valuation for assessment in excess of \$200,000.00 for ad valorem tax purposes for the year preceding the proposed annexation), has been included without the written consent of the landowners.
- B. No annexation proceedings have been commenced for the annexation to a municipality other than the City of Rifle, Colorado, of all or part of the territory proposed to be annexed.
- C. The annexation proposed in the Petition will not result in the detachment of area from any school district and the attachment of the same area to another school district.
- D. The annexation proposed in the Petition will not have the effect of extending the municipal boundary of the City of Rifle more than three (3) miles in any direction from any point on the current municipal boundary of the City in any one year; and

WHEREAS, the City has or will have in place a plan meeting the requirements of C.R.S. §31-12-105(e) prior to the effective date of the proposed annexation; and

WHEREAS, no election for annexation of the area proposed to be annexed to the City of Rifle has been held in the preceding twelve (12) months; and

WHEREAS, the signer of the Petition is the owner of one hundred percent (100%) of the territory proposed to be annexed, exclusive of public streets and alleys; and

WHEREAS, the annexation to the City of Rifle, Colorado, of the area proposed to be annexed will not result in a change of county boundaries; and

WHEREAS, the name and mailing address of the signer of the Petition and date of signing are included in the Petition, and the legal descriptions of the land owned by Petitioner is attached to the Petition. No signature on the Petition is dated more than 180 days prior to the date of filing of the Petition for annexation with the City Clerk; and

WHEREAS, the Petition is accompanied by four (4) or more copies of an Annexation Map containing, among other things, the following information:

- A. A written legal description of the boundaries of the area proposed to be annexed to the City of Rifle, Colorado;

- B. The boundary of the area proposed to be annexed to the City of Rifle, Colorado;
- C. Within the annexation boundary map, a showing of the location of each ownership tract in unplatted land and, if part or all of the area is platted, the boundaries and the plat numbers of plots or of lots and blocks; and
- D. Next to the boundary of the area proposed to be annexed, a drawing of the contiguous boundary of the City of Rifle, Colorado; and

WHEREAS, none of the area proposed to be annexed to the City of Rifle, Colorado, is presently a part of any incorporated city, city and county, or town, and is not contiguous to any other incorporated city, city and county, or town; and

WHEREAS, it appears that the Petition filed as aforesaid is in substantial compliance with the requirements of the Municipal Annexation Act of 1965, C.R.S. §31-12-107(1), as amended.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RIFLE, COLORADO, THAT:

1. The City incorporates the foregoing recitals as findings by the City Council.
2. The Petition is in substantial compliance with the requirements of the Municipal Annexation Act of 1965, C.R.S. §31-12-107(1), as amended.
3. The City Council of the City of Rifle, Colorado, will hold a hearing upon the Petition for the purpose of determining and finding whether the area proposed to be annexed meets the applicable requirements of C.R.S. §31-12-104 and §31-12-105, as amended, and is considered eligible for annexation. The hearing shall be held on **July 19, 2023**, commencing at the hour of 7 p.m. in the City Council Chambers, 202 Railroad Avenue, Rifle, Colorado.
4. Any person may appear at such hearing and present evidence upon any matter to be determined by the City Council of the City of Rifle, Colorado.
5. The City Clerk of the City of Rifle, Colorado shall give notice of the hearing to be held upon the Petition by causing notice thereof, in accordance with C.R.S. §31-12-108(2), as amended, to be published once a week for four (4) successive weeks in the *Citizen Telegram*, a newspaper of general circulation in the area proposed to be annexed, the first publication to occur at least thirty (30) days prior to the aforesaid hearing. In addition, a copy of the published notice, together with a copy of this resolution and petition as filed, shall be sent by registered mail by the City Clerk to the board of county commissioners and to the county attorney and to any special district or school district having territory within the area to be annexed at least twenty-five (25) days prior to the hearing date.

THIS RESOLUTION was read, passed, and adopted by the Rifle City Council at a regular meeting held this 7th day of June, 2023.

CITY OF RIFLE, COLORADO

By _____
Mayor

ATTEST:

City Clerk

EXHIBIT A

A tract of land being a portion of those properties described in Reception Nos. 271009 and 194149 of the Garfield County Records. Said tract of land also being a portion of the SE¹/₄SE¹/₄ of Section 16, Township 6 South, Range 93 West of the 6th Principal Meridian, described as follows:

Commencing at the southeast corner of said Section 16; thence North 89°52'53" West along the South line of said Section 16, a distance of 284.27 feet to the POINT OF BEGINNING; thence North 89°52'53" West continuing along said Section line, a distance of 501.97 feet to the southeast corner of that property described as Reception No. 243124 of the Garfield County Records; thence North 00°33'11" East along the east boundary of said property, a distance of 691.37 feet to a point on the south boundary of that property described as Reception No. 633950 of the Garfield County Records; thence along said southerly boundary South 89°00'58" East a distance of 370.36 feet to the southeast corner of said property; thence along the east boundary of said property North 00°25'42" West a distance of 30.12 feet; thence leaving said east boundary South 89°42'09" East a distance of 117.81 feet to a point on the west boundary of that property described as Reception No. 610069 of the Garfield County Records; thence South 00°35'35" East along said west boundary, a distance of 715.57 feet to the Point of Beginning.



Agenda Item #6.a.

Agenda Item Name:

Consider Declaring IT Equipment Surplus

Presenter:

Tommy Klein, City Manager

Item Description:

Consider Declaring IT Equipment Surplus and Dispose

Recommended Action:

Move to declare the equipment as surplus and approve disposal using Lifespan.

Fiscal Impact:

The intent of this proposal is to offset the costs associated with disposing of obsolete or damaged computer equipment by allowing a disposal company to sell any items that might hold value.

Operational Impact:

Obsolete IT equipment will be removed from our inventory.

Prior Board Motions:

None

Background Information:

Our IT department has accumulated obsolete and damaged computer equipment that needs to be sold or disposed of. Some equipment contains sensitive information that will need to be erased prior to recycling or destruction. IT would like to use the services of Lifespan, a company that is currently used by Grand River Hospital, to properly dispose of computer equipment. GRH uses Lifespan to destroy computer equipment that contains very sensitive medical information on patients. We are confident that Lifespan will ensure that any confidential information stored on servers or hard drives will remain secure until destroyed.

Executive Summary:

Our IT department has accumulated obsolete and damaged computer equipment that needs to be sold or disposed of. Some equipment contains sensitive information that will need to be erased prior to recycling or destruction. IT would like to use the services of Lifespan, a company that is currently used by Grand River Hospital. GRH uses Lifespan to destroy computer equipment that contains very sensitive medical information on patients. We are confident that Lifespan will ensure that any confidential information stored on servers or hard drives will remain secure until destroyed. The cost of the services should be below \$5,000, which means a department head has the authority to move forward with this aspect of the proposal.

Rifle Municipal Code dictates how property owned by the City can be destroyed, donated or sold. The method

of declaring as surplus and disposing of items is dictated by the initial purchase price of the item. If a piece of equipment costs less than \$10,000 at the time of purchase, the manager may declare the item surplus and dispose of the property. If the purchase price of a piece of equipment was greater than \$10,000 but less than \$25,000, the property must be sold at auction. If the City spends more than \$25,000 on a piece of equipment, the item must be declared surplus by the City Council and then sold at auction. These regulations work well for most assets, but electronic equipment must be disposed of in a secure and lawful manner.

The cost of disposal of equipment by Lifespan is typically \$9.00 per item if data needs to be removed from the device. For other electronic equipment that has no value, the company charges \$0.30 per pound. Proceeds from items that are sold by Lifespan will be applied towards our cost of disposal and if proceeds exceed costs, the City will be compensated for the difference. (The City would receive 70% of the value of any items sold.) It is our hope to break even in the transaction. (Costs of disposing properly + erasing data + shipping = recycling + used retail value.) We are asking that the Council declare the items listed in the attached Excel sheet as surplus equipment and allow staff to work with Lifespan to sell, destroy, refurbish for sale or recycle materials.

Notification Requirements:

We will report the results of the process to include the associated costs and any recovery of funds connected to the disposal process.

Prepared By:

Tommy Klein, City Manager

Attachments:

1. City of Rifle - LSI_Proposal
2. Network Equipment Recycle/Destroy

IT Asset Disposition



LIFESPAN INTERNATIONAL INC.

4675 E. Cotton Center Blvd., Ste. 155, Phoenix, AZ 85040 USA

04, May, 2023

City of Rifle
1718 Railroad Avenue
Rifle, Colorado
81650

Kelly Thompson,

Thank you for the opportunity to submit a proposal for the service requirements for CITY OF RIFLE in regards to the retirement of IT equipment. Lifespan is a leading provider of information technology asset disposition services and follows a full chain-of-custody security framework to ensure your IT assets are both secure and recycled in a proper environmental manner. Below is our understanding of CITY OF RIFLE requirements. This proposal, when executed, will act as a services contract and mutually agreed Statement of Work (SOW).

CITY OF RIFLE Requirements:

CITY OF RIFLE has a surplus of computer and related electronic equipment. CITY OF RIFLE needs to have equipment picked up and put through the IT asset disposition process. CITY OF RIFLE would like to achieve economic recovery from these assets while ensuring a secure and environmentally sound disposition process is deployed in a consistent fashion across the organization. Finally, CITY OF RIFLE requires standardized reporting and supporting documentation for these processes.

Lifespan's Services

Based on Lifespan's understanding of CITY OF RIFLE requirements, Lifespan proposes a comprehensive solution that includes the following set of services:

- **Logistics Services**

If requested, Lifespan can provide a full suite of logistics services including de-installations, onsite packing and transportation.

- **Data Sanitization Services**

If requested, all hard-drives, tapes and other media storage devices (floppy drives, CDs, DVDs, etc.) will be sanitized to the NIST 880-88 standard. Media that fails the data sanitization process will be physically destroyed to the NAID AAA Certified Standard.

Physical data destruction options include hard drive crushing, degaussing and shredding. All options are available both onsite or at a Lifespan facility.

LIFESPAN INTERNATIONAL INC.

4675 E. Cotton Center Blvd., Ste. 155, Phoenix, AZ 85040 USA
951 Valley View Lane #180, Irving, TX, 75061 USA
75 Clegg Road, Markham, ON, L6G 1A1 Canada
Tel: (888)720-0900



- **Reporting**

All assets will be tracked throughout the ITAD process. Lifespan will provide a detailed report capturing asset data and condition. Serial number, asset tag number and product description will be recorded. The full-serialized audit report with certificates of data sanitization and recycling will be provided for each project.

- **Recycling**

All end-of-life assets will be recycled in full compliance with local, provincial/state and federal regulations. Processing takes place in secure facilities that are certified and audited under ISO 14001 and R2:2013 standards ensuring no electronic waste will be sent to landfills or developing countries.

Lifespan's Environmental and Security Credentials:

- NAID AAA - National Association for Information Destruction Certified
- NIST 880-88 Standard - U.S. Department of Commerce standard for media sanitization
- ISO 9001 - an international standard that governs an organization's quality management system
- ISO 14001 - Environmental Management System standard
- R2:2013 - Global environmental, worker health and safety standard for the electronic refurbishing and recycling industry
- OHSAS 18001 – Occupational health and safety management system
- HIPAA - The Health Insurance Portability and Accountability Act (HIPAA) establishes national standards for electronic health care transactions.
- PIPEDA – Canadian law regulating data privacy

Economic Recovery:

CITY OF RIFLE shall receive 70% of the fair market value for IT product i.e. storage, servers, networking equipment, personal computers, notebooks and monitors etc... If the total value of all assets exceeds associated ITAD service fees CITY OF RIFLE shall receive a payment from Lifespan within 30 days of asset reporting. If associated fees exceed total value of all assets, CITY OF RIFLE shall receive an invoice for the remaining balance. Assets are reported uniquely per return by project number reflecting location and date.

LIFESPAN INTERNATIONAL INC.

4675 E. Cotton Center Blvd., Ste. 155, Phoenix, AZ 85040 USA
951 Valley View Lane #180, Irving, TX, 75061 USA
75 Clegg Road, Markham, ON, L6G 1A1 Canada
Tel: (888)720-0900



ITAD Service Fees (Plant Based):

Data bearing devices: (E.G. Laptop, Desktop, Servers, Mobile Phones, Tablets, Etc.)

Reporting, Data Sanitization & Recycling: \$9/asset

Non-Data Bearing Devices: (E.G. LCD/CRT Monitors, Networking Gear, Printers, Scanner, Fax, Telephony, Server Rack/Cabinets, Peripherals, Etc.)

Reporting & Recycling: \$6/asset

Loose & Additional Pulled Hard Drives:

Plant based destruction (wipe, shred, crush, or degauss) will be a \$4 per serialized asset processing fee for each hard drive. Lifespan will capture serial number, make and model of the hard drive. Lifespan will include the details of the hard drive in the full report and provide a Certificate of Destruction.

LTO Tape & Other Media/Data Storage Devices:

Plant based destruction (shred/crush) will be \$0.75 per asset processing fee. Capturing of count will be included and provided on the Certificate of Destruction.

E-waste/Recycling: (Equipment deemed to be no value)

Recycling & Reporting: \$0.30/lb.

Pricing is for services performed in North America. Prices listed are in U.S. dollars. Minimum project fee is \$399.00.

Logistics: quoted per project

Onsite Services: quoted per project

Items returned without notice containing hazardous materials such as mercury may be subject to disposal fees.

The serialized asset processing fee shall be assessed per asset for full audit, data destruction and/or sanitization within Ontario, unless otherwise noted and agreed upon in writing as an addendum to this SOW. Equipment that does not require full test and audit and deemed to have no recovery value will be recycled to the R2:2013 standard.

LIFESPAN INTERNATIONAL INC.

4675 E. Cotton Center Blvd., Ste. 155, Phoenix, AZ 85040 USA
951 Valley View Lane #180, Irving, TX, 75061 USA
75 Clegg Road, Markham, ON, L6G 1A1 Canada
Tel: (888)720-0900

Trans-Security Solutions / Logistics:

Pricing is based on transportation from pick-up location to the nearest Lifespan facility. Lifespan will route product to the most economical location as deemed by Lifespan. Actual costs will be quoted per pickup request. Lifespan will support the following from CITY OF RIFLE location:

- Will support Pickup of IT Assets from locations
- Onsite Packing of IT Equipment with specialized gaylord boxing material to avoid damage during transit to retain full value
- Pack / Stack / Wrap of skidded equipment
- Direct transport to Lifespan Facility
- Lifespan has trained and specialized IT Techs for Trans-Security for all ITAD Pickups

Lifespan's logistics services also include:

- EZ Cycle box services, a simple solution for recycling smaller quantities
- Customized, secure locking containers for hard drives (Lock Box)
- Trucks with tie bands to secure transports

Onsite Services:

Onsite Facility Services:

Lifespan can provide onsite services including data destruction, sanitization, install and de-install of IT hardware and asset auditing. These services would be quoted per occurrence and include a specific SOW detailing location, selected services and quantity of equipment.

Onsite Data Center Services:

Lifespan will physically de-installing/disassembling all IT storage equipment (i.e. storage racks, storage arrays, servers, storage area networks, SAN, etc.). Lifespan team makes sure that all equipment is scanned and accounted for before packaging equipment for transit. Once all equipment is accounted for, Lifespan team will palletize and package all IT equipment to ensure a safe and secure transport to the destination facility. All trucks when loaded are locked out and tagged out with Lifespan issued locks and tags. When the truck arrives at the destination facility, Lifespan Technology team checks the lock to ensure the shipment hasn't been tampered with in any way, Lifespan Technology team then unlocks truck and moves all equipment to the designated cage for re-installation. Before the re-installation begins, Lifespan Technology team verifies that all equipment that was logged at the originating facility has successfully arrived at the destination facility. Once all equipment is accounted for, Lifespan Technology team will physically re-install/assemble all IT storage equipment into their designated space.

LIFESPAN INTERNATIONAL INC.

4675 E. Cotton Center Blvd., Ste. 155, Phoenix, AZ 85040 USA
951 Valley View Lane #180, Irving, TX, 75061 USA
75 Clegg Road, Markham, ON, L6G 1A1 Canada
Tel: (888)720-0900

Onsite Services Include:

<u>Physical Inventory</u>	<u>Onsite Media Destruction</u>
Onsite SN Capture & Audit	Onsite Degaussing
Verification inventory against client-provided list	Onsite Crushing
Full Asset Reporting Given Onsite	Onsite DOD Wiping (Sanitization)
	Onsite Shredding
<u>Redeployment</u>	
De-install and remove equipment from site	<u>Loose Drive Erasure</u>
Deliver and install at new location	Erase "failed" drives from Servers and SANS
<u>Cable Pulling</u>	<u>Other</u>
Identify cable runs and environmental factors	Onsite De-install of Desktop Removal
Disconnect and pull old network cables	Full Teardown of Site Closure
Record port number of each devices and identify routers, switches, and/or hubs	End-to-End Chain of Custody

Terms & Conditions:

CITY OF RIFLE warrants that it has free and clear title to the assets and title to each asset shall transfer to Lifespan upon the execution by you of this agreement. Lifespan shall defend, indemnify and hold harmless CITY OF RIFLE, its affiliates, employees and agents from and against any and all claims, closes, liabilities, damages and expenses (including reasonable attorney fees) based upon (i) any breach of the representations and warranties of Lifespan contained in this agreement or (ii) the death, bodily injury or damage to tangible personal property to the extent arising caused by the use of the assets by subsequent purchasers.

Neither CITY OF RIFLE nor Lifespan shall be liable for Lifespan's failure to perform hereunder due to any circumstances beyond its' reasonable control, including without limitation, acts of God, fires, floods, wars, sabotage, accidents, labor disputes or work stoppages or shortages, governmental laws, ordinances, rules or regulations or any inability to obtain transportation or freight. Services will commence on a date to be determined.

Lifespan carries \$2,000,000 Errors and Omissions Insurance per incident, thereby protecting CITY OF RIFLE from any breach of information that may occur during the ITAD process.

This Agreement, including any specifically attached documents, is the complete agreement between the parties and any disputes between us shall be resolved via arbitration, using the laws of Ontario.

LIFESPAN INTERNATIONAL INC.

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 951 Valley View Lane #180, Irving, TX, 75061 USA
 75 Clegg Road, Markham, ON, L6G 1A1 Canada
 Tel: (888)720-0900



Sincerely,

Toronto Bui

Customer Acceptance:

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date(s) written above.

CITY OF RIFLE

Date:

Kelly Thompson
Authorized Signee

Lifespan Technologies Inc.

Date:

I have authority to bind the Corporatio

LIFESPAN INTERNATIONAL INC.

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951 Valley View Lane #180, Irving, TX, 75061 USA
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Tel: (888)720-0900



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4675 E. Cotton Center Blvd., Ste. 155, Phoenix, AZ 85040 USA
951 Valley View Lane #180, Irving, TX, 75061 USA
75 Clegg Road, Markham, ON, L6G 1A1 Canada
Tel: (888)720-0900

Model	MN	SN	Estimated Current Value	MSRP
Cisco 1841	IPM7W00CRA	FTX113W06D	200-1170	Unknown
Cisco 3560	ws-c3560-24ps-sv07	fdo1216x4uc	85-842	4,900.00
Cisco 3561	WS-3560-48PS-SVD4*	CAT1035ZJR4	85-843	4,900.00
Cisco 3562	WS-3560-48PS-SVD4*	CAT1035NJ1K	85-844	4,900.00
Cisco 3563	WS-3560-48PS-SVD4*	CAT1035ZJS4	85-845	4,900.00
Cisco2610	Cisco2610	JMX0544K0GS	UNK	2,000.00
Cisco2610	Cisco2610	JAB004498440	UNK	2,000.00
Cisco NEXUS 3548P-10G	N3K-C3548P-10G	F0C1820R0WY	500-2,000	20,000.00
Cisco NEXUS 2248TP-E	N2K-C2248TP-E-1GE	68-4059-02-E0	1500	14,287.00
Cisco 2800 series	Cisco 2811	FTX1035A1JU	300	1500-4500
Cisco 3600	362082013	362082013	100-500	1500-5000
Cisco 2811	COM7C00ARA	FTX1125A83	Unknown	Unknown
Cisco 2970	WS-C2970G-24TS-E	CSG0909P0DW	\$500	3,900.00
Cisco 2950	WS-C2950-12	0000205FC140	224-1800	Unknown
BELKIN F1DP108A	BELKIN F1DP108A	92602000008	NONE	0 Value
CNET POWER SWITCH	CNSH-2400	AHW12122002523	NONE	0 Value
APC 16 PORT KVM	AP5405	5A0638C00345	NONE	0 Value
Cisco ASA 5510	ASA 5510	JMX1128L01W	250-750	Unknown
CNET POWER SWITCH 1600	CNSH 1600	181FH160HB	NONE	0 Value
CNET POWER SWITCH	CNSH-2400	AHW74050000233	NONE	0 Value
Cisco 3845	Cisco 3845	FTX1218A340	500-7000	Unknown
Cisco 2960X	WS-C2960X-	FCW2037A2QK	1500-3000	5,800.00
Cisco 3560X	Cisco 3560X	FD01635R1H7	400-1200	4,900.00
Cisco 3560	Cisco 3650		Unknown	Unknown
Cisco 3650	Cisco 3650		Unknown	Unknown
Cisco 5500 WIRELESS CONTROLLER	Cisco 5500		2000	15,000.00
Cisco NEXUS 5548P	Cisco 5548P	SS/1532069W	600-2500	32,000.00
UCS-C200M2-BE6K X4	UCS C200M2 X4	QCI1549A4Z4	1500-5000	22,995.00
UCS-C210M2 X 2	UCS C200M2 X4	QC11549A421	500- 2500	22,500.00
VNxE3300	V3D12AR15CXL12		2000-15000	28,290.00
EMC-E028		DF2v1p1	50	3,500.00
Dell STPE15	STPE15	AC178110700131	500	15,000
Dell-STL3	STL3		300	3,500.00

Miscellaneous

Item	Estimated Qty		Estimated Current Value
Printers	14		0-50
Desktops	16		0-50
Laptops	4		0-50
Monitors	Myriad		0
IP Cameras	28		0
Keyboards/Mice	Dozens		0
UPS	Several		0



Agenda Item #6.b.

Agenda Item Name:

Consider Appointment to the Parks and Recreation Advisory Board

Presenter:

Austin Rickstrew, Parks & Recreation Director

Item Description:

The Parks and Recreation Advisory Board has received an application from a community member who desires to be a board member. PRAB has reviewed the application, conducted an interview, and recommended that Josi Proulx be appointed to the vacant Board seats.

Recommended Action:

Appoint Josi Proulx to fill the vacant alternate position on the Parks and Recreation Advisory Board.

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

N/A

Background Information:

The Parks and Recreation Advisory Board (PRAB) consists of 8 Board members,--7 regular members, and one alternate member. The current members of PRAB are:

Kevin Kelley - Chairperson

Aaron Cumming - Vice-Chairperson

Annie MacGregor - Secretary

Trudy Lowery - Member

Ken Blatter - Member

Michael Clancy - Member

Brian Dow - Member

The staff solicited and received an application for the vacant seat. The Parks and Recreation Board is charged with screening board member applications, interviewing candidates, and recommending candidates to the Council for appointment. The Parks and Recreation Board has completed the prescribed process and recommended Josi Proulx for the alternate board seat.

Executive Summary:

None

Notification Requirements:

None

Prepared By:

Austin Rickstrew, Parks & Recreation Director

Attachments:

1. Josi Proulx_Resume
2. Josi Proulx_PRAB Application

EDUCATION

Mississippi State University

Pursuing PhD in Engineering Education

Anticipated Graduation: May 2024

Dissertation: Attrition Rates within the Engineering Field by Gender and Time

University of Missouri

Graduate Certificate in College Teaching (2022)

University of Colorado Boulder

Master of Science in Building Systems Engineering (2020)

Thesis: A Comparative Study of Lighting Perceptions Between Tone-Mapped Virtual Reality Environments and Physical Environments

Bachelor of Science in Architectural Engineering (2016)

with Emphasis in Lighting/Electrical Systems

WORK EXPERIENCE

Senior Designer • Clanton & Associates

MAR 2022 - PRESENT

- Project management for exterior public realm, transportation, interior lighting, and daylighting projects

Lecturer of Engineering • Colorado Mesa University

JAN 2022 - PRESENT

- Instructor for CONM 362 Structure Analysis: Statics/Materials Strength
 - Developed course curriculum
- Instructor for ENGR 140 First Year Engineering Projects
- Instructor for ENGR 125 Computer Aided Design & Fabrication

Lighting Designer • LS Group

FEB 2021 - MAR 2022

- Project management for private residential projects
- Lighting design production work

CERTIFICATIONS

LEED AP BD+C

- LEED Accredited Professional in Building Design & Construction

EIT

- Engineer-In-Training in the State of CO



Rifle Parks and Recreation Advisory Board Application 2023

Name Josi Proulx

Address 734 Cactus Ct

City Rifle State CO Zip 81650

Phone 720-339-5162 Alternate phone _____

E-mail josiane.proulx9@gmail.com

Do you live within Rifle city limits? ☒ Yes ☐ No

Are you over the age of 55? ☐ Yes ☒ No

(This question is related to having one board member of 55 years of age or older)

Please answer all questions. Attach additional sheets as necessary.

1. Please describe your interest in becoming a member of the Parks and Recreation Advisory Board (PRAB)?

I am interested in becoming a member of the PRAB because I would like to become more involved with the city. I love that the city of Rifle is a diverse and welcoming place. I would like to help support the existing programs that the Parks and Rec department have created and have the opportunity to shape future projects and programs.

2. If appointed, what do you feel you could contribute to the PRAB?

If appointed, I feel that I could contribute a fresh perspective on the issues that the Parks and Rec department faces. I would provide an optimistic and enthusiastic approach to the items that come to the board. As a newer and younger person living in Rifle, I am excited to see the city and its programs grow.

3. List any civic activities with which you have been involved.

I do not have any prior experience with civic activities.

4. What is your current involvement in Rifle Parks and Recreation?

I am not currently involved with any activities or programs put on by the Park and Rec department, however I visit and use the parks throughout the city very often.

5. Tell us about qualification you possess that could be beneficial to this board.

I am an extremely organized and dedicated individual. I am a project manager for a lighting and electrical engineering firm where we help design public spaces such as parks and plazas, roadways, and architecture. We also work with cities to implement lighting codes and street lighting master plans. I am very passionate about this work and am interested to work with the city from the advisory board side to enhance existing spaces and create great new ones.

6. In your opinion, what are the most significant issues facing the City of Rifle Parks and Recreation Department?

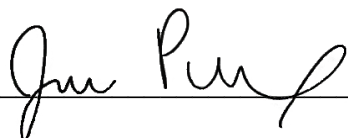
Currently, I think one of the biggest issues facing the Parks and Rec department is the lack of spaces for dog owners to go with their dogs. Parks are meant for all, from family barbeques and softball games to daily walks with dogs. I believe the city needs a dedicated dog park so that dog owners have a safe place to go to let their dogs off-leash. Additionally, it will help maintain the other parks for citizens' use without fear of stepping in dog poop or having to interact with a dog if you don't want to.

7. Please provide any additional comments which you believe will assist the PRAB/City Council in considering your application.

I love living in Rifle and want to give back to the community in any way I can. I feel that I am a very good candidate for the PRAB with my work experience and enthusiasm. Thank you for considering my application!

Oath of Applicant

I declare that this application and all attachments are true, correct, and complete to the best of my knowledge.

Signature: 

**Please return this form and attachments to arickstrew@rifleco.org
by 5:00 p.m. Friday, April 28, 2023.**





Agenda Item #6.c.

Agenda Item Name:

Consider Resolution No. 15, Series of 2023 - Adopting an Electronic Participation Policy

Presenter:

James S. Neu, City Attorney

Item Description:

Consider Resolution No. 15, Series of 2023 - Adopting an Electronic Participation Policy

Recommended Action:

Move to approve Resolution No. 15, Series of 2023 - Adopting an Electronic Participation Policy

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

Background Information:

Recognizing that there may be instances where a Council member may not be able to attend a scheduled meeting in person, it has been determined that it is in the best interest of the public health, welfare, and safety of the residents of the City of Rifle to adopt an Electronic Participation Policy.

This Electronic Participation Policy would allow Council members to participate via telephone, electronically, or other means of communication.

Executive Summary:

None

Notification Requirements:

None

Prepared By:

Misty Williams, City Clerk

Attachments:

1. Resolution No. 15-Electronic Participation Policy

**CITY OF RIFLE, COLORADO
RESOLUTION NO. 15
SERIES OF 2023**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIFLE,
COLORADO, ADOPTING AN ELECTRONIC PARTICIPATION POLICY.

WHEREAS, the City of Rifle ("City" or "Rifle") is a home-rule municipality organized under Article XX of the Colorado Constitution and with the authority of the Rifle Home Rule Charter (the "Charter"); and

WHEREAS, Section 3.8 of the Charter sets forth the requirements for holding City Council meetings as the City Council may, by resolution, prescribe; and

WHEREAS, City Council has determined that it is in the best interest of the public health, welfare, and safety of the residents of the City of Rifle to adopt an Electronic Participation Policy.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RIFLE THAT:

Section 1. The above recitals are hereby incorporated as findings by the City of Rifle.

Section 2. The City Council hereby adopts the following Electronic Participation Policy:

**CITY OF RIFLE, COLORADO
ELECTRONIC PARTICIPATION POLICY OF CITY COUNCIL MEMBERS AT
CITY COUNCIL MEETINGS**

I. Purpose.

The purpose of this Policy is to specify the circumstances and means under which City Council shall conduct regular and special meetings by telephone or other electronic means of participation, such as video-conferencing that is clear, uninterrupted, and allows two way communication for the participating members ("Electronic Participation"). Electronic Participation has inherent limitations because Electronic Participation effectively precludes a member of the City Council from contemporaneously observing documentary information presented during meetings; from fully evaluating a speaker's non-verbal language in assessing veracity or credibility; and from observing nonverbal explanations during a speaker's presentation or testimony. The City Council finds that these limitations, inherent in Electronic Participation, may produce inefficiencies in meetings, increase the expense of meetings, and alter the decision-making process. As such, the City Council shall only utilize the policies contained herein on a limited basis when 1) a quorum cannot be reached, 2) when a Council member or a member of their family, as defined in C.R.S. § 8-13.3-503 (11), has a serious injury or illness that makes in-person participation challenging or that would jeopardize the health and safety of others, or 3) for other reasons that justify Electronic Participation on a

temporary basis.

II. Statement of General Policy.

The City Council may conduct a regular or special meeting of the City Council by electronic means only in accordance with this Policy and reasons set forth below. Meetings may be held by telephone, electronically, or by other means of communication if all of the following conditions are met:

1. All members of the City Council, and at least one City staff member can hear one another or otherwise communicate with one another and can hear or read all discussion and testimony in a manner designed to provide maximum notice and participation;
2. Members of the public present at the regular meeting location can hear and read all discussion, testimony and votes;
3. At least one member of the City Council is present at the regular meeting location, unless not feasible due to emergency declaration;
4. All votes are conducted by roll call; and
5. Minutes of the meeting are taken and promptly recorded, and such records are open to public inspection.

Nothing herein precludes members of City staff or consultants of the City from participating electronically at City Council meeting.

A. Quorum

In the event a quorum is unable to meet at the day, hour, and place fixed by the rules and procedures of the City Council, Electronic Participation is allowed.

B. Injury or Illness

In the event a Council member or a member of their immediate family, as defined in C.R.S. § 8-13.3-503 (11), has a serious injury or illness that makes in-person participation challenging or that would jeopardize the health and safety of others, but does not prevent the Council member from Electronic Participation, that Council member may participate by telephone, electronically, or by other means of communication.

C. Other Reasons

In the event a Council member is temporarily unable to attend Council meetings in-person, for other reasons that justify Electronic Participation on a temporary basis, such as for

temporary family reasons, such as the care of a newborn child, but does not prevent the Council member from Electronic Participation, that Council member may participate by telephone, electronically, or by other means of communication.

III. Arranging for Electronic Participation.

- A. To arrange to participate via Electronic Participation, a Council member shall contact the City Manager or the Mayor in advance of the meeting to inform the City of their intent to participate via Electronic Participation. Council members shall endeavor to advise the City of their intent to participate via Electronic Participation at the earliest possible time and not less than twenty-four (24) hours prior to the requested participation.
- B. The City shall initiate the Electronic Participation not more than ten (10) minutes prior to the scheduled time of the meeting. Upon disconnection during a meeting, the City Clerk shall make at least three attempts to re-initiate the connection.

IV. Reasonable Accommodations.

The City shall provide reasonable accommodation and shall waive or modify provisions of this Policy to provide all members of the City Council full and equal access to City Council meetings pursuant to this Policy.

THIS RESOLUTION was read, passed, and adopted by the Rifle City Council at a regular meeting held this 7th day of June 2023.

CITY OF RIFLE, COLORADO

By _____
Mayor

ATTEST:

City Clerk



Agenda Item #6.d.

Agenda Item Name:

Consider Approval of Annual cost for Garfield County Emergency Communications Authority Invoice

Presenter:

Mike Kuper, Lieutenant

Item Description:

This is an annual expense. The invoice is for the Police Department's share of New World/Tyler User Annual Law Records and Law Mobile. The invoice is for \$27,259.07.

Recommended Action:

Move to approve the annual Garfield County Emergency Communications Authority invoice in the amount of \$27,259.07

Fiscal Impact:

Annual expense

Operational Impact:

None

Prior Board Motions:

None

Background Information:

This expense is based on \$1.2054 per incident for a total of 14,761 incidents for Rifle Police Department totaling \$17,792.91 and 20 Rifle PD mobile units at \$473.308 per unit per year totaling \$9,466.16. Grand Total - \$27,259.07

Overall county costs for both are \$146,146.29

Executive Summary:

This covers expenses for our communications, dispatch and mobile units for officers.

This expense is based on \$1.2054 per incident for a total of 14,761 incidents for Rifle Police Department totaling \$17,792.91 and 20 Rifle PD mobile units at \$473.308 per year totaling \$9,466.16. Grand Total - \$27,259.07

Notification Requirements:

None

Prepared By:

Debra Funston, Chief of Police

Attachments:

1. Invoice 826 GARCO Communications
2. PURCHASE REQUEST GARCO Communications

Garfield County Emergency Communications Authority
585 E 1 St
Rifle, CO 81650 US
970-625-8095
finance@garco911.com

INVOICE

BILL TO

Rifle Police Department
201 E 18 St
Rifle, CO 81650

INVOICE # 826**DATE** 05/30/2023**DUE DATE** 06/29/2023**TERMS** Net 30

DATE	DESCRIPTION	QTY	RATE	AMOUNT
05/30/2023	New World/Tyler User Agency Annual Law Records Law Records based on \$1.21 per incident. Overall Law records cost for the countywide system is \$99,288.82	14,761	1.2054	17,792.91
05/30/2023	New World/Tyler User Agency Annual Cost - Law Mobile Law Mobile based on the actual number of mobiles listed in New World. Countywide total Law Mobile cost is \$46,857.47	20	473.308	9,466.16

BALANCE DUE**\$27,259.07**



**CITY OF RIFLE
PURCHASE REQUEST**

1.	Vendor Name	NEW: W-9 attached ☐
	Garfield County Emergency Communications Authority	

2.	Vendor Address
	585 E 1 st Street
	Rifle, CO 81650

3.	For the Purchase of (description)
	New World/Tyler User Agency Annual Cost Law Mobile/Records

4.	Amount Requested	Amount Budgeted	Finance Director Verified Funds Avail.
	27, 259.07	27,259.07	

5.	Dept. Name	General Ledger Acct #
	Police	100-4210-400-320

6.	Type of Purchase
	Capital Construction
	Capital Construction – Change Order
	Capital Equipment
	Plant Equipment
	Materials, supplies, non-profession/technical services (includes computer/software maint.)
x	Professional Services
	Utilities (includes equipment installation)
	Land, easements, ROW

7.	Purchasing Process Required
	Cooperative Purchasing
	Open Market
	Comparative Pricing
	Request for Proposal (attach bid tab)
	Formal Bid (attach bid tab and advertisement)
x	Single Source (attach an explanation)

8.	Authorization Required
	City Manager
	City Council

9.	Signatures		
	Position	Signature	Date
	Department Director	<i>Debra Funston</i>	05-30-23
	City Manager		
	City Council Approval (meeting date)		
10.	Purchase Order # assigned by Finance		

General summary of purchasing ordinance (Section 4, Art. III)

TYPE OF CONTRACT	ESTIMATED AMOUNT	PROCESS	Purchase Order? Purchase Request?	CITY COUNCIL APPROVAL REQUIRED?
Capital Construction	< \$5,000	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO	Yes if over \$25,000 or for any amount from Capital Fund.
	\$5,000-\$25,000	Comparative Pricing (solicit quotes from 3) vendors/suppliers)	Purchase Request	
	\$25,001-\$100,000	Competitive Bid (see Code Sec 4-3-40)		
	> \$100,000	Bonded Competitive Bid		
Capital Construction Change orders	< = 10% of approved contract	When total change orders to date are < 10% - Dept Head or City Manager Approval	Purchase Request	Yes if total change orders to date are greater than 10%
	> 10% of approved contract			
Capital Equipment	< \$5,000	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO	Yes if over \$25,000 or for any amount from Capital Fund.
	\$5,000-\$25,000	Comparative Pricing (solicit quotes from 3 vendors/suppliers)	Purchase Request	
	> \$25,000	Competitive Bid (see Code Sec 4-3-40)		
Plant Equipment Replacement (purchases necessary for replacement of existing equipment that is component part of any water, wastewater, or physical plant)	< \$7,500	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$25,000
	\$7,500-\$75,000	Comparative Pricing (solicit quotes from 3 vendors/suppliers)	Purchase Request	
	>\$75,000	Competitive Bid (see Code Sec 4-3-40)		
Materials, Supplies, Non- Professional Services and Technical Services (including software/hardware maintenance technical services)	< \$10,000	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$20,000
	>\$10,000	Comparative Pricing (solicit quotes from 3 vendors/suppliers)	Purchase Request	
Professional Services (note- process for appointed positions such as auditor, attorney, engineer, or municipal judge to be determined by Council)	< \$25,000	Open Market (informal evaluation by purchasing agent)	All - Purchase Request	Yes if anticipated to exceed \$25,000 per year to a single vendor
	> = \$25,000	Written requests for written proposals must be sent to at least 3 firms or individuals		
Utilities including installation of equipment (purchases to secure utility services such as natural gas, electricity, local telephone, water, or sewer)	any amount	Single Source (negotiations, where appropriate, after good faith determination that only one viable source exists in relevant supply area - keep records for one year)	> \$5,000 - PO >= \$5,000 - Purchase Request	No
Real Property Interest (including easements and rights of wav)	any amount	Single Source (see above)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$5,000.



Agenda Item #6.e.

Agenda Item Name:

Consider Approval of Contract with Martinez Western Constructors for Construction Services on the 2023 Waterline Restraint Rehabilitation

Presenter:

Craig Spaulding, Civil Engineer

Item Description:

Bid award for repairs to waterline restraints on Riverbridge

Recommended Action:

Move to approve the contract with Martinez Western Constructors for Construction Services on the 2023 Waterline Restraint Rehabilitation in the amount of \$147,807.20

Fiscal Impact:

Yes, this project was not planned, but the waterlines that were to be installed at the Park and Ride will not be installed until 2024 due to contracts with CDOT and FHWA that are still in process so no supplemental is anticipated

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

This is a new waterline that was completed per plan. The waterline elbows at on the bridge were not restrained which has caused the waterline to move and leak. This project will repair the leak and install restraints at all elbows to avoid future leaks.

Executive Summary:

This is a critical waterline to Rifle's system. There are redundant lines that avoid major outages but the system is currently operating on the old line and repair is critical to getting both lines back in service.

Notification Requirements:

N/A

Prepared By:

Craig Spaulding, Civil Engineer

Attachments:

1. Rifle Waterline_Plans_100%, Staff Bridge
2. 20230414_RifleWaterlineRehab_SpecialProvision_Bid
3. Martinez Western PURCHASE REQUEST FORM Riverbridge Waterline

City of Rifle

WATERLINE RESTRAINT REHABILITATION PROJECT

Related Projects:	
P. E. UNDER PROJECT:	XX
Project Number	XX
Project Code:	
R.O.W. Projects:	
R.O.W. Project Description	
N/A	

PROJECT DESCRIPTION

CONSTRUCT CONCRETE THRUST BLOCKS TO RESTRAIN AN EXISTING 16" Ø WATERLINE. THRUST BLOCKS TO BE INSTALLED AT FOUR LOCATIONS ON THE EAST SIDE OF HIGHWAY 13: SOUTH AND NORTH ABUTMENTS OF HIGHWAY 13 BRIDGE OVER COLORADO RIVER AND SOUTH AND NORTH ABUTMENTS OF HIGHWAY 13 BRIDGE OVER UNION PACIFIC RAILROAD. INSTALL CONCRETE ANCHOR BLOCKS AND STEEL WIRE RESTRAINTS. RESET WATERLINE. RESTORE SITE TO EXISTING CONDITION.

Project Engineer

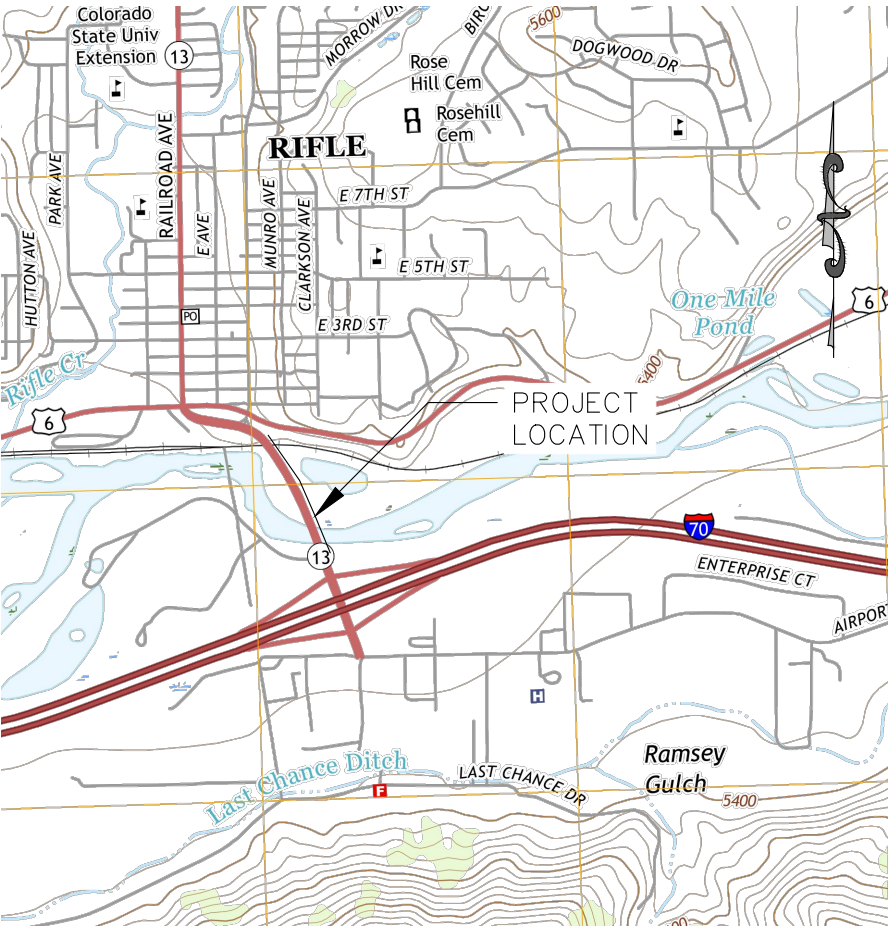
Marijean Frymoyer, P.E. #56068

PLANS PREPARED FOR

CITY OF RIFLE

202 Railroad Ave.
Rifle, CO 81650

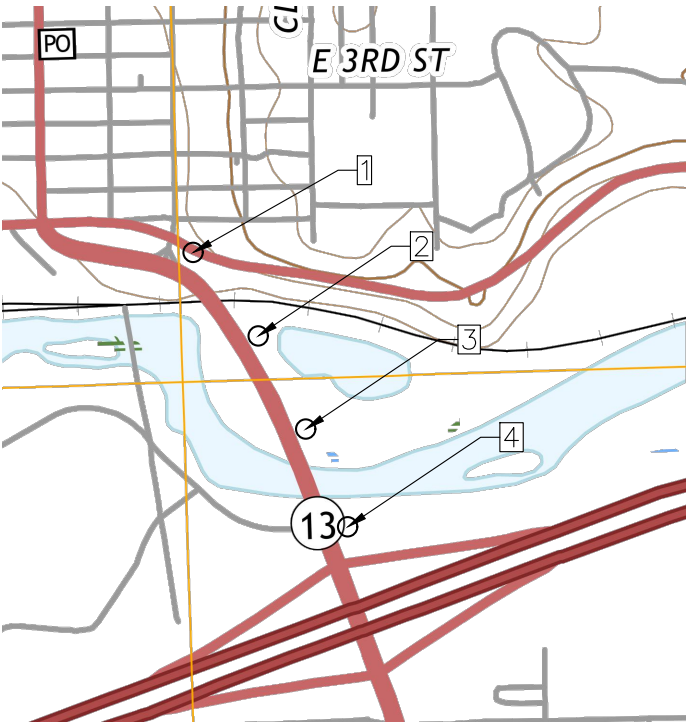
- Mayor
- Ed Green
- City Manager
- Tommy Klein
- Public Works Director
- Brian Prunty



PROJECT LOCATION MAP

N.T.S.

SHEET NO.	INDEX OF SHEETS
1	COVER SHEET
2	STANDARD PLANS LIST
3-4	GENERAL NOTES
5-6	CONCRETE THRUST BLOCK LAYOUTS
7	THRUST BLOCK ANCHOR DETAILS
8	IN GROUND THRUST BLOCK DETAILS



WATERLINE THRUST BLOCK LOCATIONS

N.T.S.

NO.	LOCATION
1	UNION PACIFIC RAILROAD NORTH
2	UNION PACIFIC RAILROAD SOUTH
3	COLORADO RIVER NORTH
4	COLORADO RIVER SOUTH



UNCC 1-800-922-1987

100% SUBMITTAL
MARCH 2023

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COLORADO
DEPARTMENT OF TRANSPORTATION
M&S STANDARDS PLANS LIST
July 31, 2019

Revised on July 22, 2022

ALL OF THE M&S STANDARD PLANS, AS SUPPLEMENTED AND REVISED, APPLY TO THIS PROJECT WHEN USED BY DESIGNATED PAY ITEM OR SUBSIDIARY ITEM.

THE M&S STANDARD PLANS USED TO DESIGN THIS PROJECT ARE INDICATED BY A MARKED BOX ☒, AND WILL BE ATTACHED TO THE PLANS. ALL THE OTHER M&S STANDARD PLANS ARE STILL ELIGIBLE FOR CONSTRUCTION IF APPROVED BY AN APPROPRIATE CDOT ENGINEER.

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☐ S-614-9	PEDESTRIAN PUSH BUTTON POST ASSEMBLY (2 SHEETS) (SUPERSEDED ON JANUARY 23, 2020 BY S-614-45)	205-206
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☐ S-630-3	FLASHING BEACON (PORTABLE) DETAILS	315
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SGM Project No.: 2022-519.001		Quality Control: JNM											

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DIVISION 100 – GENERAL PROVISIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE COLORADO DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 2022, AND AS SUBSEQUENTLY REVISED; THE STANDARD PLANS, DATED JULY 2019, AND AS SUBSEQUENTLY REVISED, AND IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS INCLUDED HEREIN.
2. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONSTRUCTION ACTIVITIES INCLUDE THE PARKING OF VEHICLES OR EQUIPMENT, DISPOSAL OF LITTER, AND ANY OTHER ACTION WHICH WOULD ALTER EXISTING CONDITIONS. THE CONTRACTOR SHALL NOT PARK ANY VEHICLES OR EQUIPMENT IN, OR DISTURB ANY AREA NOT APPROVED BY THE ENGINEER.
3. ALL EXISTING ACCESSES SHALL REMAIN OPEN TO TRAFFIC THROUGHOUT CONSTRUCTION, WITH THE EXCEPTION OF MINOR CLOSURES OF LESS THAN ONE HOUR. THE CONTRACTOR SHALL REQUEST APPROVAL FROM THE ENGINEER FOR ALL MINOR CLOSURES PER TRAFFIC CONTROL PLAN – GENERAL SPECIAL PROVISIONS.
4. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM WATER AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING SHALL BE PROMPTLY DEWATERED AND RESTORED AT NO COST TO THE PROJECT.
5. CONTROL OF SURFACE RUNOFF AND THE REPAIR OF DAMAGES RESULTING FROM RUNOFF IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THE COST TO CONTROL SURFACE RUNOFF OR REPAIR DAMAGES WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
6. THE CONTRACTOR SHALL KEEP EXISTING DRAINAGE STRUCTURES FUNCTIONAL AND MAINTAIN DRAINAGE TO THOSE STRUCTURES. MAINTAINING DRAINAGE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
7. THE CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTS DESIGNATED TO REMAIN FROM DAMAGE DURING CONSTRUCTION OPERATIONS. ANY MONUMENTS DISTURBED BY THE CONTRACTOR THAT ARE NOT DESIGNATED FOR RELOCATION SHALL BE RESET AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL NOTE THOSE MONUMENTS IN THE FIELD PRIOR TO CONSTRUCTION.
8. SANITARY FACILITIES SHALL BE LOCATED ON SITE. THE SANITARY FACILITIES SHALL BE FULL OPERATIONAL BEFORE CONSTRUCTION CAN BEGIN. SANITARY FACILITY PAY ITEM SHALL INCLUDE CLEANING A MINIMUM OF TWICE A WEEK.
9. THE CONTRACTOR SHALL HAVE: ONE COPY OF THE PLANS AND REVIEWED SHOP DRAWINGS AND ONE COPY OF THE CONSTRUCTION SPECIFICATIONS FOR THE PROJECT AT THE JOB SITE AT ALL TIMES.
10. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE ENGINEERING DEPARTMENT, OR THEIR ASSIGNED REPRESENTATIVE. THE COUNTY AND THEIR ASSIGNED REPRESENTATIVES RESERVE THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DO NOT CONFORM TO THE PLANS AND SPECIFICATIONS LISTED HEREIN. REQUIRED QUALITY CERTIFICATIONS AND DOCUMENTATION SHALL BE SUBMITTED TO THE COUNTY AND THEIR REPRESENTATIVES PRIOR TO PLACEMENT OR USE OF THE MATERIAL.
11. PROJECT INSPECTION AND TESTING WILL BE PROVIDED BY THE CONTRACTOR AND OVERSEEN BY THE ENGINEER OR REPRESENTATIVE. CONTRACTOR TO PROVIDE 24 HOUR NOTICE FOR ALL REQUIRED TESTS.

UTILITIES

1. EXISTING UTILITY LOCATIONS SHOWN ON THE PLAN SHEETS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION.
2. ANY PUMPING OF WATER MAY REQUIRE A DISCHARGE PERMIT FROM CDPHE WATER QUALITY CONTROL DIVISION, AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ONLY CLEAN WATER THAT HAS NOT PICKED UP SEDIMENT FROM THE WORK AREA SHALL BE DISCHARGED FROM THE SITE WITHOUT PRIOR TREATMENT. WATER CONTAINING ELEVATED LEVELS OF SEDIMENT SHALL BE TREATED PRIOR TO DISCHARGE USING BEST MANAGEMENT PRACTICES AS APPROVED BY THE ENGINEER. CONDITIONS OF THE PERMIT INCLUDING MONITORING AND REPORTING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
3. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SUBSECTION 105.11 OF THE CDOT STANDARD SPECIFICATIONS AND THE PROJECT SPECIAL PROVISIONS CONCERNING UTILITIES. THE CONTRACTOR SHALL COORDINATE WORK WITH UTILITY COMPANIES SO THAT NECESSARY RELOCATIONS CAN BE ACCOMPLISHED WITHOUT IMPACTING THE CONSTRUCTION SCHEDULE.
4. THE CONTRACTOR SHALL COMPLY WITH ARTICLE 1.5 OF TITLE 9, CRS ("EXCAVATION REQUIREMENTS") WHEN EXCAVATING OR GRADING IS PLANNED IN THE AREA OF UNDERGROUND UTILITY FACILITIES. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITIES AT LEAST TWO (2) BUSINESS DAYS, NOT INCLUDING THE ACTUAL DAY OF NOTICE, PRIOR TO COMMENCING SUCH OPERATIONS. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 811 OR 1-800-922-1987, 72 HOURS IN ADVANCE OF START OF WORK TO HAVE LOCATIONS OF UNCC REGISTERED LINES MARKED BY MEMBER COMPANIES. ALL OTHER UNDERGROUND FACILITIES SHALL BE LOCATED BY CONTACTING THE RESPECTIVE OWNER.
5. LOCATION AND NOTIFICATION OF BOTH UNCC MEMBER AND NON-MEMBER UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AS NECESSARY TO INSURE THE UTILITIES WILL NOT BE IMPACTED BY CONSTRUCTION ACTIVITIES.

6. IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT APPROPRIATE ACTION CAN BE TAKEN BY THE OWNER.
7. ALL UNDERGROUND UTILITY CONSTRUCTION SHALL BE COMPLETED AND ACCEPTED PRIOR TO PLACING PAVEMENT.
8. THE FOLLOWING IS A LIST OF KNOWN UTILITIES WITH SERVICE WITHIN OR ADJACENT TO THE PROJECT AREA AND THEIR RESPECTIVE CONTACT INDIVIDUALS. ADDITIONAL UTILITIES MAY BE ENCOUNTERED WITHIN THE PROJECT LIMITS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL THE WORK BEING DONE BY ALL OF THE UTILITY COMPANIES WITHIN THE PROJECT AREA.

ENTITY	CONTACT	PHONE
XCEL ENERGY (ELECTRIC AND GAS)	TBD	970-625-6000
COMCAST CABLE (CABLE TV)	TBD	970-925-4311
CENTURY LINK (PHONE)	TBD	970-328-8209
CITY OF RIFLE (WATER AND SEWER)	TBD	970-665-6590
DOMINION ENERGY (HIGH PRESSURE GAS)	TBD	970-665-6554

EXISTING UTILITY NOTES – NON "SUE-REQUIRED PROJECT"

1. THIS PROJECT DOES NOT MEET THE CONDITIONS FOR A "SUBSURFACE UTILITY ENGINEERING-REQUIRED PROJECT," AS SET FORTH IN THE 8/8/2018 COLORADO STATE LAW. SEE CHECKLIST BELOW FOR WHY WE DETERMINED THIS TO BE NOT "SUE-REQUIRED". (NOTE: A PROJECT MUST MEET ALL 4 CONDITIONS)

COLORADO REVISED STATUTES (CRS) 2018 TITLE 9-1.5-102 SUBSURFACE UTILITY ENGINEERING (SUE) REQUIRED PROJECT COMPLIANCE CHECKLIST

1	9-1.5-10 2-6.8.A	PROJECT INVOLVES CONSTRUCTION CONTRACT WITH A PUBLIC ENTITY	X	YES		NO
2	9-1.5-10 2-6.8.B	PROJECT INVOLVES PRIMARILY HORIZONTAL CONSTRUCTION AND DOES NOT INVOLVE PRIMARILY THE CONSTRUCTION OF BUILDINGS	X	YES		NO
3A	9-1.5-10 2-6.8.C.I. A	EXCAVATION FOOTPRINT EXCEEDS 2-FEET DEPTH AND IS A CONTIGUOUS 1,000-SQUARE FEET; OR		YES	X	NO
3B	9-1.5-10 2-6.8.C.I. B	INVOLVES UTILITY BORING		YES	X	NO
4	9-1.5-10 2-6.8.D	PROJECT REQUIRES THE DESIGN SERVICES OF A LICENSED PROFESSIONAL ENGINEER (P.E.)	X	YES		NO
SUMMARY	9-1.5-10 3-2.4	REQUIRED TO MEET OR EXCEED THE ASCE 38 STANDARD AND CO SUE LAW?		YES	X	NO

2. EXISTING UTILITIES ARE DEPICTED ACCORDING TO THE BEST AVAILABLE INFORMATION THAT WAS PROVIDED BY THE UTILITY OWNERS AND SURFACE FEATURES AT THE TIME OF THE SURVEY. RELIANCE UPON THIS UTILITY DATA FOR RISK MANAGEMENT PURPOSES DOES NOT RELIEVE CLIENT/CONTRACTOR OR UTILITY OWNER FROM FOLLOWING ALL APPLICABLE UTILITY DAMAGE PREVENTION STATUTES, POLICIES, AND/OR PROCEDURES DURING EXCAVATION. PRIOR TO EXCAVATION, CLIENT/CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 811 OR 800-922-1987, TO VERIFY EXISTING UTILITIES AND HAVE LOCATIONS OF UNCC REGISTERED LINES MARKED BY MEMBER COMPANIES.
3. OTHER UTILITIES MAY BE PRESENT WHICH WERE NOT IDENTIFIED IN THIS PLAN SET OR PRIOR TO CONSTRUCTION. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE DUE-DILIGENCE AND ENACT GOOD PRACTICES WHEN EXCAVATING NEAR POTENTIAL CONFLICT AREAS AND REDUCE POTENTIAL FOR DAMAGE TO FACILITIES AS MUCH AS POSSIBLE.
4. SHOULD THE CONTRACTOR ENCOUNTER UNKNOWN AND/OR ABANDONED UTILITY FACILITIES THE CONTRACTOR SHALL VERIFY WITH THE RESPECTIVE UTILITY OWNER THAT THE UTILITY MATERIAL IS INACTIVE/ABANDONED BEFORE REMOVAL FROM THE WORK AREA
5. THE CLIENT/CONTRACTOR SHALL COMPLY WITH COLORADO REVISED STATUTES (CRS) 2018, TITLE 9, ARTICLE 1.5-103 (10), "ALL NEW UNDERGROUND FACILITIES, INCLUDING LATERALS UP TO THE STRUCTURE OR BUILDING BEING SERVED, INSTALLED ON OR AFTER 8/8/2018, MUST BE ELECTRONICALLY LOCATABLE WHEN INSTALLED."

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Drawing File Name: RifleWater_AdminLayouts								Void:		Drawn By:	MLF	Numbers	--	Sheet Number 3	
Autocad Ver. 2020 Scale: As Shown								Sheet Subset:		--	Subset Sheets:		-- of --		
SGM Project No.: 2022-519.001		Quality Control: JNM													

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PERMITS

- 1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND DEVELOPING THE METHODS OF COMPLIANCE WITH THOSE PERMITS FOR ALL CONSTRUCTION ACTIVITIES ON THE PROJECT.
- 2. WORK ACTIVITIES SHALL ADHERE TO THE PERMANENT AND TEMPORARY LIMITS SHOWN ON THE PLANS SET, AS AUTHORIZED IN PERMITS, RIGHTS OF WAYS AND EASEMENTS ISSUED TO THE CITY FOR THE PROJECT.
- 3. A COLORADO DISCHARGE PERMIT SYSTEM (CDPS) – STORMWATER CONSTRUCTION PERMIT WILL BE REQUIRED. THE CONTRACTOR SHALL NOT COMMENCE PERMIT–RELATED WORK UNTIL THE PERMIT IS RECEIVED. WORK PERFORMED MUST BE CONSISTENT WITH THAT DETAILED IN THE STORM WATER MANAGEMENT PLAN.

DIVISION 200 EARTHWORK

- 1. PROTECTIVE PLASTIC FENCE AND EROSION CONTROL MEASURES MUST BE IMPLEMENTED BEFORE CONSTRUCTION AND GRADING OPERATIONS BEGIN. CONTRACTOR'S VEHICLES AND EQUIPMENT SHALL BE WASHED AND FREE OF SOIL AND DEBRIS CAPABLE OF TRANSPORTING NOXIOUS WEED SEEDS OR ROOTS FROM OTHER AREAS BEFORE BEING BROUGHT ON THE PROJECT SITE.
- 2. CLEARING AND GRUBBING SHALL INCLUDE REMOVAL OF ALL TRASH AND DEBRIS WITHIN THE PROJECT LIMITS. ALL SURFACE OBJECTS, TREES, TREE STUMPS, ROOTS, BUSHES, LANDSCAPING AND OTHER PROTRUDING OBSTRUCTIONS WITHIN THE LIMITS OF CUTS AND FILLS SHALL BE CLEARED AND GRUBBED, INCLUDING MOWING AS REQUIRED. ALL OTHER TREES AND BUSHES SHALL BE PROTECTED.
- 3. THE CONTRACTOR SHALL FIELD VERIFY EXISTING PAVEMENT ELEVATIONS PRIOR TO COMMENCING REMOVAL, PLANING AND PAVING OPERATIONS. ANY DEVIATION OR DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- 4. WHERE CUTTING OF ASPHALT PAVEMENT IS REQUIRED, THE CUTTING SHALL BE DONE TO A NEAT WORK LINE WITH A SAW OR CUTTING WHEEL AS APPROVED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
- 5. ALL REMOVALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE INDICATED IN THE PLANS AND PROJECT SPECIFICATIONS. THE CONTRACTOR SHALL PROPERLY DISPOSE OF ALL MATERIALS.
- 6. IN THE EVENT THAT PROJECT PERSONNEL ENCOUNTER UNKNOWN SOIL AND/OR GROUNDWATER CONTAMINATION, CONSTRUCTION ACTIVITIES SHOULD CEASE IMMEDIATELY AND THE PROCEDURES OUTLINED IN THE CDOT STANDARD SPECIFICATIONS SECTION 250 SHALL BE FOLLOWED.
- 7. DUST CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE EARTHWORK ITEM. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATION SHALL BE AS DIRECTED BY THE ENGINEER.
- 8. TYPE OF COMPACTION FOR THIS PROJECT WILL BE:
FINE GRAINED SOILS – AASHTO T–99 (STANDARD PROCTOR)
COARSE GRAINED SOILS – AASHTO T–180 (MODIFIED PROCTOR)
- 9. WATER FOR COMPACTION WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.
- 10. MOISTURE–DENSITY CONTROL WILL BE REQUIRED FOR THE FULL DEPTH OF THOSE EMBANKMENTS, AGGREGATE BASE COURSE (SPECIAL), AND AGGREGATE BASE COURSE (CL 6) ON THIS PROJECT:

DEPTH OF MOISTURE–DENSITY CONTROL FOR THIS PROJECT SHALL BE AS FOLLOWS:
FULL DEPTH OF ALL EMBANKMENTS AND ENGINEERED FILLS
BASES OF CUTS AND FILL 6 INCHES
FULL DEPTH OF EMBANKMENT SECTIONS USED FOR DITCHES AND CHANNEL CHANGES
- 11. ALL EMBANKMENT MATERIAL BELOW PAVED ROADWAY SHALL HAVE A MINIMUM R–VALUE OF 40 WITHIN THE TOP 24 INCHES OF SUBGRADE.
- 12. PROOF ROLLING OF THE SUBGRADE WILL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
- 13. EXCAVATION REQUIRED FOR COMPACTION OF BASES OF CUTS AND FILLS WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE WORK.
- 14. THE CONTRACTOR SHALL PROVIDE SHOULDERING MATERIAL FLUSH WITH THE EDGE OF PAVEMENT AS SHOWN IN THE TYPICAL SECTION. IF ADDITIONAL GRADING IS REQUIRED AT THE END OF THE PROJECT TO ENSURE THIS, IT SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.
- 15. THE THICKNESS OF TOPSOIL SHALL BE 4 INCHES AT LOCATION SHOWN IN THE PLANS. TOPSOIL IS REQUIRED AND SHALL BE GENERATED WITHIN THE PROJECT LIMITS FROM THE BEST AVAILABLE MATERIAL AS APPROVED BY THE ENGINEER. NO IMPORTATION OF TOPSOIL WILL BE ALLOWED. TOPSOIL SHALL BE STRIPPED AND STORED SEPARATELY DURING CONSTRUCTION ACTIVITIES IN LOCATIONS APPROVED BY THE ENGINEER. TOPSOIL SHALL BE PLACED ON AREAS TO

BE RECLAIMED JUST PRIOR TO SOIL CONDITIONING, RESEEDING AND MULCHING TO MINIMIZE COMPACTION FROM CONSTRUCTION EQUIPMENT. APPROVED QUANTITIES OF STOCKPILED TOPSOIL WILL BE MEASURED AND PAID AS STOCKPILE TOPSOIL IN ACCORDANCE WITH SECTION 207. PLACEMENT OF STOCKPILED TOPSOIL WILL BE MEASURED AND PAID AS TOPSOIL IN ACCORDANCE WITH SECTION 207.

- 16. SOIL CONDITIONING (COMPOST) SHALL BE APPLIED TO AREAS TO BE RECLAIMED JUST PRIOR TO RESEEDING AND MULCHING.

- 17. ANY OPEN EXCAVATION LEFT UNATTENDED SHALL BE BARRICADED OR FENCED OFF BY THE CONTRACTOR.

DIVISION 600 MISCELLANEOUS

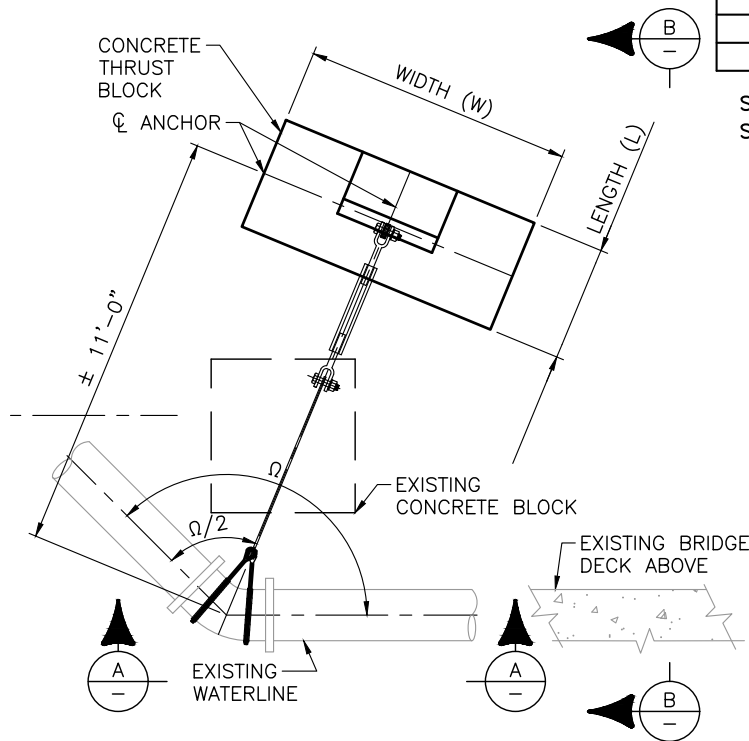
- 1. COLD WEATHER CONCRETING OPERATIONS SHOULD BE ANTICIPATED FOR THIS PROJECT. THESE OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH CDOT STANDARD SPECIFICATIONS SECTIONS 601 AND 203. THIS COST SHALL BE INCLUDED IN THE WORK.
- 2. SEVERITY OF POTENTIAL SULFATE EXPOSURE ON THIS PROJECT IS CLASS 2 WHERE ELEMENTS ARE IN DIRECT CONTACT WITH SOIL. ALL PRECAST AND CAST IN PLACE CONCRETE SHALL MEET THE REQUIREMENTS SPECIFIED IN SECTION 601, 624, AND 701.
- 3. ALL SURVEYING NECESSARY TO COMPLETE THE WORK SHALL BE DONE BY THE CONTRACTOR. THIS WORK WILL BE PAID FOR AS ITEM 625, CONSTRUCTION SURVEYING, LUMP SUM.
- 4. CONSTRUCTION TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND CDOT M&S STANDARDS. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A METHOD OF HANDLING TRAFFIC (MHT) TO THE ENGINEER FOR APPROVAL FOR EACH APPLICABLE PHASE OF WORK.
- 5. THE CONTRACTOR SHALL DETERMINE WHERE TO STOCKPILE MATERIAL OR STORE EQUIPMENT FOR THE PROJECT. TRAFFIC CONTROL MEASURES REQUIRED TO ACCOMMODATE MATERIAL AND EQUIPMENT STORAGE SHALL BE INCLUDED IN THE MHT.

Computer File Information		Sheet Revisions					 118 West Sixth Street, Suite 200 Glenwood Springs, CO 81601 970.945.1004 www.sgm-inc.com	As Constructed		WATERLINE RESTRAINT REHABILITATION CDOT - GENERAL NOTES (2)			Project No./Code		
Print Date: 3/21/23		Rev.	Date	Comments	Init.			No Revisions:					XX		
Last Modification Date: 3/21/23		1						Revised:		Engineer:	MLF	Structure	--	XX	
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Autocad Ver. 2020 Scale: As Shown								Sheet Subset:		--	Subset Sheets:		-- of --		
SGM Project No.: 2022-519.001		Quality Control: JNM													

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LOCATION	THRUST BLOCK DIMENSIONS		
	HEIGHT (H) FT	WIDTH (W) FT	LENGTH (L) FT
UP RR SOUTH	6.0	6.0	6.0
UP RR NORTH	6.0	6.0	3.0

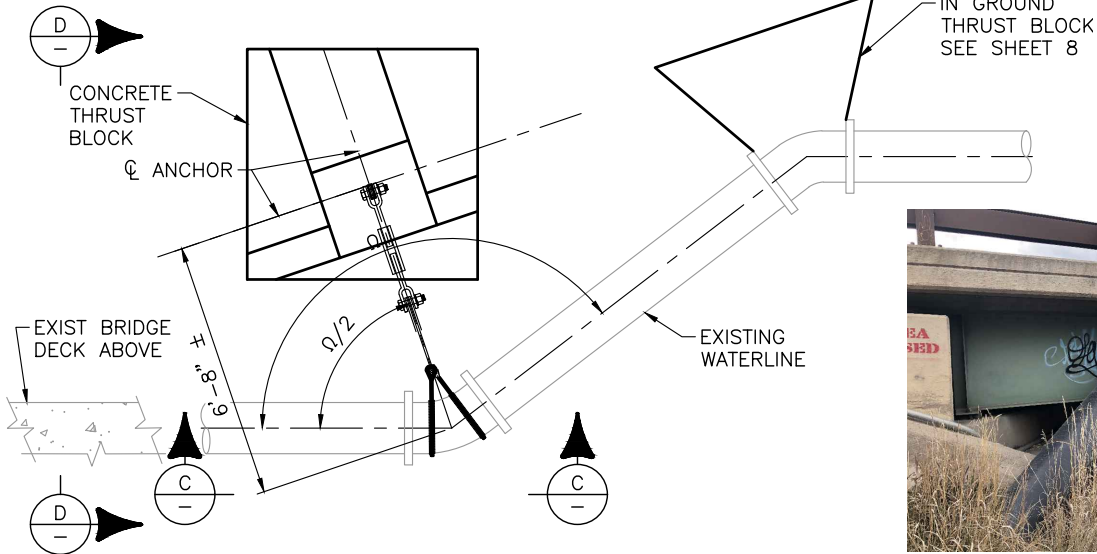
SEE SHEET 7 FOR WATERLINE TO THRUST BLOCK CONNECTION AND REINFORCEMENT DETAILS
SEE SHEET 8 FOR IN GROUND THRUST BLOCK DETAILS



PLAN VIEW —
UNION PACIFIC RAILROAD NORTH



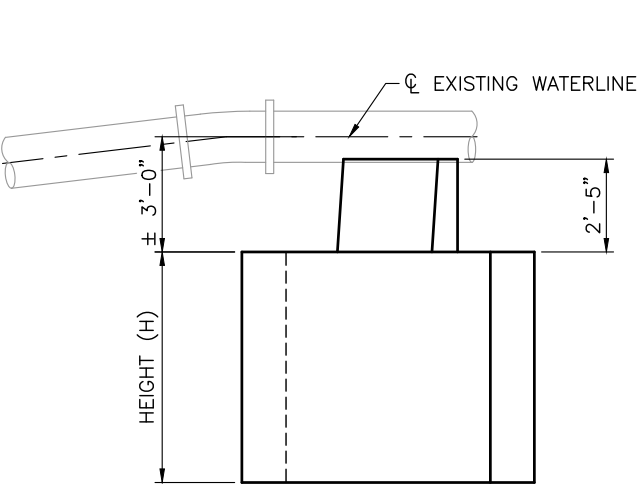
ELEV UNION PACIFIC RR NORTH
LOOKING SOUTHWEST



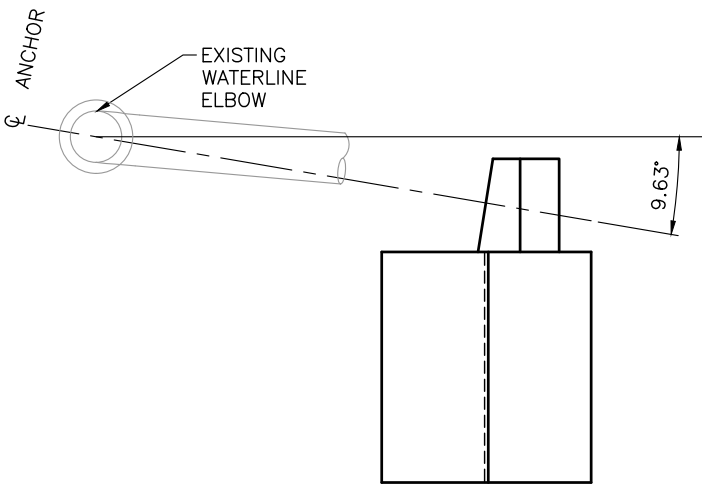
PLAN VIEW —
UNION PACIFIC RAILROAD SOUTH



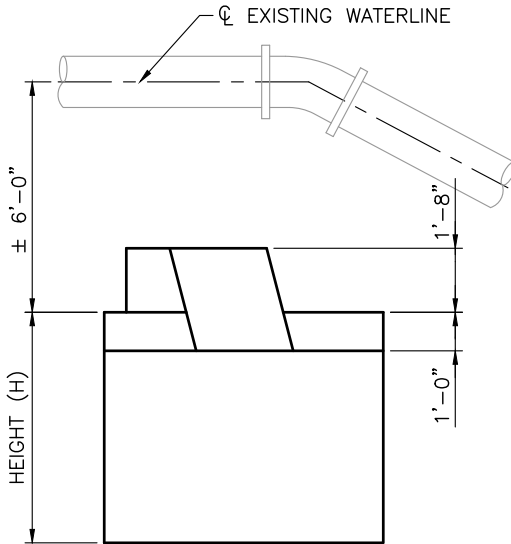
ELEV UNION PACIFIC RR SOUTH
LOOKING NORTHWEST



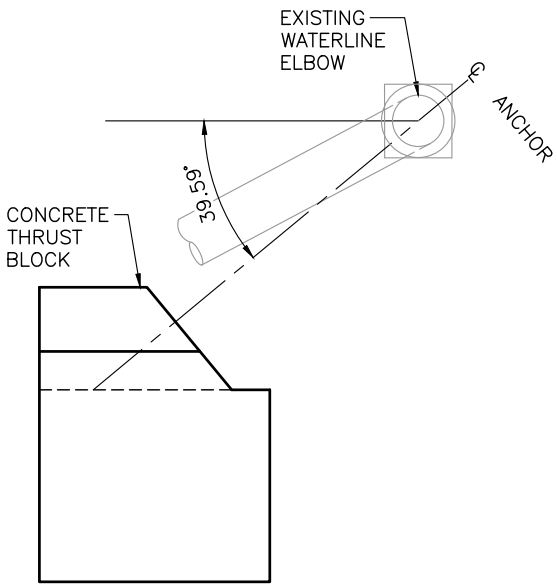
VIEW (LOOKING EAST)
UNION PACIFIC RAILROAD NORTH



VIEW (LOOKING NORTH) UNION
PACIFIC RAILROAD NORTH



VIEW (LOOKING EAST)
UNION PACIFIC RAILROAD SOUTH



VIEW (LOOKING SOUTH)
UNION PACIFIC RAILROAD SOUTH

Show north arrow for plan
views - all applicable
sheets

List structure numbers - all
applicable sheets

Computer File Information		Sheet Revisions				As Constructed		WATERLINE RESTRAINT REHABILITATION UNION PACIFIC RAILROAD LAYOUT			Project No./Code	
Print Date: 3/21/23		Rev.	Date	Comments	Init.	No Revisions:		Engineer:	MLF	Structure	XX	
Last Modification Date: 3/21/23		1				Revised:		Drawn By:	MLF	Numbers	XX	
Drawing File Name: Rifle_Concrete Thrust Block						Void:		Sheet Subset:	-	Subset Sheets:	- of -	Sheet Number 5
Autocad Ver. 2020	Scale: 1" = 5'											
SGM Project No.: 2022-519.001	Quality Control: JNM											

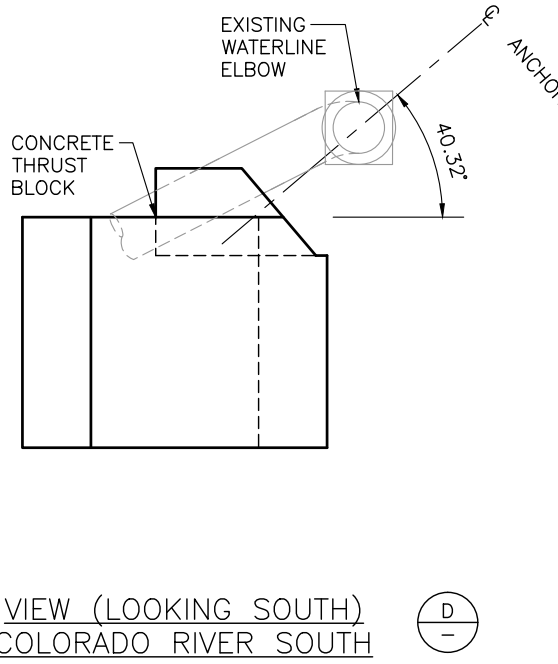
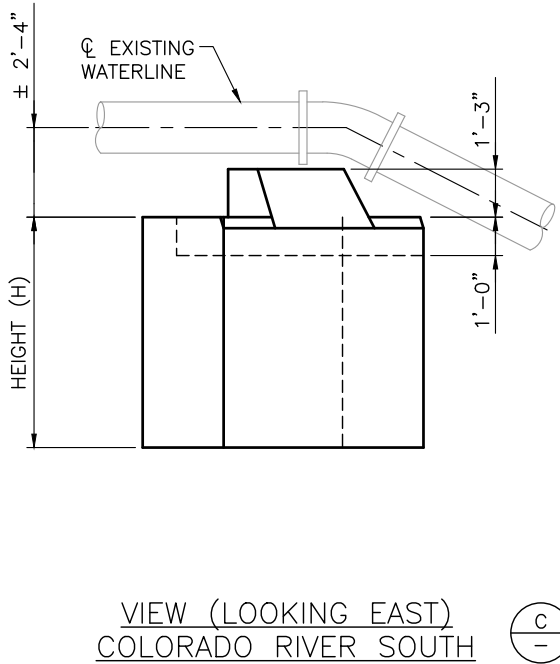
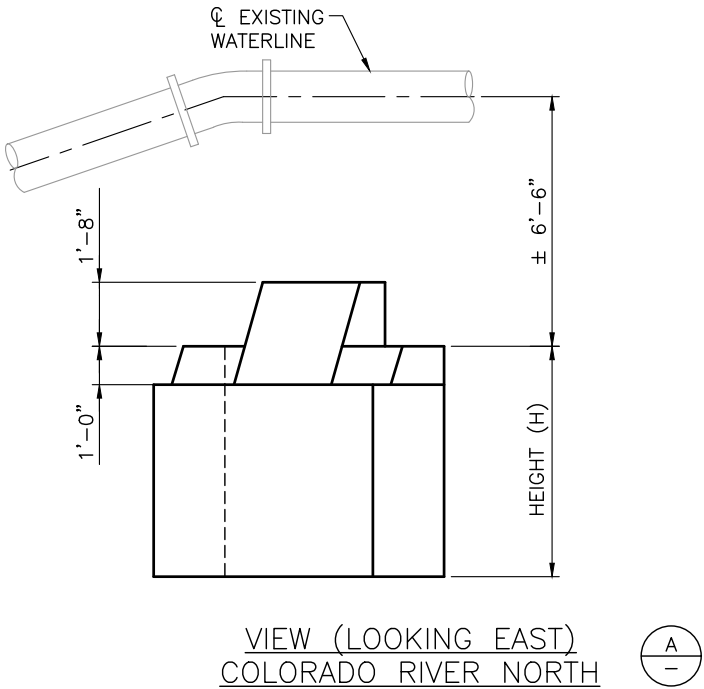
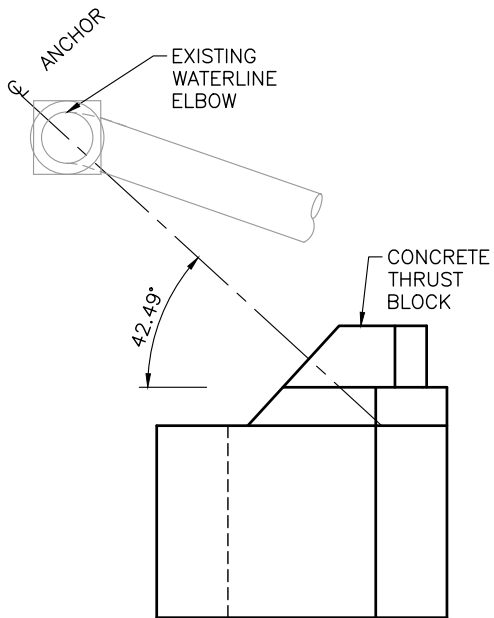
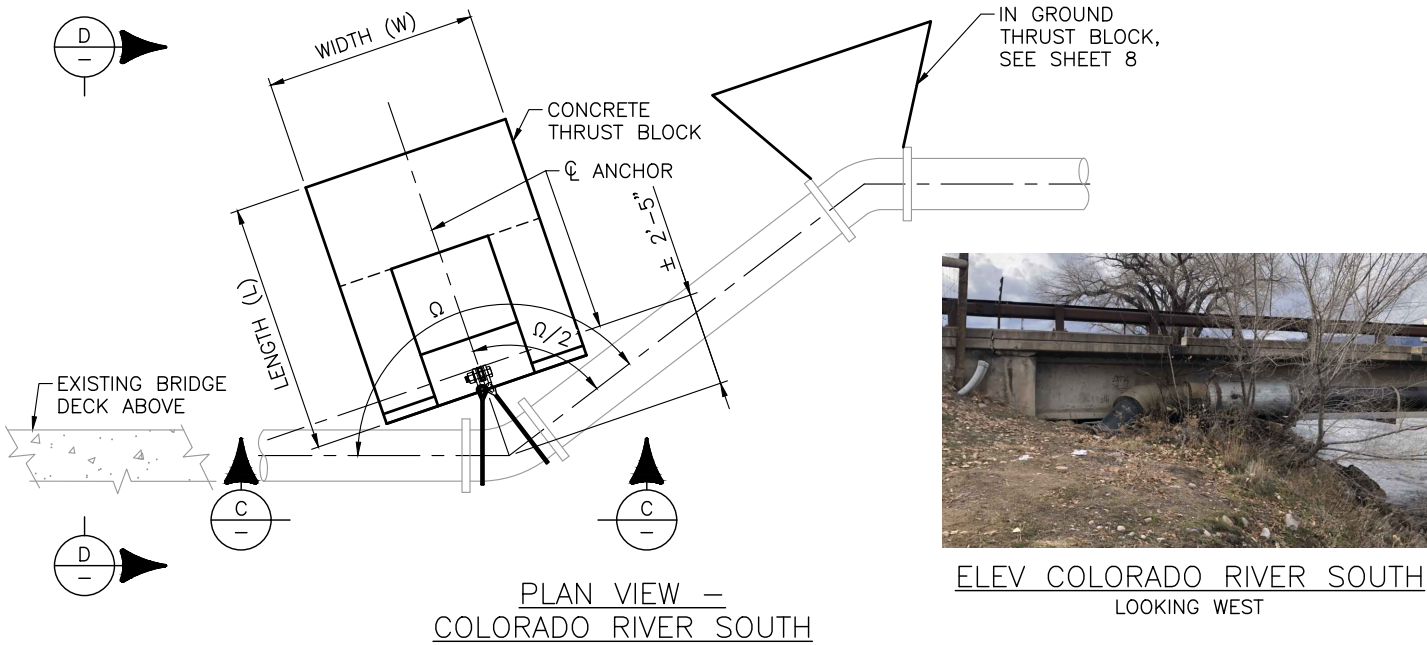
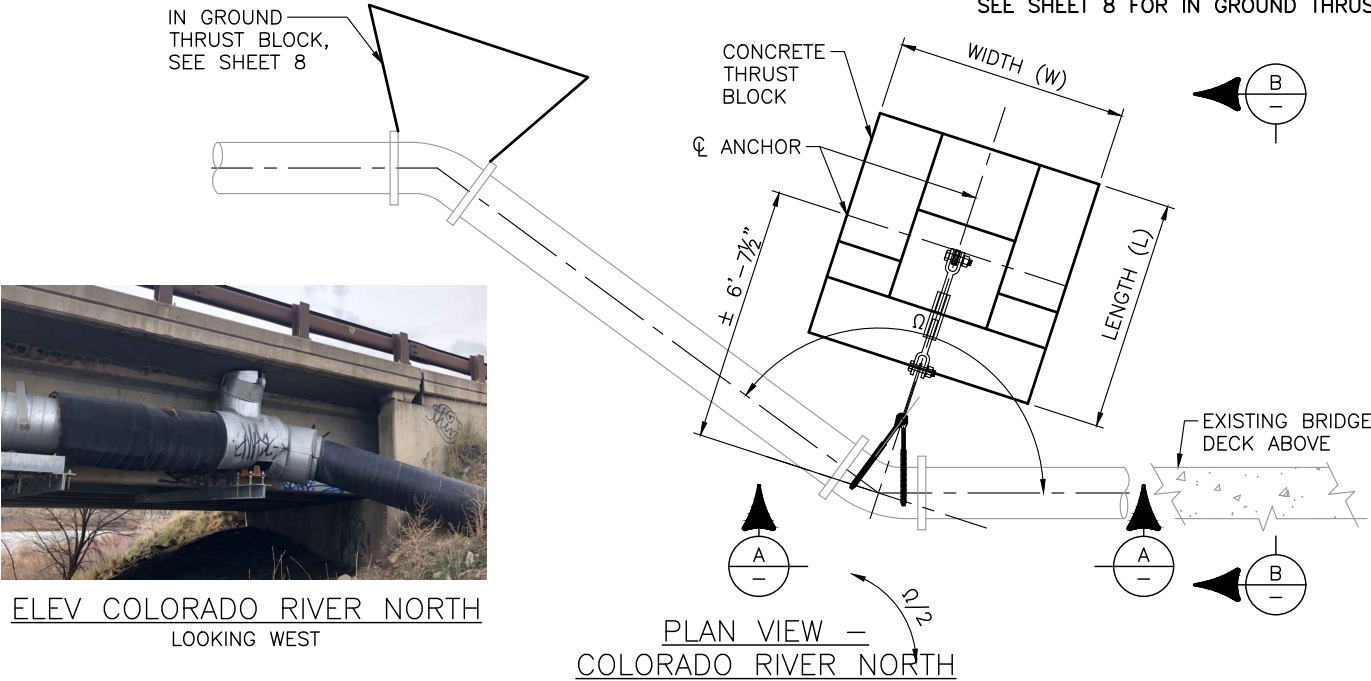


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LOCATION	THRUST BLOCK DIMENSIONS		
	HEIGHT (H) FT	WIDTH (W) FT	LENGTH (L) FT
CO RIVER SOUTH	6.0	5.5	6.5
CO RIVER NORTH	6.0	6.25	6.0

SEE SHEET 7 FOR WATERLINE TO THRUST BLOCK CONNECTION AND REINFORCEMENT DETAILS
SEE SHEET 8 FOR IN GROUND THRUST BLOCK DETAILS



Computer File Information	
Print Date:	3/21/23
Last Modification Date:	3/21/23
Drawing File Name:	Rifle_Concrete Thrust Block
Autocad Ver.	2020
Scale:	1" = 5'
SGM Project No.:	2022-519.001
Quality Control:	JNM

Sheet Revisions			
Rev.	Date	Comments	Init.
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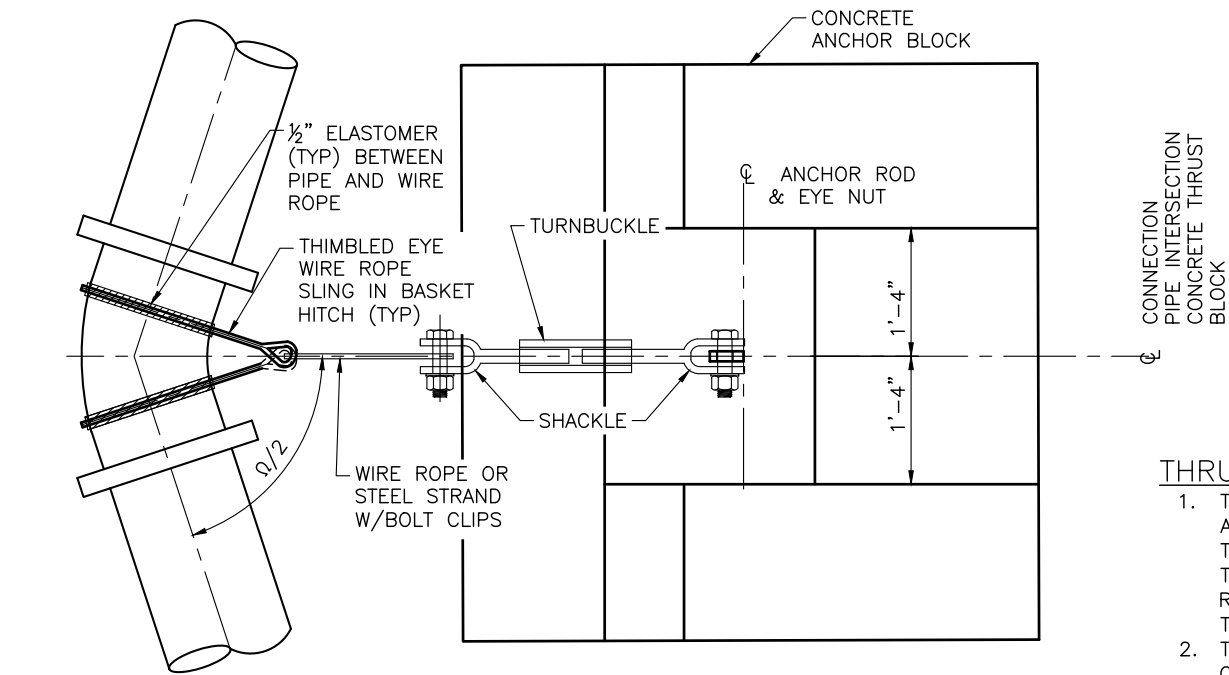
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As Constructed
No Revisions:
Revised:
Void:

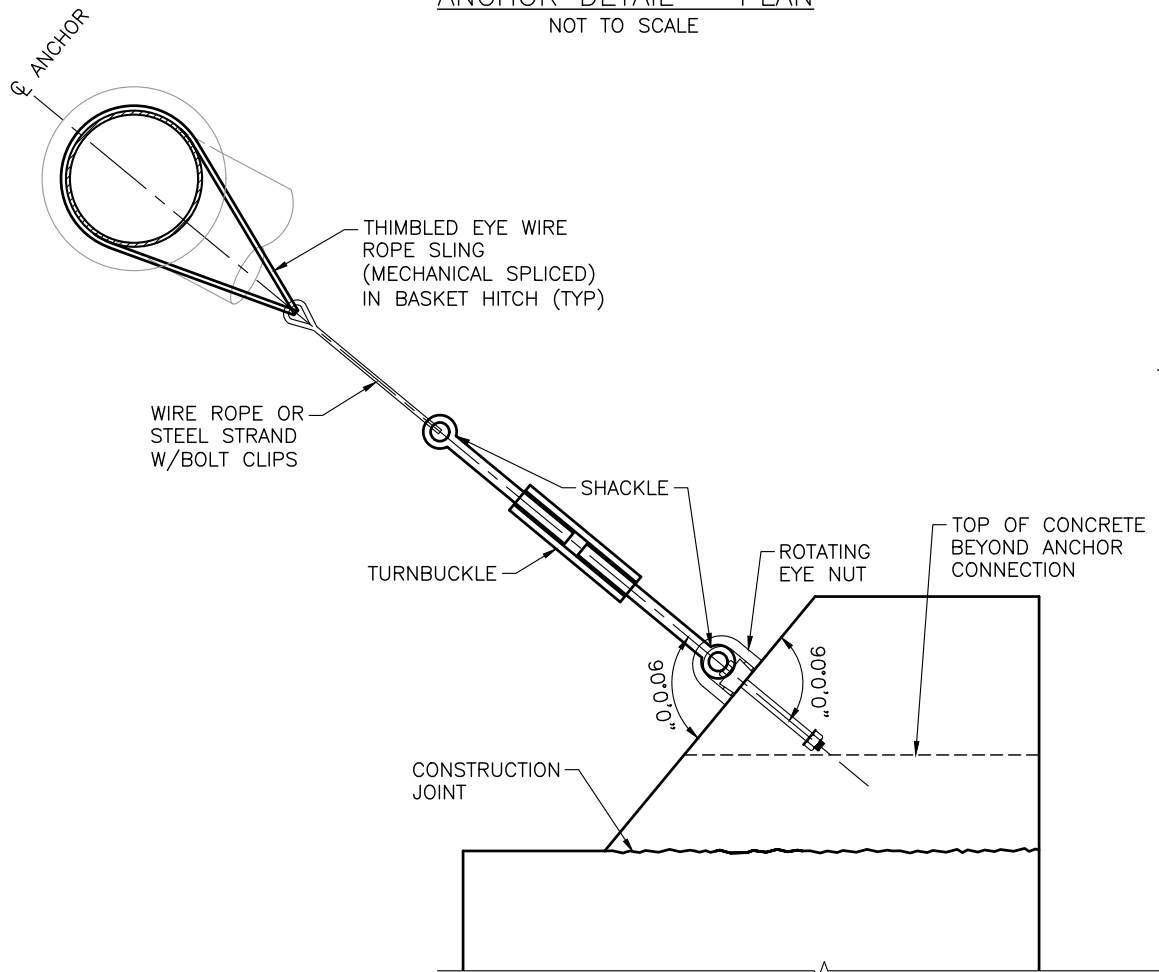
WATERLINE RESTRAINT REHABILITATION COLORADO RIVER LAYOUT			
Engineer:	MLF	Structure	-
Drawn By:	MLF	Numbers	-
Sheet Subset:	-	Subset Sheets:	- of -

Project No./Code
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Sheet Number 6

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ANCHOR DETAIL - PLAN
NOT TO SCALE



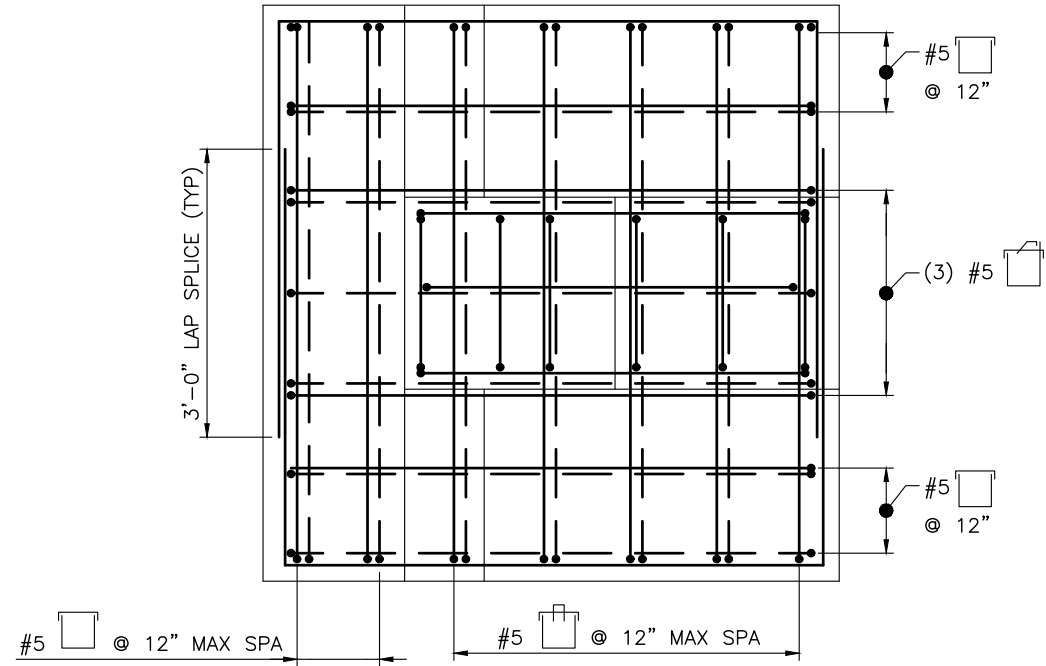
ANCHOR DETAIL - SECTION
NOT TO SCALE

THRUST BLOCK NOTES:

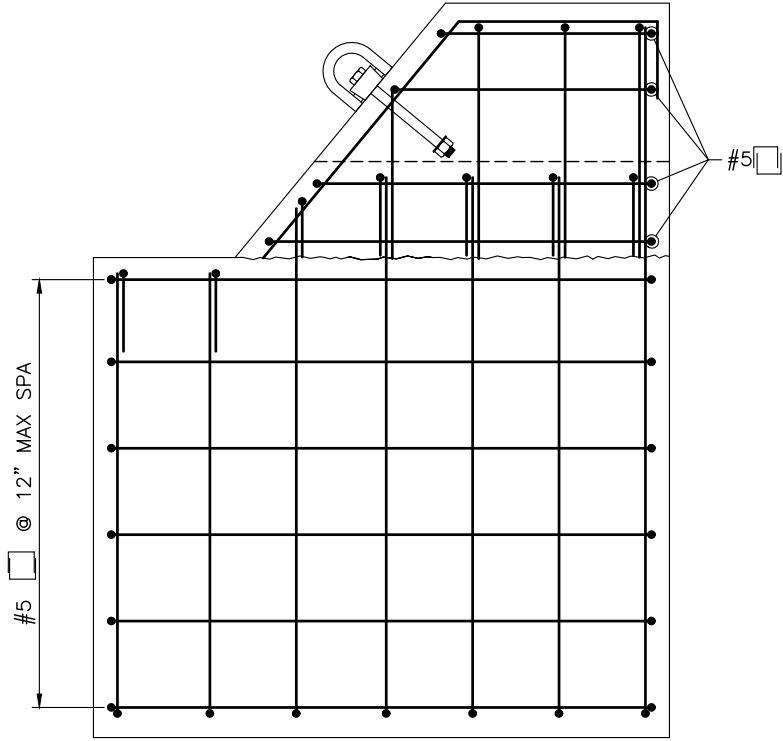
1. THE LOCATIONS OF THE CONCRETE THRUST BLOCK ARE APPROXIMATE. EXCEPT FOR THE RAILROAD SOUTH LOCATION, THE FACE OF THE BLOCK SHALL BE ORIENTED PERPENDICULAR TO THE CENTERLINE OF THE PIPE INTERSECTION ANGLE. THE RAILROAD SOUTH BLOCK SHALL BE ORIENTED PERPENDICULAR TO THE EXISTING GROUND SLOPE.
2. THE TOP OF THE THRUST BLOCK AT THE ANCHORAGE CONNECTION SHALL BE FORMED PERPENDICULAR TO THE CENTERLINE OF THE ANCHORAGE RESTRAINT DEVICE.
3. SLOPE THE TOP OF BLOCK TO DRAIN TOWARDS THE LOWER ELEVATION SIDE OF BLOCK.
4. CONCRETE SHALL BE CDOT CLASS D ($f'_c = 4,500$ psi). CONTRACTOR SHALL SUBMIT A MIX DESIGN THAT MEETS REQUIREMENTS OF CDOT STANDARD SPECIFICATION SECTION 601.
5. REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 AND SHALL MEET REQUIREMENTS OF CDOT STANDARD SPECIFICATION SECTION 602. CONTRACTOR SHALL SUBMIT A BAR LIST PER SECTION 602.03.
6. CONTRACTOR SHALL RESTORE THE SITE TO EXISTING CONDITIONS. BACKFILL MATERIAL TO 95% COMPACTION.
7. EXPOSED CONCRETE CORNERS SHALL HAVE A 3/4" CHAMFER.

CONNECTION NOTES:

1. ALL THRUST BLOCK ANCHOR COMPONENTS INCLUDING WIRE ROPE, WIRE ROPE SLINGS, ROTATING EYE NUT, TURNBUCKLE, AND SHACKLE SHALL BE GALVANIZED STEEL AND SHALL HAVE A MINIMUM WORKING LOAD OF 25,000 LB WITH A MINIMUM SAFETY FACTOR OF 2:1.
2. INSTALL EYE NUT FLUSH WITH CONCRETE SURFACE. EYE NUT SHALL BE INSTALLED SO THE RESULTANT THRUST FORCE IS INLINE WITH THE SHANK OF THE EYE NUT.
3. WIRE ROPE U-BOLT CLIPS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION, INCLUDING MINIMUM NUMBER OF CLIPS.
4. THIMBLES, OR OTHER APPROVED HARDWARE, SHALL BE INSTALLED IN WIRE ROPE LOOPS.
5. WIRE ROPE SHALL BE INSTALLED AT THE 1/4 POINTS OF THE ELBOW OF THE EXISTING WATERLINE. CONTRACTOR SHALL ENSURE THAT LOADS ARE EQUALIZED IN THE TWO WIRE ROPE SLINGS ATTACHED TO THE PIPE. SECURE WIRE ROPES IN PLACE BY PLACING PIPE CLAMPS ON BOTH SIDES OF WIRE ROPE SLINGS.
6. COLORADO RIVER SOUTH ANCHOR: CONNECT WIRE ROPE SLING BASKET HITCH DIRECTLY TO ROTATING EYE NUT.



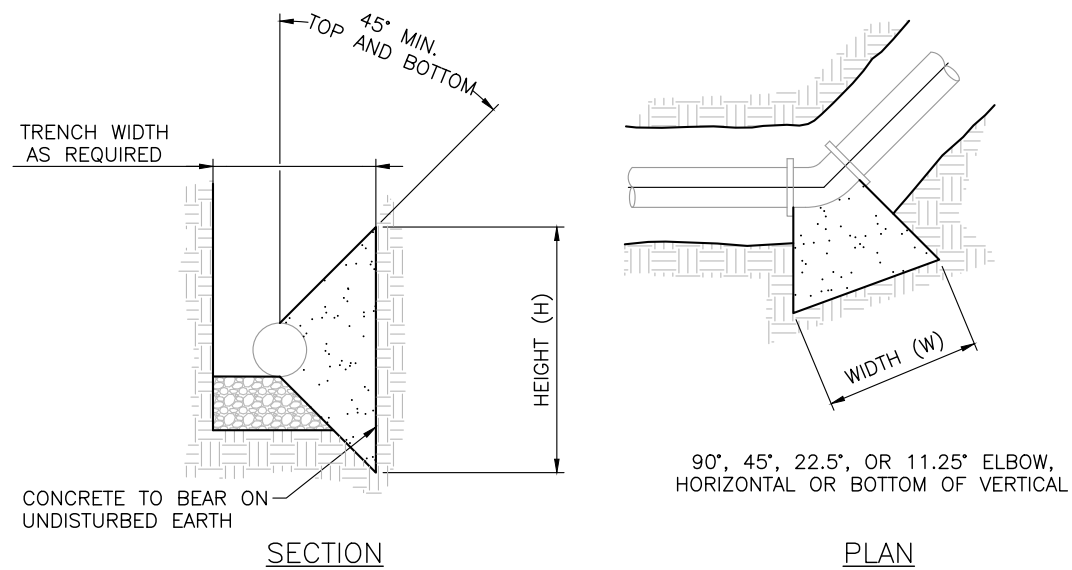
THRUST BLOCK REINFORCEMENT - PLAN
NOT TO SCALE



THRUST BLOCK REINFORCEMENT - SECTION
NOT TO SCALE

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Print Date: 3/21/23		Rev.	Date	Comments	Init.			No Revisions:						XX	
Last Modification Date: 3/21/23		1						Revised:		Engineer:	MLF	Structure			XX
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Autocad Ver. 2020 Scale: As Shown										Sheet Subset:	-	Subset Sheets:	- of -		Sheet Number 7
SGM Project No.: 2022-519.001	Quality Control: JNM														

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IN GROUND THRUST BLOCK SIZING NOTES:

- PROJECT TEST PRESSURE (TP) IS 130 PSI (AT LOWPOINT OF SYSTEM).
- PROJECT SOIL BEARING CAPACITY (SBC) IS: 1500 PSF
- PROJECT SAFETY FACTOR IS 2.0.

TYPICAL IN GROUND CONCRETE THRUST BLOCK
DETAILS FOR PIPE BELOW GRADE

NTS

LOCATION	BEARING AREA DIMENSIONS		MINIMUM BEARING AREA SF
	HEIGHT (H) FT	WIDTH (W) FT	
CO RIVER SOUTH	5.0	7.0	35.0
CO RIVER NORTH	5.0	7.0	35.0
UP RR SOUTH	5.0	7.0	35.0
UP RR NORTH *	5.0	7.0	35.0

* 45 DEGREE ELBOW LOCATED APPROXIMATELY 50 FEET TO NORTH PIPE ELBOW AT BRIDGE ABUTMENT.
NOTE, THRUST BLOCK MAY HAVE BEEN INSTALLED DURING ORIGINAL WATERLINE CONSTRUCTION.

IN GROUND THRUST BLOCK INSTALLATION NOTES FOR PIPE BELOW GRADE:

- ALL FITTINGS TO BE WRAPPED IN 8-MIL POLYETHYLENE.
- CONCRETE TO BEAR ON UNDISTURBED EARTH. CONSULT ENGINEER IF SOIL IS DISTURBED. ADDITIONAL RESTRAINED JOINTS MAY BE NEEDED, AND INSTALLED AT THE CONTRACTOR'S EXPENSE, IF THRUST BLOCKS CANNOT BEAR ON UNDISTURBED EARTH BECAUSE OF EXCAVATION DURING CONSTRUCTION.
- EXCAVATE BEYOND AND BELOW TRENCH AS REQUIRED TO OBTAIN BEARING AREA.
- USE CDOT CLASS D OR READY-MIXED 3000-PSI CONCRETE PLACED IN FORMS (REMOVED PRIOR TO BACKFILL).
- MAINTAIN ACCESS TO JOINTS AND BOLTS SUCH THAT DISASSEMBLY CAN BE ACHIEVED WITHOUT DISTURBING FITTING AND BLOCK.
- THRUST BLOCKS TO BE CENTERED VERTICALLY AND HORIZONTALLY ON FITTING.
- SUGGESTED BLOCK WIDTH SHOWN IN TABLE. BLOCK DIMENSIONS MAY BE ADJUSTED TO MEET MINIMUM REQUIRED BEARING AREA, BUT BLOCK WIDTH (W) SHALL TO BE 1 TO 2 TIMES BLOCK HEIGHT (H).
- CONCRETE TO CURE AT LEAST 72 HOURS PRIOR TO PRESSURIZATION OF PIPE.
- CONSULT ENGINEER IF ABOVE CONDITIONS OR OTHER ABNORMAL CONDITIONS ARE ENCOUNTERED POTENTIALLY REQUIRING REVISED THRUST BLOCK DESIGN.

Show excavation and backfill limits,
dimensions to nearby structures

Show design bearing pressure for thrust
blocks

Computer File Information		Sheet Revisions				As Constructed		WATERLINE RESTRAINT REHABILITATION IN GROUND THRUST BLOCK DETAILS			Project No./Code	
Print Date: 3/21/23		Rev.	Date	Comments	Init.	No Revisions:					XX	
Last Modification Date: 3/21/23		1									XX	
Drawing File Name: Rifle_Concrete Thrust Block						Revised:		Engineer:	MLF	Structure	-	
Autocad Ver. 2020 Scale: As Shown						Void:		Drawn By:	MLF	Numbers	-	
SGM Project No.: 2022-519.001	Quality Control: JNM							Sheet Subset:	-	Subset Sheets:	- of -	Sheet Number 8



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CITY OF RIFLE
PROJECT SPECIAL PROVISIONS
WATERLINE RESTRAINT REHABILITATION

The CDOT 2022 Standard Specifications for Road and Bridge Construction controls construction of this project. The following special provisions supplement or modify the Standard Specifications and take precedence over the Standard Specifications and plans.

PROJECT SPECIAL PROVISIONS

<u>Name</u>	<u>Page</u>
Index Pages	1
Special Conditions	2-3
Revision of Section 208 – Erosion Control	4
Section 519 – Steel Anchor Connections	5
Section 520 – Concrete Thrust Blocks	6-7
Revision of Section 619 – Reset Existing Waterline	8

STANDARD SPECIAL PROVISIONS

<u>Name</u>	<u>Date</u>	<u>Page</u>
Revision of Section 105 – Control of Work	(October 1, 2022)	9
Revision of Section 106 – Buy America Requirements	(October 1, 2022)	10
Revision of Section 109 – Prompt Payment	(October 1, 2022)	11-12
Revision of Section 601 – Concrete Mix Design	(October 1, 2022)	13
Revision of Section 601 – Sulfate Mitigation	(December 9, 2022)	14



1

SPECIAL CONDITIONS

1. **STANDARD SPECIFICATIONS AND DETAILS** - All work shall be done in accordance with the most recent edition of the Colorado Department of Transportation "Standard Specifications for Road and Bridge Construction", dated 2022.

All contractors bidding on this project are responsible for acquainting themselves thoroughly with all applicable specifications prior to submitting their bid. The successful bidder is responsible for thoroughly acquainting all of the personnel they intend to use on this project with all applicable specifications prior to the commencement of any construction.

2. **PROJECT DESCRIPTION** - The project consists of rehabilitation of the 16 inch diameter waterline restraints. The restraints will be installed at the abutments of the Highway 13 bridges over the Colorado River and the Union Pacific Railroad. The work will include construction of four reinforced concrete blocks, and up to four unreinforced concrete thrust blocks, including excavation and backfill. The waterline is to be reset in its original position and restrained with steel anchors attached to the concrete blocks. Additional work required to complete the project includes: surveying, erosion control, traffic control, and remove and reset of wildlife fence and guardrail.
3. **RESIDENT ENGINEER AND PROJECT ENGINEER** - The designated City of Rifle Resident Engineer and Project Engineer for this project are:

Resident Engineer:	Craig Spaulding	Project Engineer:	Marijean Frymoyer, PE
	City of Rifle Civil Engineer		SGM
	202 Railroad Ave.		118 W 6 th , Ste 200
	Rifle, CO 81650		Glenwood Springs, CO 81601
	(970) 665-6556 x556		(970) 880-9502

4. **JOBSITE SAFETY** - The Contractor shall conduct their operations in a safe manner and is responsible for all jobsite safety measures. All OSHA regulations and all other pertinent regulations pertaining to the safe operation of construction equipment, workers, methods, and the site shall be strictly adhered to by the Contractor.
5. **PERMITS** – It is the responsibility of the contractor to abide by all applicable Federal, State and Local permits and codes. The contractor shall be thoroughly acquainted with the details of each before beginning work. The following permits have been secured on behalf of the contractor during the design period:

- a. CDOT Special Use Permit

All other permits required for the Project shall be obtained by the Contractor as set forth in the Standard Specifications and as listed in the following:

- a. Colorado Discharge Permit System – Stormwater Construction Permit
- b. CDPHE Industrial Wastewater Discharge Permit – Construction Dewatering

The work and costs associated with Contractor obtained permits will not be paid for separately but shall be included in the total bid price of the Project.

6. **SCHEDULING/SEQUENCING REQUIREMENTS** – The Contractor shall phase all work to minimize impacts to traffic and neighboring properties.

SPECIAL CONDITIONS

7. **DRAWING ACCURACY AND EXISTING UTILITIES** - Every effort has been made to identify and verify all existing facilities and utilities. However, some of this information may have been taken from old drawings and utility company maps pertinent to the site.

As such, information relating to locations, sizes, or elevation of existing facilities should be considered only approximate. It shall be the responsibility of the Contractor to contact the appropriate representatives of utility companies, or utility locate companies, a minimum of 48 hours prior to the commencement of Work which might affect utility installations and to secure from such representative's information as to accurate location, size and type of such installations. The Contractor shall assume all responsibility for protection, repair and relocation of all such items encountered. Should repair or replacement be required, work shall be performed according to the requirements of the respective utility company.

8. **EASEMENTS** - The Contractor shall be responsible for securing any and all access rights they may require for construction convenience with private individuals and landowners. The Contractor shall provide the Engineer evidence of agreements for such access rights. All other permits required should be secured prior to commencement of Work at the Contractor's own expense.
9. **CONSTRUCTION STAKING** - The Contractor is responsible for Construction Survey in accordance with Section 625 of the Standard Specifications.

**REVISION OF SECTION 208
EROSION CONTROL**

Section 208 of the Standard Specifications is hereby revised for this project as follows:

In Subsection 208.11 delete the first paragraph and replace it with the following:

The Engineer will monitor the erosion control management. When the Contractor provides acceptable erosion control management in accordance with these specifications and applicable permit requirements, partial payments for the pay item Erosion Control Management will be made as the work progresses. Failure to provide acceptable erosion control management will result in withholding of payment for this item. These partial payments will be made as follows:

Partial payments for erosion control management will be made once each month as work progresses. The monthly partial payments will be determined by pro-rating the lump sum bid amount by the number of months in the actual construction schedule.

Subsection 208.12 shall include the following:

Pay Item	Pay Unit
Erosion Control Management	Lump Sum

SECTION 519
STEEL ANCHOR CONNECTIONS

Section 519 is hereby added to the Standard Specifications as follows:

DESCRIPTION

This work consists of the furnishing, fabricating, installing and tensioning the steel anchor connections per these specifications and as shown on the plans. Approximate dimensions are provided on the plans, the Contractor shall provide connection lengths as required based on the location of the concrete anchor block and the location and rotation of the existing waterline elbow.

MATERIALS

This work consists of the furnishing, fabricating, installing, and tensioning the steel anchor connections per these specifications and the plans. The Steel Anchor Connection shall include the wire rope sling, wire rope (or strand), bolt clips, thimbles, shackle, turnbuckle, rotating eye nut, elastomer, and pipe clamps. Steel components shall be galvanized and have tested and verified working loads as shown on the plans. The Contractor shall provide manufacturer's data sheets, submitted as working drawings per Section 105 of the CDOT Standard Specifications, that detail component dimensions and include working load specifications.

CONSTRUCTION REQUIREMENTS

The contractor shall follow the manufacturer's instructions and recommendations for component installation. The connection shall be installed so that the centerline of the anchorage attached to the concrete thrust block is aligned with the bisecting angle of the two segments of pipe at the elbow connection. The contractor shall tension the connection so that it is taught without any sag. After the waterline is pressurized, the Contractor shall make any adjustments as necessary so the connection is taught and in the proper alignment. The contractor shall install the steel anchor connections per the geometry as shown in the plans corresponding to the angle of rotation of the existing waterline pipe elbow.

METHOD OF MEASUREMENT

All work required to complete the Steel Anchor Connection will be measured as Each, where Each includes the entire assembled component between the waterline elbow and the concrete thrust block.

BASIS OF PAYMENT

The accepted quantities of Steel Anchor Connection will be paid for at the contract unit price.

Payment will be made under:

Pay Item	Pay Unit
Steel Anchor Connection	Each

Payment for Steel Anchor Connection will be full compensation for all labor, materials, tools, equipment, working drawings and incidentals necessary to complete the work.

1

**SECTION 520
CONCRETE THRUST BLOCK**

Section 520 is hereby added to the Standard Specifications as follows:

DESCRIPTION

This work consists of the excavation, backfill, shoring, furnishing and placing concrete, reinforcing steel and steel anchor rod per these specifications and in conformity with the lines, grades, and dimensions as shown on the plans.

MATERIALS

(a) Concrete Thrust Block (for Anchors):

Concrete shall conform to the requirements for Concrete Class D per Section 601 of the CDOT Standard Specifications. Reinforcing steel shall conform to the requirements of Section 602 of the CDOT Standard Specifications. Excavation and Backfill shall conform to the requirements of Section 206 of the CDOT Standard Specifications. Backfill for the front face (side of block facing the waterline elbow) shall be Structure Backfill (Class 1). Backfill for the other faces shall be Structure Backfill (Class 2).

(b) Concrete Thrust Block (Buried):

Concrete shall conform to the requirements for Concrete Class D per Section 601 of the CDOT Standard Specifications. Excavation and Backfill shall conform to the requirements of Section 206 of the CDOT Standard Specifications. Backfill for pipe bedding (below the pipe and to the horizontal centerline of the pipe) shall be Aggregate Base Course Class 6 per Section 703.03 of the CDOT Standard Specifications. Backfill above the centerline of the pipe shall be Structure Backfill (Class 2).

CONSTRUCTION REQUIREMENTS

Approximate location of the Concrete Thrust Block (for Anchors) is shown on the plans. Engineer shall review Contractor's surveyed location of the concrete block and centerline of the anchor rod prior to commencement of work. The dimension on the plans "Height (H)" indicates the buried depth of the front face of the concrete block.

METHOD OF MEASUREMENT

All work required to complete the Concrete Thrust Block will be measured per each. Approximate quantities of materials for the Concrete Thrust Block (for Anchors) provided below:

Location	Excavation (CY)	Backfill (CY)	Concrete (CY)	Rebar (LB)
UPRR North	12	8	4.5	500
UPRR South	18	10	9	700
CO River North	19	10	9	700
CO River South	18	10	8.5	700

The quantities are listed only for the convenience of the Contractor in determining the volume of work involved and are not guaranteed to be accurate. The prospective bidders shall verify these quantities. No adjustments will be made in the contract price even though the actual quantities required may deviate from those listed.

SECTION 520
CONCRETE THRUST BLOCK

BASIS OF PAYMENT

The accepted quantities of will be paid for at the contract unit price. Payment will be made under:

Pay Item	Pay Unit
Concrete Thrust Block (for Anchors)	Each
Concrete Thrust Block (Buried)	Each

Structure Excavation, Structure Backfill (Class 1), Structure Backfill (Class 2), Concrete, Reinforcement Steel and Anchor Rod items will not be measured and paid for separately but shall be included in the work. Payment will be full compensation for all work, materials and equipment required to complete the work.

**REVISION OF SECTION 619
RESET EXISTING WATERLINE**

Section 619 of the Standard Specifications is hereby supplemented as follows:

DESCRIPTION

This work consists of resetting the existing above grade waterline attached to the bridge to its original location with the centerline of the pipe in line with the centerline of the pipe support saddles and the bottom of pipe is resting on the existing bridge pipe support saddles. The pipe shall be reset prior to water being turned on and shall include any adjustments as needed after the water is turned on. This work shall also include removal of pipe insulation between the pipe elbow flanges to install the restraint. Replacement of pipe insulation will be by others.

CONSTRUCTION REQUIREMENTS

The Contractor shall submit a working drawings per Section 105 of the CDOT Standard Specifications describing the equipment and methods that will be used to reset the existing waterline. The Contractor shall protect the pipe, pipe supports, and the bridge to ensure that they are not damaged during resetting operations. Limit the extents of pipe insulation removal to minimum amount required to complete the work. Any damage to the bridge, waterline, or pipe supports shall be repaired at the Contractor's expense.

METHOD OF MEASUREMENT

Reset Existing Waterline will not be measured but will be paid for on a lump sum basis.

BASIS OF PAYMENT

Payment will be made under:

Pay Item	Pay Unit
Reset Existing Waterline	Lump Sum

Payment will be full compensation for all work, materials and equipment required to complete the work. Working drawings shall not be paid for separately but shall be included in the work.

**REVISION OF SECTION 105
CONTROL OF WORK**

Revise Section 105 of the Standard Specifications as follows:

Revise Paragraphs 4, 5 and 6 of Subsection 105.20 as follows:

If damage occurs to an existing structure through improper maintenance per 105.19, the Contractor shall submit a repair procedure to the Engineer to repair the defect(s).

The repair categories and requirements are defined as follows:

- a) *“In-kind” repairs*. In-kind repairs are repairs where the As-Built or Advertised plans are utilized to replace or repair damaged components with identical dimensions and materials used plans and where no plan modifications are made. In-kind repair procedures shall be reviewed and accepted by the Engineer before any repair. The use of approved repair grouts or doweled reinforcing with epoxy adhesive is permitted in in-kind repairs. Doweled reinforcing shall meet or exceed the strength requirements of the original design.
- a) *“Modified repairs”*. Modified repairs are those which deviate in dimensions and/or materials from the As-Built or Advertised plans or where plans are not available. Modified repair procedure submittals shall include calculations, independent design calculations, shop drawings, and/or working drawings per 105.02, and any other applicable section of the specifications for the needed repair. The Contractor’s Engineer shall electronically seal Modified repair submittals.

Damage to new structures or modified structures, shall be repaired per the contract documents. The Engineer of Record shall be notified and review all corresponding submittals before any repairs.

**REVISION OF SECTION 106
BUY AMERICA REQUIREMENTS
NON-FEDERAL AID HIGHWAY (FHWA)**

Section 106 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 106.11(a) and replace it with the following:

(a) Federal *Buy America* requirements for iron and steel do not apply to this project.

**REVISION OF SECTION 109
PROMPT PAYMENT
(LOCAL AGENCY)**

Section 109 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 109.06(e) and replace with the following:

- (e) *Prompt Payment.* The Contractor shall pay subcontractors and suppliers for all work which has been satisfactorily completed within seven calendar days after receiving payment for that work from the Local Public Agency (LPA). For the purpose of this section only, work shall be considered satisfactorily complete when the LPA has made payment for the work. The Contractor shall include in all subcontracts a provision that this requirement for prompt payment to subcontractors and suppliers must be included in all subcontracts at every tier. The Contractor shall ensure that all subcontractors and suppliers at every tier are promptly paid. If the Contractor or its subcontractors fail to comply with this provision, the Engineer will not authorize further progress payment for work performed directly by the Contractor or the noncompliant subcontractor until the required payments have been made. The Engineer will continue to authorize progress payments for work performed by compliant subcontractors.

Delete subsection 109.06(f)5 and replace with the following:

5. In determining whether satisfactory completion has been achieved, the Contractor may require the subcontractor to provide documentation such as certifications and releases, showing that all laborers, lower-tiered subcontractors, suppliers of material and equipment, and others involved in the subcontractor's work have been paid in full. The Contractor may also require any documentation from the subcontractor that is required by the subcontract or by the Contract between the Contractor and the LPA or by law such as affidavits of wages paid, material acceptance certifications and releases from applicable governmental agencies to the extent that they relate to the subcontractor's work.

Delete subsection 109.06(f)8 and replace with the following:

8. If additional quantities of a particular item of work are required at a later date after final measurement has been made, the Contractor shall perform this work in accordance with Contract requirements and at unit bid prices.

For this subsection only, satisfactory completion of all work described on CDOT Form No. 205 is when all tasks called for in the subcontract as amended by changes directed by the Engineer have been accomplished and documented as required by the LPA.

The requirements stated above do not apply to retainage withheld by the LPA from monies earned by the Contractor. The LPA will continue to process the release of that retainage based upon the completion date of the project as defined in the Commencement and Completion of Work special provision.

Delete subsection 109.06(f)9 and replace with the following:

9. If during the prosecution of the project a portion of the work is partially accepted in accordance with subsection 105.21(a), the Contractor shall release all subcontractors' retainage on the portion of the partially accepted work performed by subcontractors. Prior to the LPA releasing the Contractor's retainage on work that has been partially accepted in accordance with subsection 105.21(a), the Contractor shall submit to the Engineer a certified statement for each subcontractor that has participated in the partially accepted work. The statement shall certify that the subcontractor has been

**REVISION OF SECTION 109
PROMPT PAYMENT
(LOCAL AGENCY)**

paid in full for its portion of the partially accepted work including release of the subcontractor's retainage. The statement shall include the signature of a legally responsible official for the Contractor, and the signature of a legally responsible official for the subcontractor.

Delete subsection 109.06(g) and replace with the following:

- (g) *Good Cause Exception.* If the Contractor has "good cause" to delay or withhold a subcontractor's progress payment, the Contractor shall notify the LPA and the subcontractor in writing within seven calendar days after receiving payment from the LPA. The notification shall specify the amount being withheld and provide adequate justification for withholding the payment. The notice shall also clearly state what conditions the subcontractor must meet to receive payment. "Good cause" shall include but not be limited to the failure of the subcontractor to make timely submission of required paperwork.

Delete subsection 109.06(h) and replace with the following:

- (h) *Monthly Reporting.* On a monthly basis, the Contractor shall submit the Form 1418, Monthly Payment Report, to the Engineer along with the project schedule updates, in accordance with subsections 108.03(g). Failure to submit a complete and accurate Form 1418 shall be grounds for CDOT to withhold subsequent payments or retainage from the Contractor.

**REVISION OF SECTION 601
CONCRETE MIX DESIGNS**

Revise Section 601 of the Standard Specifications for this project as follows:

Revise Subsection 601.05, second paragraph as follows:

- (11) For air entrained concrete, report the SAM number according to AASHTO TP118 Characterization of the Air-Void System of Freshly Mixed Concrete by the Sequential Pressure Method (Super Air Meter). The SAM meter readings for each step shall be included. Perform a SAM leak test prior to the SAM testing. Results of the leak test shall be included in the SAM data.

REVISION OF SECTION 601 SULFATE MITIGATION

Revise Section 601 of the Standard Specifications as follows:

Revise Section 601.04, delete the Class 2 and Class 3 requirements and replace them as follows:

Class 2 requires that the concrete have a maximum Water/Cementitious Material Ratio of 0.45 and one of the following:

- (1) ASTM C150 Type V with a minimum of a 20 percent substitution of Class F fly ash or slag cement by weight
- (2) ASTM C150 Type II or III or ASTM C595 Type IL with a minimum of a 20 percent substitution of Class F fly ash, High-Reactivity Pozzolan, or slag cement by weight. The Type II, III, or IL cement shall have no more than 0.040 percent expansion at 14 days when tested according to ASTM C452.
- (3) A blend of portland cement meeting ASTM C150 Type II or III with a minimum of 20 percent Class F fly ash, High- Reactivity Pozzolan, or slag cement by weight, where the blend has less than 0.05 percent expansion at 6 months or 0.10 percent expansion at 12 months when tested according to ASTM C1012
- (4) ASTM C595 Type IP(HS), IL(HS), or IT(HS). Class F fly ash, slag cement, or High-Reactivity Pozzolan may be substituted for Type IL(HS) cement.
- (5) ASTM C595 Type IL(MS) or IT(MS) plus Class F fly ash, slag cement, or High-Reactivity Pozzolan where the blend has less than 0.05 percent expansion at 6 months or 0.10 percent expansion at 12 months when tested according to ASTM C1012

Class 3 requires that the concrete have a maximum Water/Cementitious Material Ratio of 0.40 and one of the following:

- (1) A blend of portland cement meeting ASTM C150 Type II, III, or V or ASTM C595 Type IL(MS) with a minimum of a 20 percent substitution of Class F fly ash, High-Reactivity Pozzolan, or slag cement by weight, where the blend has less than 0.10 percent expansion at 18 months when tested according to ASTM C1012
- (2) ASTM C595 IT(MS) plus High-Reactivity Pozzolan where the blend has less than 0.10 percent expansion at 18 months when tested according to ASTM C1012
- (3) ASTM C595 Type IP(HS), IL(HS), or IT(HS) having less than 0.10 percent expansion at 18 months when tested according to ASTM C1012. Class F fly ash, slag cement, or High-Reactivity Pozzolan may be substituted for Type IL(HS) cement.
- (4) ASTM C150 Type I, II, III, or V or ASTM C595 Type IL(MS) plus a minimum of 20 percent Class F fly ash when the R factor of the fly ash is less than 0.75. R factor is determined using the following from the chemical composition of the fly ash:

$$R = \frac{CaO - 5}{Fe_2O_3}$$



9.	Signatures		
	Position	Signature	Date
	Department Director		
	City Manager		
	City Council Approval (meeting date)		
10.	Purchase Order # assigned by Finance		

TABLE 1 - IS A PURCHASE ORDER NECESSARY

<u>Amount of Purchase</u>	<u>Is Purchase Order Needed</u>	<u>Method of Source Selection</u>
\$0.01 - \$10,000	No – Dept Head Approval	No special sourcing
\$10,000.01 - \$25,000	Yes – City Manager Approval	Yes – see table 2 below
\$25,000.01 or Greater	Yes – Council Approval	Yes – see table 2 below

TABLE 2 - METHODS OF SOURCE SELECTION

<u>Methods of source selection</u>	<u>Contract limits</u>
Competitive sealed bidding	Greater than \$50,000.00
Competitive sealed proposals	Greater than \$10,000.00 and less than \$50,000.00.
**Greater than \$50,000 allowed for Construction Manager/General Contractor proposals, or similar type proposal.	
Small purchases	Less than \$10,000.00 - DEPARTMENT HEAD DISCRETION

TABLE 3 - LOCAL VENDOR PREFERENCE

Contract Amount	Primary Preference In City Limits	Secondary Preference In County Out of City
Less than \$1,000	10% discount	5% discount
\$1,001 to \$5,000	8% discount	4% discount
\$5,001 to \$25,000	6% discount	3% discount
\$25,001 to \$100,000	5% discount	2% discount
\$100,000 to \$200,000	4% discount	2.5% discount
\$200,001 to \$500,000	3% discount	1.5% discount
\$500,000 or greater	2% discount	1% discount



Agenda Item #6.f.

Agenda Item Name:

Consider Approval of Contract with Martinez Western Constructors for Construction Services on the Railroad and 5th Street Intersection Improvements

Presenter:

Craig Spaulding, Civil Engineer

Item Description:

Bid Award for Improvements at 5th and Railroad Avenue

Recommended Action:

Recommend approval of contract with Martinez Western Constructors for Construction Services on the Railroad and 5th Street Intersection Improvements for \$891,608.01

Fiscal Impact:

Yes, the 2023 budget has funds to acquire the signal (\$250,000) and improvements were scheduled for 2024. A CDOT Mainstreet Grant was received to perform the improvements in the amount of \$250,000. Because of this, improvements were included in the bid. After negotiation, the bid was \$891,608.01. This exceeds the \$500,000 available through the CDOT Mainstreet Grant and Street Improvement Fund. \$200,000 from the URA is proposed to supplement the deficit as well as an additional \$191,608.01 from the Street Improvement Fund. Council requested that the URA be used for Street Improvements when the Downtown Project was awarded using Street Improvement Funds and the project is within the URA zone making it a good use of URA funds.

Operational Impact:

Yes, once the aged signals are replaced maintenance will be reduced.

Prior Board Motions:

No

Background Information:

This is work that was planned as part of the downtown project but was removed to reduce the overall cost. The work was then planned to be part of the 2024 Railroad Avenue work. With reception of a \$250,000 grant the work is now scheduled for 2023.

Executive Summary:

This is vital work to ensure ADA compliance to Rifle's downtown as well as provide reliable traffic signals. The work has been deferred once and the cost has significantly increased since it was deferred. After a public bid, two contractors attended the mandatory pre-bid meeting and one bid was received that was 89% higher than the engineer's estimate. After extensive meetings with the contractor, the bid was reduced by \$132,549.50

(13%). The contractor provided subcontractor and vendor proposals and worked with the City on areas to reduce costs. Because of the transparency of the contractor, the necessity of the project, and the \$250,000 grant it is recommended to award the project. If the project is not awarded, there is a risk of the cost increasing further and not receiving a grant.

Notification Requirements:

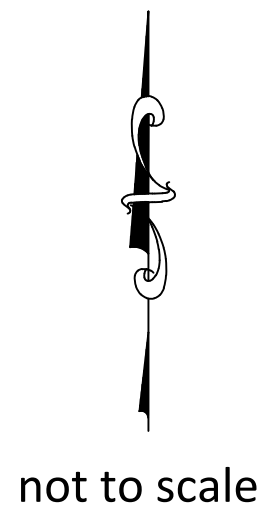
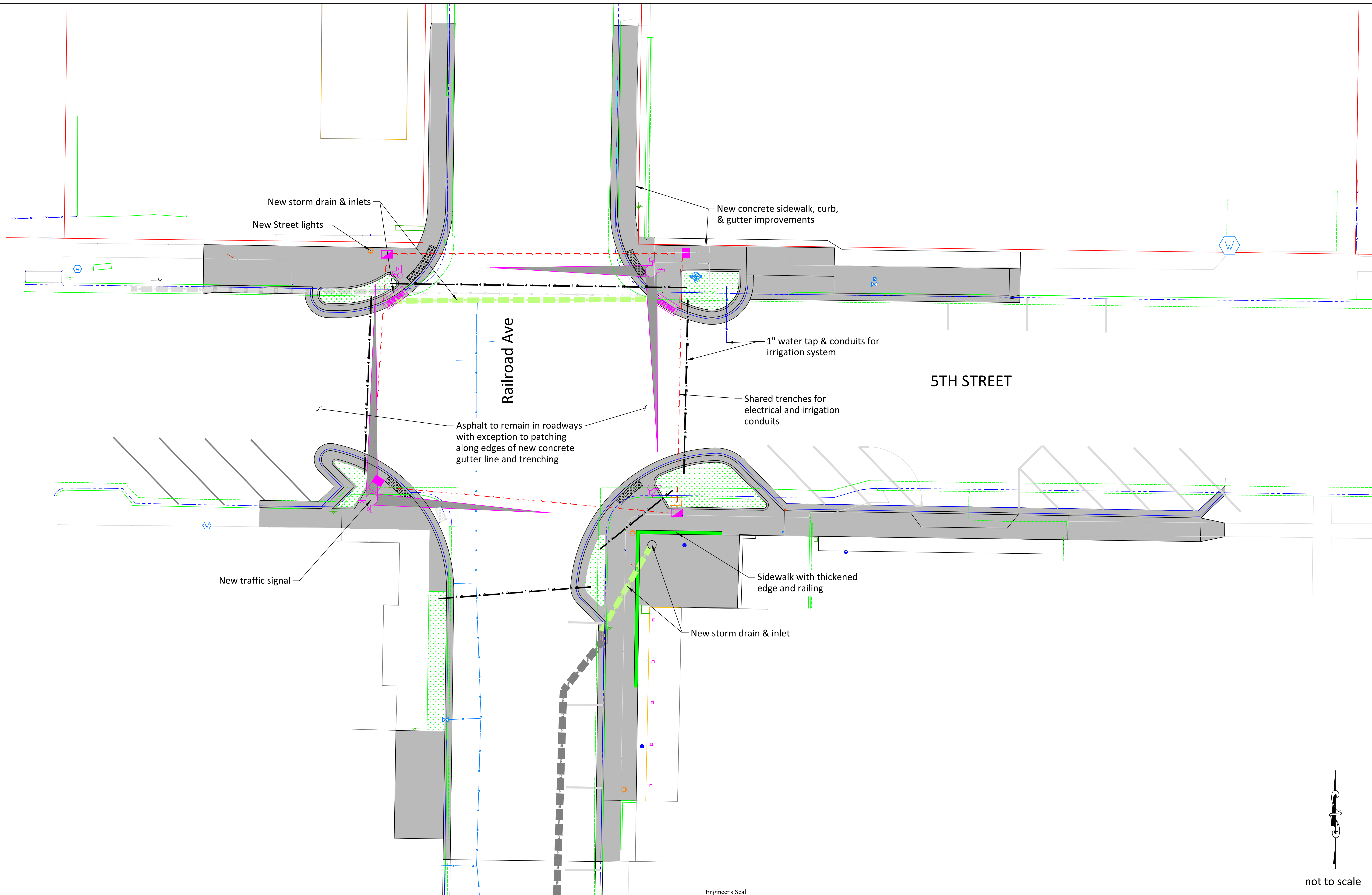
N/A

Prepared By:

Craig Spaulding, Civil Engineer

Attachments:

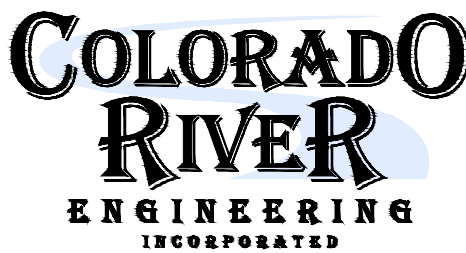
1. 2023-2-21 5th Street Intersection Overview
2. RR and 5th St 2023 Project Manual
3. 5th St Bid negotiated
4. Martinez Western PURCHASE REQUEST FORM 5th St and RR Ave



These drawings have been prepared for the client identified on the design sheet titleblock.
Unless these drawings bear a signed engineers seal, they may be used only at owners sole risk.

Drawing Revisions					Original Drawing Preparation		
No.	Description	By	Date	Approved	Date	By	Date
1						EB	2/2023
2							
3							
4							
5							

Engineer's Seal



PO Box 1301
Rifle, CO 81650
Tel 970-625-4933

CLIENT:

City of Rifle
202 Railroad Avenue
Rifle, CO 81650

SHEET TITLE:

5th Street & Railroad Avenue
Overview

SHEET NO. OF

1

Revision

PROJECT:

5th Street Intersection Improvements

CRE FILE:

M:\Land Projects R2\1261-Railroad Ave 5th to 9th\dwg\5th to 9th
Design.dwg

Railroad and 5th Street Improvements 2023



PROJECT MANUAL

**CITY OF RIFLE
202 RAILROAD AVENUE
RIFLE, COLORADO 81650**

2023

Pre-Bid Meeting: May 5, 2023

Bid Due Date: May 19, 2023

Award Date: June 7, 2023

Construction Start Date: July 31, 2023

Construction Completion Date: November 24, 2023

Project Directory

Project Engineer

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cspaulding@rifleco.org

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Construction Inspector

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ADVERTISEMENT FOR BIDS

Separate sealed BIDS for the construction of the **Railroad and 5th Street Improvements 2023** will be received at the **Council Chambers, Rifle City Hall, 202 Railroad Avenue, Rifle, CO.** until 2:00pm, on May 19, 2023, at which time they will be publicly opened and read aloud.

The Rifle Downtown 5th Street Safety and Accessibility Project will rehabilitate aging infrastructure at the downtown 5th street and Railroad Avenue intersection which includes:

- Concrete Sidewalk, curb, gutter, and ramps
- Asphalt Patching for curb, gutter and trenching
- New Signal poles and mast arms which includes but is not limited to conduit, wiring, pull boxes, equipment, caissons. Excavation and backfill
- Installation of new street lights which includes caissons, hardware, templates, trenching, backfilling, conduit, wiring and permitting,
- Landscaping which includes, irrigation, plantings, rock mulch, and irrigation controllers.

A Bid Bond in the amount of 5% of bid price is required, and a Performance and a Payment Bond, each in the amount of 100% of bid, will be required. Bid Award will be the June 7, 2023 Council Meeting. Time of Commencement of the Work is anticipated to be no later than July 31, 2023, with completion by November 24, 2023.

A PREFERENCE FOR LOCAL CONTRACTORS WILL BE APPLIED BY THE OWNER WHEN SELECTING A CONTRACTOR.

There will be a mandatory pre-bid meeting on May 5th at 10:00. Site visit meetings can be scheduled using the contact information below.

Digital copies of the Contract Documents may be downloaded from the City website at <http://www.rifleco.org/216/Projects-Out-To-Bid> for free. Contact Craig Spaulding, cspaulding@rifleco.org, 970-665-6556 for questions or issues with downloading the documentation.

Instructions to Bidders

1.0 Defined Terms

Terms used in these Instructions to Bidders, which are defined in the General Conditions of the City of Rifle Public Works Manual, have the meaning assigned to them in the General Conditions. The term “Bidder” means one who submits a Bid directly to Owner, as distinct from a sub-bidder, who submits a Bid to a Bidder. The term “Successful Bidder” means the lowest, qualified, responsible and responsive Bidder to whom Owner (on the basis of Owner’s evaluation as hereinafter provided) makes an award. The term “Bidding Documents” includes the Advertisement for Bids, Instructions to Bidders, the Bid Form, and the Contract Documents (including all Addenda issued prior to receipt of Bids).

2.0 Copies of Bidding Documents

2.1 Complete sets of Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents. The City of Rifle Public Works Manual, Part I-General Conditions, Part II-Construction Materials and Methods and Part III Minimum Design Standards, shall be followed unless otherwise specified herein. In case of conflict, follow the Supplementary General Conditions section 25, Precedence of Contract Documents. Copies of the Public Works Manual are available on Rifle’s web site www.rifleco.org.

2.2 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids on the work and do not confer a license or grant for any other use.

3.0 Qualifications of Bidders

The Owner may make such investigations as he deems necessary to determine the ability of the Bidder to perform the work, and to demonstrate qualifications to perform the Work. Each Bidder must be prepared to submit within five days of Owner's request written evidence of the types set forth in the Supplementary Conditions, such as financial data, previous experience and evidence of authority to conduct business in the jurisdiction where the Project is located. Each Bid must contain evidence of Bidder's qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the contract. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.

4.0 Examination of Contract Documents and Site

4.1 It is the responsibility of each Bidder before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site to become familiar with local conditions that may affect cost, progress, performance or furnishing of the work, (c) consider federal, state and local laws and regulations that may affect cost, progress, performance or furnishing of the work, (d) study and carefully correlate Bidder’s observations with the Contract Documents, and (e) notify Engineer of all conflicts, errors or discrepancies in the Contract Documents.

4.2 Information and data reflected in the Contract documents with respect to Underground Facilities at or contiguous to the site are based upon information and data furnished to Owner and Engineer by owners of such underground facilities or other, and Owner does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary Conditions.

4.3 Before submitting a Bid, each Bidder will, at Bidder’s own expense, make or obtain any additional

examinations, investigations, explorations, tests, and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the work and which Bidder deems necessary to determine its Bid for performing and furnishing the work in accordance with the time, price and other terms and conditions of the Contract Documents.

4.4 On request, in advance, Owner will provide each Bidder access to the site to conduct such explorations and tests as each Bidder deems necessary for submission of a Bid. Bidder shall fill and patch all holes, clean up, and restore the site to its former condition upon completion of such exploration.

4.5 The lands upon which the work is to be performed, rights-of-way, and easements for access thereto and other lands designated for use by Contractor in performing the work, are identified in the Contract Documents. All additional lands, and access thereto, required for temporary construction facilities or storage of materials and equipment, are to be provided by Contractor.

4.6 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the work required by the Contract Documents and such means, methods, techniques, sequences or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions of performance and furnishing of the work.

5.0 Interpretations and Addenda

5.1 All questions about the meaning or intent of the Contract Documents are to be directed to Engineer. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than five (5) days prior to the date of opening of Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

5.2 Addenda may also be issued to modify the Bidding Documents as deemed advisable by Owner or Engineer.

6.0 Conditions of Work

Each Bidder must inform himself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful Bidder of his obligation to furnish all material and labor necessary to carry out the provisions of his Contract. Insofar as possible, the Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with the work of any other Contractor or danger to the public.

7.0 Substitute or “Or-Equal” Items

The Contract, if awarded, will be on the basis of materials and equipment described in the drawings or specified in the specifications, without consideration of possible substitute or “or-equal” items. Whenever it is indicated in the drawings or specified in the Specifications that substitute or “or-equal” items of materials or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the effective date of the Agreement. The procedure for submission of any such application by Contractor and consideration by Engineer is set forth in the General Conditions and may be supplemented by the Supplementary Conditions.

8.0 Subcontracts

The Bidder is specifically advised that any person, firm, or other party to whom it is proposed to award a subcontract under this Contract must be acceptable to the Owner. The bidder shall submit, with their bid, a completed list of subcontractors they propose to use on this contract.

9.0 Bid Form

9.1 The Bid Form is included with the Bidding Documents; additional copies may be obtained from City Hall of Rifle, 202 Railroad Avenue, Rifle, Colorado.

9.2 All blanks on the Bid Form must be completed in ink, by typewriter, or electronically and printed.

NOTE: The spreadsheet is offered for your convenience only. The contractor is responsible for use and confirmation of any formulae or calculations therein. The submittal may be on the pdf. All tracking of project progress will be through that spreadsheet.

9.3 Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature.

9.4 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.

9.5 All names must be typed or printed below the signature.

9.6 The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which must be filled in on the Bid Form).

9.7 The address, email, and telephone number for communications regarding the Bid must be shown.

10.0 Submission of Bids

Bids shall be submitted at the time and place indicated in the Invitation to Bid and shall be enclosed in an opaque sealed envelope, marked with the project title (and, if applicable, the designated portion of the project for which the Bid is submitted) and name and address of the Bidder and accompanied by the required documents. If the Bid is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it. Any submission received after the advertised Bid Opening shall be returned unopened to the sender.

11.0 Modification and Withdrawal of Bids

11.1 Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

11.2 If, within twenty-four (24) hours after Bids are opened, any Bidder files a duly signed, written notice with Owner and Engineer and promptly thereafter demonstrates to the reasonable satisfaction of Owner and Engineer that there was a material and substantial mistake in the presentation of its Bid, that Bidder may withdraw its Bid.

12.0 Bids to Remain Subject to Acceptance

All Bids will remain subject to acceptance for sixty (60) days after the day of the Bid opening, but Owner may, in its sole discretion, release any Bid prior to that date.

13.0 Award of Contract

13.1 Owner reserves the right to reject any and all Bids, to waive any and all informalities, and to negotiate Contract terms with the Successful Bidder, and the right to disregard all nonconforming, non-responsible, unbalanced or conditional Bids. Also, Owner reserves the right to reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the project to make an award to that Bidder, whether because the bid is not responsible or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner.

13.2 In evaluation of Bids, Owner will consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

13.3 Owner may consider the qualifications and experience of subcontractors, suppliers and other persons and organizations proposed for those portions of the work as to which the identity or subcontractors, suppliers, and other persons and organizations may be submitted as provided in the Supplementary Conditions. Owner also may consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the work when such data is required to be submitted prior to the Notice of Award.

13.4 Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of Bidders, proposed subcontractors, suppliers and other persons and organizations to perform and furnish the work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.

13.5 If the Contract is to be awarded, it will be awarded to the lowest Bidder whose evaluation by Owner indicates to Owner that the award will be in the best interests of the Project.

13.6 Section 2.26 of the General Conditions of the City of Rifle's Public Works Manual and section 16.00 of the Supplementary Conditions set forth Owner's requirements as to performance and other Bonds. When the Successful Bidder delivers the executed Agreement to Owner, it shall be accompanied by the required Contract Security.

13.7 If the Contract is to be awarded, Owner will give the successful Bidder a Notice of Award within sixty (60) days after the date of the Bid opening.

14.0 Laws and Regulations

The Bidders' attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.

15.0 Complete Prices

All lump sum, alternate, and unit prices must include all required General Conditions line items necessary to complete the work, including, but not limited to the following (as required): all permits, insurance, and taxes (except as specified in Article 3.0 of the Supplementary General Conditions); supervision; layout

and survey as needed; protection of all surrounding materials; lifting/hoisting; equipment and personnel; off-site management and administrative assistance; trash disposal to a separate dumpster; miscellaneous equipment; mobilization; as-built drawings; fuel, watchmen, flagmen, and site security; scheduling; small tools; drawings and printing expenses and mailing costs.

15.1 On bid items to be paid as lump sum that may extend beyond a single pay estimate, a schedule of values shall be submitted to OWNER a minimum of 10 days prior to commencement of work. Adequate detail shall be given to allow a value to be placed on work completed during any given pay estimate.

16.0 Permits and Fees

Bids shall include all sales tax (except as specified in Article 3.0 of the Supplementary General Conditions) and all other applicable taxes and fees related directly to the construction of this project. Fees for permits and inspections directly related to this construction will be paid by the BIDDER; however, no tap fees or access charges for this or subsequent work will be the responsibility of the BIDDER. City has Tax Exemption, a copy of which will be provided to the Contractor. Contractor and all subcontractors shall hold a current license to perform work in Rifle, Garfield County, and the State of Colorado.

17.0 Authorities

Technical Specifications included herein supplement the Standard Specifications and take precedence. Work shall be completed as per these specifications and accepted by the Owner or proper agencies having jurisdiction before final payment is requested of the Owner.

18.0 Subsurface Investigations

Geotechnical reports, if available, are included in the appendix of the Project Manual. Contractor use of such reports shall be in accordance with section 18.00 "Soils Investigation", of the Supplemental General Conditions.

19.0 Completion of Work

Work shall be completed as per the City of Rifle Public Works Manual (and as modified by these specifications) and accepted by the Owner or proper agencies having jurisdiction before final payment is requested of the Owner.

****Contractor shall provide a daily estimate of progress to the Public Works Director or City representative to verify quantities and that we shall stay within the contracted price. The City shall not pay for work above the contract price.**

20.0. Bid Bond

Bid security shall be made payable to the Owner in the amount of 5% of the bidder's maximum bid price in the form of a certified check or a bid bond, using the form herein, issued by a surety meeting the requirements of the Supplementary General Conditions. The bid security of the successful bidder will be retained until such bidder has executed the agreement and furnished the required contract security whereupon it will be returned; if the successful bidder fails to execute and deliver the agreement and furnish the required contract security within ten (10) days of the Notice of Award, the Owner may annul Notice of award and the bid security of that bidder will be forfeited. Owner will return bid bonds or checks of unsuccessful bidder within or by 60 days after the bid submittal date.

21.0 Payment Bond

Payment Bond form is found in Agreement Documents section of this package.

22.0 Performance Bond

Performance Bond form is found in Agreement Documents section of this package.

23.0 Work By Illegal Aliens Prohibited

Work By Illegal Aliens Prohibited. Pursuant to Section 8-17.50191, C.R.S., *et. Seq.*,

Contractor warrants, represents, acknowledges, and agrees that:

1. Contractor does not knowingly employ or contract with an illegal alien.
2. Contractor shall not knowingly employ or contract with an illegal alien to perform works or enter into a contract with a subcontractor that fails to certify to Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this Agreement.
3. Contractor has participated in or attempted to participate in the basic pilot employment verification program created in Public Law 208, 104th Congress, as amended, and expanded in Public Law 156, 108th Congress, as amended, administered by the Department of Homeland Security (hereinafter, "Basic Pilot Program") in order to verify that Contractor does not employ illegal aliens. If Contractor is not accepted into the Basic Pilot Program prior to entering into this Agreement, Contractor shall forthwith apply to participate in the Basic Pilot Program and shall submit to the City written verification of such application within five (5) days of the date of this Agreement. Contractor shall continue to apply to participate in the Basic Pilot Program, and shall verify such application to the City in writing, every three (3) months until Contractor is accepted or this Agreement is completed, whichever occurs first. This Paragraph 3 shall be null and void if the Basic Pilot Program is discontinued.
4. Contractor shall not use the Basic Pilot Program procedures to undertake pre-employment screening of job applicants while this Agreement is being performed.
5. If Contractor obtains actual knowledge that a subcontractor performing work under this Agreement knowingly employs or contracts with an illegal alien, Contractor shall be required to:
 - (a) notify the subcontractor and the City within three (3) days that Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and
 - (b) terminate the subcontract with the subcontractor if within three (3) days of receiving the notice required pursuant to this subparagraph the subcontractor does not stop employing or contracting with the illegal alien; except that Contractor shall not terminate the contract with the subcontractor if during such three (3) days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.
6. Contractor shall comply with any reasonable request be the Colorado Department of Labor and Employment ("Department") made in the course of an investigation that the Department is undertaking pursuant to the authority established in subsection 8-17.5-102(5), C.R.S.
7. Contractor violates this Addendum; the City may terminate this Agreement for breach of contract. If this Agreement is so terminated, Contractor shall be liable for actual and consequential damages to the City arising out of said violation.

24.0 Local Contractor Preference

Primary and secondary preference will be given to contractors when determining the lowest responsible bidder for work on this project. Local contractors, who have a principle place of business, are 1) for primary preference, within the City of Rifle or within 3 miles of the City Limits and 2) for secondary preference, outside of the three mile limit but within Garfield County.

For projects of \$5,000 or more in value, to determine the lowest bidder, an amount equal to the percentage shown below will be deducted from the total price proposed for the work. The contract however, will be awarded for the total bid price proposed.

Contract Amount	Primary Preference	Secondary Preference
\$5,000 to \$25,000	6% discount	3% discount
\$25,001 to \$100,000	5% discount	2.5% discount
\$100,001 or above	4% discount	2% discount

25.0 Scopes of Bids

4.7 **General Scope of Project:** The Rifle Downtown 5th Street Safety and Accessibility Project will rehabilitate aging infrastructure at the downtown 5th street and Railroad Avenue intersection which includes:

- Concrete Sidewalk, curb, gutter, and ramps
- Asphalt Patching for curb, gutter and trenching
- New Signal poles and mast arms which includes but is not limited to conduit, wiring, pull boxes, equipment, caissons. Excavation and backfill
- Installation of new street lights which includes caissons, hardware, templates, trenching, backfilling, conduit, wiring and permitting,
- Landscaping which includes, irrigation, plantings, rock mulch, and irrigation controllers.

END OF INSTRUCTIONS TO BIDDERS

Required Bid Documents

Bids shall be submitted at the time and place indicated in the Invitation to Bid and shall be enclosed in an opaque sealed envelope, marked with the project title (and, if applicable, the designated portion of the project for which the Bid is submitted) and name and address of the Bidder and accompanied by the required documents. If the Bid is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it. Any submission received after the advertised Bid Opening shall be returned unopened to the sender. Required Bid Documents are in the Bid Submittal Checklist Below

- _____ **Bid Form**
- _____ **List of Materials Suppliers/ Subcontractors**
- _____ **Contractor's License**
- _____ **Bid Schedule**
- _____ **Bid Bond**

CITY OF RIFLE
BID FORM
FOR CONSTRUCTION OF:
Railroad and 5th Street Improvements 2023

DATE: _____

OWNER: City of Rifle
202 Railroad Avenue
Rifle CO 81650
Attn: Craig Spaulding

BIDDER: Name of Bidder _____

Address of Bidder _____

Phone Number _____

Email Address _____

Contact Name _____

THE UNDERSIGNED BIDDER, having familiarized himself with the Work required by the Contract Documents, the site and conditions where the Work is to be performed, local labor conditions, and all laws, regulations, and other factors affecting performance of the Work, and having satisfied himself of the expense and difficulties attending performance of the Work,

HEREBY PROPOSES and agrees, if this Bid is accepted, to enter into Agreement with the Owner to perform all work, including the assumption of all obligations, duties, and responsibilities necessary to the successful completion of the contract and the furnishing of all materials and equipment required to be incorporated in and form a permanent part of the Work; tools, equipment, supplies, transportation, facilities, labor, superintendence, and services required to perform the Work; and bonds, insurance, submittals; and all fees as indicated or specified in the Contract Documents to be performed or furnished by BIDDER for the amount identified and detailed in the BID SCHEDULE and further totaled below ("Bid Proposal Amount"):

_____ Dollars(\$_____)
(written) (numeric)

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DOCUMENTS AND ADDENDA:

The BIDDER submits that he has carefully examined the site of the proposed work and the existing conditions, as well as the drawings and specifications. Also, he has thoroughly reviewed the proposal form, Instructions to Bidders, General Conditions, Supplementary Conditions, General Requirements, and the Specifications and Drawings, and acknowledges that the following addenda covering revisions to the drawings and/or specifications, and the cost, if any, of such revisions has been included in the Total Bid Price.

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

CHANGES TO THE WORK:

BIDDER agrees to perform all the WORK for the Total Base Bid price identified in the "Bid Proposal Amount." If circumstances arise during construction of this project which dictate a change in quantity, then the pricing for that particular portion of the job will be adjusted up or down with the BIDDER'S Schedule of Values (as included in the Contract Documents) to the revised quantity required by the construction circumstances of these plans. Final payment will be based upon count or measurement of items in place upon completion of the project at the units of measure and unit prices, with the exception of lump sum items.

For changes not covered by a contract unit price, BIDDER proposes that all such changes ordered to the work which increases the Scope of Work shall be priced in advance of the work and such unit prices will be approved by the Owner prior to commencement of work.

PERFORMANCE AND LABOR & MATERIAL PAYMENT BONDS:

By signing and submitting this Bid Proposal, the BIDDER certifies that upon demand, Performance and Labor & Material Payment Bonds can be furnished in amounts sufficient to cover the total proposed cost of work.

TIME OF COMMENCEMENT, COMPLETION, AND DAMAGES:

The BIDDER agrees that, if awarded the Contract, the Work will be substantially complete, ready for occupancy by Owner, according to the schedule submitted by BIDDER of within the indicated construction durations specified within the Contract Documents except for delays caused by Acts of God, neglect of the Owner or the

CITY OF RIFLE

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Representative of the Owner or other causes beyond the BIDDER'S control, and allows for no time due to labor disputes or strikes. Weather (unless severe) is not considered as an excuse for delay of the work.

Time is expressly declared to be of the essence in completion of the Work covered by the Contract Documents. Where additional time is allowed under the Agreement for the Completion of the work, the new time limits shall be of the essence of the Agreement.

GENERAL AGREEMENTS:

The BIDDER agrees to the following:

The BIDDER has had an opportunity to examine the Site of the work and has examined the Contract Documents therefore.

The BIDDER has carefully prepared the bid proposal upon the basis thereof and has carefully examined and checked the Bid Proposal and the materials, equipment and labor required thereunder, the cost thereof, and figures therefore, and hereby states that the amount or amounts set forth in the Bid Proposal is, or are, correct and that no mistake or error has occurred in the Bid Proposal or in the BIDDER's computations upon which the Bid Proposal is based and the BIDDER agrees that no claim for reformation, modification, rescission or correction of the Bid Proposal will be made after the scheduled closing time for the receipt of Bid Proposals.

The BIDDER understands that the Owner reserves the right to reject any or all Bids for any or no reason and to waive any informality in the bidding.

The BIDDER understands that this Bid shall not be withdrawn for a period of 60 calendar days after the scheduled closing time for receiving bids.

The BIDDER understands that unless a bid item is included on the "Bid Schedule", no separate payment shall be made for items required to complete the work in accordance with the contract. If included on the bid schedule, then work under the item will be paid at the unit or units given and shall include all necessary work complete and in place.

In preparing the Bid Proposal, the BIDDER has verified and is reasonably assured of the availability of all labor, materials, and products in this document.

The BIDDER has carefully reviewed the Bid Documents in their entirety and has agreed to meet these requirements.

DOCUMENT EXECUTION:

DATED This _____ day of _____, 2023

(Name of Firm)

(Street Address)

(City, State, Zip)

(Signature)

(Printed Signature)

(Title)

Please check as appropriate:

_____ An individual

_____ A Partnership Between:

_____ A Corporation organized under the laws of the State of _____

END OF BID FORM

LIST OF MATERIALS SUPPLIERS / SUBCONTRACTORS

Provide the name of the materials supplier or subcontractor included in your base bid price. Any changes in the providers listed below can be made only with the approval of the Owner. Any amount of work greater than 10% of the amount bid shall be considered as a subcontractor/Materials Supplier.

Name of Subcontractor /Materials Supplier	Work Item Performed or Provided	% of Value

CITY OF RIFLE

Bid Schedule

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	ESTIMATED AMOUNT
Sidewalk					
101	Remove/export existing asphalt & concrete, saw cut all exterior edges	2,002	SY		
102	Remove/export existing subgrade	222	CY		
103	Asphalt patching: 3" thickness	73	TON		
104	Road Base beneath Asphalt: 12" CDOT Class 6	445	TON		
105	Road Base beneath Concrete: 12" CDOT Class 6	147	TON		
106	Concrete Sidewalk: 4" thick Class D with Fibermesh	5,179	SF		
107	6" curb around landscape islands, poured monolithically with sidewalk	220	LF		
108	Concrete Curb & Gutter (6" curb & 18" Gutter)	786	LF		
109	Concrete pedestrian ramps with cast iron landing mat	4	EA		
600 Storm Drain					
601	Nyoplast Basin	1	EA		
602	Reset existing Inlet, Type 1	1	EA		
603	Storm Inlet Type 2	2	EA		
604	Tie in new manhole to existing	2	EA		
605	Pipe: 12" ADS	28	LF		
606	Pipe: 18" PVC SDR-26	75	LF		

900 TRAFFIC SIGNALS, SIGNAGE, & STRIPING					
901	REMOVAL OF LUMINAIRE	2	EACH		
902	REMOVAL OF PULLBOX	8	EACH		
903	REMOVAL OF TRAFFIC SIGNAL HEAD	12	EACH		
904	REMOVE TRAFFIC SIGNAL POLE	4	EACH		
905	REMOVE TRAFFIC SIGNAL MAST ARM	4	EACH		
906	REMOVAL OF VIDEO DETECTION SYSTEM (CAMERA)	4	EACH		
907	RESET SIGN PANEL	26	EACH		
908	3 INCH ELECTRICAL CONDUIT (PLASTIC) (TRAFFIC)	1065	LF		
909	2 INCH ELECTRICAL CONDUIT (PLASTIC) (TRAFFIC and LUMINAIRE)	320	LF		
910	PULL BOX (TYPE 4)	2	EACH		
911	PULL BOX (TYPE 5)	2	EACH		
912	WIRING (TRAFFIC)	1	LS		
913	WIRING (LIGHTING)	1	LS		
914	LUMINAIRE (LED)	2	EACH		
915	SIGN PANEL (CLASS I)	76	SF		
916	SIGN PANEL (CLASS II)	180	SF		
917	STEEL SIGN SUPPORT (2-INCH ROUND)(POST AND SOCKET)	2	EACH		
918	PEDESTRIAN FACE SIGNAL (16) (COUNTDOWN)	8	EACH		
919	TRAFFIC SIGNAL FACE (12-12-12)	8	EACH		
920	TRAFFIC SIGNAL FACE (12-12-12-12-12)	4	EACH		
921	PEDESTRIAN PUSH BUTTON	8	EACH		
922	INTERSECTION DETECTION SYSTEM (Remount on new Masts)	4	EACH		
923	TRAFFIC SIGNAL LIGHT POLE STEEL (2-40 FOOT MAST ARM)	2	EACH		
924	TRAFFIC SIGNAL PEDESTAL POLE STEEL	2	EACH		
925	PAVEMENT MARKING	16	GAL		
1000 LIGHTING & ELECTRICAL					
1001	GFCI REC: Planter Outlets	4	EA		
1002	Globe Style Acorn Light: 12' Street Light	4	EA		
1003	Trenching, Conduit and Wiring to Globe Lights	320	LF		
1004	Trenching, Conduit for future service	60	LF		

1100 IRRIGATION & LANDSCAPING					
1101	shade tree	4	EA		
1102	shrub bed, planted, fabric & mulch	60	SF		
1103	irrigation tap, backflow protection, locking enclosure	1	EA		
1104	4" irrigation sleeving	120	LF		
1105	control valve	1	EA		
1106	drip piping	500	LF		
1107	drip distribution/emitters	60	SF		
1108	Sprinkler Controller, Includes wiring and electrical	1	EA		
1200 MISC					
1201	Mobilization, Staging, Supervisor, & Project Management	1	LS		
1202	Stormwater protection & maintenance: Straw Wattles around inlets & vehicle tracking pads	1	LS		
1203	Traffic Control During Construction & Traffic Control Plan preparation	1	LS		
1204	Surveys: Construction Staking & Asbuilts	1	LS		
1205	Bonding (Performance & Payment)	1	LS		
1206	Contingency	1	LS		

TOTAL BID PRICE _____

Total Bid Price in Words _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, _____

as Principal, and _____

held and firmly bound unto _____

in the penal sum of _____

for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed this _____ day of _____, 2023. The condition of the above obligation is such that whereas the Principal has submitted to the **CITY OF RIFLE, COLORADO**, a certain BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for the Railroad and 5th Street Improvements 2023

NOW, THEREFORE,

[a] If said Bid shall be rejected, or

[b] If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a Bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

(L.S.)

Principal

Surety

By: _____

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as Amended) and be authorized to transact business in the state where the project is located.

CONTRACTOR'S LICENSING STATEMENT FORM

The undersigned is licensed in accordance with the laws of Colorado providing for the registration of Contractors: License Number _____; Class _____.

Name of Contractor's Firm _____

Business Address and Telephone Number _____

Name of Individual Owner (print) _____

Signature of Owner _____

OR

Signature, Title, and Address of members signing on behalf of the partnership:

Name _____ Title _____

Address _____

Name _____ Title _____

Address _____

Name _____ Title _____

Address _____

OR

Corporation organized under the laws of the State of _____

Signature of President of Corporation

Signature of Secretary of Corporation

(Place Seal Here)

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 2023, by and between, CITY OF RIFLE hereinafter called "OWNER", and _____ doing business as a Corporation, hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of _____
Railroad and 5th Street Improvements 2023
2. The CONTRACTOR will furnish all of the material, supplies, tools, equipment, labor and other service necessary for the construction and completion of the WORK described herein.
3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within **14** calendar days after the date of the NOTICE TO PROCEED and will complete the same by **as indicated in the contract documents**, unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.
4. The Contractor agrees to perform all of the Work described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of (\$ _____) dollars or as shown in the BID SCHEDULE.
5. The term "CONTRACT DOCUMENTS" means and includes the following:
 - A. ADVERTISEMENT FOR BID
 - B. INSTRUCTIONS TO BIDDERS
 - C. BID
 - D. BID BOND
 - E. AGREEMENT
 - F. GENERAL CONDITIONS (CITY OF RIFLE PUBLIC WORKS MANUAL)
 - G. SUPPLEMENTARY GENERAL CONDITIONS
 - H. PAYMENT BOND
 - I. PERFORMANCE BOND
 - J. NOTICE OF AWARD
 - K. NOTICE TO PROCEED
 - L. List of Drawing Sheets
 - 2023 Crack Seal Map
 - M. TYPICAL SPECIFICATIONS noted in the City Public Works Manual and CDOT Specifications.
 - N. Technical Specifications
 - O. ADDENDA: No. _____, dated _____, 2023.

**CITY OF RIFLE
AGREEMENT**

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the GENERAL CONDITIONS such amounts as required by the CONTRACT DOCUMENTS.
7. This AGREEMENT shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this AGREEMENT in triplicate, each of which shall be deemed an original on the date first above written.

CITY OF RIFLE

OWNER: _____
BY: _____
NAME: _____
TITLE: _____

(SEAL)

ATTEST (OWNER): _____
(Please Type)

NAME: _____

TITLE: _____

CONTRACTOR: _____
BY: _____
NAME: _____
ADDRESS: _____

(SEAL)

ATTEST (CONTRACTOR): _____
(Please type)

NAME: _____

TITLE: _____

Contingency Allowances Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

FORCE ACCOUNT ITEMS

DESCRIPTION

This special provision contains the Department's estimate for force account items included in the Contract. The estimated amounts marked with an asterisk will be added to the total bid to determine the amount of the performance and payment bonds. Force Account work shall be performed as directed by the Engineer.

BASIS OF PAYMENT

Payment will be made in accordance with PWM Section 2.30. Payment will constitute full compensation for all work necessary to complete the item.

Force account work valued at \$5,000 or less, that must be performed by a licensed journeyman in order to comply with federal, state, or local codes, may be paid for after receipt of an itemized statement endorsed by the Contractor.

<u>Force Account Item</u> <u>Amount</u>	<u>Quantity</u>	Estimated
F/A Minor Contract Revisions	F.A.	\$0.00

Force Account Descriptions

F/A Minor Contract Revisions – This work consists of minor work authorized and approved by the Engineer, which is not included in the contract drawings or specifications, and is necessary to accomplish the scope of work of this contract.

Preliminary Construction Schedule

Planting

Fair

Signal Lead Times

Asphalt Plant Closures

Winter Conditions

Task	Predecessors	Start	End
Bidding		Mon 4/24/23	Fri 5/19/23
Bid Award		Mon 5/22/23	Wed 6/07/23
Contract Execution		Thu 6/08/23	Fri 6/23/23
Submittals and Shop Drawings		Thu 6/08/23	Fri 7/14/23
Procurement of Signal		Fri 7/14/23	Mon 11/13/23
Cutting, Demo, Trenching for conduits and boxes		Mon 7/31/23	Fri 8/11/23
Install Caissons		Mon 8/14/23	Fri 8/18/23
Demo Sidewalk		Mon 8/21/23	Fri 8/25/23
Prepare Subgrade, Form, Place, Strip		Mon 8/28/23	Fri 9/08/23
Signage		Mon 9/11/23	Fri 9/15/23
Landscape Planters		Fri 9/15/23	Fri 9/29/23
Install Signal Poles and Masts		Mon 11/13/23	Fri 11/24/23

Certificate of Insurance

Certificates of Insurance from the contractor and subcontractor's insurance carriers shall name both the City of Rifle and CDOT as additional insured parties. Submission of Certificates of Insurance shall be provided prior to commencing any work.

Performance Bond Form

KNOW ALL MEN BY THESE PRESENTS that

Name of Contractor

Address of Contractor

a _____
Corporation, Partnership or Individual

Hereinafter called Principal, and _____
Name of Surety

Address of Surety

Hereinafter called Surety, are held and firmly bound unto _____

Name of Owner

Address of Owner

Hereinafter called OWNER, in the penal sum of _____
_____ Dollars (\$_____) in lawful money
of the United States for the payment of which sum well and truly to be made, we bind ourselves,
successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a
certain contract with the OWNER, dated the _____ day of _____, _____, a copy of
which is hereto attached and made a part hereof for the construction of:

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the
undertakings, covenants, terms conditions and agreements of said contract during the original term
thereof, and any extensions thereof, which may be granted by the OWNER, with or without notice to the
SURETY and during the one-year guaranty period, and if he shall satisfy all claims and demands incurred
under such contract, and shall full indemnify and save harmless the OWNER from all costs and damages
which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay
and expense which the OWNER may incur in making good any default, then this obligation shall be void;
otherwise to remain in full force and effect.

PEFORMANCE BOND

PROVIDED, FURTHER, THAT THE SAID surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the terms of the contract or to the WORK to be performed hereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____

(number of copies)

counterparts, each one of which shall be deemed an original, this ____ day of _____,

_____.

Principal (signature)

By _____

Type/print

ATTEST:

Address

(Principal) Secretary

(SEAL)

Witness as to Principal

Address

SURETY: _____

By: _____

Attorney-in-Fact

ATTEST:

Witness as to Surety

Address

Address

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is partnership, all partners should execute BOND. IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the WORK is located.

Payment Bond Form

The following additional provision shall constitute an amendment to Payment Bond No. _____.

PROVIDED, FURTHER, that the Principal and Surety, for value received, shall indemnify and save harmless the Owner to the extent of any payments required to be made by the Principal under the terms of the Contract. Subcontractors, material men, mechanics, and others shall have the right of action for amounts lawfully due them from the Principal or Subcontractor directly against the Principal and Surety of this bond. In the event the Principal or his Subcontractor fails to duly pay for any labor, materials, team hire, sustenance, provisions, pro-vendor, or other supplies used or consumed by such Principal or his Subcontractor in performance of the Work contracted be done, the Surety shall pay the same in an amount not exceeding the sum specified in the bond, together with interest, at the rate of eight percent (8%) per annum.

IN WITNESS WHEREOF, this Amendment is executed in four counterparts, each one of which shall be deemed an original, this _____ day of _____.

Principal

ATTEST:

(Principal) Secretary By: _____

(Address)

Witness as to Principal

(Witness as to Principal)

(Address)
Surety

By: _____
Attorney-in-Fact

Address

ATTEST:

Address

**CITY OF RIFLE
NOTICE OF AWARD**

Dated

TO: _____
Bidder

OWNER'S PROJECT NO. _____

PROJECT: Railroad and 5th Street Improvements 2023

CONTRACT FOR: FULL CONSTRUCTION SERVICES

You are notified that your Bid dated _____, 2023, for the above Contract has been considered. You are the apparent successful Bidder and have been awarded a contract for CONSTRUCTION SERVICES AS PER PLANS DATED.

Contract Price of your Contract is _____ Dollars (_____).

Three copies of each of the proposed Contract Documents (except Drawings) accompany this Notice of Award.

You must comply with the following conditions precedent within fifteen days of the date of this Notice of Award, that is by _____, 2023 _____.

1. You must deliver to the OWNER three fully executed counterparts of the Agreement, including all the Contract Documents, Performance and Payment Bonds. Each of the Contract Documents must bear your signature on the cover.
2. You must deliver with the executed Agreement the Contract Security (Bonds)
3. You must deliver with the executed Agreement, proof of insurance coverage as specified in the General Conditions (section 2.32) and Supplementary General Conditions (paragraph 2.00). Failure to comply with these conditions within the time specified will entitle OWNER to consider your bid abandoned, to annul this Notice of Award and to declare your Bid Security forfeited. Within ten days after you comply with those conditions, OWNER will return to you one fully signed counterpart of the Agreement with the Contract Documents attached.

City Of Rifle
Owner

By: _____
Authorized Signature

Civil Engineer
Title

CITY OF RIFLE

NOTICE TO PROCEED

To: _____ Date: _____
Project: _____

You are hereby notified to commence WORK in accordance with the Agreement
dated _____, 2023, on or before _____, 2023_.
By: _____
Owner

Title: _____
ACCEPTANCE OF NOTICE Receipt of the above NOTICE TO PROCEED is hereby acknowledged

By _____
this the _____ day of _____, 2023 .
By: _____
Title: _____

General Conditions

PWM Section 2.1. ADDITIONAL INSTRUCTIONS, MODIFICATIONS AND DETAIL DRAWINGS

The engineer may, during the duration of the contract agreement and in accordance with Sections 2-16, 2-17, and 2-18 of these General Conditions, furnish the contractor written instructions, modifications or detail drawings necessary to illustrate changes in the work.

The additional written instructions and detailed drawings thus supplied shall become a part of the contract documents, without invalidating the contract agreement, and the contractor shall perform the work as modified or altered.

PWM Section 2.2. EXECUTION, CORRELATION, INTENT, INTERPRETATION AND FURNISHING OF CONTRACT DOCUMENTS

The contract documents shall be executed in triplicate by the owner and contractor.

By executing the contract agreement the contractor represents that he has visited the sight of the work, familiarized himself with the locale, subsurface and site conditions under which the work is to be performed, and correlated his observations with the available information included with and required by 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 incidentals necessary for the proper execution and completion of the work. It is not intended that work not covered under any heading, section, class or trade of the specifications shall be supplied unless it is required elsewhere in the contract documents or is reasonably inferable there from as being necessary to produce the intended results. Words, which have well known technical or trade meanings, are used herein in accordance with such recognized meanings. Well-known technical standards are used herein in accordance with the latest edition and revisions thereof.

Written interpretations necessary for the proper execution or progress of the work, in the form of drawings or other wise, will be issued with reasonable promptness by the engineer and in accordance with any approved schedule, upon written request from the contractor. Such interpretations shall be consistent with and reasonably inferable from the contract documents and may be effected by field order.

Unless otherwise provided in the contract documents, the contractor will be furnished, free of charge, three (3) copies of drawings and specifications necessary for the execution of the work. All drawings and specifications thus furnished shall not be reused on any other project.

PWM Section 2.3. SCHEDULES, REPORTS AND RECORDS

The contractor shall submit to the owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the owner may request concerning work performed or to be performed.

Prior to the first partial payment estimate the contractor shall submit to the engineer schedules indicating:

A. Partial payments that he anticipates he will earn during the course of the work.

B. The order in which he proposes to carry on the work, including dates at which he will start the various parts of the work, estimated date of completion of each part; and as applicable:

1. The dates at which special detailed drawings will be required from the engineer.
2. The date that the contractor will submit shop drawings to the engineer.
3. Respective dates that manufacturing will begin, the testing and the installation of materials, supplies and equipment.

Schedules submitted by the contractor shall reflect:

C. The timely and orderly completion of:

1. Specific portions of the work as called for in the Special Conditions.
2. The work in accordance with allowed contract time.

D. The inability to perform work on Saturdays, Sundays, holidays or between the hours of 7:00 p.m. and 7:00 a.m. on any working day, without written permission from the engineer.

E. The safety, adequacy and efficiency of his plant equipment, tools, labor and methods of performing the work.

F. The availability of materials, equipment and incidentals to be incorporated in the work.

G. Maintenance and control of traffic.

PWM Section 2.4. DRAWINGS, SPECIFICATIONS, CONFLICTS AND DISCREPANCIES

The intent of the drawings and specifications is that the contractor shall furnish all labor, materials, tools, equipment, incidentals and transportation necessary for the proper execution of the work in accordance with the contract documents to complete the project in an acceptable manner, ready for use, occupancy or operation by the owner.

In case of conflict between the drawings and specifications, the specifications shall govern. Figured dimensions on drawings shall govern over scale dimensions, detailed drawings shall govern over General Drawings and Special Conditions shall govern over Standard Specifications. Any discrepancies between the drawings and specifications and site conditions; or any inconsistencies, errors, omissions or ambiguities in the drawings or specifications; or any errors or omissions in the layout as given by survey points and instructions shall be immediately reported to the engineer, in writing, who shall promptly verify and correct such inconsistencies or ambiguities in writing. Work performed by the contractor after such discovery, until authorized or corrected by the engineer, shall be done at the contractor's risk.

PWM Section 2.5. SHOP DRAWINGS AND MATERIAL SAMPLES

The contractor shall provide shop drawings, in triplicate, as may be necessary for the prosecution of the work (i.e. vault piping, electrical systems, reinforcing, non-detailed items, etc.) as required by the contract documents. The engineer shall promptly review all shop drawings. The engineer's approval of any shop drawing shall not release the contractor from responsibility for deviations from the contract documents. The approval of any shop drawing, which substantially deviates, from the requirement of the contract documents shall be evidenced by a Change Order.

When submitted for the engineer's review, shop drawings shall bear the contractor's certification that he has reviewed, calculated non-detailed dimensions, checked and approved the shop drawings and that they are in conformance with the requirements of the contract documents.

Portions of the work requiring a shop drawing or material sample submission shall not begin until the shop drawing or submission has been approved by the engineer. A copy of each approved shop drawing and each approved material sample shall be kept in good order by the contractor at the site and shall be available to the engineer.

PWM Section 2.6. MATERIALS, SERVICES, AND FACILITIES

It is understood that, except as otherwise specifically stated in the contract documents, the contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete and deliver the work within the specified time.

Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the work. Stored materials and equipment to be incorporated in the work shall be located so as to facilitate prompt inspection. Manufactured articles, materials and equipment shall be fabricated, furnished, applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer or in accordance with the latest revision to or edition of well known technical standards (i.e. ASTM, AWWA, Colorado Department of Transportation, etc.) referred to in the Specifications or Special Conditions.

Materials, supplies and equipment shall be in accordance with samples submitted by the contractor and approved by the engineer.

Materials, supplies or equipment to be incorporated into the work shall not be purchased by the contractor or the subcontractor subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

PWM Section 2.7. INSPECTION AND TESTING

All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with generally accepted standards and as required by the contract documents.

The owner shall provide technical personnel, acting under the supervision of the engineer, for the inspection and testing of the work in progress to ascertain that the completed work complies in all respects with the requirements of the contract documents.

If the contract documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to specifically be inspected, tested, or approved by someone other than the contractor, the contractor will give the engineer timely notice of readiness. The contractor will then furnish the engineer the required certificates of inspection, testing or approval.

Neither observations by the engineer nor inspections, tests or approvals by any person shall relieve the contractor from his obligations to perform the work in accordance with the requirements of the contract documents.

The engineer and his representative will at all times have access to the work whenever it is in preparation or in progress. In addition, authorized representatives and agents of any participating federal or state agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The contractor will provide proper facilities for such access and observation of the work and also for any inspection thereof.

If any work is covered contrary to instructions or without approval or consent from the engineer, it must if required by the engineer, be uncovered for his examination and properly restored at the contractor's expense.

If any work has been covered which the engineer has not specifically requested to observe prior to its being covered, or if the engineer considers it necessary or advisable that covered work be inspected or tested by others, the contractor, at the engineer's request, will uncover, expose or otherwise make available for observation, inspection or testing as the engineer may require, that portion of the work in question, furnishing all necessary labor, materials, tools and equipment. If it is found that such work is defective, the contractor will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such work is not found to be defective, the contractor will be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate Change Order shall be issued.

PWM Section 2.8. SUBSTITUTIONS

Whenever a material, article or piece of equipment is identified on the drawings or specifications by reference to brand name or catalog number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The contractor may request, in writing, the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the contract documents by reference to brand name or catalog number, and if, in the opinion of the engineer, such material, article, or piece of equipment is of equal substance and function to that specified, the engineer may approve its substitution and use by the contractor. Any cost differential shall be deductible from the contract price and the contract documents shall be appropriately modified by Change Order. The contractor warrants that if substitutes are approved, no major changes in the function or general design of the project will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the contractor without a change in the contract price or contract time.

PWM Section 2.9. PATENTS

The contractor shall pay all applicable royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and save the owner harmless from loss on account thereof, except that the owner shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified by the owner; notwithstanding anything above to the contrary, if the contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information, in writing, to the engineer.

PWM Section 2.10. SURVEYS

The owner shall furnish, at no cost to the contractor, field electronic horizontal and vertical control data at only two control points at each site of the work at the owner's choice of location of control points. From the information provided by the owner, the contractor shall be required to make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets.

The contractor shall carefully preserve benchmarks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

The contractor shall notify the engineer, in writing, forty-eight hours in advance, of the time and place at which he will require lines and grades in order to perform the Work or obtain measurements for record and payment.

PWM Section 2.11. LICENSES, PERMITS, AND REGULATIONS

All contractors and subcontractors performing work on the project shall have a current City of Rifle Municipal or Building Contractor's License, whichever is applicable to their trade. Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the contractor. Permits, licenses, and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the owner, unless otherwise specified. The contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the contractor observes that the Contract Documents are at variance therewith, he shall promptly notify the engineer in writing, and any necessary changes shall be adjusted as provided in the Contract Documents for changes in the work.

PWM Section 2.12. PROTECTION OF WORK, EMPLOYEES, PUBLIC AND PROPERTY

The contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the Work and the public who may be affected thereby, all the work and all the materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including pedestrian and vehicular traffic, trees, shrubs, lawns, fences, walks, pavements, roadways, structures and utilities, shown or not shown on the plans which are not designated for removal, relocation or replacement in the course of construction.

The contractor will comply with all applicable laws, ordinances, rules, regulations and order of any private or public body having jurisdiction. He will notify owners and users of adjacent utilities when prosecution of the work may affect them. He shall keep adjacent highways, streets and private access open to traffic and free of dirt and litter resulting from handling operations. He shall take reasonable precautions to protect private property adjacent to the project from such nuisances as dust, dirt, rock and excessive noise. The contractor shall remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the contractor, any subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except such as may be due to errors in the Contract Documents, or caused by agents or employees of the owner.

PWM Section 2.13. EMERGENCIES

In emergencies affecting the safety of life or the work or property at the site or adjacent thereto, the contractor, without special instruction or authorization from the engineer or owner, shall act to prevent threatened damage, injury or loss.

He will give the engineer prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby, and a Change Order shall thereupon be issued covering the changes and deviations involved, except when the emergency is attributed to acts of the contractor in performing the Work.

PWM Section 2.14. LAWS, ORDINANCES, RULES, REGULATIONS, AND ORDERS

The contractor shall keep himself fully informed of, and shall comply with all applicable laws, ordinances, rules, regulations and orders of the city, county, state, federal or public bodies having jurisdiction affecting the work. He shall provide, erect and maintain all necessary, police, watchmen, flagmen, firemen, shoring, signing, traffic devices, barricades and sanitary facilities, as required by the conditions and progress of the work, and all other necessary safeguards for safety and protection, as set forth by the United States Department of Labor, Occupational Safety and Health Administration.

The contractor must conform to the rules and regulations of the Industrial Commission of Colorado. Prior to starting excavation the contractor shall obtain from the Commission and file with the engineer a copy of his "Notice of Intent to Excavate."

The contractor shall comply with the requirements of CRS § 8-17-101 (1985 Supp.) by employing not less than 80 percent Colorado residents in the several classifications of skilled and common labor employed on the project.

The contractor shall be an equal opportunity employer and adhere specifically to all the City of Rifle resolutions and ordinances pertaining thereto.

The contractor shall protect and indemnify the owner and its agents against any claim or liability arising from or based on the violations of such ordinances, regulations, or laws, caused by the negligent actions of the contractor, his agents or employees.

PWM Section 2.15. SUPERVISION AND DISCIPLINE BY CONTRACTOR

The contractor will supervise and direct the work. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The contractor will employ and maintain on the work a qualified supervisor or superintendent who shall have been designated in writing by the contractor as the contractor's representative at the site. The supervisor shall have full authority to act on behalf of the contractor and all communications given to the supervisor shall be as binding as if given to the contractor. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the work.

The contractor shall at all times enforce strict discipline and good order among his employees and shall avoid employing on the project anyone unskilled in the work assigned.

PWM Section 2.16. CHANGES IN THE WORK

At any time during the progress of the work, the owner, through its city manager, may order alterations or changes in the plans, specifications, character or quantity of work, without invalidating the contract agreement. When the total arithmetic dollar value of all such changes, both additive and deductive, does not exceed 25 percent of the contract price, bid unit or lump sum prices, where applicable, shall be used. Should the dollar value of the changes exceed 25 percent of the contract price, the value of the changes over 25 percent shall be based on negotiated unit or lump sum prices, where applicable.

The engineer, also, may at any time, by issuing a Field Order, make changes in the details of the work, the contractor shall proceed with the performance of any changes in the work so ordered by the engineer unless the contractor believes that such Field Order entitles him to a change in contract price or time, or both, in which event he shall give the engineer written notice thereof within fifteen days after the receipt of the ordered change, and the contractor shall not execute such changes pending the receipt of an executed Change Order or further instruction from the owner.

PWM Section 2.17. CHANGES IN CONTRACT PRICE

The contract price may be changed only by a Change Order. The value of any work covered by a Change Order or of any claim for increase or decrease in the contract price shall be determined by one or more of the following methods in the order of precedence listed below.

A. Contract Unit Prices. If a change is ordered in an item of work covered by a contract unit or lump sum price, then an adjustment in the contract price will be made based upon the increase or decrease in quantity of the contract unit or lump sum price.

B. Agreed Prices. Adjustments in contract price for changes ordered that are not covered by contract unit or lump sum price or exceed the limitation in Section 2.16, will be determined by agreement between contractor and owner. If unable to reach agreement, the owner may direct the contractor to proceed on the basis of extra work in accordance with Paragraph C.

C. Extra Work. When the price for extra work cannot be agreed upon, the owner will pay for the extra work based on the accumulation of costs as provided herein below.

1. Daily Reports by Contractor. At the close of each working day, the contractor shall submit a daily report to the engineer, together with applicable delivery tickets, listing all labor, materials, and equipment for that day, and for other services and expenditures when authorized. An attempt shall be made to reconcile the report daily, and it shall be signed by the engineer and the contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the report. Reports by subcontractors or others shall be submitted through the contractor.

a. Labor. The report shall show the names of workers, classifications, and hours worked.

b. Material. The report shall describe and list quantities of materials used.

c. Equipment. The report shall show type of equipment, size and hours of operation, including loading and transport, if applicable.

d. Other Services and Expenditures. Other services and expenditures shall be described in such detail as the engineer may require.

2. Basis for Establishing Costs.

a. Labor. The costs of labor will be the actual cost for wages for each craft or type of workers at the time the extra work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, and other direct costs resulting from federal, state or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the extra work cost will not be permitted unless the contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

b. Materials. The cost of materials, or equipment to be incorporated in the work, shall be at invoice or lowest current price at which such materials are locally available and delivered to the job site in the quantities involved, plus freight and delivery.

The owner reserves the right to approve materials and sources of supply, or to supply materials to the contractor if necessary for the progress of the extra work. No markup shall be applied to any material provided by the owner.

c. Tool and Equipment Rental. No payment will be made for the use of tools which have a replacement value of \$400 or less.

Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed rates approved or authorized by the Colorado Department of Transportation at the time the extra work is performed. (Dataquest-Rental Rate Blue Book)

The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance and all incidentals.

Necessary loading and transportation costs for equipment used in performing the extra work shall be included.

If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to the owner than holding it at the work site, it shall be returned, unless the contractor elects to keep it at the work site at no expense to the owner.

The reported rental time for equipment already at the job site shall be the duration of its use on the extra work, commencing at the time it is first put into actual operation on the extra work.

d. Other Items. The owner may authorize other items, which may be required on the extra work. Such items include labor, services, material and equipment which are different in their nature from those required for the work and which are of a type not ordinarily available from the contractor or any of the subcontractors.

Invoices covering all such items in detail shall be submitted with the request for payment.

e. Invoices. Vendors' invoices for material, equipment rental, and other expenditures, shall be submitted with the request for payment. If the request for payment is not substantiated by invoices or other documentation, the engineer may establish the cost of the item involved at the lowest price which was current at the time of the report.

3. Markup.

a. Work by Contractor. The following percentage shall be added to the contractor's costs and shall constitute the markup for all overhead and profits:

Labor (1.32 x certified payroll) 15%

Materials 15%

Equipment Rental 15%

Other Items and Expenditures 15%

To the sum of the costs and markups provided for in this subsection, one percent shall be added as compensation for bond and liability insurance.

b. Work by Subcontractor. When all or any part of the extra work is performed by a subcontractor, the markup established herein shall be applied to the subcontractor's actual cost of such work, to which a markup of five percent on the subcontracted portion of the extra work may be added by the contractor.

4. Any other cause which, in the opinion of the engineer, entitles the contractor to additional time, including but not restricted to acts of the public enemy, acts of any government in either its sovereign or any applicable contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unforeseeable severe abnormal weather.

PWM Section 2.18. CHANGES IN CONTRACT TIME

The contract time may be changed only by a Change Order. The contractor shall notify the engineer promptly and in writing of any occurrence or conditions which, in the contractor's opinion, entitle him to an extension or reduction in contract time. Such notice shall be submitted in ample time to permit full investigation and evaluation of the contractor's claim. Failure to provide such notice shall constitute a waiver by the contractor of any claim. The engineer shall acknowledge the contractor's notice within seven days of its receipt.

Changes in contract time for the completion of the work shall be stipulated by Change Order:

- A. When changes in the work occur.
- B. When work is suspended by the owner.
- C. For unforeseeable causes beyond the control and without the fault or negligence of the contractor, his subcontractor or supplier and which were not the result of their fault or negligence.
- D. When delays in the progress of the work caused by:
 - 1. Any act or neglect of the owner, his employees or agents.
 - 2. Other contractors employed by the owner.
 - 3. Any delay in furnishing of drawings, information or return of shop drawings by the engineer.
 - 4. Any other cause which, in the opinion of the engineer, entitles the contractor to additional time, including but not restricted to acts of the public enemy, acts of any government in either its sovereign or any applicable contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unforeseeable severe abnormal weather.

PWM Section 2.19. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

The date of beginning and the time for completion of the work are essential conditions of the contract documents and the work embraced shall be commenced on the date specified in the Notice to Proceed.

The contractor will proceed with the work at such rate of progress to insure full completion within the contract time. It is expressly understood and agreed, by and between the contractor and the owner, that the contract time for the completion of the work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work.

A daily charge will be made against the contractor for each working day, including free time, that any work shall remain uncompleted after elapse of contract time. This daily charge, determined by the original contract amount for the project from the table herein below, will be deducted from any money due the contractor. This deduction will not be considered a penalty but as liquidated damages.

The schedule of liquidated damages set forth below is an amount, agreed to by the contractor and the City of Rifle, as reasonably representing additional construction engineering costs incurred by the City if the contractor fails to complete performance within the contract time.

The schedule of liquidated damages will be:

Original Contract Amount Daily Charge From To and More than Including

\$ 0	\$ 25,000	\$ 270
25,000	50,000	465
50,000	100,000	540
100,000	500,000	950
500,000	1,000,000	1,250
1,000,000	2,000,000	1,400
2,000,000	4,000,000	1,750
4,000,000	8,000,000	1,970
8,000,000	10,000,000	2,050

Over \$10,000,000 - daily charge will increase by \$100 increments for each \$2,000,000 over \$10,000,000.

Permitting the contractor to continue and finish the work or any part thereof after elapse of contract time will not operate as a waiver on the part of the City of any of its rights under the contract.

Any deduction assessed as liquidated damages under this section shall not relieve the contractor from liability for any damages or costs resulting from delays to other contractors on the project or other projects caused by a failure of the assessed contractor to complete the work according to contract times.

The contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due to the following and the contractor has promptly given written notice of such delay to the owner or engineer.

A. To any preference, priority or allocation order duly issued by the owner.

B. To unforeseeable causes beyond the control and without the fault or negligence of the contractor, including but not restricted to, acts of God, or of the public enemy, acts of the owner, acts of another contractor in the performance of a contract with the owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unforeseeable severe abnormal weather.

The owner shall have the right to deduct the amount of liquidated damages from any monies due or to become due to the contractor, or to sue for and recover compensation for damages for non-performance of the work, from the contractor and his surety, as stipulated in the contract documents.

PWM Section 2.20. CORRECTION OF WORK

The contractor shall promptly remove from the premises all material and work condemned by the engineer for failing to comply with the contract documents, whether incorporated in the construction or not, and the contractor shall promptly replace and re-execute the work in accordance with the contract documents and without expense to the owner and shall bear the expense of making good all work and material of other contractors destroyed or damaged by such removal or replacement.

All removal and replacement Work shall be done at the contractor's expense. If the contractor does not take action to remove such condemned work and materials within ten days after receipt of written notice, the owner may remove such work and store the materials at the expense of the contractor.

PWM Section 2.21. SUBSURFACE CONDITIONS

The contractor shall promptly, and before such conditions are disturbed, except in the event of an emergency, which jeopardizes the safety of the project and/or persons thereon, notify the owner in writing of:

A. Subsurface or latent physical conditions at the site differing materially from those indicated in the contract documents.

B. Previously unknown physical or other conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract documents.

The engineer shall promptly investigate the conditions, and if he finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the work, an equitable adjustment shall be made and the contract documents shall be modified by a Change Order. Any claim of the contractor for adjustment hereunder shall not be all wed unless he has given the required written notice; provided that the engineer may, if he determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

PWM Section 2.22. SUSPENSION, DELAY OR INTERRUPTION OF WORK

The owner may, at any time and without cause, suspend the work or any portion thereof for a period of not more than ninety calendar days or such further time as agreed upon by the contractor, by written notice to the contractor and the engineer which notice shall fix the date on which work shall be resumed. The contractor will resume that work on the date so fixed. The contractor will be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to any suspension.

If the performance of all or any portion of the work is suspended, delayed or interrupted as a result of a failure of the owner or engineer to act within the time specified in the contract documents, or if no time is specified, within a reasonable time, an adjustment in the contract price or an extension of the contract time, or both, shall be made by Change Order to compensate the contractor for the costs and delays necessarily caused by the failure of the owner or engineer.

PWM Section 2.23. OWNER'S RIGHT TO TERMINATE OR ABANDON WORK

If the contractor is adjudged bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the contractor or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to subcontractors or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the work or if he disregards the authority of the engineer, or if he otherwise violates any provision of the contract documents, then the owner may, without prejudice to any other right or remedy and after giving the contractor and his surety a minimum of ten days from delivery of a written notice, terminate the services of the contractor and take possession of the project and of all materials, equipment, tools, construction equipment and machinery thereon owned by the contractor, and finish the work by whatever method he may deem expedient. In such case the contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the contract price exceeds the direct and indirect costs of completing the project, including compensation for additional professional services, such excess shall be paid to the contractor. If such costs exceed such unpaid balance, the contractor will pay the difference to the owner. Such costs incurred by the owner will be determined by the engineer and incorporated in a Change Order.

Where the contractor's services have been so terminated by the owner, said termination shall not affect any right of the owner against the contractor then existing or which may thereafter accrue. Any retention or payment of monies by the owner due the contractor will not release the contractor from compliance with the contract documents.

After ten calendar days from delivery of a written notice to the contractor, the owner may, without cause and without prejudice to any other right or remedy, elect to abandon the project and terminate the contract. In such case, the contractor shall promptly remove all of his equipment, temporary facilities and supplies from the premise, clean up the project and contiguous properties. Otherwise, the owner shall perform such housekeeping at the expense of the contractor. However, the contractor shall be paid for all work executed and any expense sustained plus reasonable profits as a result of such action by the owner.

PWM Section 2.24. CONTRACTOR'S RIGHT TO TERMINATE OR STOP WORK

If, through no act or fault of the contractor, the work is suspended for a period of more than ninety calendar days by the owner or under an order of court or other public authority, or the engineer fails to act on any request for payment within thirty calendar days after it is submitted, or the owner fails to pay the contractor substantially the sum approved by the engineer within thirty calendar days of its approval and presentation, then the contractor may, after ten calendar days from delivery of a written notice to the owner and the engineer, terminate the contract and recover from the owner payment for all work executed and all expenses sustained. In addition and in lieu of terminating the contract, if the engineer has failed to act on a request for payment or if the owner has failed to make any payment as aforesaid, the contractor may upon ten calendar days notice to the owner and the engineer stop the work until he has been paid all amounts then due, in which event and upon resumption of the work, Change Orders shall be issued for adjusting the contract price or extending the contract time, or both, to compensate for the costs and delays attributable to the stoppage of the work.

PWM Section 2.25. SUBCONTRACTING

The contractor may utilize the services of subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty subcontractors.

The contractor shall not award work to subcontractor(s), in excess of fifty percent of the total contract price, without prior written approval of the owner.

The contractor shall be fully responsible to the owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

The contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the contractor by the terms of the contract documents insofar as applicable to the work of subcontractors and to give the contractor the same power as regards terminating any subcontract that the owner may exercise over the contractor under any provision of the contract documents.

Nothing contained in this contract shall create any contractual relation between any subcontractor and the owner.

PWM Section 2.26. CONTRACT SECURITY

The contractor shall, within seven calendar days after the receipt of the Notice of Award, furnish the owner with a Performance and Payment Bond in the penal sum of the total contract price, conditioned upon the performance by the contractor of all Change Orders, undertakings, covenants, terms, conditions and agreements of the contract documents, and upon the prompt payment by the contractor to all persons supplying labor, equipment and materials in the prosecution of the work provided by the contract documents. Such bond shall be executed by the contractor and a corporate bonding company licensed to transact such business in the State of Colorado and listed in the most recent revision of "Surety Companies Acceptable on Federal Bonds" as published in the U.S. Treasury Department Circular No. 570. The expense of the bond shall be borne by the contractor. If at any time a surety on any such Bond is declared a bankrupt or loses its right to do business in the State of Colorado, or is disapproved by the owner, the contractor shall, within ten calendar days after notice from the owner to do so, substitute an acceptable bond (or bonds) in such form and sum and signed by such other surety or sureties as may be satisfactory to the owner. The premiums on such bond shall be paid by the contractor. No further partial payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable bond to the owner.

PWM Section 2.27. PARTIAL COMPLETION AND OCCUPANCY

At any time during the performance of the work that a portion of the permanent construction has been satisfactorily completed, in accordance with the contract documents, which is not required for the operation of the contractor but is needed or required by the owner, the engineer shall issue to the contractor a written notice of partial completion, and thereupon or at any time thereafter, the owner may take over, occupy, operate and use that portion of the construction therein described.

The notification of partial completion shall in no way be construed to constitute an extension in contract time for the completion of all the work or as a waiver of the right of the owner to require the fulfillment of all the terms of the contract documents. If such prior use should cause an increase in the cost of, or in the time required for, performance of the Work, as determined by the engineer, an equitable adjustment to the contractor shall be made and the contract documents modified by a Change Order.

PWM Section 2.28. MEASUREMENT OF QUANTITIES FOR PAYMENT

Measurement for pay items in the contract shall be as defined in the Measurement and Payment Section of the City of Rifle Standard Specifications for Design and Construction or as modified in the Special Conditions. The methods of measurement and computation to be used in determination of quantities; of work performed, of materials to be furnished and/or installed; will be those methods generally recognized as conforming to good engineering practice.

Sundry items, which are incident to or required in the construction of the work, but are not included as items in the Bid Schedule, shall be considered an integral part of the work to be performed. All labor, materials, etc., required for such items shall be furnished and installed, and the costs shall be included in the applicable contract unit price or lump sum amount bid.

PWM Section 2.29. SCOPE OF PAYMENT

Payment to the contractor will be made only for the actual quantities of contract items constructed and installed in accordance with the plans and specifications.

Payment made at the contract unit price or lump sum amount bid shall be full compensation for furnishing all labor, materials, equipment, appurtenances, taxes, insurance, permits and incidentals necessary to complete the work as shown on the plans and as required by the Specifications. Each item, fixture, piece of equipment, etc., shall be complete in place, operational and accepted.

No additional payment, over the amount bid, will be made for related work to any item unless specifically called for in the contract. Neither will payment be made for materials wasted, rejected or placed outside of plan limit lines.

PWM Section 2.30. PARTIAL PAYMENT AND CERTIFIED TAX REPORTS

The engineer, on or about the twenty-fifth day of the month in which work on the project is performed, shall prepare for contractor's approval, a partial payment estimate of the work performed and materials placed in accordance with the contract documents.

Not more than eighty (80) percent of the cost of materials and equipment delivered and suitably stored at or near the project site, but not incorporated in the work may be included in an estimate; provided however, the contractor furnishes invoices and supportive data establishing title in the name of the owner, to the engineer.

The amount to be retained from partial payments will be ten percent of the value of completed work, exclusive of mobilization and payment for materials on hand. When the retainment on contracts exceeding \$80,000 in value has reached five percent of the amount of the contract, no further retainment will be made. Amount of retainment will be held until such time as final payment is made with the following provision: When ninety-seven and one-half percent of the work has been completed, the engineer may, at his discretion and The amount to be retained from partial payments will be ten percent of the value of completed work, exclusive of mobilization and payment for materials on hand. When fifty percent of the work required by contracts exceeding \$150,000. has been performed, no further retainment will be made if in the opinion of the City, satisfactory progress is being made on the work. Amount of retainment will be held until such time as final payment is made with the following provision: When ninety-seven and one-half percent of the work has been completed, the engineer may, at his discretion and with the consent of the Surety, reduce the retained amount to twice the value of the work remaining to be done. Any amount retained under this provision shall be subject to the requirements of Colorado Revised Statute § 24-91-103.

Earnings so retained on contracts exceeding \$150,000. in value may be withdrawn by the contractor provided the contractor provides the City with an irrevocable letter of credit in a form and from a financial institution acceptable to the owner. Any amounts so retained by the owner under this provision shall be subject to Colorado Revised Statute, § 24-91-105.

The contractor upon receipt of each partial payment estimate shall either indicate his approval by signing and returning a copy to the engineer, or return the estimate unsigned and indicate in writing his reason for refusing payment. The owner, within fifteen- (15) days of presentation to the engineer of an approved partial payment estimate, shall pay the contractor the amount due thereon.

Upon receipt from the contractor of an approved designated semifinal estimate, as prepared by the engineer:

- A. The contractor shall, in writing, request the engineer to make a semifinal inspection in preparation for final acceptance of the work by the owner.
- B. The contractor shall prepare and furnish the engineer certified city and county sales and use tax reports covering the equipment and materials incorporated in the work.

The engineer, upon receipt of written request for semifinal inspection, shall promptly make said inspection of the work and issue to the contractor a written notice advising him of any deficiencies, corrective measures or clean up that he must complete prior to preparation of the final payment request.

All work covered by partial payment made shall thereupon become the sole property of the owner, but this provision shall not be construed as relieving the contractor of the sole responsibility for the care and protection of the work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the owner to require the fulfillment of all terms of the contract documents.

PWM Section 2.31. FINAL PAYMENT REQUEST, ACCEPTANCE AND RELEASE

Upon completion of the work, cleanup of the project site, the engineer's receipt from the contractor in triplicate of certified tax receipts, the engineer, within ten calendar days thereafter shall:

- A. Prepare a final payment request, for contractor's approval, showing the total value of the work completed in accordance with the contract documents and as modified by any Change Orders, less the value of:
 - 1. Partial payments previously made by the owner to the contractor.
 - 2. Retention of any claims, on file with the owner, against the contractor
 - 3. Estimated costs of completing any incomplete or unsatisfactory items of the work.
 - 4. Payments advanced by the owner, to subcontractors, material and equipment suppliers or others which are known by the contractor to have been made but not previously accounted for.
 - 5. Liquidated damages not previously paid to the owner by the contractor.
- B. Advise the owner and contractor by written notice that:
 - 1. The work has been inspected and accepted by him under the conditions of the contract documents.
 - 2. The work, effective the date of the notice, is placed under warranty, at the contractor's expense, for a period of one year.

3. The entire balance shown on the final payment request, as prepared by the engineer, is due and payable within thirty calendar days from date of approval thereof by the contractor.

Upon approving the final payment request, as prepared by the engineer, the contractor by such act, indemnifies and saves the owner and his agents harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, material men and furnishers of machinery and parts thereof, equipment, tools, and all supplies incurred in the furtherance of the performance of the work. The contractor shall, at the owner's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged or waived. If the contractor fails to do so, the owner may, after having notified the contractor, either pay unpaid bills or withhold from the contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged, in accordance with the terms of the contract documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the owner to either the contractor, his surety, or any third party. In paying any unpaid bills of the contractor, any payment so made by the owner shall be considered as a payment made under the contract documents by the owner to the contractor and the owner shall not be liable to the contractor for any such payments made in good faith.

The acceptance by the contractor of final payment shall be and shall operate as a release to the owner of all claims and all liability to the contractor other than claims in stated amounts as may be specifically excepted by the contractor for all things done or furnished in connection with this work and for every act and neglect of the owner and others relating to or arising out of this work. Any payment, however, final or otherwise, shall not release the contractor or his sureties from the warranty period or any other obligations under the contract documents or the Performance and Payment Bond.

In the event the owner fails to make final payment as herein provided, there shall be added daily interest at the rate of six percent per annum, commencing on the first day after said payment is due and continuing until the payment is delivered or mailed to the contractor.

PWM Section 2.32. INSURANCE

The contractor shall at its own expense keep in full force and effect during the term of this contract insurance as follows:

The contractor shall secure and maintain statutory workmen's compensation.

The contractor agrees to secure, at his own cost, a policy or policies of insurance sufficient to insure against the liability assumed by the contractor pursuant to the provisions of paragraph 2.36 of these General Conditions. The contractor's insurer must be rated "B+" or better, according to Best's Key Rating Guide and must be admitted to do business in the State of Colorado. The contractor shall provide the owner with a certificate of insurance from a properly qualified representative of the insurer, that any policy purchased pursuant to this contract complies with the conditions required by this contract. The certificate of insurance must show current name and address of the insured(s) named in the policy. The contractor shall not commence any work under this contract, and shall not allow any subcontractor or any officer, employee, or agent of the contractor or any subcontractor to commence any work under this contract, until any such certification has been received and approved by the owner.

The contractor shall not be relieved of any liability assumed pursuant to the foregoing paragraph by reason of its failure to secure insurance as required by this contract or by reason of its failure to secure insurance in sufficient amounts, of sufficient durations, or of sufficient types to cover such liability. The required policy shall meet the following conditions:

A. The policy limits shall be as follows:

1. The limit for an injury to one person in any single occurrence shall be no less than \$1,000,000, and the limit for an injury to two or more persons in any single occurrence shall be no less than \$2,000,000. Costs of defense shall not be included within such limits or, if they are so included, the minimum limits shall be \$1,000,000 combined single limits.

2. The general aggregate limit shall be unlimited or at least \$2,000,000.

B. The policy shall include the owner as an additional insured. The parties hereto understand and agree that the owner is relying on and does not waive or intend to waive by this contract, any provision hereof, including the provisions of this paragraph, the monetary limitations (presently \$1,000,000 per person and \$2,000,000 per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, C.R.S. 24-10-101, et seq., as from time to time amended, or otherwise available to the owner.

C. The insurer shall give the owner notification of any cancellation or termination by refusal to renew the policy or any change in coverage of the policy in the manner provided by law. If no such notification is provided by law, the insurer shall give the owner at least thirty (30) days prior written notification of any cancellation or termination by refusal to renew the policy or of any change in coverage of the policy, unless cancellation or termination is for non-payment of premium, in which case, the industry standard of ten (10) days prior written notification shall apply.

D. The contractor shall be solely responsible for any deductible losses under the policy.

E. If the policy is a claims made policy, the policy shall provide the contractor the right to purchase, upon cancellation or termination by refusal to renew the policy, an extended reporting period of not less than two years. The contractor agrees to purchase such an extended reporting period should the policy be cancelled or terminated.

F. If the policy is a claims made policy, the policy shall give the owner the right to purchase the extended reporting period described in paragraph E above if the contractor fails to purchase such an extended reporting period as required by this contract. The owner's exercise of such right shall not relieve the contractor of any liability for its failure to purchase such an extended reporting period as required by this contract.

G. If the policy is a claims made policy, the retroactive date of any renewal of such policy shall be no later than the date this contract is signed by the parties hereto.

H. If the contractor purchases a subsequent claims made policy in place of any prior policy, the retroactive date of such subsequent policy shall be no later than the date the contract is signed by the parties hereto.

The contractor shall secure and maintain, at his own expense, if applicable or called for in the Special Conditions, the following insurance coverage:

Fire, extended coverage and vandalism insurance on the project to the full insurable value thereof for the benefit of the owner, the contractor and subcontractors.

"All Risk" type builder's risk insurance for work to be performed. Unless otherwise authorized by the owner, the amount shall not be less than the contract price totaled in the Bid Proposal. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft and smoke during the contract time and until the work is accepted by the owner. The policy shall name as the insured the contractor, the owner and their designated agents.

Special Comprehensive General Bodily Injury and Property Damage for the period of time that work being performed is encroaching on property owned or controlled by individuals, partnerships or corporations such as irrigation companies and railroads, state or federal agencies, and to limits set forth in their permit. The policy shall be issued to the permittee and name as the insured the contractor, the owner and their designated agents.

The contractor must comply with the owner's requirements for filing certificates of insurance, as determined by the Risk Management Division. A certificate of insurance acceptable to the Risk Management Division must be provided at the time the contract is executed by the parties hereto unless both parties arrange otherwise.

The contractor is responsible for submitting certificate(s) of insurance, subject to the insurance requirements described above, for all subcontractors. All certificates of insurance are subject to periodic verification and approval by the owner.

PWM Section 2.33. SEPARATE CONTRACTS

The owner reserves the right to let other contracts in connection with this project, or contiguous thereto. The contractor shall afford other contractors, utility companies or owner's forces reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate his work with theirs. If the proper execution or results of any part of the contractor's work depends upon the work of any other contractor, the contractor shall inspect and promptly report to the engineer any defects in such work that render it unsuitable for such proper execution and results.

If the performance of additional work by other contractors, utility companies or the owner is not noted in the contract documents prior to the execution of the contract, written notice thereof shall be given to the contractor by the engineer, prior to starting any such additional work. If the contractor believes that the performance of such additional work by the owner or others entitles him to a change in contract price or time, or both, he may, by written notice to the engineer, request a Change Order as provided under Changes in the Work.

PWM Section 2.34. HOUSEKEEPING AND CLEANUP

At all times during the progress of the work the contractor, at his expense, shall maintain the site, storage yard, adjacent properties, both public and private, policed and free of litter or trash. All material and equipment to be incorporated in the work shall be stored in a neat appearing manner and protected from damage or the elements until accepted in accordance with the contract documents.

Prior to final payment, the contractor, at his expense, shall remove from the project site and from contiguous private and public property, all temporary structures, equipment, rubbish and waste materials resulting from his operations. He shall clean up, police around and over all facilities that the owner will acquire maintenance thereof.

Disposal areas for waste material, from the contractor's operation, shall be those areas that comply in every way with local ordinances and are approved by the engineer.

PWM Section 2.35. ASSIGNMENT

Neither the contractor nor the owner shall sell, transfer, sublet as a whole, or otherwise dispose of the contract or any portion thereof without the written consent of the other and its surety; nor shall the contractor assign any monies due or to become due to him thereunder, except to a bank or financial institution acceptable to the owner.

PWM Section 2.36. INDEMNIFICATION

The contractor agrees to indemnify and hold harmless the owner, its officers, employees, insurers, and self-insurance pool, from and against all liability, claims and demands on account of personal injuries, including without limitation worker compensation claims and death claims, or property loss or damage, or any other loss of any kind whatsoever, which arises out of or are in any manner connected with this contract, whether or not such injury, loss, or damage is caused by, or is claimed to be caused by, the act, omission, negligence or other fault of the contractor, any employees of the contractor, or any other person or entity; or by accident; or by any other cause. Nothing herein is intended to constitute a covenant, promise, or agreement to indemnify and hold harmless the owner from any liability or damages directly caused by or attributable to the owner's own negligence. The contractor agrees to investigate, handle, respond to, provide defense for, and defend against, any liability, claims, or demands arising from, connected with, or related to the contract at the sole expense of the contractor regardless of whether the liability, claim, or demand is related to the owner's own negligence and the contractor further agrees to bear all other costs and expenses, related thereto, including court costs and attorney fees, whether or not the claim or claims alleged are groundless, false, or fraudulent. Nothing herein is intended to be, or may be construed as, a waiver or the immunities, protections, or limitations on damages provided to The City of Rifle by the Colorado Governmental Immunity Act, C.R.S. § 24-10-101 through 24-10-120, as it may from time to time be amended.

PWM Section 2.37. ENGINEER'S STATUS AND DECISIONS

The engineer shall act as the owner's representative during the construction period. He shall decide questions which arise in the execution of the work. He shall perform technical inspections in the field, in laboratories, at factories, at sources of supply and wherever he feels the necessity to determine the quality and acceptability of material and equipment furnished and work performed. He shall reject all material, equipment and work which fails to conform to the specifications. He shall stop the performance of the work whenever such stoppage may be necessary to insure the proper execution of the contract documents. He shall determine the quantity of work to be paid for and prepare all partial payments, estimates and the final payment request for submittal to the owner after obtaining the contractor's approval thereof.

The engineer will not be responsible for the construction means, controls, techniques, sequences, procedures or construction safety.

The engineer shall, within a reasonable time after presentation, make decisions by written notice on all claims of the owner or the contractor on all matters relating to the execution and progress of the work or the interpretation of the contract documents.

PWM Section 2.38. LAND, RIGHTS-OF-WAY, EASEMENTS AND ENCROACHMENTS

Prior to issuance of Notice to Proceed, the owner shall obtain all land and rights-of-way necessary for carrying out and for the completion of the work to be performed pursuant to the contract documents, unless otherwise stated in the Special Conditions or mutually agreed to.

The owner shall indicate on the drawings or provide to the contractor information which delineates and describes the lands owned, rights-of-way and easements acquired, and encroachments over lands upon which the work is to be performed.

Delays in furnishing land for the work by the owner may be deemed proper cause for a change in the contract price, contract time, or both.

The contractor shall provide, at his own expense and without liability to the owner, any additional land and access thereto that the contractor may desire for temporary construction facilities, or for storage of materials and equipment.

PWM Section 2.39. GUARANTY AND WARRANTY

The contractor shall guarantee all material and equipment incorporated in, and warrant all workmanship on, the project for a period of one year from the date of written notice of acceptance of the project or portions thereof. The contractor shall within forty-eight hours after notification from the owner, subsequently verified by written notice, make all needed repairs and corrections which develop or result from defective workmanship, materials or equipment.

In the event the contractor should fail to make such repairs, adjustments, or performs other necessary work required to correct any deficiencies, the owner may do so and charge the contractor the cost thereby incurred. The Performance and Payment Bond shall remain in full force and effect through the guarantee and warranty period.

PWM Section 2.40. TAXES

The contractor will pay all applicable sales, use and other similar taxes required by the laws of the State of Colorado. When taxes are due, the developers, other responsible parties, and/or their subcontractors, prior to requesting final warranty on their project shall furnish the engineer, in triplicate on the City form, certified receipts of sales, use and other similar taxes, required by law, paid on all materials and equipment incorporated in or used in the performance of the work.

Notwithstanding the above, the contractor shall obtain from the Colorado Department of Revenue a Certification of Exemption indicating, where applicable, that the contractor's purchase of construction or building materials is for use in the building, erection, alteration or repair of public works owned and used by the City of Rifle, in its governmental

capacity. The contractor shall file with the engineer a certified copy of the Certification of Exemption, prior to commencing Work.

Where a project is exempt from such tax, the amount of such tax shall not be included in any bid proposal submitted to the City.

PWM Section 2.41. DESIGNING AND PERFORMING WORK WITHOUT A CONTRACT AGREEMENT

All property owners, individuals, partnerships or corporations which engage in the subdividing or improving of land, or in the design or construction of the Work, ultimately to be maintained, operated, occupied or owned by the City of Rifle, other than those directly contracting with the City, shall adhere to this Public Works Manual, Design and Construction of Public Improvements to which these General Conditions are a part.

No portion of the work shall be performed until the engineer has approved the drawings pertaining there to, and then only by a contractor that is licensed and bonded to the City of Rifle.

Those who are responsible for, or cause the work to be performed, and those who actually perform the work, will be considered, for purposes of these General Conditions and Standard Specifications, as having executed a contract agreement, as contractor, with the City of Rifle as owner, even though no agreement exists. As such, they shall comply with all the technical and performance provisions of these Specifications, be subject to inspection and the directives of the engineer.

PWM Section 2.42. CLOSEOUT

To close out a project or development, several items need to be taken into account by the Contractor, Engineer and by the Owner. Several of these items may have been initiated prior to or during the work.

The Contractor of the work shall notify the Engineer and the Owner in writing that he has reached "Substantial Completion" and include a list of work yet to be completed or corrected. If requested by the Engineer, closeout of areas or portions of work may be allowed by the Owner.

The Engineer, along with the Owner's representative, shall inspect the work to determine if it is substantially complete. If it is substantially complete, a "Certificate of Substantial Completion" will be issued by the Engineer along with a "Punch List" of items to be completed or corrected, to the Contractor and the Owner.

The Contractor shall complete and/or correct the items listed on the punch list, or any other item that becomes known, and again notifies the Engineer and Owner in writing that the work is ready for final inspection. At this time, the Contractor may submit his application for final payment to the Engineer.

The Engineer along with the Owner's representative will make a final inspection. If the work is found acceptable and complete to the satisfaction of the Owner, a meeting will be scheduled to finalize all other items due. Should the Contractor fail to complete and/or correct all punch list items required by the Owner, the Contractor shall pay for additional "Final Inspections" by the Engineer at the Engineer's current rates. If the Contractor has any question with regard to any items found on the punch list, he shall request clarification from the Engineer prior to final inspection.

Prior to release of final payment, a meeting (referred to in the previous paragraph) shall be held to collect from the Contractor and/or the Engineer, for the Owner, the following items:

1. Outside Inspection Certificates, as applicable,
2. Materials Certificates of Compliance,
3. Equipment and Material guarantees,
4. Contractors one-year (or longer, if required) guarantee or warranty using Owner forms,
5. Operation & Maintenance Manuals and Parts list, as applicable,
6. Receipts for Materials delivered to the Owner,
7. Miscellaneous Keys, Tools, etc.
8. Final Application for Payment,
9. Consent of Surety to Final Payment,
10. Contractor's Affidavit of Release of Liens,
11. Project Record Drawings (As-Built),

12. Quitclaim deed from developer conveying any interest it has in the public improvements to the Owner using Owner format,
13. Bill of Sale conveying all public improvements to the Owner free and clear of liens and encumbrances using Owner format,
 1. Final Payment Amount,
 2. Contractor acknowledgement of Date of Warranty, and
 3. All other documentation.

And the Owner will provide to the Engineer:

1. Public Works Director Certification that the work has been constructed in conformance with the plans and specifications.
2. A letter informing the financier to release the Letter of Credit.

Inspection certificates shall be submitted (Number 1, in the list above) from any State or Other governing body having jurisdiction, such as State electrical certification that the work is in strict conformance with applicable codes. The Contractor shall remedy any defects due to faulty materials or workmanship and pay for damage to other work resulting there from, for a period of one year (or longer, if required) in accordance with Section 2.39 herein. A written warranty based on the provisions of Section 2.39 shall be provided to the Owner, dated as agreed with the Owner, properly signed and notarized and addressed to the Owner.

All keys to doors, panels or switches, special tools required for equipment and spare parts or supplies, as applicable, shall be accounted for and turned over to the Owner.

The Owner, will initiate action to advertise in the local newspaper regarding final payment to the Contractor and determining the date for payment.

Project Record Drawings (As-Built) shall consist of one blackline copy of the completed project work with changes clearly marked and clouded and a CD-ROM. The CD-ROM disk shall include the marked up sheets in individual PDF format files and the electronic line work in the latest AutoCad drawing format. The electronic line work should be supplied such that all improvements are located on the Rifle grid i.e. UTM Z13 in metric (meter) scale. All drawings (electronic and hardcopy) should be clearly and neatly marked "RECORD DRAWING" in ½" block letters in the lower right quadrant of the sheet.

Item 14, above, shall be broken down into 1) cost of water system per individual street (including pipe, fittings, valves, services, hydrants, etc.), 2) sewer system (including pipe, services, manholes, etc.) per individual street, 3) storm drain and culvert system per individual street (including pipe, inlets, boxes, flared ends, manholes, etc.) and 4) individual street costs (including signals, signs, striping, asphalt, road base, curb, gutter sidewalk, grading, etc.).

PWM Section 2.43. RIGHTS AND REMEDIES

The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not as a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law, including but not limited to tort remedies. The Contractor agrees that the economic loss rule as set forth in the Town of Alma v. Azco Construction, Inc., 10 p.3d 1256 (Colo. 2000) shall not serve as a limitation on the Owner's right to pursue tort remedies in addition to other remedies it may have against the Contractor. Such rights and remedies shall survive the acceptance of the Work or any termination of the Contract Documents. Contractor further specifically waives all provisions of Chapter 8 of Article 20 of Title 13, Colorado Revised Statutes, regarding defects in the Work under the Contract. In the event any portion of this provision is deemed un-enforceable by a court of competent jurisdiction, the remaining portions of this provision shall survive.

Supplementary General Conditions

1.00 GENERAL

These Supplementary General Conditions amend or supplement the Standard General Conditions of the Construction Contract and other provisions of the Contract Documents as indicated below. All provisions, which are not so amended or supplemented, remain in full force and effect.

2.00 INSURANCE

The Contractor shall provide and maintain adequate Workmen's Compensation Insurance for all labor on the Work under this Contract. Protection under said policies shall extend to the Owner and Contractor. Certifications of such insurance shall be filed with the Owner prior to commencement of operations. Proof of carriage of insurance by subcontractors shall also be furnished.

2.01 Unless otherwise provided in these Supplementary General Conditions, Contractor shall purchase and maintain property insurance upon the Work at the site to the full insurable value thereof (subject to such deductible amounts as may be provided in these Supplementary General Conditions or required by Law). This insurance shall include the interests of Owner, Contractor and Subcontractor in the Work, shall insure against the perils of fire and extended coverage, shall include "all risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in these Supplementary General Conditions, and shall include damages, losses and expenses arising out of, or resulting from, insured loss or incurred in the repair or replacement of any insured property (including fees and charges of engineers, architects, attorneys and other professionals). If not covered under the "all risk" insurance, or otherwise provided in these Supplementary Conditions, Contractor shall purchase and maintain similar property insurance on portions of the Work stored on or off the site or in transit when such portions of the Work are to be included in an *Application for Payment*. Such coverage shall be provided until the issuance of a certificate of substantial completion. The policies of insurance required to be purchased and maintained by Contractor in accordance with section 2.32 of the Rifle Public Works Manual shall contain a provision that the coverage afforded will not be canceled or materially changed until at least thirty (30) days prior written notice has been given to Owner.

2.02 All equipment shall be covered under the insurance requirements of the Contractor as stated under 2.01 above.

2.03 Coverage Required (minimum):

A. General Liability

1. Limits

- | | | |
|----|-------------------|--|
| a. | Bodily Injury - | \$1,000,000 each person
\$2,000,000 each occurrence |
| b. | Property Damage - | \$1,000,000 each occurrence
\$2,000,000 aggregate |

2. Coverages

- | | |
|----------|--------------------------------------|
| <u>x</u> | Comprehensive Form |
| — | Premises-Operations Explosion |
| — | Collapse Hazard |
| — | Underground Hazard |
| <u>x</u> | Products/Completed Operations Hazard |
| <u>x</u> | Contractual Insurance |
| <u>x</u> | Broad Form Property Damage |
| <u>x</u> | Independent Contractors |
| <u>x</u> | Personal Injury |

B. Automobile Liability

1. Limits

- | | | |
|----|-------------------|---------------------------|
| a. | Bodily Injury - | \$250,000 each person |
| b. | Property Damage - | \$500,000 each occurrence |
| c. | Combined - | \$600,000 each occurrence |

2. Coverages
- | | |
|----------|--------------------|
| <u>x</u> | Comprehensive Form |
| <u>x</u> | Owned |
| <u>x</u> | Hired |
| <u>x</u> | Non-Owned |

2.05 Certificates of Insurance from the contractor and subcontractor's insurance carriers shall name both the City of Rifle and CDOT as additional insured parties. Submission of Certificates of Insurance shall be provided prior to commencing any work.

3.00 TAX EXEMPTION.

Owner's tax-exempt number, when applicable, to be used as part of this project, will be provided to the successful bidder. The successful bidder shall then apply for sales tax exemption before working on a City Project. See www.revenue.state.co.us/PDF/dr0172.pdf. Subcontractors shall be provided copies of the contractor's sales tax exemption certificate to avoid paying taxes when purchasing materials to be incorporated in the City project. Therefore, these taxes should not be included in the cost for performing the work.

4.00 FINAL PAYMENT.

Lien waivers from all prime Contractors and Subcontractors to be provided prior to issuance of final payment.

5.00 COMPLETION TIME.

Task	Predecessors	Start	End
Bidding		Mon 4/24/23	Fri 5/19/23
Bid Award		Mon 5/22/23	Wed 6/07/23
Contract Execution		Thu 6/08/23	Fri 6/23/23
Submittals and Shop Drawings		Thu 6/08/23	Fri 7/14/23
Procurement of Signal		Fri 7/14/23	Mon 11/13/23
Cutting, Demo, Trenching for conduits and boxes		Mon 7/31/23	Fri 8/11/23
Install Caissons		Mon 8/14/23	Fri 8/18/23
Demo Sidewalk		Mon 8/21/23	Fri 8/25/23
Prepare Subgrade, Form, Place, Strip		Mon 8/28/23	Fri 9/08/23
Signage		Mon 9/11/23	Fri 9/15/23
Landscape Planters		Fri 9/15/23	Fri 9/29/23
Install Signal Poles and Masts		Mon 11/13/23	Fri 11/24/23

6.00 OWNER'S REPRESENTATIVE.

Unless provided for otherwise in writing by the Owner, any on-site Inspector or Representative of the Owner shall not have the authority to render any binding decisions nor make any binding judgments to the Contractor pertaining to any work which may change the Contract price or time of completion, or to the quality of Work, or to the manner in which the Work is being performed. The Representative of the Owner shall serve as a means of communication between the Owner and the Contractor and shall monitor the Work for the Owner. Any communication given to the Representative of the Owner by the Contractor shall be considered as being given to the Owner.

7.00 SAFETY REQUIREMENTS.

Nothing in the Contract Documents shall be construed as relieving the Contractor from protecting all property and persons or from strictly adhering to all applicable local, state and federal safety requirements. Where there is a conflict between the Contract Documents and any applicable safety requirement, the safety requirement shall take precedence.

8.00 LAWS AND ORDINANCES.

The Contractor shall at all times observe and comply with all federal, state and local laws, ordinances and regulations which in any manner affect the contract or Work, and shall indemnify and save harmless the Owner and the Owner's agent against any claim arising from the violations of any such laws, ordinances and regulations, whether by the Contractor or his employees.

If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules or regulations, and without notice to the Engineer, he shall bear all costs arising there from.

9.00 WAIVER.

It is expressly understood and agreed that any waiver granted by the Engineer or Owner of any term, provision or covenant of this Contract shall not constitute a precedent nor breach of the same or any other terms, provisions or covenants of this Contract. Neither the acceptance of the Work by the Owner nor the payment of all or part of the sum due the Contractor hereunder, shall constitute a waiver by the Owner of any claim which the Owner may have against the Contractor or otherwise.

10.00 PROTECTION OF PUBLIC UTILITIES AND OTHER ADJOINING PROPERTY.

The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury, or loss to other property at the site or adjacent thereto, and he shall be liable for any and all claims for such damage on account of his failure to fully provide such protection.

The Contractor shall notify all public utility companies at least forty-eight (48) hours prior to commencement of any Work in the vicinity of the utilities. No Work shall commence until the utilities have been located and staked by the utility company or written consent to proceed has been given by the Owner. If utility service must be interrupted, the Contractor shall notify the head of local administrative services (i.e., City Manager, Mayor, and City Clerk), as applicable, and utility users affected by the interruption of service at least twenty-four (24) hours prior to interruption. Notice shall consist of publication in a local newspaper and/or announcement on local radio or television stations as determined by the Owner.

11.00 PROJECT PHOTOGRAPHS/VIDEOS

It is the Contractor's responsibility to take a sufficient number of pre-construction photographs/videos to resolve any disputes, which may arise regarding the conditions prior to and subsequent to construction. The Contractor shall provide copies of the pre-construction photographs/videos to the Owner prior to the start of work. Any potential problems should be identified at that time.

Progress and record photographs/videos shall be provided by the Contractor as appropriate to resolve any disputes and to completely document the work performed as a supplement to the Record Drawings. In general, the photographs/videos should be sufficient to show that all work was properly completed in accordance with the plans

and specifications.

12.00 DAMAGE TO CONSTRUCTION.

The Contractor shall safeguard, until all work embraced by this Contract is formally accepted, all construction, both complete and incomplete, against damage and destruction, and should damage result, he will be required to reconstruct or repair it at his expense in a manner conforming to the Plans and Specifications, reconstruction shall be in a manner suitable to the Engineer.

13.00 PRE-CONSTRUCTION CONFERENCE.

A pre-construction conference shall be held within fifteen (15) days after the *Notice To Proceed*, at the Owner's place of business. The purpose of such meeting shall be to explain as required to the Contractor, the requirements of the Contract Documents, the procedures to be used in the administration of the Contract, the requirements of any funding Agencies, and to discuss any item of concern to the Work. The Contractor, Owner and Engineer, or authorized representative of each, shall be required to attend such meeting as a condition of the Contract.

14.00 BIDDER EXPERIENCE.

Upon request, bidder to provide documentation of relevant experience with reference to a minimum of three (3) projects of similar scope and size. Statement shall include equipment and manpower available for utilization on project. Supervisory personnel for project shall be provided. Qualification information shall be submitted as stated in section 3.0 of the "Instructions to Bidders".

16.00 PERFORMANCE AND PAYMENT BONDS.

Payment and Performance Bonds are required (section 2.26 of the general conditions and Agreement Documents section of the Project Manual).

17.00 WARRANTY INSPECTION.

At the Owner's discretion, a warranty inspection will be held during the sixty (60) calendar days prior to the expiration of the two-year warranty period. Contractor agrees to provide an authorized representative at such inspection to represent Contractor's interests. All defects identified during the inspection shall be corrected at Contractor's expense at direction of Owner in a timely manner. Corrective work shall be commenced within ten (10) calendar days after written notice to Contractor.

19.00 JOB SITE RESTRICTIONS.

19.01 Salvage. All materials to be removed from the project site or demolished on site shall be disposed of by the Contractor off the project site within five days.

19.02 Staging Area. Staging may utilize right of way if the contractor provides adequate warning cones, reflectors, etc. Contractor takes sole responsibility for leaving any equipment or materials in the City right of way.

19.03. Disposal Area. Owner's property is not available for a Contractor disposal area.

19.04 Working Hours. Work will normally be permitted after 7:00 a.m. and before 7:00 p.m. Monday through Friday. Other work hours must be approved by Engineer in writing. Work may be permitted on Saturday with 48 hours prior notification given to the Owner's representative.

20.00 ARBITRATION.

Anything in the General Conditions of the Contract Documents notwithstanding the choice to submit any dispute to binding arbitration shall be solely that of the Owner and no other party to this Contract shall have the right to submit any controversy to binding arbitration.

21.00 PAYMENT RETAINAGE.

Retainage on Pay Estimates shall be five (5) percent.

22.00 REFERENCE TO OWNER.

The City of Rifle will be the Owner of this project and will be referred to as Owner in the Agreement.

23.00 NOTIFICATION TO ADJACENT PROPERTY OWNERS.

Contractor shall provide constant communication with adjacent property owners to schedule and discuss impacts the contractor's work will have on their access and utility service.

Access to property owners adjacent to the work site shall be open at all times unless other arrangements are made a minimum of twenty-four (24) hours in advance.

24.00 DRAWING ACCURACY AND EXISTING UTILITIES.

Contractor shall provide constant communication with adjacent property owners to schedule and discuss impacts the contractor's work will have on their access and utility service.

As such, information relating to locations, sizes, or elevation of existing facilities should be considered only approximate. It shall be the responsibility of the Contractor to contact the appropriate representatives of utility companies, or utility locate companies, a minimum of 48 hours prior to the commencement of Work which might affect utility installations and to secure from such representatives information as to accurate location, size and type of such installations. The Contractor shall assume all responsibility for protection, repair and relocation of all such items encountered. Should repair or replacement be required, work shall be performed according to the requirements of the respective utility company.

25.00 ABBREVIATIONS.

Whenever the following abbreviations are used in these Specifications or on the Drawings, they shall be construed the same as the respective expressions represented:

AASHO or	
AASHTO	American Association of State Highway Officials
ACI	American Concrete Institute
AISC	American Institute of Steel Construction
ANSI	American National Standards Institute, Inc.
AWWA	American Water Works Association
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health & Environment
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standard, U.S. Department of Commerce
FED. SPEC.	Federal Specifications
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
OSHA	Occupations Safety and Health Act (Federal and/or State)
SSPC	Steel Structures Painting Council
UBC	Uniform Building Code
UL	Underwriters Laboratories, Inc.

25.01 Standard Specifications Reference. Where reference is made in these Specifications to other Standard Specifications, it is the intent that the latest available revisions of the CDOT Standard Specifications referenced be used. All portions of the CDOT Standard Specifications referenced shall be considered a part of these Specifications unless specifically superseded herein.

In case of conflict between the drawings and specifications, the specifications shall govern. Figured dimensions on drawings shall govern over scale dimensions, detailed drawings shall govern over General Drawings and Special Conditions shall govern over Standard Specifications.

Any discrepancies between the drawings and specifications and site conditions; or any inconsistencies, errors, omissions or ambiguities in the drawings or specifications; or any errors or omissions in the layout as given by survey points and instructions shall be immediately reported to the engineer, in writing, who shall promptly verify and correct such inconsistencies or ambiguities in writing. Work performed by the contractor after such discovery, until authorized or corrected by the engineer, shall be done at the contractor's risk.

26.00 PERMITS AND EASEMENTS.

The Contractor shall be responsible for securing any and all access rights he may require for construction convenience with private individuals and landowners. The Contractor shall provide the Engineer evidence of agreements for such access rights. All other permits required should be secured prior to commencement of Work at the Contractor's own expense.

The successful Contractor will be required to obtain a City of Rifle Contractor's license for construction operation. Proof of insurance shall be required.

27.00 SUBSTITUTION OF MATERIALS.

At no time shall materials be substituted for those shown on the Drawings or called for in the Specifications unless written approval is obtained from the Engineer in writing prior to construction. Any deviation from the Drawings and Specifications shall be accompanied by a written directive of the Engineer or his representatives. (See Article 6, General Conditions).

28.00 CONTROLLED AREA OF WORK.

The Contractor shall confine all the construction work and all related activities to the public roadways, utility easements, or construction areas designated by the Engineer. Access and egress to the work area shall be minimized to specific points.

29.00 INTERPRETATION OF ESTIMATED QUANTITIES.

Bidders are cautioned that the estimated quantities in the Bid Schedule are approximate only and are prepared for the comparison of bids. The basis of payment will be actual quantities of work performed and accepted or as stated in the Measurement and Payment section of each specification section. Prior to mobilization the contractor shall present their verification of quantities and final work plan for all aspects of work.

30.00 TEMPORARY FACILITIES.

The Contractor, at his expense, shall provide all necessary temporary facilities for his own convenience or to meet local, state, or federal requirements, including, but not limited to, potable water, sanitary waste facilities, power, telephone, etc. (See Article 6, General Conditions).

31.00 CLEAN-UP.

The Contractor will be responsible for immediately cleaning the job site during and after construction. A continuing effort shall be made through the duration of the contract to keep all areas clean and free of all rubbish, removed vegetation, construction waste, employee waste, debris and other objectionable materials generated from the project. All materials as part of this work shall be disposed off site in an acceptable manner. Final clean-up must be approved and accepted by the Owner before the contract may be considered complete.

32.00 MEASUREMENTS AND PAYMENT.

Payment for work done shall be as defined in *Bid Schedule*. Payment shall be complete compensation for the work unit completed and shall consist of furnishing and installing all materials, plant, equipment, labor and other items related to the work unless otherwise specified. All incidentals not specifically mentioned, but required to complete the Work, shall be paid for as part of the Work unit they are related to. All bid items shall be measured and paid in accordance with the appropriate section of the Colorado Department of Transportation Standard Specifications for Road and Bridge Construction unless revised by the Standard or Project Special Provisions.

33.00 SUBMITTALS.

The Contractor shall submit submittal data, as defined in the General Requirements. Submittals shall be required on all items of the submittal schedule contained in the Technical Specifications.

34.00 COMMUNICATION.

Project will demand the need for communication with properties impacted by work performed. The Contractor shall notify, twenty-four (24) hours in advance of work, all property owners that may be affected by his work. This notification shall include times and duration of access or traffic interruptions. Anticipated interruptions shall be discussed with the City representatives daily.

The purpose of public notification is to reasonably inform the public of the work and to allow the public to schedule activities that may be impacted by the work. Owner, through its Representative, may stop work not consistent with

the schedules prepared by the Contractor, which in the opinion of the Owner causes unreasonable hardship to the public.

Contractor shall designate an Information Coordinator who shall be on site during all work hours and shall be responsible for:

1. Preparing a weekly work schedule that includes planned type of work and areas of affected by work. Once schedule is confirmed, the City shall prepare door hangars for the Contractor to distribute the week prior.
2. Communication with adjacent properties of any change to traffic control that may affect their access via written notice for residents. The Contractor is responsible for any follow-up communications with residents after the initial door hangars are provided.
3. Communication with the media or by other means as appropriate, planned/scheduled changes in traffic control and other items that will affect the public traveling through the site. Also communicate with emergency services as to location of work and impacts.
4. Coordinate performed work to be consistent with weekly work schedule.

End of Section

Technical Specifications

These Technical Specifications supplement the specifications provided in the City Of Rifle Public Works Manual. All provisions, which are not so amended or supplemented, remain in full force and effect.

Submittal Schedule

Submittals on the items below must be accepted by the City Of Rifle prior to commencement of work.

- _____ Project Schedule
- _____ Traffic Control Plans
- _____ Concrete Mix Design
- _____ Concrete Curing Agents/Admixtures Product Data
- _____ Asphalt Mix Design
- _____ ADA Landing Mats Product Data
- _____ Storm Drain Materials
- _____ Trench Drain Product Data
- _____ Waterline Product Data
- _____ Striping Product Data
- _____ Thermoplastic Product Data
- _____ Signage Product Data
- _____ Traffic Signal Product Data
- _____ Lighting & Electrical Data
- _____ Landscaping Product Data
- _____ Irrigation Product Data
- _____ Structural Product Data

Project Schedule

I General

Submittal Requirements

Within 10 days after the Effective Date of the Contract the Contractor shall submit to Engineer a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract

II Products

A project schedule generated in updateable construction software including biweekly updates as necessary to show any deviations.

Traffic Control

I General

Submittal Requirements

The Contractor shall prepare a Transportation Management Plan for each portion of the project.

The Contractor shall manage the work zone impacts of the Project in accordance with the Transportation Management Plan (TMP). The TMP shall consist of the Traffic Control Plan (TCP), and Public Information (PI) requirements. The TCP addresses traffic safety and control through the work zone and the PI component requirements shall address communication with the public and concerned stakeholders. The initial TMP shall be submitted at the Pre-construction Conference. The Contractor's superintendent shall implement the TMP.

(a) Traffic Control Plan. The Contractor shall control traffic in accordance with the Traffic Control Plan (TCP), as shown in the Contract. To implement the TCP, the Contractor shall develop and submit a Method for Handling Traffic (MHT) for each different phase of construction which shows the Contractor's proposed construction phasing and proposed traffic control devices consistent with the TCP. If at any time the Contractor desires to change the MHT, it shall be considered a different phase requiring a new MHT.

Any major revisions to the TCP as determined by the Engineer must be authorized by a contract modification order.

Each proposed MHT shall be approved in writing by the Engineer before the corresponding phase of construction will be allowed to begin. The initial MHT shall be submitted at the Pre-construction Conference.

The proposed MHT shall include as a minimum the following:

(1) A detailed diagram which shows the location of all traffic control devices, including advance construction signs and speed limit signs; method, length and time duration for lane closures; and location of flaggers and time duration of the flagging operation. Lane closures shall be kept to a minimum in both length and duration, and cause a minimum of interference to the traveling public, consistent with the work being performed.

(2) A tabulation of all traffic control devices shown in the detailed diagram including, but not limited to: construction signs; vertical panels; vertical panels with light; Type 1 and Type 2 barricades; Type 3 barricades; cones, drum channelizing devices; concrete barrier (temporary); advance warning flashing or sequencing arrow panels. Traffic control devices may be used for more than one operation or phase. However, all devices required for any particular phase must be detailed and tabulated for each phase.

Traffic cone spacing shall be determined as required by the standard plans calculations based on current speed limits. Cone spacing shall not exceed 120 feet. Cones shall be placed a distance of 2 miles on the centerline. The distance and spacing may be adjusted, depending on traffic conditions and terrain, as determined by the Engineer.

(3) A plan for maintaining and controlling pedestrian, bicycle, and other non-vehicular traffic.

(4) A plan for emergency vehicle access.

II Products

Traffic Control Devices shall conform with Section 630 of the CDOT 2019 Standard Specifications

III Execution

The Contractor shall designate an individual, other than the superintendent, to be the Traffic Control Supervisor. The Traffic Control Supervisor shall be certified as a worksite traffic supervisor by either the American Traffic Safety Services Association (ATSSA) or the Colorado Contractors Association (CCA), and shall have a current Department flaggers certificate. A copy of the Traffic Control Supervisor's certifications shall be provided to the Engineer at the Pre-construction Conference. The Contractor's Superintendent and all others serving in a similar supervisory capacity shall have completed a CDOT-approved two-day Traffic Control Supervisor training as offered by the CCA. The one-day ATSSA Traffic Control Technician (TCT) training along with the two-day ATSSA Traffic Control Supervisor training will serve as an alternate. If the alternate is chosen, the Contractor shall provide written evidence that at least an 80

percent score was achieved in both of the two training classes. The certifications of completion or certifications of achievement for all appropriate staff shall be submitted to the Engineer at the Preconstruction Conference.

The Traffic Control Supervisor's duties shall include:

- (1) Preparing, revising, and implementing each required Method of Handling Traffic in accordance with the Traffic Control Plan.
- (2) Directly supervising project flaggers.
- (3) Coordinating all traffic control operations, including those of subcontractors and suppliers.
- (4) Coordinating project activities with appropriate police and fire control agencies.
- (6) Inspecting traffic control devices on every calendar day that traffic control devices are in use, masked, or turned away from traffic. These inspections shall include at least one night inspection per week. The TCS or another representative who is certified as a worksite traffic supervisor shall perform these inspections.
- (7) Insuring that traffic control devices are functioning as required.
- (8) Overseeing all requirements covered by the Contract which contribute to the convenience, safety and orderly movement of traffic. Have an up-to-date copy of the MUTCD and applicable standards and specifications available at all times on the project.
- (9) Attending all project scheduling meetings.
- (10) Supervising the cleaning and maintenance of all traffic control devices.

A certified worksite traffic supervisor shall be responsible for Traffic Control Management (TCM) on a 24-hour-per-day basis. The TCS shall be on the work site at all times when Traffic Control Management (TCM) is performed and shall be on call at all times.

Concrete

I General

- PWM 0.0.1. Submittals- Deliver to City all the materials, mix designs and other materials contractor proposed to use on the project which require testing, with request for acceptance.
- PWM 0.0.2. Storage Facilities - Provide and maintain adequate facilities on the site for safe storage and proper curing of concrete test cylinder for the first 24 hours, as required by ASTM C-31.
- PWM 0.0.3. Defective Concrete - If concrete is found defective from testing, placing, curing or for other causes, and if the contractor is so directed, he must remove the concrete at no cost to the City.

II Products

Materials that are to be incorporated in the structure shall conform to the minimum standards hereinafter referred to, unless otherwise approved.

PWM 0.0.1. Cement

- A. Portland Cement, conforming to the requirements of ASTM C-150 Type I or II.
- B. Chemcomp, expansive shrinkage compensating cement, as manufactured by Texas Industries, Inc., or equal product licensed by and conforming to the requirements of the Chemical Prestressed Concrete Corp. (CPCC).

PWM0.0.2. Admixtures

- A. Air Entraining Agent conforming to the requirements of ASTM C-260, Protex R03300-3, or approved equal.
- B. Water Reducing Agent conforming to the requirements of ASTM C-494, Master Builders Pozzoloth, or approved equal. No accelerators or admixtures containing chlorides will be permitted.
- C. Retarding Agent conforming to the requirements of ASTM C-494, Type B, Master Builders MB-HC, or approved equal. If Type D is used, adjust mixture of water reducing agent.

Lignin type retarders will not be permitted.

- D. Fibrous Concrete Reinforcement: 1.5 lbs/cy of 100% virgin polypropylene fibrillated fibers, as manufactured by Fibermesh Co.,

Chattanooga, Tennessee, or approved equal, shall be plant batched into the mix when called for in the special conditions.

PWM0.0.3. Water - Potable, nonalkaline water devoid of salts and other injurious elements for concrete mixing shall be used.

PWM0.0.4. Aggregates

A. General: All fine and course aggregates shall conform to the following specifications:

Concrete Aggregates	ASTM C-33
Unit Weight of Aggregates	ASTM C-29
Organic Impurities Colormetric	ASTM C-40
Soundness of Aggregate by Sodium Sulfate	ASTM C-88
Sieve Analysis	ASTM C-29

B. Gradation: Fine and course aggregates are regarded as separate ingredients and each shall be well graded between the limits as shown in the following chart:

**Percentage Passing Designated Sieves
and Nominal Size Designation**

<u>Sieve Size</u>	<u>COURSE</u>			<u>FINE</u>
	#467	#57 <u>1 1/2" to #4</u>	#67 <u>1" to #4</u>	AASHO-M6 <u>3/4" to #4</u>
<u>#4 to #100</u>				
2"	100			
1 1/2"	95-100	100		
1"		95-100	100	
3/4"	35- 70		90-100	
1/2"		25- 60		
3/8"	10- 30		20- 55	100
# 4	0- 5	0- 10	0- 10	95-100
# 16		0- 5	0- 5	45- 80
# 50				10- 30
#100				2- 10

PWM0.0.5. Reinforcing Steel

- A. Bar steel shall be round bars conforming to ASTM A-615, Grade 60, except #5 or smaller bars may be Grade 40 or 60 as shown on drawings, and deformed in accordance with the requirements of ASTM A-305.
- B. Welded Wire Fabric shall be electrically welded wire fabric, cold-drawn wire, conforming to ASTM A-185.
- C. Epoxy-coated reinforcing bars and/or welded wire fabric shall be epoxy coated by electrostatic spray methods meeting the requirements of AASHTO M-284. The coating material shall be a light colored powdered epoxy resin which will highlight rusting of untreated bar area.
- D. Dowels for Slabs on Grade at joints where indicated shall be hot rolled merchant bars conforming to ASTM A-151, C-1020.
- E. Miscellaneous Reinforcement not covered above must conform with the requirements of ACI-315 and ACI-318.

PWM0.0.6. Joint Materials

- A. Non-extruding and resilient non-bituminous type conforming to ASTM D-1752 or resin-impregnated fiberboard having the Physical requirements of ASTM D-1752, in widths shown or 3/8" where not shown, shall be used where joint sealers are indicated. Materials shall be Darasel-U fiberboard filler as manufactured by W.R. Grace & Co. or equal. Filler material containing asphalt or tar will not be allowed.
- B. Non-extruding and resilient bituminous type conforming to ASTM D-1751 shall be used for concrete paving and structural construction where joint sealers are not called for.
- C. Portland cement concrete pavement joints shall be sealed in accordance with the Colorado Department of Transportation (CDOT) Specifications.

PWM0.0.7. Curing Compounds - Curing compounds where allowed shall conform to ASTM C-309.

PWM0.1. PROPORTIONING INGREDIENTS

Concrete ingredients shall be proportioned so as to provide concrete which is workable and homogeneous, yet when hardened it will provide the required strength, durability, resistance to deterioration, abrasion, watertightness, appearance and other specified properties.

Concrete shall be CDOT class D with design strength of 4500 psi

- 0.1.8. Construction - Application for the various combination of aggregate size, in combination with allowable air content and slump range, for the different classes of concrete are as shown below.

Nominal Max. Size Coarse Ag.	Air Content Range	Vib. Slump Range	Min. Cement Content	Concrete	Typical Application
In.	% by. Vol.	In.	lb/CY	Class	
3/4" on Grade	5-8	3-7	615-660	CDOT Class D	Reinforced Slab

0.1.9. Mix Designs

- A. Designs employing the same ingredients proposed for use and used successfully on a previous project under similar conditions to those anticipated on this project may be used, Provided the contractor requests and obtains City approval on the following, all of which must be certified to by the supplier:
1. Concrete mix designs conforming to these specifications.
 2. ID sets of 7 and 28 day concrete strength tests made during the last 6 months on concrete conforming to the design in (1) above.
 3. Curve showing relationship of 7 and 28 day strengths in (2) above.
 4. Reports of compliance tests of fine and course aggregates made during the last six (6) months.

OR

- B. The contractor shall employ, at his expense an acceptable independent laboratory to design, proportion and select ingredients from the supplier's sources that will produce a concrete mix conforming to the requirements of these specifications, while providing proper place-ability, durability, strength and other required physical properties for the proposed application

IV Execution

PWM0.2. FORM WORK

Provide all forms, shores, cores, molds and similar items in sufficient quantity and quality to properly execute the work.

Lumber or plywood contact surfaces must be free from knots, warps, breaks, or other defects likely to cause irregular surfaces. Metal forms must be free from irregularities, dents and sags and suitable for concrete exposed to view in finished areas.

Do not reuse forms if there is any evidence of surface wear or tear which would impair the quality of the finish. Thoroughly clean and relubricate forms for reuse.

PWM0.2.1. Tolerances - Construct forms so as to insure that concrete surfaces will conform to tolerances of Section 203.1 ACI 347.

PWM 0.2.2. Preparation of Form Surfaces - Make forms sufficiently tight to prevent leakage of grout or cement paste. Seal wood surfaces against absorption of moisture from the concrete with an acceptable oil, sealer, or factory applied nonabsorptive liner.

Coat forms to prevent bond with concrete prior to placing of the reinforcing steel. Do not allow coating material to stand in puddles in forms nor to come in contact with concrete against which fresh concrete will be placed.

PWM 0.2.3. Removal of Forms

- A. Form work that supports weight of concrete must remain in place until concrete has reached its specified 28 day strength, unless otherwise specified or permitted.
- B. Form work not supporting weight of concrete may be removed as soon as the concrete has hardened sufficiently to resist damage from removal operations.
- C. Whenever the form work is removed during the curing period, the exposed concrete shall be immediately cured by one of the methods herein specified.

PWM 0.2.4. Reinforcement Placement - Support and wire together all reinforcing bars to prevent displacement from external loading prior to and during concrete placement. On ground where necessary supporting concrete blocks may be used,

otherwise use concrete, metal, plastic or other satisfactory bar chairs and spacers. Templets will be required for all column dowels.

Epoxy coated reinforcing bars and welded wire fabric shall be tied with epoxy coated tie wire that will not damage or cut the coating. Bars shall be placed on plastic supports or steel supports fully coated with plastic or epoxy. Care shall be taken to prevent coated bars from coming into contact with other steel items. The contractor shall repair all damaged coating prior to concrete placement.

Provide adequate support for welded wire fabric during placing of concrete to insure proper position of the fabric in the slab.

At time of concrete placement all steel is to be free from loose, flaky rust, mud, oil or other coatings that may destroy or reduce bond.

Unless otherwise noted on the drawings, the steel shall be protected by concrete, after placement as follows:

- A. 3/4" for interior slabs.
- B. 1" for interior walls and formed exterior slabs.
- C. 1 1/2" for beams, columns and concrete exposed to the weather or in contact with the ground.
- D. 3" for concrete deposited against the ground.

Smooth dowels to join existing concrete to new concrete shall be epoxied into drilled holes and extend into the old concrete a distance of 24 diameters.

PWM 15.3.2. Curb, Gutters, Sidewalks and Crosspans

Where curbs and gutters are adjacent to and constructed in conjunction with sidewalks, the concrete shall be placed simultaneously on a compacted subgrade. Monolithic concrete so placed, as in all slabs on grade, shall be divided into ten (10) foot sections by dummy joints formed with a jointing tool. Dummy joints shall extend into the concrete for a depth of not less than 1/4 of the slab concrete depth and shall be approximately 1/8" in width.

Premolded expansion joint filler 1/4" to 1/2" in thickness that extends for the full depth of the concrete shall be installed between all, concrete sidewalks, driveways, and any fixed structures or appurtenances such as manholes, utility poles, etc.

Back of curbs and edges of sidewalks shall be backfilled and shaped to drain after the forms have been removed. Areas between Property lines and back of sidewalk or curbs shall be shaped and uniformly graded in accordance to Landscaping Specifications

PWM 0.2.1. Construction Joints - Continue all reinforcing steel and welded wire fabric across joints, unless otherwise indicated. Provide keys and inclined dowels as shown or as directed. Provide longitudinal keys at least 1 1/2" deep in all joints in walls and between walls and slabs.

Thoroughly clean surfaces and remove all laitance on the surface of joints before next placement.

When required or directed, obtain bond between hardened concrete and new concrete by:

- A. Use of an epoxy bond in accordance with the applicable provision of ACI Journal, Proceedings V59 #9, September, 1962, pp. 1121-1142.
- B. Use of an acceptable chemical retarder.
- C. By roughening surface of old concrete in an acceptable manner such as sandblasting.
- D. Provide a continuous water stop as specified.

PWM 0.2.2. Expansion Joints - Install filler in expansion joints 3/4" thick by 1/2" less than slab thickness. For floors place a 3/4" x 1/2" tapered wood strip over the joint filler, flush with the top of the slab and finish the edges with an edging tool. After the concrete has hardened remove the wood strip and seal the joint flush with the surface.

PWM 0.2.3. Control Joints - Joints shall be formed by use of acceptable sheet metal forms, or by insertion of hard-pressed fiberboard strips into the plastic concrete, or by sawing with carborundum or diamond-tipped blade after concrete has set. Joints shall be 1/4" wide and approximately 1/4 of the slab thickness in depth, unless otherwise indicated or directed.

When concrete is dry, clean out sawed or fiberboard joints and fill to wearing surface with joint sealer.

PWM 0.3. CONCRETE MIXING

Concrete shall be mixed and transported to the job site in accordance with the requirements of ASTM C-94.

Delivery tickets for each batch delivered shall show the date, mix by number or sack content with maximum size aggregate, admixtures and amounts used per cubic yard, air content, slump and time of loading.

PWM 0.3.1. Agitating, Mix and Discharge - Concrete shall be continuously agitated from the time water is added and then mixed for 2 1/2 minutes just prior to discharge. The mix shall be discharged from the truck within one (1) hour after cement is batched, unless longer time is specifically authorized.

PWM 0.3.2. Water - Indiscriminate addition of water to increase slump is prohibited.

PWM 0.3.3. Admixtures

- A. Liquid admixtures shall be charged into the mixer by means of an approved metering device.
- B. Powder admixtures shall be weighed or measured by volume in accordance with manufacturer's recommendation.
- C. When two or more admixtures are to be incorporated in the mix, they shall be added separately during batching sequence.

PWM 0.3.4. Retempering - Mix concrete only in quantities for immediate use. Concrete which has been in the mixer 80 minutes or longer shall be discarded. Retempering of concrete will not be allowed. Concrete arriving at the project with slump below that suitable for placing may have water added only if neither:

- A. The maximum permissible water-cement ratio has not been exceeded.
- B. Maximum slump has not been exceeded.

Any addition of water above that permitted by limitation on water-cement ratio must be accompanied by a quantity of cement sufficient to maintain proper cement ratio and a mixing time of 1 1/2 minutes. No such additions will be permitted unless specifically authorized in writing by a city representative.

PWM 0.3.1. Batch Temperature - As mixed temperature of concrete shall be maintained above 55 degrees F and below 80 degrees F, even though the mean temperature falls below 40 degrees F.

PWM 0.3.2. Protection - Provide adequate protection against rain, sleet, snow, cold and other weather conditions.

Protect exposed surfaces from rain water and from 40 degrees F and below temperatures with suitable covering, and equipment to maintain a minimum temperature of 50 degrees F for a period of 72 hours after the concrete has been placed.

PWM 0.3.1. Preparation of Surfaces - Preparation for placing shall include, but is not limited to, form construction, setting of reinforcing steel and embedded items, securing and alignment of forms, cleaning thoroughly all surfaces that will be in contact with concrete and keeping them free of debris, ice, rust, scale, grease or other coatings during placement of the concrete.

PWM 0.3.2. Equipment and Labor - Assemble and provide sufficient labor and equipment for proper mixing, transporting, placement and protection of concrete until accepted by the City.

PWM 0.3.3. Conveying - Truck mixers, agitators, and non-agitating units, including their manner of operation, must conform to the applicable requirements of ASTM C-94. Aluminum tubing or pipe for conveying concrete will not be allowed.

Concrete shall be conveyed to place of final deposit by methods which will prevent segregation or loss of ingredients and insure the required quality of the concrete is obtained. A hopper or tremie will be required at the end of metal chutes having a slope greater than 1:2 or less than 1:3 vertical to horizontal; or chutes in excess of 20 feet in length.

Use of horizontal belt conveyors discharging into a hopper and pumping or pneumatic conveying equipment such that the loss in slump does not exceed 1 1/2" shall be subject to approval.

PWM 0.3.4. Depositing - Deposit concrete continuously, or in layers of such thickness that no concrete is deposited on concrete which is hardened sufficiently to cause formation of seams or planes of weakness within the section. Deposit concrete as nearly as practicable in its final position to avoid segregation due to rehandling or flowing.

Depositing of concrete in general shall conform with the applicable detailed recommendation of ACI 304.

PWM 0.3.5. Consolidation - Perform consolidation in conformance with applicable detailed recommendation of ACI 309.

Consolidate all concrete by internal and external vibrators, spading, rodding or forking so that concrete is thoroughly worked around reinforcement, embedded items and into form corners, eliminating all air or stone pockets which may cause honeycombing, pitting or planes of weakness. Thoroughly consolidate concrete in slabs and floors with vibrating bridge screeds, roller pipe screeds or other acceptable means. Only mechanical vibrators having a minimum frequency 7000 RPM and operated by competent workmen shall be employed.

Over vibration and transporting concrete within the form by vibration will not be allowed.

PWM 0.4. FINISHING

PWM0.4.6. Broom - Sidewalk slabs and other slabs so specified shall have a coarse traverse sawed texture obtained by drawing a broom across the surface immediately after floating. Broom direction shall be perpendicular to travel direction.

PWM 0.5. CURING

Freshly deposited concrete shall be protected from premature drying and excessively hot or cold temperatures and maintained with minimal moisture loss at a relatively constant temperature for the time required for hydration of cement and proper hardening of the concrete.

PWM 0.5.1. Initial Curing - Immediately following finishing the contractor shall provide methods to keep the concrete continuously moist at least overnight unless otherwise specified by:

A0 Ponding or continuous sprinkling

B0 Absorptive mat or fabric kept continuously wet

C0 Sand or other covering kept continuously wet

D0 Steam vapor mist bath at a temperature not to exceed 150 degrees F.

E0 Curing compounds conforming to ASTM C-309 applied according to manufacturer's recommendations, providing the surface to be cured is not to be bonded to other cementitious materials.

PWM 0.5.2. Duration of Curing - Continue curing until the cumulative number of days, or fraction thereof, not necessarily consecutive, during which the air temperature in contact with the concrete is above 50 degrees F has totaled seven (7) days.

PWM 0.5.3. Cold Weather Curing - Curing shall conform to all applicable detail recommendations in ACI-306. Temperature of concrete shall be maintained between 50 degrees-70 degrees F for the required curing period when the mean daily atmospheric temperature is less than 40 degrees F. Sufficient equipment and materials required to comply with this specification shall be at the site prior to placing concrete.

PWM 0.5.4. Hot Weather Curing - Curing shall conform to all applicable detail recommendations, in ACI-305. As quickly as concrete hardening and finishing will allow, the contractor shall install such protective measures, such as, but not limited to,

windbreaks, shading, fog spraying, sprinkling, ponding or wet covering as may be required.

PWM 0.5.5. Protection from Damage - Especially during the curing period and until the work is accepted, the contractor shall protect the concrete from damage by vehicular or mechanical equipment, foreign materials and by rain or by running water.

PWM 0.6. TESTING

Technical services performing routine preliminary testing of materials of proposed mix designs and resulting concrete for compliance with the specifications will be provided by the City, at no expense to the contractor.

PWM 0.6.1. Tests for Changes and Non-Compliance - Testing required because of changes in materials or proportions of the mix requested by the contractor, as well as any extra testing of concrete, field cured cylinder, or materials occasioned by failure to meet specification requirements, shall be at the contractor's expense.

PWM 0.6.2. Testing Provided by the City

A0 Test contractor's proposed material for compliance.

B0 Review and check test contractor's proposed mix design.

C0 Prepare and cure complete set of concrete cylinders, test and report results of 7 and 28 day compressive strength, in accordance with ASTM C-39, for each placement up to 50 cubic yards.

D0 Determine slump range of concrete as delivered in accordance with ASTM C-143.

E0 Determine air content of standard weight concrete with either ASTM method.

F0 Check batching and mixing operations.

Asphalt

I General

The job mix formula developed by the Colorado Department of Transportation on the aggregates to be incorporated in the asphaltic concrete surface must be submitted to the City of Rifle Public Works Director for approval prior to commencing the work.

Hot plant mix surfacing material using aggregates from sources that have not been tested by the CDOT, for the purpose of developing a job mix formula, within nine (9) months prior to the date of intended delivery will be rejected.

The job mix formula with allowable tolerances shall be within the master range specified in the material section of these specifications.

II Products

Asphalt shall be HMA SX75 PG64-22

III Execution

15.3.4. Aggregate Base Course

Base course shall be placed and compacted in four (4) inch to six (6) inch layers on a prepared subgrade surface in conformity with the lines, grades and typical cross sections shown on the plans.

Each layer shall be densified to ninety-five (95) percent of the Modified Proctor when tested in accordance with AASHTO T-180. Water shall be uniformly applied during compaction so as to achieve proper consolidation.

The prepared surface, ready to receive the surface course shall be uniformly graded to design elevation so when tested with a ten (10) foot straight edge the variation above or below the testing edge, between any two (2) contact points with the surface, shall not exceed 1/2" for Class 1 or 1/4" for Class 5 or Class 6 base course. Areas that do not conform with these tolerances shall be reworked.

15.3.9. Flexible Pavement

Along the lip lines of gutters and crosspans sufficient bituminous material shall be deposited so that, after compacting, the wearing surface will remain not less than 1/8" nor more than 1/4" above the concrete. For median curb wearing surface will be from 1/4" to 1/2" below concrete.

Longitudinal joints in the wearing surface layer shall be hand luted and provide a uniform transition, after compacting, between passes with the paving machine. They shall also be positioned such that they will overlay any sublayer longitudinal joint by six (6) inches. Longitudinal joints in the wearing surface shall generally be located as follows:

- A. For two lane roadways - at the center line of the pavement and at the outside edge of the traveled lanes.
- B. For roadways of more than two lanes - at the lane lines and at the outside edge of the travel lanes.

The bituminous mixtures shall be placed within the air temperatures limitation designated herein below and only when the weather conditions otherwise permit the pavement to be properly placed and finished. Asphalt shall be placed at a minimum air and surface temperature of 50°F.

Asphaltic concrete shall be handled and placed on the prepared subgrade in such a manner as to minimize segregation. All segregated areas behind the pavers shall be removed immediately upon discovery and replaced at contractor's expense, with specification material before the initial rolling. If more than fifty (50) square feet of segregated material is ordered removed and replaced in any 500 linear feet of paver width laydown, paving operations shall be discontinued until the source of the segregation has been found and corrected.

After the asphaltic concrete has been spread, struck off and surface irregularities adjusted, it shall be thoroughly and uniformly compacted by rolling. Rolling of the surface shall begin as soon after spreading as rolling will not cause undue displacement cracking or shoving of the mixture. Rolling shall start at the sides and proceed longitudinally parallel with the street centerline, each trip overlapping one-half (1/2) of the roller width, gradually progressing to the crown of the street. Rolling shall be continued until all roller marks are eliminated and a minimum density of ninety-five (95) percent of a laboratory specimen made in the proportions of the job mix formula has been obtained.

On lifts of asphaltic concrete three (3) inches or more in thickness breakdown rolling shall immediately follow the spreading sequence using rubber tired rollers, free of recapped tires, followed by steel wheel rolling. Field density determinations will be made in accordance with Colorado Procedure #44 and #81.

Variation between any two (2) contacts with the surface shall not exceed 3/16" in ten (10) feet. All lumps or depressions exceeding the specified tolerance shall be corrected by removing defective work and replacing it with new material as directed.

- 15.3.15. Cold Milling, Asphalt Surfaces - All valve boxes, manhole rings and covers within the area to be cold milled shall be lowered sufficiently to clear the milling operation, and then raised to within 1/4 inch of the resurfaced finished grade. Electric and phone vaults shall not be lowered, but shall be protected from damage during the performance of the work. Cold milling shall be performed using mechanical equipment capable of uniformly routing materials while providing a uniform milled level or tapered surface, varying between 6 1/2 to 8 feet wide and zero to 2 1/2 inches in depth, per pass. Milled edges shall be vertical and true with the alignment of each pass of the equipment. Electric and phone manholes and vaults are to be left with gradual asphalt tapered approaches in alignment with traffic flow, when resurfacing will not immediately follow the milling operation. Such approaches left to facilitate traffic adjacent to vaults, crosspans, utility manholes, structures, etc., shall be milled out or removed by other acceptable means, immediately proceeding the resurfacing operation. Leaving of abrupt vertical edges that will impede traffic will not be allowed. Where milling is required along and parallel with concrete gutters the router shall be set to provide a uniform tapered slope. The slope shall vary from two (2) inches below the gutter lip line to daylight with the existing asphalt surface, 6 1/2 to 8 feet from and perpendicular to the gutter flow line. Material recovered during the milling operation shall be disposed of by the contractor at his expense, unless otherwise directed.

Unless otherwise approved, milling and resurfacing shall be performed simultaneously such that both operations are completed during the same day.

Landscape Materials

I General

Submittals- Deliver to City all product data, and samples

II Products

Gravel-3/4" Washed Gravel

Cobble-3"-6" River Rock

Mulch chips shall consist of wood products having a size of two and one-half inch (2-1/2") minus with a thickness not greater than three-eighths inch (3/8"). Wood chips shall be uniform in overall appearance, color, quality, and size and are subject to approval by the Engineer. Wood chips are to be free of sawdust, dirt, twigs, excessive bark, or any other debris.

Weed Barrier, a layer of approved filter fabric (Myrify, Typar, Trevira) will be used in gravel, cobble and mulch beds

Grass Materials - All bluegrass seed shall be eighty percent "Baron" bluegrass and 20 percent "Pennfine" rye grass unless otherwise indicated in the plans, drawings or specifications. Other blends will not be allowed unless specifically called for in the special conditions.

- A. Seed - Seed shall be furnished in containers that are labeled in conformance with applicable state and federal regulations and showing at least the name and address of supplier, seed name, lot number, net weight, percent of seed content, guaranteed percent of purity, and percent of germination. All seed furnished shall be free from noxious weed seeds. Containers whose contents become wet, moldy, or otherwise damaged will not be acceptable. All seed labels will be received by the project manager prior to acceptance of the seeding. Final or finish grade will be accepted by the project manager prior to seeding.

Mulch For Seeded Grasses - Dyed wood cellulose fiber that is free of any substance which will inhibit germination or grass growth, will evenly disperse and suspend when agitated in water, will absorb water while allowing infiltration and when air dry will contain less than ten percent moisture especially at the time of delivery.

Cellulose fiber shall be supplied in packages, having a gross weight of 100 pounds or less and marked to show the air dry weight content.

- B. E. Topsoil - Loose, friable loam that is free from admixtures of subsoil, refuse, stumps, rocks, roots, brush, weeds, or other material which would be detrimental to the proper development of vegetative growth.

III Execution

45.3.2. Pruning - All pruning will conform to currently approved horticultural practices. Pruning evergreens shall be limited to the removal of damaged or dead foliage. Other plants shall have all damaged or dead roots or branches pruned to slightly above the nearest healthy side bud, at an angle not to exceed 45 degrees from the remaining portion. Leaders shall not be pruned. Other pruning, as required by project manager, may be required.

45.4.1. Season for Planting Grass Seed - Seeding seasons in any calendar year shall be limited to those periods of time favoring a healthy growth of grass by accepted horticultural practices.

Unless otherwise approved by the project manager, seeding shall be accomplished within the following time periods:

Grass Area Early Season Late Season

Sprinkler Irrigated March 1 to April 15 September 1 to October 1

Non-Irrigated March 1 to April 15 -----

Seeding shall not be performed during windy weather or when the ground is frozen or otherwise untillable. Seeding portions of the designated areas may be permitted before construction is complete in order to take advantage of the growing season, with prior approval of the project manager.

45.4.2. Bed Preparation for Seeding or Sod Placement - Commercial fertilizer (18-46-0 NPK) at the rate of 300 pounds per acre shall be applied and then be spread and tilled into the top two inches of the soil. The ground surface shall be graded and worked by hand, if necessary to within one-half inch of finish grade to prepare for seeding or sod placement. Areas to be seeded or sodded which are contiguous with curbs, sidewalks, or other architectural structures shall be sloped and graded to a level one inch lower than the structural surface grade, on the uphill side of the paved surface. On the downhill side of the structured surface, the finish grade, after seeding or sodding, will be flush with the top of the paved surface.

All areas that have set for any period of time after fertilizing, which become firm or leaked over for whatever reason, shall be retilled to a depth of one inch prior to seeding.

45.4.3. Seed Planting Rate - Seed shall be sown to provide the coverage of "Pure Live Seed" (PLS) mixture, as determined in accordance with the following formula:

lbs. (PLS) = lbs. seed x % Purity x % Germination

45.4.4. Planting Seed - The contractor will seed over fertilized ground using approved mechanical power-drawn drills followed by packer wheels.

Fertilizer type and method of application may vary with each project. Consult the project plans and specifications for any modifications in the fertilization or bed preparation process. The power-drawn drill shall be set to maintain a seed planting depth of one-fourth (1/4) inch. Seed sown by broadcast type seeders or by hand shall be "raked in" or otherwise covered with soil to a depth of one-quarter (1/4) inch. The hand-broadcasting method of seeding shall be limited to those areas not accessible by machine methods.

45.4.5. Mulching Seeded Areas - Mulching seeded areas shall be accomplished by the hydraulic method using wood cellulose fiber mulch. Hydraulic mulching in slurry form shall be applied to all seeded areas. Proportionate quantities of water and other approved materials shall first be placed in the slurry tank and mix. Cellulose fiber mulch shall be added and mixing continued until the slurry is homogeneous. The slurry mixture shall then be uniformly spray applied at the rate of 1,400 pounds/acre over the designated area, using the color of the mulch as a metering agent. Hydraulic mulching shall not be performed in the presence of free surface water. Seed shall not be included in the hydraulic mulch. Mulch shall be Weyerhaeuser Silva-Fiore or approved equal.

Areas not properly mulched, or damaged due to contractor's negligence, shall be repaired and remulched in an acceptable manner at the contractor's expense. Mulch removed by wind or water erosion Prior to acceptance shall be reseeded and remulched by the contractor at this expense.

45.5.2. Seeded Grass Areas - Seeded areas shall be mowed to a two inch height at least once by the contractor. The contractor will otherwise maintain seed until there is an acceptable uniform plant growth. Areas that are not producing a uniform plant growth within five weeks following seeding shall be reseeded.

Unacceptable uniform plant growth shall be defined as scattered bare spots, greater than one square foot, exceeding three percent of the seeded area. However, for seeded areas under irrigation it shall also include producing a uniform plant growth to a height of two inches. Irrigated areas that are seeded late in the fall planting season which are not producing an acceptable uniform plant growth, as previously defined, shall be reseeded during the following spring planting season. If such a condition exists and the contractor has diligently pursued the performance of his work, the City, at its option, may extend the contract completion date and reduce the contract retainage. Retainage may be reduced to less than five percent of the total contract amount but shall be at least

double the estimated or contracted cost of obtaining the required growth in the indicated areas, plus those areas which are susceptible to damage by winter kill, washout, or other causes.

Landscape Architecture –Ciavonne, Roberts & Associates

Planting

SECTION 329000 Planting

1 General

- 1 Scope of Landscape Work
Include labor, equipment, material, incidentals, for the completion of planting, fabric and mulch work shown on the Drawings, stated in the Specifications or otherwise required.
- 2 Stake Out Location of Landscape Work
The Contractor shall completely stake out the location of all trees, shrubs, and lawn area limits on the site for the approval of the Landscape Architect, making modifications as required.
- 3 Applicable Standards
U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act, American Association of Nurserymen, current edition of "American Standard for Nursery Stock". Published by the American Association of Nurserymen, Inc., 635-636 Southern Building, Washington D.C. and/or Colorado State Law, whichever is greater.
- 4 Shipment and Delivery
No plant materials shall be delivered to the site more than 3 days before planting. Plants left unplanted for more than 3 days shall be subject to rejection by the Owners Representative. A suitable method of handling shall be employed to insure the careful, workmanlike delivery of all plants, especially heavy balled trees. The Contractor shall protect the stock in a temporary nursery at the project, protected from sun, drying winds and shaded, kept moist and protected with damp soil, moss or other acceptable material.
- 5 Notification of Delivery
The Landscape Contractor shall notify the General Contractor and Owners Representative a minimum of 2 days in advance of the delivery of the plant materials. Notification shall include the time and method of delivery.
- 6 Quality Control Submittals
Certificates of Inspection for Plants: All necessary State, Federal and other inspection certificates shall accompany the invoice for each shipment of plant materials as may be required by law, and showing source of origin. Certificates shall be filed with the Owners Representative prior to his acceptance of the material.
- 7 Plant Material Labeling
Durable, legible labels stating in weather-resistant ink indicating the correct plant name and size as specified on the plant list shall be securely attached to all plants, bundles or packages of plants of a single species and size, or plant container delivered to the planting site. Plants not properly labeled shall be subject to rejection by the Owners Representative.
- 8 Plant List
A list of purchased plants to be provided is shown on the Drawings.
- 9 Plant Material Inspection

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

10 Plant Sizes

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

11 Planting Commencement

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

12 Weather Restrictions

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

13 Irrigation & Establishment Restrictions

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

14 Substitute Products

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

2 Products

1 Weed Control Fabric

Filter fabric for use as weed control shall be 3.5 oz./square yard spunbond, permeable material by Landmaster, or equal. Fabric shall have a water flow rate of 300 gallons/minute/square feet, burst strength of 130 P.S.I. and trapezoidal tear of 65/53 Lbs. Filter fabric shall be used in all tree wells and shrub beds.

2 Fertilizer for Shrub Areas

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

3 Biosol Soil Amendment

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

4 Fertilizer for Trees

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

5 Insecticide Spray

Methoxychlor or similar insecticide.

6 Tree Wrapping Material

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

7 Tree Stakes

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

8 Protective Nylon Loops

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

- 9 Guy Wire
12 gauge, double strand, pliable galvanized steel wire twisted to remove slack to each stake.

3 Materials

- 1 Soil Amendment
50% Ground well-aged cow or chicken manure, or ground sheep manure, 50% finely ground and aged wood chip, with a proven analysis to verify organic content, PH, electro-conductivity, nitrogen, potassium, and phosphorus content. A sample of the material will be supplied to the Owner's Representative with an analysis.
- 2 Imported Topsoil
Imported friable sandy loam; reasonably free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds, and foreign matter; electro-conductivity range 0 to 4 mmohs; containing a minimum of 4 percent and a maximum of 25 percent organic matter; Limit decaying matter to 2% percent of total content by volume.
- 3 Container Grown Plants
Plants designated in various size and type containers in the plant list shall be of a reasonable age and state of development for the size container in which they are specified. They shall have been growing in their containers sufficiently long to develop a good sound root system capable of holding the soil intact after removal from the container, but not so long as to have become root bound.
- 4 Balled Plants
Plants delivered as "B&B", balled and burlapped shall be adequately balled with firm, natural ball wrapped tightly with burlap. No plant shall be planted if the ball is cracked or broken either before or during the planting process. Any plant which is loose in the ball shall be removed from the site and another plant conforming to the specifications of the plant removed shall be planted in its place at the expense of the Contractor.
- 5 Shrub Quality
All Plants shall conform to the Colorado Nursery Act. Shrubs shall have a well-developed branch structure with a vigorous root system typical of the size and species and be sound, healthy and vigorous plants free from visual defects, plant diseases and all forms of insect infestation until Final Acceptance. Unless noted, all plants shall be nursery-grown, meaning plants that have been growing in a nursery either lined out or containerized for a minimum of two growing seasons and have been root pruned according to acceptable nursery practice. All shall be freshly dug at the time of delivery, (Plants healed in or placed in cold storage for more than 9 months will not be accepted.) and shall have been grown under similar climatic conditions as that of the project's location prior to planting.
- 6 Tree Quality
All tree specimens shall conform to The Colorado Nursery Act including grading specifications for deciduous trees; Height measurement, Caliper measurement, Height Relationship to Caliper, and Root Spread. All trees shall have lower branch structures five feet (5'-8") minimum height above root ball. Tree specimens shall have a well-developed branch structure with a vigorous root system typical of the size and species and be sound, healthy and vigorous plants free from visual defects, plant diseases and all forms of insect infestation until Final Acceptance. All trees shall be nursery-grown, meaning plants that have been growing in a nursery either lined out or containerized for a minimum of two growing seasons and have been root pruned according to acceptable nursery practice. Verify location of structural roots on trees. Structural roots to be between 1-2" below top of ball. All shall be freshly dug at the time of delivery, (Plants healed in or placed in cold storage for more than 9 months will not be accepted.) and shall have been grown under similar climatic conditions as that of the project's location prior to planting.
- 7 Granite Rock Mulch -3/4"
Rock Mulch shall be 3/4 inch granite covering shrub beds. Rock mulch shall be free of trash, sticks or roots. Granite to be buff-tan colored granite. Submit sample to Owner's Representative prior to construction.

4 Execution

- 1 Stockpiling Imported Topsoil
Stockpile materials on site at locations indicated. Stockpile in sufficient quantities to meet project schedule and requirements. Separate differing materials with dividers or stockpile apart to prevent mixing. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.
- 2 Preparation for topsoil
Excavate areas to be planted or as designated on plan to the depth as per drawings or specifications. Remove all unsatisfactory material from planting areas, including road base, asphalt, concrete and trash and remove from site.
- 3 Topsoil Backfill - Shrub Beds
Contractor shall backfill excavated shrub beds with specified topsoil. Soil is to be compacted to 85% modified proctor (wheel rolled) to minimize settling. Beds are to be filled to a depth of 6" above adjacent edge of shrub bed, shaped to form mounded planting areas. Shrub bed perimeter is to be finished with 4:1 slopes from 2" below adjacent concrete to finish grade. Scarify all areas to receive topsoil to a depth of 6".
- 4 Topsoil Spreading
Stockpiled topsoil shall be spread to a depth of 12" in areas designated, finish grade to be sloped to pavement edge at a maximum of 4:1.
- 5 Soil Preparation
Contractor shall prepare the landscape areas by applying soil amendment at a rate of 6 cu. yds. per 1000 sq. ft. over all planting areas., discing or rototilling/mixing, the soil to a depth of 6". Mixture shall be 1 part soil to 3 parts topsoil by volume. After this has been done, all rocks bigger than 1" shall be picked up and removed from the site.
- 6 Fine Grading for Landscape areas
Remove any dikes used to facilitate watering. Smooth surface, contour to distribute irrigation to root ball. Form trench at all landscape edgers or pavements to accommodate mulch at depth specified. See details.
- 7 Cleanup of Topsoil Stockpile
Remove stockpile, leave area in a clean and neat condition. Grade site surface to prevent free standing surface water.
- 8 Weed Control Fabric
Fabric is to be laid flat, with 6" overlap at seams and no gaps at edges. Plants shall be installed through fabric by cutting the fabric neatly and cleanly, with the fabric replaced over the root ball and within 1" of the base of the shrub stem or tree trunk. Fabric is to be pinned in place with sod staple 5' on center and in all corners.
- 9 Tree Location conflicts with Underground Lines
The Contractor shall be responsible for damage to any underground utility, irrigation line or other improvements. In the event a pipe or line obstructs a plant location, the Contractor will notify the Owners Representative to receive a new plant location.
- 10 Layout of Plant Locations
Contractor is to stake out the location of all trees, shrubs, perennials, and lawn area limits, or place containerized shrubs and perennials for approval by Landscape Architect prior to planting. All planting stake locations shall be observed and approved by the Landscape Architect, prior to planting operations.
- 11 Plant Pit Excavation
The plant pit, centered on the location stake, shall be excavated at least twice the spread of ball, spade or container in a cylindrical shape with tapered sides and flat or saucer-shaped bottom. Sides of pit shall be rough and irregular, not smooth. Plant pits shall be excavated below finish grade as required to accommodate the ball.
- 12 Planting Procedure

Deciduous plants will be set so that if settlement occurs, the ball will be at the same finish elevation as adjacent grades. top of root ball is to be determined by the location of the root flare being at the top of the root ball. All pines shall be set 2"-4" higher than ground level, with backfill sloped up to trunk. Plant shall be set in center of pit, kept plumb and straight and pit backfilled with mix. Remove wire or twine around balled plants, remove burlap from top 1/3 of ball and leave rest of burlap intact. Remove plants from container prior to planting. Root ball on all container grown stock shall be scored vertically to a depth of 1" at 3" intervals around root ball.

13 Pruning

Plant material shall be pruned as directed by the Owners Representative. After inspection, and with the approval of the Owners Representative, the Contractor shall only prune plants as necessary to remove dead, injured or lower branches preserving the natural form and character. Branches pruned from plant material shall be made flush, leaving branch collar with no stubs. Accepted bruises, scars or injuries, and cuts over 3/4" in diameter shall be carefully trimmed and dressed as per Tri River Area Extension Guidelines.

14 Fertilizer for Shrub Areas

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

15 Biosol Soil Amendment

Biosol Planters Mix shall be incorporated at the following rates

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

16 Watering

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

17 Preparation for Mulch

Perimeter of Shrub Beds shall be graded 2" below top of curbs, walks, edger (see detail), or any other grade level improvements for receiving rock or wood chip mulch. Planted area of shrub bed shall remain at the same grade or higher than adjacent pavements or lawn areas to insure adequate drainage of shrub beds.

18 Fertilizer for Trees

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

19 Tree Wrapping Material

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

20 Staking and Guying

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

21 Insecticide Spray

All deciduous tree trunks shall be thoroughly sprayed with a Methoxychlor or similar insecticide prior to application of tree wrap.

5 Warranty

1 Protection and Maintenance of Plant Materials

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

2 Replacement

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

3 Final Inspection and Acceptance

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

6 Payment

1 Payment for Landscaping

Payment for Landscaping shall be paid for at the lump sum contract price bid for "Landscaping". This payment shall be full compensation for all equipment, tools, and labor required for these operations within the construction limits of this contract.

Irrigation –Ciavonne, Roberts & Associates

Irrigation

SECTION 328000 Irrigation

1 General

1 Scope of Landscape Irrigation Work

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

2 Job Supervision - Irrigation

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

3 Qualifications for Electrical Work

Electrical service from service drop as located on drawing to controller shall be installed by a licensed electrician. A permit shall be secured by the Contractor at least 48 hours prior to construction.

4 Job Conditions and Provisions-Irrigation

No irrigation system construction shall take place during freezing or wet weather or when temperatures are less than 40 degrees Fahrenheit, and no trenches shall be backfilled with frozen

material. Installation of the system shall not take place until all earthwork has been substantially completed, compacted. Errors, conflicts or omissions from the Drawings or Specifications, or the misdescription of details of work which are manifestly necessary to carry out the intent of the Drawings or Specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details or work, but they shall be performed as if fully and clearly set forth and described in the Drawings and Specifications.

5 Substitute Products

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

6 Layout of Lines & Levels

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

7 Tolerances

Depths of mains and laterals shall be eighteen (18") bury, and pitch of pipes as specified shall be minimums. Coverage achieved on site shall be guaranteed according to plan; any unwatered areas due to poor placement of or insufficient heads shall be corrected by the Contractor.

2 Products

1 Reduced Pressure Backflow Assembly

Reduced pressure backflow assemblies shall be Febco 825YA, sized as shown on drawing, or equal, approved prior to Bidding. Valves shall be of bronze construction with threaded connections, complete with bronze ball valves of same size and ball valve test cocks, complete with unions at both ends.

2 Backflow Assembly Enclosure

Backflow Assembly Device Enclosure shall be Locbox LB 2T, Hinged fiberglass Assembly, as manufactured by Hubbell Power Systems, or equal, approved prior to bidding.

3 Flow Sensor

Hunter Flow-Clik Flow Sensor for use with control system.

4 Automatic Control Valves

Automatic Control Valves are to be Rainbird PEB Electric Remote Control Irrigation Valves of size indicated on drawings, or equal.

5 Isolation Gate Valve

Isolation valves (3" or less) are to be a Spears PVC gate valve, same size as main line, manufactured of PVC type 1, Cell Classification 12454-B, with polypropylene wedge and handle, and BUNA-N "O" Rings, and shall be listed by NSF for use in potable water service.

6 Quick Coupler Valves

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

7 Curb Stop Valve

Curb Stop valve to be Mueller #H10283

8 Manual Drain Valves

Manual Drain Valves shall be 3/4" Mueller curb stop or equal. Valves shall be of bronze construction with threaded connections, cross handle and operating key;

9 Pressure Regulating Valve

Pressure regulating valve to be brass Wilkins 500HLR or equal.

10 Valve Boxes

Super Jumbo box (2 valves max), or equal.

11 Manual Drain Valve Boxes

Manual drain valve boxes shall be 10" circular box with lid.

- 12 Irrigation Pipe - Main Pressure Line
Main Pressure Line pipe less than 4" in size shall be Class 200, solvent weld PVC, with PVC schedule 40 fittings, sized as shown on plans.
- 13 Irrigation Pipe - Lateral Lines
Pipe shall be PVC Class 160 with PVC Schedule 40 fittings, solvent weld, as detailed, sized as shown on the plan.
- 14 CL 200 PVC Sleeving
PVC sleeving shall be PVC Class 200, solvent weld, sized as shown on drawings
- 15 Pipe Thread Material
All threaded pipe connections shall be made with Weld-on 87685 thread sealant shall be used, or equal.
- 16 Solvent Weld Primer & Cement
Solvent Weld Primer & Cement shall be only that which is recommended for use on pipe installed.
- 17 Irrigation Valve Control Wires
Electrical control wires from valves to controller shall be direct bury jacketed Hunter two-wire. The wire paths shall be twisted pair, solid-core, color-coded red/blue pairs with each conductor in a polyethylene jacket suitable for direct burial. The two-wire paths shall be Hunter Industries Model IDWIRE2
- 18 Wire Connectors
Wire connectors at electric control valves and all splices of irrigation controller wire in the field shall be made using "3M DBR-6" only.
- 19 Surge Protection for 110v Electrical
Surge protection for 110 v system shall be Intermatic AG2401-C
- 20 Irrigation Controller Grounding
Copper components, ground enhancing material and ground rods as required per detail
- 21 Drip Distribution Tubing
Drip Distribution Tubing to be Salco, or Landscape Products 1/4" tubing (or approved equal) used with necessary couplings, stakes and end plugs to provide the system shown on the drawing
- 22 Irrigation Controller Pedestal
Automatic irrigation controller with mounting pedestal shall be Hunter I-CORE-D Controller
- 23 Drip Emitter - Netafim Woodpecker/Pc Emitter
to be Netafim Woodpecker/PC Emitter, connected directly to 1/2" poly tubing or 1/4" distribution tubing and 1/4" barbed transfer fitting between 1/4" poly tubing and 1/2" poly tubing as shown on drawing. Emitter is to be of flow rate shown on Valve Schedule.
- 24 In Line Drip Emitter Tubing - Netafim Techline CV
to be Netafim Techline CV, Emitter flow rate and spacing are to be as of shown on drawings.
- 25 Flush Cap Assembly
Rainbird CF-22 Compression flush cap to be installed at the end of all polyethylene laterals in Ametek 6 or 10" circular box with tan/brown C.V. lid Part #181108. Contractor is to include one 1804 Rainbird pop-up SAM spray head w/ Maxijet "Top hat" spray jet or closed nozzle spray head connected with swing pipe to one 1/2" irrigation lateral.
- 26 Flush Cap Box - 6"
Flush cap box to be Ametek 6" circular box with brown C.V. lid Part #181108.

4 Execution

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

- 2 Reduced Pressure Backflow Assembly
Install reduced pressure backflow assembly in location as shown on drawings, and tie into new mainline.
- 3 Water Service Connection
The Contractor shall tie into existing 3/4" water meter. Contractor shall coordinate tie in of irrigation system with City installation of water meter.
- 4 Flow Sensor
Install Flow Sensor in valve box as shown on drawings, with no fittings on the upstream side for 10 diameters of the pipe, and no fittings on the downstream side for 5 pipe diameters, according to manufacturer's recommendations.
- 5 Pressure Regulating Valve
Pressure regulating valve to be installed per detail and manufacturer's recommendations.
- 6 Isolation Gate Valve
Isolation valves are to be installed in mainline at locations shown on drawings. Contractor is to provide extension sleeving from valve box to valve location.
- 7 Curb Stop Valve
Install Curb stop valve in curb box as shown on details and drawings.
- 8 Quick Coupler Valves
Quick coupler valves are to be installed on swing pipe swing joint at location and grade as indicated on drawings and as per details. Installation in soft soils may require staking and tying quick coupler to stake. Drive stake to 4" below grade and tie with nylon tie.
- 9 Manual Drain Valves
Manual drain valve shall be located at low points on irrigation main. A drain sump of not less than 4.0 cu. ft. of 3/4" washed gravel shall be installed surrounding each drain valve.
- 10 Pressure Regulating Valve
Pressure regulating valve to be installed per detail and manufacturer's recommendations.
- 11 Valve Boxes
Install valve box at locations shown on drawings. Extensions and adjustments shall be made to establish the valve box and cover flush with the final grade level, and provide 4" layer of washed gravel as sump.
- 12 Manual Drain Valve Boxes
All manual drain valves are to be installed with 6" round valve box and cover and 4" PVC sleeve of length to allow hand access to valve.
- 13 CL 200 PVC Sleeving
Sleeving shall be installed in locations noted on drawings and at a depth to accommodate irrigation lines at their required depth. No changes in direction are allowed in sleeves. Ends are to be taped to prevent filling by backfill. Mark locations with lath and notation indicating "sleeve".
- 14 Automatic Control Valves
All control valves shall be installed as close as possible to the locations shown on the plan; any variances must be approved by the Owners Representative. Install valves, unions, reducers, pipes, wiring, etc. per detail. Control valves shall be installed in accordance with the manufacturer's recommendations. All valves shall have sufficient clearance from adjacent obstructions to provide accessibility for maintenance, including complete removal without removal of valve box. Valves are not to be located in flow line of swales or drainages.
- 15 Irrigation Controller Cabinet
Install automatic irrigation controller cabinet in locations noted with anchor bolts specified in concrete pad as per drawings. The Contractor shall provide and install all conduit, bushings, wiring, fused disconnect, etc from the electric service 'drop' through the controller. Secure all conduit as per code.
- 16 Irrigation 2 wire Field Decoder
Field decoder shall be installed in line at valve locations as per manufacturer's directions
- 17 Wire Connectors

Wire connectors are to be installed as per manufacturers recommendation.

18 Surge Protection for 110v Electrical

Surge protection for 110 v system shall be installed as per manufacturer's instructions.

19 Trench Excavation

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

20 Trenching & Backfilling

Comply with earthwork specifications, see Civil spec as required.

21 Piping- general

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

22 Drip Irrigation Pipe laterals - 1/2" Polyethylene

Pipe shall be installed in lengths no longer than 200', max 200 gph. Pipe is to be staked a minimum of every 5'. Pipe is to be installed below weed control fabric where fabric occurs, and below mulch where mulch occurs. Pipe is to terminate with flush cap in 6" round valve box.

23 Drip Distribution Tubing-1/4"

Tubing to be installed as shown on detail. Tubing is to be laid beneath weed control fabric and mulch, stake at plant and every 2.5'.

24 In Line Drip Emitter Tubing - Netafim Techline CV Tree Rings

Techline CV tubing to be installed in concentric rings as shown in detail and according to manufacturer, connected directly to poly lateral and spaced according to drawings.

25 Drip Emitter - Woodpecker /PC Emitter

Install NetaFim Woodpecker/PC Emitter 2.2 gph (8lph) emitters in quantities shown on detail, connected directly to 1/2" poly tubing or 1/4" distribution tubing and 1/4" barbed transfer fitting between 1/4" poly tubing and 1/2" poly tubing as shown on drawing. Emitters & tube is to be staked at root ball of plant. Install beneath fabric and/or mulch where mulches are used. Emitter is to be a flow rate as noted in Valve Schedule.

26 Flush Cap Assembly

Rainbird CF-22 Compression flush cap to be installed at the end of all polyethylene laterals in Ametek 10" circular box with black C.V. lid Part #181108. Contractor is to include one 1806 Rainbird pop-up spray head w/ Maxijet "Top hat" spray jet connected with swing pipe to one 1/2" irrigation lateral per flush cap assembly. Direct spray toward plantings. Flush Cap Assemblies are to be located adjacent to walks or lawn areas where possible for maintenance access.

27 Irrigation Valve Control Wires

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

5 Warranty

1 As-Built Submittals

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

2 Vandalism

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

6 Payment

1 Payment for Landscape Irrigation System

Payment for Landscape Irrigation System work shall be paid for at the lump sum contract price bid for "Landscape Irrigation System". This payment shall be full compensation for all equipment, tools, and labor required for these operations within the construction limits of this contract.

Metal Fabrications –Ciavonne, Roberts & Associates

Metal Fabrications

SECTION 055000 Metal Fabrications

1 General

1 Scope of Metalwork

Metalwork consists of fabrication and installation of hand rails and bollard components.

3 Materials

1 Enamel Paint

Enamel Paint for steel fabrications shall be designed for metal, Color = Sherwin Williams #6090 "Java"

2 Steel Shapes, Bars and Plates

Steel shapes, bars and plates shall conform to ASTM A36-81a.

3 Structural Steel Fabrication

All structural steel has been designed and shall be fabricated and erected in accordance with "Manual of Steel Construction", 8th Edition, published by the American Institute of Steel Construction and Chapter 27 of the Uniform Building Code (UBC Ch. 27, UBC Std. 27-2).

4 Execution

1 Steel Layout

Field measure footings, bolt patterns, frames, etc. to insure fabrication dimensions. Fabricate to line, levels and patterns as indicated once measurements have been verified.

2 Enamel Paint

Enamel Paint for steel fabrications shall be applied as per Steel Structures Painting Council Specification SSPC 25 over a rust inhibiting primer. All field fabrications shall receive paint following final fabrication. Clean off scale, rust, weld slag or flux deposit, oil grease, dirt or other foreign material, prime with a rust inhibiting primer, and shop coat all fabricated items. Do not paint when metal surface is below 60°

3 Welding

Comply with AWS D1.1. Miter and cope intersections and weld all around. Remove splatter, grind exposed welds to blend and contour surfaces to match those adjacent.

4 Structural Steel Fabrication

Welding of structural steel shall be in accordance with Standard D1.1 of the American Welding Society Structural Welding Code and UBC Std. 27-6.

6 Payment

1 Payment for Metal Fabrication

Payment for Metalwork shall be paid for at the lump sum contract price bid for "Metal". This payment shall be full compensation for all equipment, tools, and labor required for the fabrication and installation of handrails and Bollard Components.

ADA Landing Mats

I General

Submittals- Deliver to City all Product Data

II Products

Materials that are to be incorporated in the structure shall conform to the minimum standards hereinafter referred to, unless otherwise approved.

Detectible Warning shall be cast iron with a truncated dome surface. They shall be 2' in length and over the complete width of the ramp area. Plates are to be cast iron

III Execution

All detectable warning areas shall start a minimum of 6" from the flow line of the curb and not be more than a maximum of 8" from any point on the flow line of the curb.

All detectable warning areas shall be 2' in length and cover the complete width for the ramp area only

Ramp slopes shall be 12:1 or flatter. The detectible warning slopes shall be 20:1 or flatter.

Detectible warning plates shall be placed while concrete is workable and vibrated such that concrete fills the vent holes. All vent holes exposed after placement must be grouted at contractor's expense

Storm Sewer Manholes

I General

Submittals- Deliver to City all product data and shop drawings

II Products

0.7. MATERIALS

Materials; other than bedding, backfill and trench resurfacing; which are to be placed within the trench limits, shall conform to the minimum standards hereinafter referred to.

Applicable specifications for material as set forth by the American Society for Testing Materials (ASTM), the American Association of State Highway and Transportation Officials (AASHTO) and the Colorado Department of Transportation (CDOT) are made a part of these specifications. Referenced standards are the latest edition or revision thereof.

25.2.1 Pipe - The pipe shall conform to the type indicated on the construction plans and to the specification noted in Table 25-1 of this section for the indicated type and application.

0.7.2. Concrete - See Section 10 of these specifications.

0.7.3. Mortar - Freshly made uniform mix consisting of one (1) part Portland Cement, two (2) parts mortar sand and sufficient water to provide a workable paste.

TABLE 25-1**PIPE MATERIAL AND SPECIFICATION****STORM SEWER PIPE (NON-PRESSURE)**

<u>MATERIAL</u>	<u>SPECIFICATION</u>	<u>DIA. INCHES</u>	<u>NOTES</u>
(HDPE) POLYETHYLENE	AASHTO M252	3 - 10	(A)(B)
(HDPE) POLYETHYLENE	AASHTO M294	12 - 60	(A)(B)
(RCP) REINFORCED CONCRETE ROUND CLASS III	ASTM C76,C361,C655 AASHTO M170, M242	12 -144	(A)(H)
(RCA) REINFORCED CONCRETE ARCH	ASTM C506,C655	15 -132(E)	(A)(H)
(RCE) REINFORCED CONCRETE ELLIP.	ASTM C507,C655	18 -144(E)	(A)(H)
(RCB) REINFORCED CONCRETE	ASTM C789	Box	(A)(C)(H)
(RCB) REINFORCED CONCRETE	ASTM C850	Box	(A)(D)(H)
(PVC) POLYVINYL CHLORIDE	ASTM F949	8 - 36	(A)(I)(J)(K)
(PVC) POLYVINYL CHLORIDE	ASTM F1803	21 - 54	(A)(I)(J)(K)
(ASP) ALUMINIZED STEEL TYPE 2	ASTM A760,A796,A891 AASHTO M274, M36	12 - 60	(A)(G)(L)(M)

****NOTE-CORRUGATED METAL PIPE, GALVANIZED, IS NO LONGER ALLOWED FOR PUBLIC DRAINAGE PIPE****

Note: Storm sewer or culvert pipe type shall be as designated on construction plans. If no designation, use of reinforced concrete pipe (RCP) shall be required.

- (A) See Section 20 for Bedding Type, Limits; Gradation, and Compaction
- (B) Profile Wall - Type S, 2 ft. min. bury, 10 ft. max bury, bell and spigot joint with rubber gasket as specified in ASTM D2321, AASHTO Section 18 and ASTM D3212
- (C) Reinforced Box - Minimum cover 2 feet
- (D) Reinforced Box - Cover less than 2 feet
- (E) Equivalent round size
- (G) Existing soil must be tested to verify adequate service life of pipe before use
- (H) Rubber O-ring gasketed joints in accordance with ASTM C443 must be used, 1 ft. min bury, 11 ft. max bury thru 42" dia., 12 ft. max bury thru 78" dia., 13 ft. max bury thru 144" dia.
- (I) Bell and spigot joints with ASTM D3212 rubber gasket
- (J) Minimum pipe stiffness of 46 psi
- (K) Minimum cover 2 feet or one pipe diameter (which ever is less) as determined by ASTM D2321
- (L) Coupling bands shall conform to AASHTO M36 and allow the use of o-ring gaskets as required
- (M) 1 ft. min bury, 16 ga., sizes 54-60 require 1.5 ft. min bury and 14 ga.

**TABLE 25-1
PIPE MATERIAL AND SPECIFICATION**

UNDERDRAIN PIPE

<u>MATERIAL</u>	<u>SPECIFICATION</u>	<u>DIA. INCHES</u>	<u>NOTES</u>
(PVC) POLYVINYL CHLORIDE	ASTM D3034	6 - 8	(A)(B)
(PVC) POLYVINYL CHLORIDE	ASTM F949	6 - 8	(A)(B)
(HDPE) POLYETHYLENE	AASHTO M252	6 - 8	(A)(C)

(A) See Section 20 for Bedding Type, Limits; Gradation, and Compaction

(B) SDR 35 Minimum, 46 psi min. stiffness, Perforated or Solid - White Color

(C) Profile wall –Type SP, 10 ft. max bury, bell and spigot joint with ASTM D3212 rubber gasket

LINER PIPE

<u>MATERIAL</u>	<u>SPECIFICATION</u>	<u>DIA. INCHES</u>	<u>NOTES</u>
(HDPE) POLYETHYLENE	ASTM D3350	6 - 18	(A)
(HDPE) POLYETHYLENE	ASTM D3350	21 - 48	(B)

(A) SDR-26 Minimum

(B) RSC = 100, Grout annular void

CASING PIPE

<u>MATERIAL</u>	<u>SPECIFICATION</u>	<u>DIA. INCHES</u>	<u>NOTES</u>
(S) STEEL	AWWA C200	18 - 36	(A)

(A) Coal Tar Epoxy Coated, Welded Joint, Grout annular void to 10 psi

JACKING PIPE

<u>MATERIAL</u>	<u>SPECIFICATION</u>	<u>DIA. INCHES</u>	<u>NOTES</u>
(RCP) REINFORCED CONCRETE	ASTM C76,C361,C655	36 - 84	(A)(B)

(A) Joint – Rubber and Steel “R-4”

(B) Grout annular void to 10 psi

0.7.4. Manholes - Manholes for sanitary, storm and irrigation systems:

- A. Bases shall precast using Class "A" concrete. Cast in place bases shall be reviewed on a case by case basis with engineered design drawings provided.
- B. Risers, cones, bases and flat-tops shall be precast in accordance with ASTM

C-478, and combined as follows:

Riser ID Ft.	Normal Top	Cone Opening
4	Eccentric Concrete (1)	24" Diameter
5	Eccentric Concrete (1)	24" Diameter
6	Flat-Top (2)	24" Diameter

1. Use flat-top when the distance between the top of the bench to the top of the manhole ring is less than six (6) feet.
2. Reduce the ID to five (5) feet approximately 6'6" above the manhole bench.

C. Interior concrete surface protective coating – The interior concrete surface of all exterior drop manholes and the adjacent upstream and downstream manholes shall be coated with one coat of 30 mil minimum thickness Sikadur 31 Hi-Mod Gel coating ???? Still Use ???? and two coats each 5 mil minimum thickness Sikagard 62 Epoxy coating over the Sikadur 31. Manhole base including bench and invert to be coated with two coats of Sikagard 62 Epoxy coating only. First Sikagard 62 coat shall be red color. Second coat to be gray color.

0.7.5. Adjustment Rings - Leveling course and set ring adjustment; reinforced CI "A" concrete rings or HDPE Adjusting Rings. Maximum height of adjustment rings shall be twelve inches (12") total.

0.7.6. Rings, Covers, Grates and Frames - Gray cast iron conforming to ASTM A-48 Class 35 B (unpainted) with machined metal bearing surfaces. Inverted set rings are not allowed on sanitary manholes. In certain instances, manhole rings and covers may also be aluminum alloy A-132 and A-142 secondary furnished with positive lock down mechanisms. Aluminum rings and covers are only allowed with prior approval of the City Engineer. Covers shall be cast showing designate use (sanitary, storm, or water) and City of Rifle logo as shown in standard drawings. Storm manhole covers shall also have the "No Dumping-Drains to Creek" logo cast into them as shown in standard drawings. The following types have been approved for the application indicated.

Rings & Covers

Alloy	Sanitary Sewer	Storm Drain	Manufacturer
Cast Iron 24"	1258	1258	Deeter
Cast Iron 30"	1197	1197	Deeter
Cast Iron 24"		2018-A*	Deeter
Cast Iron 24"	R-1706	R-1706	Neenah Foundry
Cast Iron 30"	R-1798	R-1798	Neenah Foundry
Cast Iron 24"		R-1706-1S*	Neenah Foundry
Aluminum 100-24		550-31	Castings Inc.

* Slab-type for installation with "Type R" curb inlets only

Inlet Frames and Grates

GET FROM DRAWINGS DETAILS

Alloy	Application	Model	Manufacturer
Cast Iron	Type 13 Inlet	#13	Castings Inc.

Cast Iron	Type 13 Inlet	#13 CURB	Castings Inc.
Cast Iron	Type 13 Inlet	DBL	Castings Inc.

- 0.7.7. Steps - Copolymer polypropylene plastic over 1/2" diameter Grade 60 steel, PS2-PFS as manufactured by M.A. Industries, American Step Company, or equal installed on non-staggered, fifteen (15) inch vertical centers.
- 0.7.8. Joint Sealant for Manhole Sections, Tongue and Grooved Pipe - Preformed water repellant sealant conforming to federal specification SS-S-210A superseding Interim Federal Specification SS-S-00210 headed "Sealing Compound, Preformed Plastic for Pipe Joints". Rub'r Nek LTM preformed gaskets as manufactured by the Henry Company or equivalent are acceptable.
- 0.7.9. Watertight Joint Seals for Manhole and Pipe Sections - Type M or O rubber gasket as recommended by the pipe or manhole manufacturer is required below groundwater level.
- 0.7.10. Chemical Joint Sealant - Acrylamide base gel grout, urethane effectiveness requirements set forth in the Environmental Protection Agency publication entitled, "Chemical Sealants for Elimination of foam grout or an approved equal. Grout shall exceed or meet the I/I". When handled and mixed in strict accordance with the manufacturer's recommendations the chemical grout sealant must: be able to react in moving water, withstand submergence in water without degradation and be impervious to water penetration over the life of the grout, be flexible after curing and be able to withstand freeze-thaw and wet-dry cycles; be biodegradable and resistant to concentrations of acids, alkalis and organics found in normal sewage.

III Execution

0.8. INSTALLATION

The installation of pipe material and appurtenances shall be performed in accordance with the acceptable practices set forth by the American Society for Testing Materials (ASTM), the manufacturer's recommendations, these specifications and approved plans.

- 0.8.1. Interruption of Sanitary Service - The contractor must in writing, advise affected users twenty-four (24) hours prior to performing work on a service or collector line which will interrupt a customer's wastewater line. Contractor prepared notices shall be hand delivered to each customer or occupant. If the occupant cannot be contacted, the written notice shall be left attached to the door knob or screen.

In addition, the contractor must notify Rifle's Wastewater Collection Division (970-625-2121, ext 324) of the schedule for plugging and bypassing manholes necessary to isolate the line on which work is to be performed.

The contractor shall provide all labor, materials and equipment to properly handle and divert all sewage flow when required for construction.

If sewage backup occurs and enters buildings, private property, irrigation ditches, streams or storm drains during contractor's bypassing operations, the contractor shall be responsible for clean-up, repair, property damage and all costs and claims.

A normal outage shall be a maximum of four (4) hours and between the hours of 8:00 a.m. and 2:00 p.m. If the outage will be greater than four (4) hours, the work shall be done in a manner to minimize the inconvenience to users, such as working at night in a continuous operation until service is restored. A connection which will require an outage longer than four (4) hours shall be subject to review by the City as to the appropriate time for performing

the work.

If in the process of installing a connection, there exists an industry or building in the area that cannot be out of sanitary service such as a hospital, school, etc., the contractor shall provide wastewater disposal service to them at all times during the performance of the work.

0.8.2. Excavation, Bedding and Backfill - See Section 20 of these Standard Specifications.

0.8.3. Alignment and Grade - Sanitary and storm sewers, underdrains, irrigation ditches and their appurtenances shall be constructed to the line and grade specified on the approved plans.

The grade and alignment of the pipe or ditch being installed shall be controlled by means of laser beams or offset grade stakes, set in the field by professional survey parties. The contractor shall be responsible to accurately transfer said grade and alignment to the trench and construct thereto.

0.8.4. Service Line Grades - Sanitary sewer services between the main and a point located seven (7) feet into the property or ten (10) feet behind and back of the sidewalk, whichever is the greater, shall be installed according to the following minimum grades:

<u>Pipe Diameter</u>	<u>Minimum Gradient Ft./100 Ft.</u>	<u>Minimum Fall In./Ft.</u>
4"	2.08'	1/4"
6"	1.04'	1/8"

- 0.8.5. Pipe Installation - Construction shall start at the low point in elevation or at an existing structure. Bedding and pipe shall be installed laying uphill to controlled grade and alignment. Voids shall be created by hand excavation at each pipe joint to provide room for the pipe bell or grouted diaper, and prevent beam support at the joints.

Surfaces of the joints shall be clean and dry prior to installing Rub'r Nek LTM or O-ring gasket. After the jointing material is in place, the pipe section shall be carefully pushed home using approved methods of leverage. Care shall be exercised so that there is no damage to the ends of the pipe or the joint material so that a water tight joint is assured.

Tongue and groove concrete pipe shall be set to line and grade and the joint sealed by means of Rub'r Nek LTM or O-ring gasket. Diapered and grouted joints shall not be encased by bedding material until the grout has obtained its initial set along and under the haunches and up to springline of the pipe. Once the pipe sections have been joined and adjusted to line and grade, the section shall be secured in place by tamping bedding material along and under the haunches and up to springline of the pipe.

Pipe installed shall be maintained dry and free of gravel, dirt, animals and debris. Whenever work ceases for any reason, the unfinished end of the line shall be securely closed with a temporary watertight plug. No pipe sections shall be covered with bedding or backfill material until they have been inspected by a representative of the Engineering Department.

- 0.8.6. Manholes - Construct in accordance with the City of Rifle Standard Drawings. Manholes shall be placed at maximum of 400 feet intervals along the sewer main regardless of main size and at all changes in alignment, grade or at other laterals leading into the sewer main.

The maximum interior drop through any manhole shall be 0.3 ft. The main line shall be laid continuously through the manhole wherever practical and the base cast with Class "A" concrete from the pipe springline to at least eight (8) inches below the outside bottom of the pipe. The top of the base shall be shaped by sloping the manhole floor upward from the pipe springline to the manhole wall at the rate of two (2) inches per foot. Where half pipe is used or when the arch of the pipe is removed, the floor shall be finished over the exposed pipe wall

to give a free draining, smooth monolithic finish. When placing concrete under the pipe to form the base, care must be exercised to prevent flotation of the pipe.

Where there are changes in alignment, grade or other laterals leading in, the base of the manhole shall be formed and the concrete placed therein. The flowlines through the base shall be shaped to conform exactly to the lower half of the pipe to which it connects and left smooth and clean. Side branches shall be constructed with as large a radius of curvature as possible. The manhole floor shall be sloped to drain as herein above stated.

When stub-outs are required through the manhole wall or any type of structure, the bell end of the stub shall face upstream, be as close to the structure as possible and be plugged with a watertight compression seal. The barrel portion of the stub shall have Type "M" or "O" rubber gaskets around the OD of the stub placed four (4) inches back from each face of the structure wall, before dry packing and sealing in place. Where the walls of the structure are eight (8) inches or less in width, only one (1) gasket will be required.

After the manhole base concrete has been properly cured, for a period of not less than forty-eight (48) hours, the bearing area to receive a precast concrete barrel ring shall be cleaned of all laitance. Rub'r Nek LTM or equivalent shall be placed in the bearing areas and the precast section carefully lowered onto the bench so that the sealant will be forced out evenly from under the section and on all sides. Likewise, subsequent barrel sections, reducers, cones, flat-top sections and concrete riser rings installed shall be sealed. The joint between the manhole cover set ring and the cone section or riser ring it rests on shall also be sealed to prevent infiltration. Care shall be taken in setting subsequent sections to assure vertical alignment of the steps over the bench of the manhole.

Manhole cover set rings shall be set to grade in full bead of mortar over a maximum of three (3) concrete riser rings totaling no more than 12" in height above the cone or flat-top. HDPE adjusting rings are not allowed. Mortar shall be evenly placed around the exterior of the cover set ring to set the ring in place when the manhole is not in a paved area.

In areas where the rim and cover are within a driving or walking surface slope greater than 5%, a field formed grade ring shall be constructed to match the rim to that slope. Such application may require adjustment of cone height when ordering.

Manhole and Utility Box Adjustments - Manholes, valve and survey range boxes shall be adjusted to $\pm 1/4"$ of finish grade before the surface course of asphaltic cement is placed. The contractor shall remove all foreign matter found or introduced into them in the performance of his work, and it shall be his responsibility to insure proper compaction around same after they have been adjusted.

On streets that are being sealed, the contractor shall cover the manhole and valve covers with a roofing paper or other suitable material prior to sealing. The covering shall be left in place for a minimum of forty-eight (48) hours after which it shall be removed and disposed of. All covers shall be clean when work is complete.

On streets that are being overlaid with asphaltic concrete the contractor shall adjust the valve and range boxes by screwing the adjustable rings upward to finish grade, prior to final rolling. In the case of manhole rings the contractor shall vertically and uniformly cut the existing asphalt mat eight (8) inches from the ring and remove the mat and base to a depth of six (6) inches below finish grade.

Rings shall then be removed and the existing mortar and brick courses adjusted and pointed to provide the required subgrade for resetting the rings, free of pressure points.

Once the ring is reset to finish grade the collar (eight (8) inch) x six (6) inch void between the mat and

Water Transmission Lines

I General

Submittals- Deliver to City all product data and tie in procedures.

Tie in procedures must be submitted to the COR within 48 hours of the planned connection. Only City personnel are to operate existing system valves or new valves if they are connected to the City system.

The contractor must, in writing, advise affected users twenty four (24) hours prior to performing work on a service, distribution or transmission line which will interrupt a customer's supply of water. Contractor prepared notices shall be hand delivered to each customer or occupant. If the occupant cannot be contacted, the written notice shall be left attached to the door knob or screen.

II Products

0.9. MATERIALS

Pipe, fittings and appurtenances to be installed in the City water system shall be equal or exceed the minimum standards as set forth by the: American Society of Testing Materials (ASTM); American Water Works Association (AWWA); American National Standards Institute (ANSI), etc. Referenced standards shall be the latest edition or revision thereof.

Standard specifications applicable to the manufacturing of the various types of pipe and fittings to be used are listed in Table 30-1. Special requirements modifying the standard specification are referred to in Part III Section 120, Table 120-I and under specific items throughout this and the Design Section of these specifications.

Manufacturers of pipe, valves and other in-line appurtenances shall furnish a certified statement that the inspection and all the specified tests have been made and the results obtained comply with the requirements of the applicable standards as herein specified. A copy of the certification shall be sent to the Project Engineer prior to installation.

**TABLE 30-1
WATER PIPE**

APPLICATION TYPE & MATERIAL	SPECIFICATION		DIAMETER	CLASS	JOINT
	ASTM	ANSI/AWWA			
SERVICE LINES					
(CU) Copper	B-251		3/4" - 2"	TYPE K	Flared or Compression (1)

(PVC) Polyvinyl Chloride (Outside vaults)	D2737	C900	3" - 8"	CL 150	Bell and spigot or MJ
(HDPE) Pure Core Service				250 PS	
DISTRIBUTION & TRANSMISSION LINES: (2)					
(PVC) Polyvinyl Chloride Cell 12454 A or B	D-1784 D-2241	C900	4" ,6",8" or 12"	CL 200 DR 14	Bell and spigot ASTM F-477, D-3139 AWWA C900, C905, C909 UNI-B-1
		C905	14"-24"	CL 165 DR25	
		C909	6", 8" or 12"	CL 200 DR 14	
(PVC) Polyvinyl Chloride Molecular Oriented					

- (1) Compression joints allowed are Mueller (110 only), Ford (Q only), AY McDonald (Q only), Cambridge (CB only), James Jones (SG only)
- (2) See Section 20 for bedding type, gradation and compaction.
- (3) Requires asphaltic protective coating, cement mortar lining, and polyethylene encasement. See Paragraph 30.2.7 of these standards.
- (4) Requires AWWA C214 Tape Coating and AWWA C205 Cement Mortar Lining
- (5) Requires cathodic protection system.

0.9.1. Fittings for Service Lines, Meters and Mains

- A. Service Line Fittings: Service line fittings shall be of the manufacturer and types herein below specified only. Other manufacturers and model numbers must be approved by the Public Works Department prior to installation.

Corporation Stops - Ball Type Only			
Size	Brand	Mueller	AY McDonald
¾"	Compression	B-25008	4701BQ
1"	Compression	B-25008	4701BQ
1 ½"	Compression	B-25008	4701BQ
2"	Compression	B-25008	4701BQ
Curb Stop Valves - Ball Type Only with 1/4 Turn Check			
Size	Brand	Mueller	AY McDonald
¾"	Compression	B-25209	6100Q
1"	Compression	B-25209	6100Q
1 ½"	Compression	B-25209	6100Q

2"	Compression	B-25209	6100Q
Curb Stop Box			Rod
Size	Mueller	AMETEK	AMETEK
3/4" – 1"	H10314	110183	
1½" – 2"	H10336	110183	110046-33

Meter Pit			
¾" – 1"	20"	Plastic	Simplex or Duplex series 250
1 ½"	20"	Plastic	DFW Plastics Model Number DFW 242148H (48" Height, White Color, ½" wall thickness)
2"	20"	Plastic	Mid States Plastics "B" Series (48" Height, White Interior, ½" wall)

Meter Pit Dome and Cover	
Brand	Castings Inc.
	M-70 AL or M-70 CI

Service Saddles* - Bronze with Stainless Steel Straps (3/4" – 2" taps)		
Pipe Type	A.Y. McDonald	Mueller
PVC	3855	BR2S
Ductile or Cast Iron	3855	BR2S
Asbestos Cement	3855	BR2S

* Saddles must be installed in accordance with manufacturer's recommended torque specifications

- B. Fittings for PVC and Ductile Iron Distribution and Transmission Lines: Distribution and transmission line fittings for PVC and ductile iron pipe shall be ductile iron and in accordance with ANSI/AWWA C153/A21.53 and ANSI/AWWA C110/A21.10. Fittings shall have a 350 psi pressure rating and be furnished with a cement-mortar lining of standard thickness and a bituminous seal coating as defined in ANSI/AWWA C104/A21.4. Fittings may also be coated both internally and externally with fusion bonded epoxy in accordance with ANSI/AWWA C116. The fittings shall be furnished with mechanical joint ends in accordance with ANSI/AWWA C111/A21.11 and, in addition, the tee-head bolts and hexagon nuts shall conform to ASTM A325, Type 3 and be fabricated from "Cor-Ten" or "Usalloy", a high strength, low alloy steel. 4" through 12" diameter fittings may also be ductile iron One-Bolt type with integral restrained joints as manufactured by One-Bolt, Inc.
- C. Steel Pipe Transmission Line Fittings: All specials and fittings shall conform to the dimensions of AWWA C208. Fittings shall be of the same material and thickness as the pipe. The minimum radius of elbows shall be 2.5 times the pipe diameter, and the maximum miter angle on each section of the elbow shall not exceed 11 1/4 degrees. If elbow radius is less than 2.5 x pipe diameter, stresses shall be checked per AWWA M11 and wall thickness or yield strength increased if necessary. Fittings shall be equal in pressure design strength and shall have the same lining and coatings as the abutting pipe. Fittings shall be made of segmentally welded sections from hydrostatically tested pipe with ends compatible with the type of joint or coupling specified for the pipe.
- D. Concrete Cylinder Pipe Transmission Line Fittings: Special fittings such as wyes, tees and crosses shall be constructed of steel cylinders and shall be mortar lined and coated. Fittings shall be at least equal in strength to the abutting pipe sections in accordance with AWWA C300, C301, C303 and M9. The design shall be approved by the Project Engineer prior to fabrication.

0.9.2. Valves

- A. Resilient Wedge Gate Valves (3" - 12"): Gate valves shall be manufactured in accordance with AWWA C-509 "Resilient-Wedge Gate Valves" (3" - 12") for water systems, open left (counterclockwise).

Valves shall be epoxy coated both internally and externally in accordance with ANSI/AWWA C550 and have a non-rising stem. The operating pressure for all gate valves shall be 200 psi gauge.

The stem seal shall consist of two (2) each O-rings, designed to allow replacement of the seal above the thrust collar with the valve operating under pressure in the full open position.

Flat gaskets, either of the ring or full faced type, required at the bonnet connection shall be fabricated from compressed asbestos sheet with a rubber compound binder. Use of homogenous rubber or vegetable fiber sheet is not acceptable.

- B. Butterfly Valves (14"-54"): Butterfly valves shall be manufactured in accordance with AWWA C504 "Rubber Seated Butterfly Valves", open left (counterclockwise).

Valves shall be Class 150 B and be drop tight for flows in either direction at a maximum static differential pressure across the valve of 150 psi.

Valve body material shall conform to that shown in Section 5.4 of referenced specification. All flanged end valves shall have a short body laying length conforming to Table 3 of specification, AWWA C504.

Manual valve operators shall be sized and designed to develop output torques for Class 150 B operating service and shall be sufficient to seat, unseat and rigidly hold the disc in any intermediate position for the above conditions. The operator shall be capable of withstanding an overload input torque of 300 ft/lbs at full open or closed position without damage to the valve or valve operator. The maximum input torque required to fully open or close the valve for Class 150 B conditions shall not exceed 150 ft/lbs., when applied to the operating nut. All gearing shall be totally enclosed, full gasketed, grease packed, and sealed from ground water. The operator shall be designed to resist a minimum pressure head of twenty-five (25) feet, when submerged in water.

External and internal valve coating shall be a 6 mil polyamide cured epoxy in accordance with ANSI/AWWA C550.

- C. Pressure Reducing Valves: Pressure reducing valves shall operate at a pressure of 150 psi gauge and be capable of reducing a high existing pressure to a pre-adjusted lower downstream pressure for varying rates of flow without causing water hammer on the system. The maximum fluid velocity through the valve shall not exceed fifteen (15) fps at maximum demand flow. The valve shall be designed to provide an access opening into the valve body for removing internal parts without removing the main valve body from the line. Valves shall be supplied with position indicator assembly, open and close speed controls, sustainer and preset pilot valves in accordance with City of Rifle specified pressures.

Pressure reducing valves approved for installation are as follows:

Clayton Model 92-01, manufactured by Cla-Val Co., Newport Beach, California or Singer Valve Model 106-S

- D. Air Release-Vacuum Valves: Combination air release-vacuum valves operating to 150 psi shall be of the single body, double orifice type allowing large volumes of air to escape out of the large air vacuum orifice when filling the pipeline and to close watertight when the liquid enters the valve. During closure of the large orifice, the small air release orifice shall open to allow small pockets of air to escape automatically and independently of the large orifice. The large air vacuum orifice shall also allow large volumes of air to enter through the orifice during pipeline drainage to break the vacuum. Valves shall be manufactured in accordance with AWWA C512. Drain plugs shall be removed before installation and broiler drains installed by the contractor before the valve is put into service.

The valve body and cover shall be cast iron conforming to ASTM A-48, Class 30. The body inlet must be baffled to protect the lower and upper floats from direct contact of the rushing air and water to prevent premature valve shut off. All floats

shall be stainless steel conforming to ASTM A-240, be hermetically sealed and designed to withstand a minimum of 1000 psi. The upper float shall be center guided for position shut off.

The valve needle and seat shall be Nitrile Rubber conforming to ASTM SB-800. The seat must be fastened to the valve cover, without distortion, for drop tight shut off.

The level frame shall be Delrin conforming to ASTM D-638 and the lug shall be bronze conforming to ASTM B-124-55.

APCO valve series 143C, 145C, 147C, 149C, 150C and 151C, as manufactured by Valve and Primer Corporation or Val-Matic numbers 201C, 202C, 203C, 204C as manufactured by Val-Matic Valve and Manufacturing Corp. are allowed.

1. Guard Valve: The guard valve to be used with two (2) inch and smaller air valves shall be a Ford or Mueller brass ball valve with female iron pipe threads, or approved equal. Connections between the air and guard valve shall be made using brass nipples conforming to AWWA C-800, "Threads for Underground Service Line Fittings". Large guard valves may be flanged type.

A service saddle shall be used to install taps for all combination air release vacuum valves installed on water mains. Service saddles shall conform to the manufacturer and type shown in Section 30.2 of these specifications. For air release-vacuum valves installed on transmission mains larger than 16" diameter, saddle shall be equivalent to APAC 113 large diameter, double strap all bronze service saddle.

- E. Tapping Valves: Tapping valves shall conform to all the requirements set forth herein above for resilient seat gate valves and the following:

The inlet end of the valve shall be Class 125 flange and the outlet end shall be a mechanical joint. Body of the valve and seat opening shall be sized large enough to accommodate the following sizes of shell cutters:

<u>Tapping Valve Nominal Diameter</u>	<u>Shell Cutter Diameter</u>
4"	3- 7/8" $\pm$ 1/32"
6"	5-13/16" $\pm$ 1/32"
8"	7- 7/8" $\pm$ 1/32"
10"	9- 7/8" $\pm$ 1/32"
12"	11- 7/8" $\pm$ 1/32"

0.9.3. Valve Appurtenances:

- A. Flanged Ends: Flanges shall be sized and drilled in accordance with ANSI-B 16.1, Class 125 specifications; flanges shall be machined to a flat face with a finish of 250 micro-inches, or machined to a flat surface with a serrated finish in accordance with AWWA C207 "Steel Pipe Flanges".
- B. Mechanical Joint: Mechanical components of this type of joint shall conform with ANSI-A21.11/AWWA C-111 "Rubber Gasketed Joints for Cast Iron and Ductile Iron Pressure Pipe and Fittings". The tee-head bolts and hexagon nuts shall be fabricated from a high strength, low alloy steel known in the industry as "Cor-Ten", "Usalloy" or equal.

C. Bolting Material: Bolts and hex nuts used on the bonnet of the valve shall be manufactured from a low-alloy steel for corrosion resistance or electroplated with zinc or cadmium. The hot-dip process, in accordance with ASTM A-153, is not acceptable for the threaded portion of the bolts.

D. Operators and Stem Extension: Operators shall be designed for buried service and to operate indefinitely in a fully buried condition. Operators shall be equipped with a standard AWWA 2" square operating nut. Valves shall open with a left (counterclockwise) rotation of the nut.

Top operating nut stem extensions shall be manufactured from cold rolled steel. Stem extensions shall be equipped with a standard AWWA two (2) inch square operating nut and shall be of sufficient length to place the stem operating nut to between three (3) to five (5) feet of finished grade. Stem extension shall be attached to the valve operating nut by means of two (2) each 5/16" x 1/2" set screws. 1/8" deep dimples shall be drilled into operating nut for set screws to hold on to.

E. Testing: Each valve after shop assembly shall be given the operation and hydrostatic tests in accordance with the applicable specifications.

F. Painting: All surfaces of the valve shall be clean, dry and free from grease before painting. All ferrous surfaces, exterior and interior, except the seating surfaces of flange faces, shall be evenly coated with a suitable primer to inhibit rust or black asphalt varnish in accordance with Federal Specification TT-V-51e, Military Specification C450C, Type 11 or Navy Specification JANT 450. Flange faces shall be shop coated with a rust preventive compound such as Dearborn Chemical "No-OX-Id", Houghton "Rust-Veto 344", or "Rust-O-Leum R-9".

On rubber seated valves, after above painting is complete, a lubricant compatible with the rubber seal shall be applied to the surface of the seal and the mating metal surface to prevent bonding of the two (2) surfaces during shipment and storage. Following application of the seal lubricant, the valve disc shall be placed in the fully closed position for shipment.

G. Valve Boxes: Valve box parts shall be made of gray cast iron and the boxes shall be two (2) piece, adjustable screw type, with 5 1/4" shafts. Extension pieces shall be used where necessary. Lids shall be of the drop type having 1 1/2" skirts and marked for water usage. Slip cheater type are unacceptable.

Tyler Pipe Company, Series 6850 or equal with Small Base are allowed unless a larger valve requires a Wide Base.

30.2.4

Tapping Sleeves for Wet Taps (3" - 12"): All tapping sleeves for use on PVC, ductile iron or existing asbestos cement water mains shall be designed for an operating pressure of 150 psi and shall be fabricated using Smith- Blair 622 or equivalent. Sleeve shall be furnished with gridded virgin SBR compounded gasket for water service that provides full 360° pipe coverage ("full gasket"). Gasket shall be shop glued to the body section of the sleeve and the gasket shall provide adequate seal for the design pressure. Sleeve flange shall be Type 304 (18-8) Stainless Steel having the flange face machined and recessed to receive standard tapping valve in accordance with MSS Standard SP-60 for sizes 4" through 12". Flange shall conform to AWWA C207 Class D ANSI 150 lb. drilling. Bolts shall be Type 304 (18-8) Stainless Steel per ASTM A193 and A194. The use of two (2) tapping saddles, when side by side or back to back, as a substitute for a cross will not be

allowed. Edge of tapping saddle must be a minimum of 24" away from all joints as measured along the water main.

0.9.5. Fire Hydrants: Dry-Barrel Dry-Top Fire Hydrants: Except as modified or supplemented herein, all fire hydrants shall be designed to operate for a line pressure of 150 psi and manufactured in accordance with AWWA C502 "Dry-Barrel Fire Hydrants". Kennedy K81D Guardian or Mueller Super Centurion 250 are the approved City of Rifle hydrants

- A. Size: Hydrants shall have a main valve opening size of 5 1/4 inches.
- B. Type: Hydrants shall be the 3-way type with one (1) pumper nozzle and two (2) hose nozzles all located on the same horizontal plane, between eighteen (18) and twenty-four (24) inches above final grade. All extension kits are to be furnished and installed by Contractor. Proper breakaway coupling installation shall be verified by City inspector prior to reinstalling hydrant bonnet.
- C. Base Connection: Hydrant base shall be provided with a mechanical joint to accommodate six (6) inch diameter AWWA C-900, CL200 or AWWA C-909, CL150 pipe complete with plain rubber gasket, gland, bolts and nuts all in accordance with ANSI A-21.11/AWWA C111.

The mechanical joint bolts and nuts shall be high strength, low-alloy corrosion resistant steel "Cor-Ten" or equal with a minimum yield of 50,000 psi conforming to ASTM Specification A-242. Incorporated into the base shall be two (2) lugs for rodding or strapping of pipe.

All mechanical joint accessories shall be attached to hydrant for shipment.

- D. Traffic Breakaway: Hydrant shall incorporate a traffic breakaway feature of the barrel and stem. Stem coupling shall be of cadmium plated steel or bronze with fasteners of stainless steel.
- E. Main Valve Assembly: The main valve of the hydrant shall be 5 1/4" diameter compression type which closes with the water pressure. Seat ring shall be bronze with a machined face and external threads for threading into a bronze drain ring. Provide bronze to bronze threads for the main valve assembly and a fully bronze lined drainway.

Gasket for valve shall be a replaceable type fabricated of a resilient material, with a threaded bottom plate or nut, complete with seal to prevent leakage of the hydrant shaft.

The valve assembly shall include one (1) or more drain valves which will work automatically with the main valve and drain the barrel when the main valve is in the closed position. Drain valves shall be positive, mechanically activated and be an integral part of the main valve assembly. Drain channels shall be bronze lined and sized large enough for the barrel to drain within twelve (12) minutes when the barrel is sized for a five (5) foot trench depth.

All parts of the main valve assembly shall be so designed that removal of the assembly from the barrel is accomplished without excavation in accordance with Section 201.13 of the referenced specification.

- F. Operating Shaft and Nut: The operating nut shall be bronze or cast iron #17NS hexagonal shaped with a finish height of 1 1/4". The dimensions from point-to-point are 1 1/2" at the top and at the bottom. Bushings in the bonnet shall be so constructed that it will prevent the operating nut from traveling during opening or

closing operation; also the bushing shall house a gasket or seal to prevent moisture or foreign material from entering the lubricant reservoir.

The hydrant shall open by turning the operating nut to the left in a counter clockwise direction and shall have an arrow on top of the bonnet to designate the direction of opening.

- G. Pumper Nozzle and Cap: The pumper nozzle shall be 4 1/2" nominal diameter. Threads shall be right-hand and National Standard in accordance with NFPA #194.

Nozzle cap shall be furnished with a synthetic rubber gasket installed in a retaining groove and the dimensions and shape of the nozzle cap nut shall be the same as the operating shaft nut as described in Paragraph F above.

Nozzle caps shall be furnished with security chains with one (1) end of each securely attached to the upper barrel section of the hydrant.

- H. Hose Nozzles and Caps: The two (2) hose nozzles shall be 2 1/2" nominal diameter. Threads shall be right-hand and National Standard in accordance with NFPA #194. Each hose nozzle shall include a nozzle cap with nut and security chain the same as described in Paragraph F above.
- I. Nozzle Attachment: Outlet nozzles shall be fastened into the barrel by mechanical means. Threaded nozzles shall be secured by a stainless steel pin or screw and sealed by the use of O-rings. All bronze castings shall be of low zinc bronze ASTM B-62. Internal fasteners shall be of ASTM A-276, Type 302 or 305 stainless steel.
- J. Painting and Coating: The buried portion of the hydrant shall be given a bituminous coating in accordance with AWWA C-106, Section 6-8. All ferrous metal parts shall be coated in accordance with AWWA C-500, Section 4.5 and Section 2.22. The bonnet and nozzle cap shall then be given one red shop coat of heavy-duty alkyd enamel paint conforming to Federal Specification #13538. The remaining above ground portion of the fire hydrant shall also be shop painted red enamel.

All internal ferrous metal surfaces that are in constant contact with pressured water shall have a minimum of four (4) mils epoxy-coating as outlined in AWWA C550 entitled "Protective Coatings for Valves and Hydrants."

- K. Interchangeable Parts: Hydrants shall have interchangeable parts with presently installed hydrants. Kennedy K81D Guardian or Mueller Super Centurion 250 are the approved City of Rifle hydrants.

0.9.6. Restrained Joints for Steel or Concrete Pipe: Restrained Joints for steel or concrete transmission lines shall conform to the requirements set forth in AWWA Manual M9, "Concrete Pressure Pipe" or AWWA M11, "Steel Pipe Manual."

Joints shall be one of the following types as indicated on the construction plans:

- 1. Lap welded slip joint – The standard bell shall provide for a 2½ inch lap. The minimum lap shall be 1 inch. The design maximum joint deflection or offset shall be a 1" joint pull.
- 2. Double welded butt strap joint - Butt straps, where required will be a minimum of six (6) inches wide, the same thickness as the pipe wall, and will be welded to one end of each pipe section so the joint can be lapped on the outside of the pipe.

On joints where butt straps are used for realignment, adjustment, or deflection, the pipe ends will be cut straight, and fillet welds shall be made on the outside of the pipe.

- 3. Flanged and bolted – Flanges shall be in accordance with AWWA C207 Class D for operating pressures to 150 psi and transient pressures to 225 psi. Flange face shall be coated with soluble rust-preventative compound. Bolts for buried flanges shall be type 316 stainless steel conforming to ASTM A193, Grade B8M, Class 1 and ASTM 194, Grade 8M nuts.

4. Mechanical coupling – Mechanical couplings shall be Smith Blair Style 411, Baker Style 200, Brico Depend-O-Loc, or equal. Insulated mechanical couplings shall be double insulated Smith Blair Style 416, Baker Style 216, or equal for working pressures up to 150 psi only. Mechanical couplings shall be harnessed for the maximum pressure in accordance with AWWA M11.
5. Carnegie end rings restrained by means of: circumferential clamps, snap ring, bell bolts or filler rod welded to both the bell and spigot ring.

0.9.7. Exterior Coatings for Pipe and Fittings

- A. Steel Pipe Coatings: Exterior coating for steel pipe shall be a multi-layer 80 mil prefabricated Polyken YG-111 Tape System conforming to AWWA C-214 "Tape Coating Systems for the Exterior of Steel Water Pipelines", or a cement mortar coating conforming to AWWA C-205 "Cement Mortar Protective Lining and Coating for Steel Water Pipe four (4) inches and Larger - Shop Applied".
 1. Shop Applied Concrete Coating: Type V cement conforming to ASTM C-150 "Specification for Portland Cement" shall be used in concrete placed in the walls of concrete cylinder pipe or on metallic pipe to be coated in accordance with AWWA C-205.

Modified Type II Portland Cement, having a low tricalcium aluminate content, is considered as an equal alternate for Type V cement.
 - a. Dielectric Coating Over Concrete Coated Pressure Pipe: Prior to shipment, the exterior concrete surface shall be spray seal coated with a 100% solids cool for epoxy, applied at the rate of 61 sq. ft. per gallon and control cured. Epoxy and its application shall conform to the latest requirements of the U.S. Bureau of Reclamation.
 2. Shop Applied Tape Coating: Shop applied tape coating shall be a continuous four (4) layer system applied to the exterior of the metallic cylinder and extend from the end of the bell to within 4 1/4" of the spigot. It shall consist of:
 - a. Primer Layer - applied over a pipe surface prepared as specified in SSPCSP 6, "Surface Preparation Specification #6, Commercial Blast Cleaning or NACE TM-01-75, Visual Standards for Surfaces of New Steel Centrifugally Blast Cleaned with Steel Grit and Shot."
 - b. Corrosion Protection - wrapped twenty (20) mil tape layer.
 - c. Inner Mechanical Protection - wrapped thirty (30) mil tape layer.
 - d. Outer Mechanical Protection - wrapped thirty (30) mil tape layer.
- B. Ductile Iron Pipe Coating: Ductile iron pipe shall have a bituminous seal coating in accordance with ANSI/AWWA C151/A21.51, as well as a bituminous coated cement mortar lining in accordance with ANSI/AWWA C104/A21.4.
- C. Field Coating Appurtenances: Field applied coatings for inline fittings, valves, welds and appurtenances shall conform to one of the following:

1. Polyethylene Encasement: Polyethylene shall be manufactured in accordance with ANSI/AWWA C105/A21.5 "Polyethylene Encasement for Gray and Ductile Cast Iron Piping for Water and Other Liquids" with the following additional requirements or exceptions.

Materials and Physical Properties: The raw material used to manufacture polyethylene film shall be Type 1, Class A, Grade E-1, in accordance with ASTM D-1248. The film produced shall meet or exceed the following requirements:

Tensile Strength	1200 psi min.
Elongation	300% min.
Dielectric Strength	800 V/mil thickness min.
Thickness	0.008" (8 mils)
Melt Index	0.4 max.

2. Cold Applied Tape Encasement: Cold applied tape shall be Type II as described in AWWA C-209 "Standard for Cold Applied Tape Coatings for Special Sections, Connections and Fittings for Steel Water Lines". Protecto-Wrap #1170 Primer and #200 Mastic Tape or equivalent has been approved for this application.

When pipe is tape coated according to AWWA C-214, the appurtenance shall be field protected using Polyken #927 primer and Polyken #930 and/or #934 tape or equivalent.

0.9.8. Insulators - Cathodic Protection

- A. Service Line Insulators: Insulators for service lines at the corporation stop for taps on metallic mains shall be Ford Service Insulators or equal as approved by the Project Engineer.
- B. Distribution, Lateral and Transmission Line Insulators: Insulated mechanical couplings on metallic lines, six (6) inches and larger, shall be Rockwell (Smith-Blair) Style 416 or Dresser Style 39, insulating couplings, or equal. Flanged by flanged joints shall be insulated using PSI-Pacific Seal Gasket with sleeves and double insulating washers.

0.9.9. Harness Rods

- A. Lateral and Distribution Lines (6" - 12"): Harness rods shall be manufactured using Mild Steel (MS) conforming to ASTM Specification for "Structural Steel", designation A-36. Hex nuts shall be fabricated in accordance with ASTM Designation A-307, Grade A or B, hexagon heavy series.
- B. Distribution and Transmission Lines (14" - 18"): Harness rods shall be manufactured using High Strength (HS) Steel conforming to ASTM Designation A-193, Grade B7. Nuts shall conform to ASTM Standard A-194, Grade 2H.

0.9.10. Retainer Glands - Mechanical joint retainer glands may be used in lieu of harness rods on PVC and Ductile Iron pipe and shall be cast from grade 60-45-12 ductile iron conforming to ASTM A536-80. Bolt circle, holes and bolts shall be dimensioned to be compatible with standard mechanical joint bells as per specification ANSI/AWWA A21.11/C111 and ANSI/AWWA A21.53/C153. These glands shall have serrations or individually actuated gripping surfaces to maximize restraint capability to hold working and test pressures. The retaining glands shall have a pressure rating equal to that of the pipe on which it is used. Retainer glands for PVC pipe shall be equivalent to those as manufactured by EBAA Iron, Inc. Series 2000PV (4"-36"), Uni-Flange Series 1500 (4"-24") or Star Pipe Products Allgrip Series 3600 (4"-12"). Retainer glands for Ductile Iron pipe shall be equivalent to EBAA Iron, Inc. Series 1100 (30"-48"), Uni-Flange Series 1400 (30"-36") or Star Pipe Products Allgrip Series 3000 (30"-36"). Retainer gland bolts shall be torqued to manufacturer's recommended torque specification.

30.2.11. Bell and Spigot Joint Restraints – In lieu of harness rods, restraint devices for bell and spigot joints of PVC or Ductile Iron pipe shall consist of split restraint rings, one installed on the spigot, connected to one installed on the pipe barrel behind the bell. The restraint devices shall incorporate a series of machined serrations on the inside diameter to provide positive restraint, exact fit, 360° contact and support of the pipe wall. A split bell ring in lieu of a serrated ring may also be used behind the pipe bell. Restraint devices shall be of ductile iron, ASTM A536, Grade 65-45-12 and connecting bolts shall be of high strength, low alloy material in accordance with ANSI/AWWA C111/A21.11. Restraint devices for PVC pipe shall be equivalent to those manufactured by EBAA Iron, Inc. Series 1600 (4"-12") and 2800 (14"-36") or Uni-Flange Series 1390 (4"-36"). Pipe bell restraint devices for Ductile Iron pipe shall be equivalent to EBAA Iron, Inc. Series 1700 (30"-36") or Uni-Flange Series 1450 (30"-36"). Joint restraint bolts shall be torqued to manufacturer's recommended torque specification.

30.9.12. Steel Casing for Bores - Welded steel casing pipe shall meet the requirements of AWWA C200 and shall have an inside diameter of at least twelve (12) inches greater than the outside diameter of the bell joint of the carrier pipe to be installed therein. Casing shall be coal tar epoxy coated. Casing pipe shall be cathodically protected using a minimum of one (1) anode bag per 400 foot length. The minimum wall thickness of the steel tubing shall be:

<u>Wall Thickness</u>	<u>Casing O.D.</u>
3/8"	30" and smaller
1/2"	33"-42"

30.9.13. Casing Spacers and Insulators - APS Model SSI or SI with fusion bonded epoxy or PVC coating as manufactured by Advance Products and Systems, Inc., Lafayette, LA or equal, installed at a maximum center to center spacing of ten (10) feet along the carrier pipe invert with an additional spacer placed within 6" of each end of the casing pipe. Spacers shall be 8" width for carrier pipe 6" to 14" diameter, 12" width for carrier pipe 16" diameter or larger.

30.2.14. End Seals for Casing Pipe – 1/8" thick synthetic rubber wrap around end seals with stainless steel bands shall be installed on casing pipe after carrier pipe insertion. End seals shall be APS Model AW Wrap Around End Seal as manufactured by Advance Products and Systems, Inc. Lafayette, LA or equal.

0.9.15. Miscellaneous Items

- A. Concrete and Reinforcing Steel: Concrete and reinforcing steel shall be furnished in accordance with the requirements set forth in Section 10, "Concrete", of these Standard Specifications. Class "A" concrete shall be placed in all vaults and/or structures. Class "B" concrete may be used for kickblocks, protective pads and pipe encasement.
- B. Standard Manholes: See Section 25 and Standard Drawings of these specifications.
- C. Telemetry and Electrical System for PRV Vaults: The telemetry system installed shall be capable of transmitting signals via telephone to the Ralston Water Treatment Plant at 18975 West 66th Avenue.

Telemetry equipment to be provided and installed by contractor. City crews will install interconnect to Ralston Plant recorder. Equipment shall be as specified in Special Conditions for a specific project or as approved by the Utilities Division.

The equipment shall be electrically powered, connected via telephone and fully operational.

Electrical system to be installed in the vault shall be weather proof and include, but not be limited to, 2 each 75 watt explosion proof light fixtures and bulbs; 2 each non-metallic duplex receptacles with covers; non-metallic junction boxes, breaker box, single pole switches weather head as required. Contractor shall also supply #6 copper grounding rod, 1 inch EMT Riser tubing and wire and install meter setting.

- D. Vent Pipe: Vent piping for manholes and vaults shall be 6 5/8" O.D. Schedule 40 PVC pipe or steel with threaded joints. In residential areas, the vent pipe above ground shall be painted green. In parks and range land, the vent pipe shall be painted caterpillar yellow. See Vent Pipe Assembly Standard Drawing W-49.
- E. Pipe Detector Wire: Wire shall be AWG, Size #12, type UF or USE cable, UL Listed, and shall have a white plastic insulation jacket and single copper conductor.
- F. Water Service Insulation: Insulation shall be IMCOAFLEX, as manufactured by Insulation Materials Corporation of America or equal, one (1) inch minimum wall thickness. Side slits and bolt joints shall be duct taped.

0.9.16. Cathodic Protection and Monitoring Systems - Metallic water transmission lines (18" and larger) shall be cathodically protected by means of a National Association of Corrosion Engineers (NACE) designed sacrificial anode system or an impressed current cathodic protection and monitoring system. Materials to be incorporated into the system shall be as hereinafter listed unless otherwise approved as equals prior to bidding by the Project Engineer.

<u>Item</u>	<u>Manufacturer or Trade Name</u>
Anode Junction Box	Cott
Test Stations, flush to grade	Cott-Fink, Gerome-Testox 500
Galvanic Anodes	Dow Galvomag
Thermite Brazing	Cadweld, Thermoweld
Brazed Coating	Koppers #50 Bitumastic
Voltmeters	D'Arsonral

Co.	Graphite Anodes	Harco-Centap-NA Treated
	Cable to Anode	Duralar Halar
	Calcined Fluid Petroleum Coke	Loresco, DW-2 or DW-3 C.E. Equipment
	Rectifier, air cooled	Good-All, Universal
	ES-ABS Solid Casing	Armco
	Zinc Grounding Cells	Federated Metals
	Reference Electrodes	Harco Permacel
	Field Bonding Straps	AWG Stranded Copper Wire w/HMWPE insulation
	HIRDA Anode System	Harco

III Execution

0.10. PIPE INSTALLATION

Installation of pipe and appurtenances shall be performed in accordance with the acceptable practices set forth by the American Society for Testing Materials (ASTM), the American Water Works Association AWWA C600, "Installation of Ductile-Iron Water Mains and their Appurtenances"; AWWA Manuals M9, M11, AWWA C605, "Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water", approved plans and as modified herein.

At all times during construction of the pipeline, the contractor shall use every precaution to prevent damage to protective coating on the pipe. No metal tools or heavy objects shall be permitted to come into contact unnecessarily with the finished coating. Workmen will be permitted to walk upon the coating only when necessary, in which case they shall wear shoes with rubber or composition soles and heels. Any damage to the pipe or protective coating from any cause during the storage or installation of the pipeline shall be repaired prior to laying of the pipe, as directed by the Project Engineer, by and at the expense of the Contractor.

0.10.1. Storage of Materials - The contractor shall store and adequately protect all material prior to installation. Any damage to the materials resulting from improper storage or handling by the contractor shall be repaired or replaced by and at the expense of the contractor.

Stored pipe shall at all times be supported on sawdust bags, timbers, sand bags or other suitable support. Bags shall be of sufficient size to prevent contact of the pipe coating with the ground or any obstruction. Rolling pipe sections on its coating surface will not be permitted.

When pipe laying is not in progress, the ends of the pipeline, all special openings and all pipe waiting to be laid shall be kept closed with suitable bulkheads to prevent unauthorized access by persons, animals, water or any other undesirable substances. The bulkheads shall be so designed to prevent drying out of the interior lining of the pipe. The contractor shall introduce water into the pipe to keep the mortar lining moist where moisture has been lost due to damaged bulkheads.

It shall be the responsibility of the contractor to prevent damage to coatings which might be caused by handling and/or embrittlement caused by storage of the completed pipe at low temperature.

PVC Pipe stored outside and to be exposed to sunlight for more than 30 days shall be

covered with a solid canvas to block the light. Clear plastic is not allowed as a cover. Air circulation shall be maintained under the covering.

0.10.2. Handling Pipe - Pipes, fittings, etc., shall be carefully handled and protected against damage to lining and coating, impact shocks, and free fall. All pipe handling equipment shall be approved by the Project Engineer. Pipe shall not be placed directly on rough ground but shall be supported in an approved manner which will protect the pipe against injury whenever stored at the trench site or elsewhere. No pipe shall be installed where its coating or lining shows cracks that may be harmful. Damaged coating or lining shall be repaired to the satisfaction of the Project Engineer, or a new undamaged pipe section shall be installed, at no expense to the City.

Pipe shall be handled, hauled, and placed using wide slings and padded cradles of canvas, leather, or other suitable material so designed and constructed to prevent damage to the pipe lining or coating. The use of bare metal cables, chains, hooks, or other equipment which might injure the pipe coating will not be permitted.

- A. Pre-installation Coating Inspection: The contractor shall permit and aid in the inspection of all coating on the underside of the pipe, at the time of the installation, and shall repair any damage before lowering the pipe into the trench. While being laid, the pipe shall not be rolled, skidded or otherwise moved when in contact with the ground at any point.

At the trench site, just prior to installing, the contractor shall inspect the pipe coating for flaws, cracks, spalling, etc. Tape coated pipe shall be inspected for holidays with a contractor furnished coil spring or brush type electrode, having a primary wattage no higher than twenty (20) watts and a minimum pulse, at crest voltage, of twenty (20) per second. Where holiday flaws are detected, they shall be repaired to the satisfaction of the Project Engineer before the pipe section is placed in the trench.

Cement mortar coated pipe shall be inspected for cracking or spalling while supported in belted or canvas slings, prior to lowering in the trench. Where coating imperfections are found, and providing there is no visible damage to the pipe lining, straight pipe sections shall be rotated so the damaged coating is atop the pipe after being lowered and set in the trench.

The coating shall then be cement mortar repaired and allowed to cure for a period of 24 hours before backfilling. Concrete coatings on beveled sections, bends and other special sections which cannot be rotated, as herein above described, shall be repaired to the satisfaction of the Project Engineer prior to lowering and setting in the trench.

- B. Pipe Struts: Struts in steel and pretensioned concrete cylinder pipe shall be left in place until backfilling operations have been completed. After the backfill has been placed, the struts shall be removed and will remain the property of the contractor.

0.10.3. Excavation, Bedding and Backfill - Excavation, bedding and backfill required for the installation of pipe covered by this section of the specifications shall be performed in accordance with Section 20 of these standard specifications. See Standard Drawings for pay limits of select backfill and trench resurfacing. Valve boxes installed in streets shall be backfilled with special backfill material for the entire width of the trench. Trenches in streets shall be backfilled with special material at the discretion of the Project Engineer.

0.10.4. Alignment and Grade - When called for on approved plans or by the laying diagram, the water lines, including their appurtenances, shall be constructed to the specified line and

grade. When not shown on plans, minimum pipe cover shall be four and one half (4½) feet and a maximum of seven (7) feet. Gate valve and curb stop valve operators on services must not be deeper than five (5) feet from finished grade.

The grade and alignment of the pipe, structures and appurtenances shall be controlled by means of laser beams or offset grade stakes, set in the field by professional survey parties. The contractor shall be responsible to accurately transfer said grade and alignment to the trench and construct thereto.

- A. Laying Diagram: Each section of pipe shall be laid in the order and position shown on the laying diagram. In laying pipe, it shall be laid to the set line and grade, within a reasonable tolerance, approximately one (1) inch plus or minus. On grades of zero (0) slope, the intent is to lay pipe to grade. Fittings, valves and hydrants shall be installed at the specified stations and elevation. Three copies of the approved laying diagram signed by the contractor shall be submitted prior to installation.

0.10.5. Pipe Laying - The contractor, with the assistance of the Project Engineer and City Inspector, shall inspect each pipe and fitting to insure that there are no damaged portions of the pipe. Metallic pipe joints will inherently have small amounts of burrs, gouges, weld splatter or other small defect, which the contractor will be required to remove or smooth out. On other than transmission lines, the pipe shall be cut, whenever necessary, to conform to location of fittings, line or grade. All cuts shall be straight and true, in a workmanlike manner so as to leave a smooth end without damaging the pipe. All burrs shall be removed from the ends of cut pipe, and the end lightly rasped or filed.

No dry cutting or beveling of existing asbestos cement pipe will be allowed. MOA-PVC pipe shall be used in place of MOA Asbestos-Cement Pipe.

Before placing pipe in the dry trench, each pipe section valve and fittings shall be thoroughly cleaned of all foreign material, kept clean at all times thereafter, and carefully examined for cracks and other defects before installation. Bell ends and spigot ends are to be examined with particular care. The openings of all pipe and fittings in the trench shall be closed to the satisfaction of the inspector during any interruption to the work, overnight or over the weekend.

- A. Frost Foundations: No pipe, fitting or appurtenance shall be installed upon a foundation into which frost has penetrated or at any time when the Project Engineer shall deem there is danger of the formation of ice or penetration of frost at the bottom of the excavation. No pipe shall be laid unless it can be established that the trench will be backfilled before the formation of ice and frost occurs.

B. Order of Laying Pipe:

1. Bell End Ahead and Uphill: Pipe shall be laid with bell ends facing in the direction of laying unless otherwise approved by the Project Engineer. In general, pipe shall be laid starting at the lower end of the line and proceeding uphill. In no case shall pipe be laid in a downhill direction where the slope is greater than ten (10) percent, unless permitted by the Project Engineer in writing.
2. Downhill: When approved, pipe that is laid on a downhill grade shall be blocked and held in place until sufficient support is furnished by the

following pipe to prevent movement. All bends shall be properly installed and anchored in place before continuing laying downhill.

3. Curves: When laying pipe on curves, the intent is to lay each section to the alignment. The pipe shall be kept in alignment by placing all deflection joints or bends on the curve. Short lengths of pipe shall be used as necessary to accomplish curvature without exceeding individual deflection specified by the manufacturer. Bends shall be used whenever individual deflections exceed those specified by the manufacturer.

C. Laying Procedure:

1. Holes for Jointing and Sling Removal: Holes for jointing pipe sections and sling removal shall be excavated prior to setting the pipe in the trench. Bell holes shall have a minimum clearance of one (1) foot on each side of the pipe end and not less than eight (8) inches deep to allow room for taping or grouting the joint. For field welded joints the minimum bottom clearance shall be three (3) feet each side of the joint and one (1) foot deep.
2. Lubricating Joint: Following final cleaning of the bell and spigot a non-toxic, water-soluble joint lubricant shall be applied to the gasket, and the spigot end of the pipe. Caution shall be exercised to insure the correct type of gasket is used and the manufacturer's recommendations are followed when joining pipe sections.
3. Rotating and Jointing: When the pipe is being laid, it shall be turned and placed where possible, so that any slight damaged coating will be on top. All damaged lined or coated areas shall be repaired using materials and methods as approved by the Project Engineer.

Pipe shall be laid directly on bedding material. No blocking will be permitted, and the bedding shall be such that it forms a continuous, solid bearing for the full length of the pipe. The spigot end shall be aligned with the bell end and carefully centered so that the pipe is still supported by the slings such that the gasket will not drag as it is entered into the bell. The pipe shall be pulled together by an approved method such as bands and come-alongs or band and hydraulic jacking head as recommended by the pipe manufacturer. In all cases, the joint shall be assembled with the axis of the pipe lengths in a straight line; and deflection, if required, shall be taken by swinging the pipe end after the joint has been completely assembled. Pipe furnished without a depth mark shall be marked before assembly to assure insertion to the full depth of the joint. The spigot end of field cut pipe lengths shall be filed, or ground to resemble the spigot end of such pipe as manufactured. Care shall be taken to assure that the gasket is not twisted or pulled when the pipe is jointed.

Where necessary to raise or lower the pipe due to unforeseen obstructions or other causes, the Project Engineer may change the alignment and/or grades. Such change shall be made by the deflection of joints, by the use of bevel adapters, or by the use of additional fittings. However, in no case shall the deflection in the joint exceed the maximum deflection recommended by the pipe manufacturer. No joints shall be out of home any amount which, in the opinion of the Project Engineer, will be detrimental to the strength and water tightness of the finished joint. In all cases, the joint opening, before grouting or finishing with the protective mortar inside the pipe, will be the controlling factor.

4. Detector Wire: The contractor shall furnish and spirally wrap detector wire around PVC water pipe as it is installed into the system. Wire shall be white, AWG size #12, type UF or USE cable, UL listed, with single copper conductor.

During installation, wire shall be spirally wrapped around the pipe exterior, two (2) wraps minimum per twenty (20) feet of pipe. Splices due to breaks in wire continuity shall be made by stripping insulation from each wire end with wire stripper pliers. Wires shall be joined with a solderless connector such as a 3M DBY direct bury splice kit by 3M or approved equal installed in accordance with the manufacturer's instructions. The solderless connector shall then be covered with Seal-A-Conn II putty, manufactured by Emmerson Electric, or approved equal.

The wire shall form a continuous electrical circuit between any two contact points on the new pipeline including branch lines and fire hydrant laterals. Wire shall be stubbed out to the point where new pipe connects to existing mains unless otherwise directed by the City representative. Where the wire terminates at a point where there is not an installed wire, the ends of the wire shall be stripped bare a minimum of 18 inches and grounded into the native soil material. Wire shall be extended to each fire hydrant installed and looped through a test station. Tracer wire cannot be coiled in a water valve box. Wire shall not be cut at the test station and shall not be connected to the test station leads. Test station shall only serve as an access point for the wire. Test station shall be a CP Test Services, Glenn Series Glenn-4 with locking lid, 3½ x 4, or approved equal.

5. Bell and Spigot Steel Pipe Joint Seating:

- a. Pipe with Carnegie Joint End Rings: As the spigot is thrust home, its advance shall be checked by two (2) steel inserts held in the seat of the bell 180 degrees apart. These inserts shall be removed and a feeler gauge entered into the recess to detect any irregularity in the position of the rubber gasket. If the gasket cannot be felt all around, the joint shall be disassembled. If the gasket is undamaged as determined by the Project Engineer, it may be reused, but only after the bell ring and gasket have been resoaped, as previously specified. After reassembling the joint, the position of the gasket shall again be checked.

The tied joints shall be jointed as above, and then the necessary wedging or clamping shall be done as recommended by the pipe manufacturer.

- b. Pipe with Expanded Bell and Rolled Spigot Ends: After the joint has been pulled completely together as indicated by the stab marks, the gasket shall be checked using a feeler gauge. This check shall be made around the complete circumference of each joint to be sure that the gasket has not rolled out. If a gasket has rolled out, the joint shall be pulled apart, the gasket inspected, and, if damaged, shall be discarded and a new gasket installed. It should be noted that it is extremely important to obtain full engagement of the stab joint and to check each joint as it is laid.

Each steel pipe length shall be backfilled at least partially before the next length is installed to prevent pullout or movement of the pipe from expansions and contraction.

0.10.6. Jointing Specials and Fittings

- A. Mechanical and Flexible Coupled Joint: When installing mechanical and flexible steel couplings, care shall be taken that the connecting pipe ends, couplings and gaskets are clean and free of all dirt and foreign matter with special attention being given to the contact surfaces of the pipe, gaskets and couplings. These couplings shall be assembled and installed in conformity with the recommendation and instructions of the coupling manufacturer. All mechanical couplings shall be fusion-bonded epoxy coated with stainless steel bolts.

Wrenches used in bolting couplings shall be of a type and size recommended by the coupling manufacturer. Coupling bolts shall be tightened so as to secure a uniform annular space between the middle ring, follower rings and the body of the pipe with all bolts tightened approximately the same amount. Diametrically opposite bolts shall be tightened progressively and evenly. Final tightening shall be done with torque wrenches set for the torque recommended by the coupling manufacturer. All clamping torque shall be applied to the nut only.

- B. Field Welded Joint: When laying pipe requiring a field welded joint, pipe deflection shall be limited to that which will produce a lap of one and one-half (1½) inches.

1. Butt Strap Joint: Butt straps, where required will be a minimum of six (6) inches wide, the same thickness as the pipe wall, and will be welded to one end of each pipe section so the joint can be lapped on the outside of the pipe.

On joints where butt straps are used for realignment, adjustment, or deflection, the pipe ends will be cut straight, and fillet welds shall be made on the outside of the pipe.

2. Lap Joints: On lap joints, exterior fillet welds shall be made as shown on the drawings. The remaining seal weld, where required, shall be 3/16" minimum. An inside weld will not be required. The clearance, before field welding, between the outside circumference of the spigot end and the inside circumference of the bell end shall be not less than 0.09" nor more than 0.41".

3. Bell and Spigot Joints: Where welding of a bell and spigot joint is required, the all around gap between the bell and spigot as delivered from the manufacturer shall not be less than 1/32 (0.03125) nor more than 3/32 (0.09375) of an inch.

- C. Flanged Joint: Before the joint is assembled, the flange faces shall be thoroughly cleaned of all foreign material with a power wire brush. The gasket shall be centered and the connecting flanges drawn up watertight without unnecessarily stressing the flanges. All bolts shall be tightened in a progressive diametrically opposite sequence and torqued with a suitable approved and calibrated torque wrench to a torque value as recommended by the manufacturer. All clamping torque shall be applied to the nuts only.

- D. Harnessed Joints: Joint harnessing by use of rods and clamps shall be installed at interference crossings; on fire hydrants, bends, offsets, domestic and fire sprinkler connections.

Rod material required to harness six (6) inch to eighteen (18) inch pipe joints is specified in paragraph 30.2.9 of this specification. After the rods are bolted in place, they shall be double wrapped with eight (8) mil thick polyethylene or other approved cold applied tape. In addition to rodding, restraints, bends, fire hydrants and tees shall be kickblocked against undisturbed soil with concrete.

Harnesses, where required, on twenty (20) inch and larger steel and concrete cylinder pipe transmission lines, shall be of a type as specified in AWWA Manuals M-9 and M-11.

- E. Retainer Joints: Mechanical joint retainer glands may be used in lieu of rods and clamps for joint harnessing at interference crossings, fire hydrants, tees, bends, offsets, domestic and fire sprinkler connections on PVC and ductile iron mains. (See Paragraph 30.2.10) After the retainers are bolted in place, they shall be double wrapped with eight (8) mil thick polyethylene or other approved cold applied tape. In addition to the retainer gland, all bends, fire hydrants and tees shall be kickblocked against undisturbed soil with concrete.

- F. Insulated Joints: Extra care shall be exercised when installing insulating joints. After the insulating joint has been installed, an electrical resistance test shall be performed by an independent corrosion engineering company selected by the City. Should the resistance be found less than 10,000 ohms, the insulating joint shall be removed and any necessary repairs made. The joint shall then be reinstalled and retested. This process shall continue until the joint is successfully tested. Retesting shall be at contractor's expense. Test results shall be submitted to the Project Engineer.

- G. Bonding Joints: The contractor shall provide and make two (2) each electrical bonds between the metallic cylinders of adjoining pipe sections and across all non-insulating joints. In line valves shall be made electrically continuous where called for on the drawings.

Electrical bonds shall be installed, one each side of the Pipe crown centerline, at approximately twenty (20) degrees apart, when measured from the pipe centerline. Bonding rods shall be long enough and provide sufficient slack to allow for a total joint displacement of two (2) inches.

Expanded bell and spigot steel joints shall be bonded using #4 AWG insulated copper wire, Cadweld CA-15 brazing cartridges and thermite weld caps. Carnegie end ring joints shall be bonded by welding each end of a 6" x 3/8" steel jumper rod, rolled to the mean diameter of the annular space between the rings, to the bell and spigot.

Bonding across insulated flanged joints or insulated couplings will not be allowed.

0.10.7. Joint Coating and Lining on Steel and Concrete Cylinder Pipe - The inside and outside of all joint recesses shall be thoroughly wiped clean to the satisfaction of the inspector. In this cleaning operation, all water, loose scale, dirt and other foreign material shall be removed from the surface of the pipe joints to be coated and lined in the field.

- A. Interior Joint Lining of Welded Steel Pipe Joints: Material used for mortar lining shall conform to AWWA Standard 205. At welded joints, the contractor shall

furnish and tack weld 2" x 4" 13/13 gauge self-furred welded wire fabric to the inside of the joint recess prior to application of mortar. The mortar shall be applied with a uniform pressure producing a smooth surface and a uniform thickness of lining to match the shop applied mortar lining. At no point shall there be an indentation or projection of the mortar which exceeds 1/16 of an inch. Every precaution shall be taken to prevent damage to the lining. After the mortar lining has set sufficiently, clear seal compound "Protex" or equal, shall be applied to the joint lining to the satisfaction of the Project Engineer.

With the approval of the Project Engineer, Probond or equal may be used in place of the welded wire fabric.

- B. Exterior Tape Coated Pipe Joints: The exterior of all joints shall be thoroughly cleaned of all foreign material to the satisfaction of the inspector and primed with Polyken #927 primer and wrapped with two (2) wraps of #930 Polyken tape. Each tape layer shall be thirty five (35) mils thick and applied so that joints lap. The primer and tape shall be manufactured by the same manufacturer as the shop applied tape coating.
- C. Exterior Cement Mortar Coated Pipe Joints: After cleaning, the outside joint recess shall be filled with grout composed of one (1) part cement and two (2) parts sand. The grout shall be poured under a polyethylene lined grout band placed around the joint recess and thoroughly rodded with a stiff wire. The joint recess at the top shall then be closed with a stiffer grout of the same mix as above. Except for piped joints, prefabricated joint protectors may be used as an alternative to mortaring the outside of the joint. If such protectors are used they shall be made from a high density polyester, polyurethane foam containing at least the equivalent of nine (9) bags per cubic yard of unhydrated Portland Cement. The protectors shall be of suitable cross section to fully protect the joint rings and shall be supplied in the form of continuous rings.

No backfilling around the outside of the joints shall be done until the grout has set, and the joint has been inspected and approved.
- D. Interior Cement Mortar Lined Pipe Joints on Steel and Concrete Pressure Pipe: After cleaning, the inside pipe joint recess shall be dry packed filled with a grout composed of one (1) part cement and one (1) part sand. This grout shall be troweled flush with the interior surface, and all excess shall be removed. At no point shall there be an indentation or projection of the mortar exceeding 1/16".

0.10.8. Coating of Flexible Joints, Valves and Fittings for Steel and Concrete Cylinder Pipe - After assembly and cleaning; the exposed metal surface shall then be primed by brush or spraying and then wrapped with two (2) layers of Type II elastomeric tape, all in accordance with AWWA C-209 "Standard for Cold-Applied Tape Coatings for Special Section Connections and Fittings for Steel Water Pipelines".

NOTE: When line pipe, coated in conformance with AWWA C-214 is installed, the appurtenances shall be primed and tape coated using Polyken Primer and Tape.

The two (2) layers of tape, each thirty five (35) mil thick, shall overlap the adjoining pipe sections a minimum of three (3) inches. A final six (6) inch wide tape wrap shall be placed over the above two tape wraps to seal all seams, folds or overlaps.

- A. Coating Non-Metallic Pipe Line Appurtenances: Metallic fittings, valves and inline appurtenances installed in nonmetallic water lines, (existing asbestos cement and

polyvinyl chloride) may be wrapped in two (2) layers of polyethylene in lieu of the Type II tape as specified above.

The polyethylene shall have a minimum thickness of eight (8) mils and shall be in accordance with AWWA Standard C-105. A two (2) inch wide, ten (10) mil thick polyethylene sensitive tape shall be used to close seams and hold folds over overlaps. Damage to polyethylene wrapped fittings and appurtenances in the trench prior to and during backfill shall be repaired to the satisfaction of the City. All polyethylene wrapping shall be repaired and in a state of readiness prior to tapping a line.

- 0.10.9. Field Welding Procedures for Steel Water Pipe - Field welding shall be performed in accordance with AWWA C-206 "Field Welding of Steel Water Pipe".

All welding shall be done by skilled welders who have had adequate experience in the method and materials to be used. All welding operators shall be qualified under the provisions of Section 4.4 of referenced specification. Welders shall be qualified by a local approved testing agency not more than six (6) months prior to commencing work on the pipeline. Machines and electrodes similar to those used in the work shall be used in qualification test. The test will include welding an actual field section to the top of the pipe.

The contractor shall furnish all materials and bear the expense of qualifying welders and submit to the City, proof of their certification.

- A. Pipe Coating Protection During Welding: An eighteen (18) inch wide strip of heat resistant material shall be draped over the top half of the pipe on each side of the coating holdback during welding to avoid damage to the coating by hot weld splatter. No welding ground shall be made on the coated part of the pipe.
- B. Stress Relief: Where more than one (1) welding pass is required, the welding procedures set forth in AWWA C-206 shall be strictly adhered to; all dirt, slag and flux shall be removed before the succeeding bead is applied.

- 0.10.10. Valves and Valve Boxes - Valves shall be handled in such a manner so as to prevent any injury or damage to any part of the valve. Joints shall be thoroughly cleaned and prepared prior to installation. If so ordered by the Project Engineer, valves shall be operated prior to installation to insure proper operation ability.

A line or outlet valve that is to be buried in soil shall be thoroughly cleaned and then wrapped as specified under exterior coating of flexible joint, valves, etc. above.

All valves shall be installed such that the valve stems are plumb and in the location shown on the drawings with disk seat bolts facing nearest access manhole.

A valve box shall be provided with three (3) inch and larger tapping valves. The valve box shall not transmit shock or stress to the valve and shall be centered and plumb over the valve wrench nut, with the box cover set to finish grade. It is the responsibility of the contractor to insure that valve boxes are plumb and raised to the proper elevation.

Operating nuts for butterfly valves shall be placed to the north and east of the water main.

Valve box and stem extensions shall be furnished and installed on all valves that are installed in lines buried greater than five (5) feet below finish grade. The top elevation of the operating nut on the valve or valve stem extension shall be no greater than five (5) feet, nor less than three (3) feet below finish grade. This also applies to curb stop valves on service lines.

- 30.3.11. Marker Posts – When valves, manholes (or bends on mains larger than 12") are installed outside of a paved surface, a marker post shall be installed adjacent to the valve or manhole or on top of the bend. Marker post shall be a 5 foot long 3" diameter steel post set in concrete to a depth of 2 feet. Post shall be filled with soil and capped with 6" of concrete. Post shall be painted fire hydrant yellow.

- 0.10.12. Service Taps - Service saddles and corporation stops shall meet the standards shown in Table 30.2.1. Taps shall be made only after release of mains by the Public Works Department following their installation, chlorine and pressure testing, payment of appropriate fees and completion of the tap application papers. Service installations shall be performed by a contractor or plumber licensed and bonded with the City of Rifle.

Notification and requests for tapping on mains shall be made in writing to the Public Works Department twenty four (24) hours prior to the time the tap is to be made. The contractor shall excavate, expose the main at least twenty-four (24) inches on all sides, and provide a safe dry trench perpendicular to the main which is considered as being:

- A. Three (3) foot wide by five (5) feet long and excavated to a depth of one (1) foot below the main.
- B. When unstable ground conditions exist or the trench is deeper than five (5) feet, the trench must be shored, sheeted or sloped and dewatered before making the tap.

PVC pipe shall not be tapped when the ambient temperature or the temperature of the PVC is less than 32 degrees Fahrenheit. If taps are desired when the temperature is less than 32 degrees Fahrenheit any pipe failures will be the responsibility of the contractor and/or developer.

Under no circumstances shall a main be tapped within twenty four (24) inches of the ends of a pipe or pipe collar or within eighteen (18) inches of an existing tap.

Dry tapping of a distribution or lateral main is strictly prohibited unless approved by the Public Works Department.

- C. 3/4" through 1" Service Tap - Connection of a 3/4" or 1" diameter service line to four (4) inch through twelve (12) inch laterals or mains shall be made by wet tapping the line by means of a corporation stop installed by the Contractor into an approved service saddle installed by the Contractor. Direct tapping into the line is not allowed. In all instances, the corporation stop, when in place on the service saddle, shall be at an angle of forty-five (45) degrees above springline and perpendicular to the centerline of the lateral or main being tapped.
- D. 1 1/2" through 2" Service Tap – 1 1/2" through 2" diameter service line connections to four (4) inch through twelve (12) inch laterals or mains shall also be made by wet tapping the line by means of a corporation stop installed by the contractor into an approved service saddle. The service saddle shall be mounted on the line such that the corporation stop installed is perpendicular to the centerline and at the springline of the lateral or main being tapped.

- E. 3" and Larger Service Tap - Three (3) inch and larger service lines shall be connected to the lateral or main by means of an approved stainless steel tapping saddle and resilient seat tapping valve installed perpendicular thereto. Valve boxes and covers shall be installed directly over the valve operating nut on all valves three (3) inches and larger.

0.10.13. Fire Hydrant Laterals - Piping for fire hydrant lateral shall be rodded and/or mechanically retained and clamped between the mechanical joint end of the valve at the main and the fire hydrant. A concrete thrust block shall also be required.

Pipe for the fire hydrant lateral shall be Class 200 PVC (Polyvinyl Chloride) conforming to AWWA C900 and extend perpendicular from the main. The hydrant shall be set plumb at the end of the lateral, face the main and be adjusted to finish grade. The use of horizontal bends, vertical bends and offsets to install the lateral or tapping into the lateral line is strictly prohibited unless approved by the Project Engineer.

0.10.14. Water Service Lines - Water service line pipe (3/4" - 2") from the main to the curb stop and box or to the meter yoke in the pit shall be one continuous length of seamless copper tube of the type designated as Type "K" (soft) in the industry. Three (3) inch and larger service lines shall utilize ductile iron or PVC pipe. The size of the service line shall be the same size as the meter except for a 5/8" x 3/4" meter the service line shall be 3/4". A 4" tapping sleeve and valve may be used on a 3" service. The service line shall be reduced to 3" diameter just outside the meter vault. The service line through and on both sides of the meter pit must be copper and/or brass only for services 2" or less. Leaded joints and galvanized piping shall not be allowed inside meter vaults or on service lines. Installation of increasers or reducers at or between the corporation stop and the meter yoke will not be allowed except on 3" services and no branch connections will be allowed inside the meter vault. Sprinkler system connections must be made a minimum of 5 feet outside of the downstream side of the meter vault.

A bypass is to be installed on all 1½" and larger meters for domestic use. Irrigation only services do not require a bypass. See Standard Drawings.

Service piping between the meter and the building for ¾" – 2" services shall be Type K copper only. Transition fittings for copper shall be Mueller or Ford (or equal) flared fittings or Mueller #110 or Ford Quick Joint (or equal) compression fittings with integral metal insert. Piping for 3" and larger services shall be PVC outside of the meter vault and Ductile Iron inside the meter vault.

Connection of copper to all metallic water mains shall be electrically insulated by means of an approved insulator fitting installed on the corporation stop. After installation, the fitting shall be cleaned and wrapped with a double layer of eight (8) mil polyethylene tape before backfilling. An insulator fitting shall also be installed on the outlet side of the meter setter.

- A. Curb Stop Valve, Valve Boxes and Meters: Single family service line installations shall terminate at a meter yoke in the meter pit or curb stop (under approved conditions only) at a point near the property line. Service lines 1 1/2" and larger shall terminate at a curb stop valve and box at or near the property or easement line. See Standard Drawings. Curb stop valves shall be of the same size as the service pipe. A curb stop valve shall be installed on each service line leaving a manifold.

Locations of meter pits shall be established by the Project Engineer. Installation of curb stop valve and box or meter pit in driveways, parking areas or sidewalks is strictly prohibited. With special approval, heavy duty frames and covers shall be installed in instances where it is impossible to meet the above requirements. See

Table 30.2. If the street or ground is not to final grade at the time of meter pit installation, the property owner must raise or lower the meter pit to coincide with final grade when established. Ramneck shall be placed between the dome or set ring and top riser ring and also between all subsequent riser rings. All service line installations including meter settings must be inspected by a representative of the Engineering Division before backfill.

- B. Separation of Water Service and Sanitary Sewer Service or Drains: Except as permitted below, the underground water service pipe and the building drain or building sanitary sewer shall be not less than ten (10) feet apart horizontally and shall be separated by undisturbed or compacted earth. Under extenuating circumstances, the water service pipe may be placed in the same trench with the building drain or building sanitary sewer provided prior written approval is given by the City Engineer and the following conditions are met:
1. The bottom of the water service pipe at all points shall be at least twelve (12) inches above the top of the sewer line at its highest point.
 2. The water service pipe shall be placed on a solid shelf excavated at one side of the common trench.
 3. The water service line is one (1) continuous section of Type "K" copper tubing, joint free.
 4. The material and joints of the sewer service pipe shall be installed in such manner and shall possess the necessary strength and durability to prevent the escape of solids, liquids and gases therefrom under all known adverse conditions such as corrosion, strains due to temperature changes, settlement, vibrations and superimposed loads.
- C. Service Line Crossing Curb, Gutter and Sidewalks: The point where the service line crosses under an existing or proposed curb, gutter or sidewalk, the curb shall be marked. The point shall be indicated by chiseling a symbol "V" on the curb directly over the service line.
- Service lines shall be pushed, bored or jacked through the soil under existing curb, gutters and sidewalks. Tunneling or open trench cutting beneath existing curbs, gutters and sidewalks is strictly prohibited.
- For pipe with an internal diameter of twelve (12) inches or less, the depth of backfill over the pipe, measured from official street grade or finish grade to the top of the pipe, shall be four and one-half (4 1/2) feet and shall be known as the pipe cover. If difficulties arise when crossing interferences and where specifically approved by the Project Engineer, deviations of the four and one-half (4 1/2) foot pipe cover may be permitted at a point in the line. A maximum of seven (7) feet of cover shall be maintained in these instances. When approved by the Project Engineer and where the pipe cover is less than four (4) feet, the carrier pipe shall be insulated against frost with an approved insulating material sufficient in thickness to prevent frost penetration and freezing.
- D. Service Line Crossing a Foreign Line: A water service line crossing over a foreign line (storm sewers, water transmission lines, etc.) shall be insulated through areas and at points where its bury is less than 4.5 feet. Imcoaflex or equal insulation shall be of sufficient thickness dependent on bury, to prevent frost penetration and freezing of the service line. Butt joints between sections and side slits in insulation shall be duct or mole taped upon placement around service line.

- E. Backfill of Service Lines in Streets: Service line trenches cut through surfaced streets or adjacent to existing curbs, gutters, and sidewalks in public ROW shall be bedded using squeegee and backfilled using material conforming to CDOT Class 6 Base Course, Flow Fill or Flash Fill.

Base course backfill shall be compacted by vibrating, tamping or a combination thereof, to ninety-five (95) percent of maximum proctor density when tested in accordance with AASHTO T180. Granular bedding material shall be compacted to seventy (70) percent relative density for sand materials as determined by the relative density of cohesionless soils test, ASTM D-2049. The trench backfill material shall be compacted to within six (6) inches of the finished street grade and the trench then topped out to finish grade with six (6) inches of CDOT Grading S Asphaltic Concrete. Asphaltic concrete shall be placed and compacted in accordance with these standard specifications.

- 0.10.15. Interruption of Water Service - The contractor must, in writing, advise affected users twenty four (24) hours prior to performing work on a service, distribution or transmission line which will interrupt a customer's supply of water. Contractor prepared notices shall be hand delivered to each customer or occupant. If the occupant cannot be contacted, the written notice shall be left attached to the door knob or screen.

In addition, the contractor must contact City of Rifle's Collection and Distribution (C & D) Department (970-625-2121, extension 324) and schedule the closing of valves necessary to isolate the line or lines on which work is to be performed. Only City personnel are to operate existing system valves or new valves if they are connected to the City system. Also, it is the contractor's responsibility to advise Rifle Fire Protection District (970-625-1243) as to time and interval the system will be down and also the location of all fire hydrants that will be out of service.

A normal outage shall be a maximum of four (4) hours and between the hours of 8:30 a.m. and 3:00 p.m. If the outage will be greater than four (4) hours, the work shall be done in a manner to minimize the inconvenience to users, such as working at night in a continuous operation until service is restored. A connection which will require an outage longer than four (4) hours shall be subject to review by the City as to the appropriate time for the connection. If in the process of installing a connection there exists a customer, industry or building in the area that cannot be out of water such as a hospital, school, etc., the contractor shall take appropriate means to provide and convey potable water to them at all times during the performance of the work.

- 0.10.16. Sanitary and Storm Sewer Crossings - It shall be the contractor's responsibility to protect all utility, sanitary and storm sewers which either parallel or cross the line being installed.

Contractor cost for protecting parallel or crossing utility sanitary and storm sewers, sprinkler irrigation lines and raw water irrigation pipes and ditches, shall be included in the unit price bid in the proposal for furnishing and installing pipe.

- A. Crossing Over Sanitary Sewer: When a water line crosses over a sanitary sewer with less than a two (2) foot clearance between the sewer and water line, the contractor will encase the sanitary sewer with concrete, to a distance of two (2) feet each side of the outside edge of the water line.
- B. Crossing Under Sanitary Sewer: When a water line crosses under a sanitary sewer, any VCP sanitary sewer pipe must be replaced with PVC pipe and all joints on the sewer line within ten (10) feet of the water line shall be concrete encased, unless otherwise approved by the Project Engineer.

All drains that previously existed under the sanitary or storm sewer shall be restored in a manner that will not allow any flow in the drain to enter and flow down the trench in which the water conduit is laid. When a water line crosses under a storm or sanitary sewer, compacted bedding must be installed to one (1) foot over the storm or sanitary sewer.

- C. Paralleling Foreign Conduits: The City reserves the right to require concrete encasement of pipe joints or the entire pipe of sanitary or storm sewer which are within ten (10) feet and/or less than two (2) feet below the flowline of a water line being installed.

0.10.17. Boring of Casing Pipe and Threading of Carrier Pipe – Boring of casing pipe and threading of carrier pipe shall be completed in accordance with Section 25.5 of these Specifications. Carrier pipe for water mains shall be installed in the casing pipe using approved centering, restraining casing spacers and insulators only. Steel banded skids and chocks are not allowed. Sand filler is also not allowed for water main carrier pipes. End seals of casing pipes shall be rubber boots as described in Section 30.2.14

0.10.18. Special Items

- A. Vent Piping: Vent piping from manholes and vaults shall be trenched with a minimum cover of eighteen (18) inches and carried to a location as designated by the Project Engineer in the field, at which point the vents shall be projected to a height of four (4) feet above the ground, or flush with the ground, to permit installation of the six (6) inch vent pipe box assembly. The steel and PVC pipe to be supplied shall be Schedule 40.

- B. Painting: All metal exposed to atmosphere or buried in the ground, except aluminum, brass, bronze, or copper, shall be painted.

All exposed metal and that portion of the black steel vent pipes that is to be buried shall be given two (2) coats of CA-1180 mastic cold coating or equal as manufactured by Protecto Wrap Company, Denver, CO, except for metal with shop applied coating approved by the Project Engineer. All metal exposed to the atmosphere shall be painted with one (1) coat of red-lead priming paint and two (2) coats of aluminum paint, unless otherwise directed by the Project Engineer.

All surfaces to be painted shall be cleaned of oil, grease, weld spatters, burrs, grit, dust, or other objectionable surface irregularities. Cleaning solvent used shall be mineral spirits or equivalent.

Paint shall not be applied, except under shelter, during wet, damp, or foggy weather, or when windblown dust, dirt, debris, or insects will collect on freshly applied paint. Paint shall not be applied at an air temperature below fifty (50) degrees Fahrenheit, or to surfaces of metals, such as the surface of a valve or pipe containing cold water, with a temperature below fifty (50) degrees Fahrenheit regardless of the air temperature, or when metal temperature and atmospheric conditions cause condensation on the surface of the metal.

Painted surfaces which have become damaged prior to acceptance shall be repainted with the same or equivalent paint used in the original application to the satisfaction of the Project Engineer.

- C. Trench Support: The trench shall be adequately supported and the safety of workers provided for as required by the Occupational Safety and Health

Administration (OSHA). Sheet piling and shoring shall be utilized where required to prevent any excessive widening or sloughing of the trench which may be detrimental to human safety, to the pipe or appurtenances being installed, to existing utilities, to existing structures or to any other existing facility or item. Where excavations are made under severe water conditions, the Project Engineer may require the contractor to use an approved sheet piling, instead of sheet piling and shoring.

Excavated material shall not be placed closer than two (2) feet from the top edge of the trench. Heavy equipment should not be used or parked near the sides of the trench unless the trench is adequately braced.

- D. Test Site and Anodes: The test site and anode installations shall be as called for on the project drawing. If not specified thereon they shall be as shown on City of Rifle Standard Drawings W-63 and W-64.
- E. Manholes and Vaults: The contractor shall furnish materials for and construct all manholes and vaults as shown on the drawings. All manholes and vaults shall be so constructed that they are as watertight as practicable throughout the full depth, including the areas where valve operators or blowoffs extend through the barrel or wall sections.
- F. Concrete and Reinforcing Steel: Concrete and reinforcing steel to be incorporated in the project shall be furnished and installed in accordance with Section 10 - "Concrete", of these standard specifications.
- G. Thrust Anchor Blocks: Thrust anchor blocks shall be placed behind outlets, bulkheads, bends, branches, tees, fire hydrants and fittings which require support due to unbalanced thrust. These anchor blocks shall be Class "B" concrete and of the size and shape indicated in the standard drawings or on the project drawings. Care shall be taken not to block outlets or to cover bolts, nuts, clamps, or other fittings with concrete, making them inaccessible. A polyethylene bond breaker shall be placed between the pipe and the thrust block to aid in future removal. Thrust anchor blocks larger than one (1) cubic yard shall have a minimum of two lifting hooks placed into the top.

The contractor's attention is particularly called to the requirements that the entire face of the excavation against which the anchor block will bear shall be undisturbed earth and shall be flat and at the proper angle with the pipe unless otherwise specified by the Project Engineer.

All forming for concrete thrust blocks and anchors will be done by bulkheading around the shape of the thrust blocks and anchor with bracing or burlap sacks filled with sand or earth. Sacks shall be left in place in the trench. No horizontal struts or braces required for trench shoring shall remain in the concrete kickblocks. Before any concrete is placed, the excavation for concrete shall be inspected and approved by the Project Engineer and/or City Inspector.

Backfill may be placed over thrust blocks once the surface has set sufficiently to resist the weight of the backfill. However, no tamping or compacting of the backfill shall be allowed above the thrust block for a minimum of twenty four hours (24) after placement of the concrete.

- H. Progress of Work - The maximum amount of open trench allowed shall be that amount which, in the opinion of the Project Engineer, is reasonable and prudent for conditions existing at any particular location. That amount may be as little as

sixty (60) feet at some locations. It is not the intention of this specification to impede the contractor's progress; however, the Project Engineer will be the judge of the amount of open trench allowed.

In streets, the complete backfilling operation to the finished grade and cleanup operation shall proceed on a continuous basis and shall follow within 150 feet of the installation of the pipe. However, at the end of each working day, pipe backfill shall cover the installed pipe sufficiently to protect the coating and/or lining of the installed pipe. Any deviation from the above requirements shall be made only with the written approval of the Project Engineer.

0.11. TESTING AND CLEAN UP

- 0.11.1. Testing Cathodic Protection System - The contractor shall furnish all material and properly construct and connect in place a cathodic protection system where called for in strict accordance with contract documents. The contractor shall locate, expose and repair all points along the pipeline, where by testing, there is a lack of electrical continuity or improper isolation. Test stations shall be free of debris or dirt and test leads left with sufficient slack for easy testing and repair. Test stations shall be tagged with the words "City of Rifle" and the diameter of the water main in inches that they are connected to.

The City and/or contractor will employ a corrosion engineering firm to conduct tests and report results obtained during and after completion of the installation or the work may be conducted by City Personnel as determined by the City Engineer. Testing will be performed in accordance with accepted practices as recommended by NACE - "National Association of Corrosion Engineers".

All insulated fittings shall be tested for proper isolation. Electrical continuity tests of the bonded and tied portion of the pipeline shall also be performed. Structure for soil potential measurements, shall be recorded on all protected structures along with DC current outputs of the components. Testing shall be repeated and repairs made, at contractor's expense, until the system is functional and operating to the standard it was designed for.

- 30.4.2. Testing Pipe Detector Wire – Electrical continuity in the wire must be restored and maintained. City personnel will test for electrical continuity and alignment after trench backfill is complete and after permanent asphalt surfacing is installed, as a condition of warranty acceptance.

- 0.11.3. Hydrostatic Testing and Disinfecting Lines - Potable water lines shall be hydrostatic tested, disinfected and flushed prior to being placed into service. Line disinfection performed simultaneously with hydrostatic testing must satisfy the requirements of the Colorado Health Departments.

Hydrostatic testing shall only be performed after the line has been cleaned of debris, concrete anchor blocks have cured and all backfill is in place. Water Division personnel shall be the sole operators of existing valves through which water for testing, disinfecting and flushing is obtained.

- A. Disinfection of Water Lines: Disinfection of potable water lines shall be performed in accordance with AWWA C651 "Disinfecting Water Mains" and to the satisfaction of the Colorado Health Departments.

Following twenty-four (24) hour soak and absorption time, the residual chlorine content of the water shall be no less than twenty-five (25) milligrams per liter, when

tested at any one or all fire hydrants, blow-offs, corporation stops, stub ends, etc., on the line.

Suggested methods of chlorination and their limitations are:

1. Tablet Method: Five (5) gram calcium hypochlorite tablets, each containing 3.75 grams available chlorine, shall only be used when the line cannot be flushed prior to chlorination. The tablet method shall not be used when trench water or foreign materials have entered the water line during installation or the ambient temperature is below forty-one (41) degrees Fahrenheit. The tablets shall be secured to the crown of each pipe section, as it is installed in the trench, with "red" PERMATEX or other approved adhesive. Under normal conditions to obtain the 25 MG/L residual chlorine concentration, after twenty-four (24) hour solution time, will require the use of the number of tablets called for under pipe diameter and opposite pipe joint length as listed below.

<u>Pipe Joint Length</u>	<u>Tablets per Joint</u>					
	<u>6"</u>	<u>8"</u>	<u>10"</u>	<u>12"</u>	<u>14"</u>	<u>16"</u>
13'	2	2	3	5	7	9
20'	3	4	5	7	11	14

2. Continuous Feed Method: This method shall be used when it is necessary to flush the line prior to chlorination or for rechlorination.

Water from an existing distribution source shall be made to flow at a constant rate through the line to be disinfected. Chlorine is then pumped into the line from the water supply source at a rate which will result in a chlorine concentration of no less than 50 MG/L, when tested at any or all accessible discharge locations. The amount of chlorine to be inserted per 100 feet of pipe, to produce 25 MG/L residual concentration after a twenty-four (24) hour solution time, will normally be as shown below.

<u>Pipe Dia. In.</u>	<u>100% Cl. lbs/100 ft.</u>	<u>1% of Cl. Solution gal/100 ft.</u>
6	0.061	0.73
8	0.108	1.30
10	0.170	2.04
12	0.240	2.88
14	0.333	3.98
16	0.435	5.20

3. Slug Method: The slug method shall be used for 18" and larger transmission mains or where use of the tablet or continuous feed method are impractical.

Chlorine in gaseous or super chlorinated liquid form shall be introduced at the water supply source, after the line has been filled. The chlorine slug shall be caused to traverse the entire length of the line, at a velocity, length and concentration, such that the entire interior surface of the pipe is exposed to the equivalent of 300 MG/L of chlorine for at least three (3)

hours.

4. Cut and Repair Method: When a water line breaks or is cut into and it is impossible or impractical to rechlorinate using the continuous feed or slug methods, the following procedure shall be used.

All fittings, valves, couplings and make up pipe sections shall be swabbed with a 5% sodium hypochlorite solution (Clorox) or a 350 MG/L available chlorine solution made from calcium hypochlorite, just prior to being installed. (One 5 g. tablet as specified under the tablet method, dissolved in 10 liters of water is equal to 350 MG/L).

- B. Pressure Testing Lines: Once the line has been cleaned of debris and backfilled, the pipe shall be filled with potable water. Filling for pressure and/or chlorination testing shall be done at a velocity rate at which air can be released to atmosphere through fire hydrants, air valves, blow-offs, etc., on the line, without causing surges or damage to the line and its appurtenances. All air within the pipe shall be purged therefrom, and twenty-four (24) hours lapsed time allowed for water absorption into the pipe lining, before pressure testing.

The hydrostatic test pressure shall be the higher of 150 psig at the lowest point in the line or section under test or 1 ½ times normal operating pressure at the connection. Test pressure shall be maintained continuously for a minimum period of two (2) hours. Pressure shall be applied in a manner satisfactory to the Project Engineer with all testing apparatus furnished by the contractor.

Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe, or any valved section thereof, to maintain the specified leakage test pressure after the air in the pipeline has been expelled and/or displaced with water. No pipe installation will be accepted if the leakage in U.S. gallons per hour is greater than that set forth herein below in accordance with AWWA C600, C605 and M11:

Allowable leakage for steel pipe is for O-ring rubber gasket joints only. The allowance shall be zero on all-welded or mechanically coupled steel pipe.

ALLOWABLE LEAKAGE - ELASTOMERIC JOINT PIPE

U.S. GALLONS PER HOUR

Pipe Diameter Inches	Nominal Allowable Leakage per 1000 ft.		
	DIP	PVC	Steel
4	0.37	0.33	
6	0.55	0.50	
8	0.74	0.66	
12	1.10	0.99	
14	1.29	1.16	
16	1.47	1.32	
18	1.66	1.49	
20	1.84	1.66	
24	2.21	1.99	
30	2.76	2.48	5.91
36	3.31	2.98	7.09

42	3.85	8.27
48	4.41	9.45
54	4.97	10.63

The City reserves the right to substitute its own calibrated meter and/or pump for the contractor's meter or pump for testing.

- C. Flushing Super Chlorinated Water Lines: Prior to connecting super chlorinated lines to the City system, the lines shall be flushed with potable water until the residual chlorine does not exceed 1.0 parts per million. Care in flushing must be taken to prevent erosion and/or killing desirable vegetation. The contractor is responsible in providing any special materials or supplies to meet this requirement.

Super chlorinated water in the line must be dechlorinated so that no more than 1.0 ppm chlorine residual is detected prior to release to streets or into storm sewers, ditches, streams and/or their tributaries. Contractors proposed method of dechlorination must be approved by the City Engineer and be performed within the limits set forth in the NPDES permit, as issued to the City by the Colorado Department of Health. Sodium Thiosulfate Pentahydrate XTL can be used as a dechlorinator, available from Van Waters & Rogers, Inc. If the super chlorinated water is released to a dirt area that will not run to a receiving water then the requirement to dechlorinate may be waived by a representative of the City's Water Quality Section.

A City representative shall be present and operate all valves during flushing and dechlorination of lines.

- 0.11.4. Connecting to City System - Connection to the City system shall be in a neat and workmanlike manner. An inspector shall be present at all times during the construction of the connection. Under no circumstances shall a non-disinfected main, which cannot be isolated, be connected to an existing disinfected main. Disinfection of the line shall meet the requirements of the City of Rifle, Jefferson County and Colorado Health Departments.

The City is not responsible for water tightness of its valves and existing facilities. If existing valves leak, the City will assist in reducing the influx of water as much as possible, but the contractor must use methods at his own disposal at his own cost to work with the resulting leakage.

When connecting lines to the City water system, it may be necessary to operate new and existing valves. Valves on or connected to the City system must be operated by City personnel only. The City system includes lines that have been recently placed in service even though no taps have been made off of the mains. The contractor shall give the inspector twenty-four (24) hours notice to arrange for operating the valves. Both the contractor and the inspector shall be present when the valves are being operated.

- A. Placing Line in Service: A line will only be accepted for tapping and/or placing in service after all of the following conditions have been met:
1. The main has been installed to the satisfaction of the inspector and all pertinent notes and measurements have been made.
 2. The main has been successfully filled, chlorinated, de-chlorinated and pressure tested to the requirements of the City of Rifle.

- 0.11.5. Housekeeping, Restoration and Cleanup

See Section 5 of these standard specifications.

Striping and Thermoplastics

I General

Submittals- Deliver to City all the product data

II Products

708.05 Pavement Marking Materials. All pavement marking materials shall be selected from the Department's Approved Products List (APL). Prior to start of work, a Certificate of Compliance (COC) for all pavement marking materials shall be submitted in accordance with subsection 106.13.

(a) *Color.* The pavement marking paint, without drop-on beads, shall correspond following requirements:

White – Federal Standard No. 595B-17925. The Yellowness Index (YI) of white shall not exceed 8.0 per ASTM E-313-10 initially. The color after drying shall be a flat-white, free from tint, and shall provide the maximum amount of opacity and visibility under both daylight and artificial light.

Yellow – Materials for pavement markings shall meet the initial daytime chromaticity that fall within the box created by the following corner points:

Initial Daytime Chromaticity Coordinates (Corner Points)

	1	2	3	4
x	0.530	0.510	0.455	0.472
y	0.456	0.485	0.444	0.400

- (b) *Low Temperature Acrylic Waterborne Paint.* Low Temperature Acrylic Waterborne Paint binder (nonvolatile portion of vehicle) shall be 100 percent XSR acrylic polymer, by weight, as determined by infrared analysis or other chemical analysis available to the Department.
- (c) *High Build Acrylic Waterborne Paint.* High build acrylic waterborne paint binder (nonvolatile portion of vehicle) shall be 100 percent HD 21 acrylic cross linking polymer, by weight, as determined by infrared analysis or other chemical analysis available to the Department.

Low Temperature Acrylic Waterborne Paint, and High Build Acrylic Waterborne paint shall meet the following requirements:

Performance Requirements: The paint shall be water resistant and shall show no softening or blistering.

Table 708-1
LOW TEMPERATURE WATERBORNE AND HIGH BUILD ACRYLIC WATERBORNE PAINT

Property	White	Yellow	Test Method
Nonvolatile portion of vehicle (white and yellow), %	43.0 (min)	43.0 (min)	ASTM D 2205
Pigment Composition			
Percent by weight♦	60.0	60.0	ASTM D 4451 ASTM D 3723
Paint			
Titanium Dioxide Content, lb./gal	1.0 (min)		ASTM D 5381
Properties of the Finished Paint			
Total Non-volatiles, (solids) % by weight	77.0 (min)	77.0 (min)	FTMS 141C - Method 4053.1, ASTM D 2369, or ASTM D 4758
Density, lbs./gal	14.0-14.6	13.7-14.3	ASTM D 2205
Consistency (Viscosity) White and Yellow, Krebs-Stormer Units	85-95	85-95	ASTM D 562
Freeze Thaw Stability	Shall complete 5 or more test cycles successfully		ASTM D 2243
Fineness of Grind, Cleanliness Rating B, minimum	3	3	ASTM D 1210
Scrub Resistance	800	800	ASTM D2486
Directional Reflectance: [15 mil Wet Film]	88 (min)	50 (min)	ASTM E 1347
Dry Opacity (Contrast Ratio): [5 mil Wet Film]	0.95 (min)	0.95 (min)	ASTM D 2805
♦Percent by weight shall include percent of organic yellow pigment.			

15.2.13.3 Preformed Thermoplastic Material

Preformed Thermoplastic markings shall be composed of aggregates, pigments, binders and glass beads and shall conform to AASHTO designation M 249 with the exception of the relevant differences due to the material being supplied in a preformed state. The material shall be either alkyd or hydrocarbon based. Only preformed thermoplastic pavement marking material approved by the City may be used.

- 1) The material shall contain a minimum of 30% graded glass beads by weight. The beads shall be clear and transparent. Twenty percent or less shall consist of irregular, fused spheroids, or silica. The reflective index shall be at least 1.50.
- 2) White pigment shall be titanium dioxide to insure a color similar to Federal Highway White, Color Number 17886, conforming to Federal Standard 595. Yellow pigment shall be used to insure a color similar to Federal Highway Yellow, Color Number 13655, conforming to Federal Standard 595. Yellow pigment shall be organic and contain no lead chromate.
- 3) The surface of the preformed thermoplastic markings shall provide a skid resistance of 45 BPN when tested according to ASTM E 303.
- 4) The material shall be supplied with a minimum thickness of 125 mils.
- 5) The preformed thermoplastic material shall be resistant to deterioration due to exposure to sunlight, water, oil, gasoline, salt and adverse weather conditions.

III Execution

Traffic Signage & Signals

I General

Submittals- Deliver to City all Product Data

II Products

Signs shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD). Stop or Yield Signs shall be 30-inch by 30-inch size. All signs shall be mounted 7-feet to the bottom of the sign from grade below the sign. Street name signs shall be 8-gauge aluminum with white double-faced 4-inch high letters on green background without a border. Street name signs shall be 24" x 6" or similar. Where a stop or yield sign is installed, the street name signs shall be placed above the stop or yield sign a minimum of 1-inch above and between signs. Street name signs may be purchased from Newman Traffic at 1-800-437-9770 or approved equal. All signs shall have high intensity retro reflectivity (type III) in accordance with ASTM D4956. Sign posts shall be Octagonal and Chestnut Bronze in Color, splice system breakaway devices approved by FHWA. These shall be Safety-Splice Support System, or equal. Signs shall be fastened to the U-post with two ¼ inch galvanized stove bolts, with washer (next to sign) and nut.

Traffic Signals

1. STANDARD SPECIFICATIONS AND DETAILS - All work shall be done in accordance with the Colorado Department of Transportation "Standard Specifications for Road and Bridge Construction", dated 2019 and the applicable CDOT S Standard Plan Sheets.

All contractors bidding on this project are responsible for acquainting themselves thoroughly with all applicable specifications prior to submitting their bid. The successful bidder is responsible for thoroughly acquainting all the personnel he intends to use on this project with all applicable specifications prior to the commencement of any construction.

2. SCOPE OF WORK – Work applicable to the CDOT Specifications include Signage, Pavement Marking, Rectangular Rapid Flashing Beacons, Pedestrian Push Buttons, and Traffic Signals and appurtenances.

PEDESTRIAN PUSH BUTTONS –REVISION TO CDOT STANDARDS

Section 614 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 614.08(f) and replace with the following:

- (f) *Pedestrian Push Buttons.* Pedestrian push buttons shall be a piezo, direct push button contact type and shall consist of electronic control equipment, mounting hardware, and push button.

The pedestrian push button shall be weatherproof, tamper-proof, constructed so that it will be impossible to receive any electrical shock under any weather condition, and operate on a voltage not to exceed 24 VAC.

The housing shall be shaped to fit the curvature of the pole to which it is attached to provide a rigid installation. Saddles shall be provided to make a neat fit when required.

Materials for Pedestrian Push Button Post Assembly shall conform to the following:

- (1) The Pedestrian Push Button Post Assembly, sign, and push button shall conform to the following:
 - (i) The latest version of the ADA Standards for Accessible Design, Chapter 3, Section 309 Operable Parts.
 - (ii) Current CDOT adopted Manual of Uniform Traffic Control Devices (MUTCD), Chapter 4E- Pedestrian Control Features.
 - (iii) NEMA TS 2 Section 2.1 requirements for Temperature and Humidity, Transient Voltage Protection, and Mechanical Shock and Vibration.
 - (iv) IEC 61000-4-4; 4-5 Transient Suppression requirements.

- (v) FCC Title 47, Part 15, Class A, Electronic Noise requirements.
- (2) The post for the Pedestrian Push Button Post Assembly shall be aluminum Schedule 40.
- (3) Wiring for the Pedestrian Push Button Post Assembly shall conform to the manufacturer's recommendations.
- (4) A #10 AWG (minimum) bare copper wire shall be used to connect the Pedestrian Push Button to the signal grounding system.
- (5) For signalized intersection crossings, the system shall have a programmable Extended Push Activation feature with the ability to extend the Walk time. Activation shall be programmable from one to six seconds.

Delete subsection 614.08(g) and replace with the following:

- (g) *Accessible Pedestrian Signals.* The Accessible Pedestrian Signal (APS) shall be an audible vibro-tactile pedestrian signal system and shall consist of all electronic control equipment, mounting hardware, and push button, designed to provide both a push button with a raised, vibrating tactile arrow on the button as well as a variety of audible indications for differing pedestrian signal functions.

The integrated pedestrian push button shall be weatherproof, tamper-proof, constructed so that it will be impossible to receive any electrical shock under any weather condition, and operate on a voltage not to exceed 24 VAC.

The housing shall be shaped to fit the curvature of the pole to which it is attached to provide a rigid installation. Saddles shall be provided to make a neat fit when required.

Materials for Pedestrian Push Button Post Assembly shall conform to the following:

- (1) The pedestrian push button post assembly, integrated push button, and sign shall meet the following requirements:
 - (i) The latest version of the ADA Standards for Accessible Design, Chapter 3, Section 309 Operable Parts.
 - (ii) Current CDOT adopted Manual of Uniform Traffic Control Devices (MUTCD), Chapter 4E – Pedestrian Control Features.
 - (iii) NEMA TS 2 Section 2.1 requirements for Temperature and Humidity, Transient Voltage Protection and Mechanical Shock and Vibration.
 - (iv) IEC 61000-4-4; 4-5 Transient Suppression requirements.
 - (v) FCC Title 47, Part 15, Class A, Electronic Noise requirements.
 - (vi) The APS pushbutton enclosure shall meet the NEMA 250 – Type 4X enclosure requirement.

- (2) The post for the Pedestrian Push Button Post Assembly shall be aluminum, Schedule 40.
- (3) Wiring for the Pedestrian Push Button Assembly shall conform to the manufacturer's recommendations.
- (4) A #10 AWG (minimum) bare copper wire shall be used to connect the Pedestrian Push Button Post Assembly to the signal grounding system.
- (5) For signalized intersection crossings, the system shall have a programmable Extended Push Activation feature with the ability to extend the Walk time and provide an informational audible message. Activation shall be programmable from one to six seconds.

The Accessible Pedestrian Signal shall have the following functional requirements:

1. APS functional features.

The APS shall be programmable and adjustable. Programming and adjustments shall be made using a laptop computer, smart device, or vendor supplied programmer. No additional hardware or equipment shall be required. The APS shall be fully compatible with the three latest versions of the Windows operating platform. The programmable features shall be:

- (1) Push-button locator tone.
- (2) Walk and Wait audible message.
- (3) Audible push-button informational message.
- (4) Audible crossing beacon.
- (5) Vibrating, tactile arrow push button.
- (6) Independent minimum and maximum volume limits for the Locator Tone, Walk, and Audible Beacons features.

Audible features shall emanate from the pedestrian pushbutton housing. The APS shall utilize digital audio technology, having a minimum 12-bit sample at a 16k Hz sample rate. Total harmonic distortion shall be less than 3 percent at 75 decibels. The APS shall provide independent ambient sound adjustment for the Locator Tone feature. The APS shall allow for Locator Tone volume to be set below the ambient noise level. The system shall have a minimum of three programmable locator tones. All sound levels shall adjust automatically utilizing an internally mounted, interval ambient sensing microphone, in accordance with the MUTCD.

For signalized intersection crossings, the APS shall monitor the Walk condition for conflict operation. As a standalone unit, the APS shall disable the Walk functionality should a conflict be detected.

The APS system shall log cumulative call data. The data shall be date and time stamped, and shall be accessible via laptop or smart device.

For signalized intersection crossings, the system shall provide a programmable audible Wait message when the button is pushed. The message shall only annunciate once per actuation.

2. Power Control Unit (PCU).

The PCU shall be mounted in the pedestrian signal head and shall be powered by the activation of Walk or Don't Walk using 120 Volts Alternating Current (VAC).

The PCU shall utilize separate power inputs for Walk and Don't Walk. The PCU shall not require more than four wires from the PCU to the corresponding push button.

3. Push Button Assembly (PBA).

The PBA shall be a single assembly containing an ADA compliant, vibro-tactile (signalized) directional arrow button, weatherproof audible speaker, and informational sign with optional placard braille messages. The PBA housing shall not incorporate any plastic or polycarbonate parts.

The PBA tactile arrow shall be 2 inches in length and shall be field adjustable to two directions.

The push button shall utilize Piezo switch technology rated at greater than twenty million operations. Vibro-tactile operation shall pulse at 20 Hz with a minimum 0.003-inch displacement against a 2 pound applied force.

The PBA assembly shall be capable of mounting on a curved or flat surface utilizing either machine screws or bolts or banding type mounting hardware. The PBA shall accommodate mounting to a minimum 4-inch diameter pole.

Delete paragraph 3 of subsection 614.09(4) and replace with the following:

Prior to start of the installation of a APS, the Contractor shall submit all units for testing. Installation of the APS shall not begin until written approval of each unit has been received from the Engineer. If a unit fails to pass testing, the Contractor shall repair or replace the unit at their expense.

Delete paragraphs 4 and 5 of subsection 614.09(4)

Subsection 614.10(j) shall include the following:

- (j) A field test of a single APS shall be performed in the presence of the Engineer. All repairs or replacements required to ensure a fully operational system shall be at the Contractor's expense.

The APS shall be installed in accordance with the manufacturer's recommendations.

Subsection 614.13 shall include the following:

Pedestrian Push Button will be measured by the actual number that are installed and accepted.

Subsection 614.14 shall include the following:

Payment will be made under:

Pay Item	Pay Unit
Pedestrian Push Button	Each

CDOT - STANDARD SPECIFICATIONS AND DETAILS

CDOT M-412 PCCP Stds

CDOT S-614-40 (7 Page Set)

CDOT S-614-44

Fifth and Railroad Avenue Improvements				Martinez Western Bid		Engineer's Estimate		Martinez Western Negotiated Amount		Over/(Under)	% Eng Est	Notes
ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	ESTIMATED AMOUNT	UNIT PRICE	ESTIMATED AMOUNT	UNIT PRICE	ESTIMATED AMOUNT			
Sidewalk												
101	Remove/export existing asphalt & concrete, saw cut all exterior edges	2,002	SY	\$ 21.00	\$ 42,042.00	\$ 7.00	\$ 14,014.00	\$ 21.00	\$ 42,042.00	\$ 28,028.00	300%	
102	Remove/export existing subgrade	222	CY	\$ 63.00	\$ 14,014.00	\$ 16.50	\$ 3,670.33	\$ 40.52	\$ 9,014.00	\$ 5,343.67	246%	Martinez Western Reduced by \$5k under condition that there is no muck-excavation
103	Asphalt patching: 3" thickness	73	TON	\$ 275.00	\$ 20,192.54	\$ 250.00	\$ 18,356.85	\$ 275.00	\$ 20,192.54	\$ 1,835.69	110%	
104	Road Base beneath Asphalt: 12" CDOT Class 6	445	TON	\$ 77.00	\$ 34,256.44	\$ 41.00	\$ 18,240.44	\$ 71.38	\$ 31,756.44	\$ 13,516.00	174%	Martinez Western Reduced combination of these items by \$5k
105	Road Base beneath Concrete: 12" CDOT Class 6	147	TON	\$ 79.00	\$ 11,601.53	\$ 41.00	\$ 6,021.05	\$ 61.98	\$ 9,101.53	\$ 3,080.48	151%	
106	Concrete Sidewalk: 4" thick Class D with Fibermesh	5,179	SF	\$ 12.00	\$ 62,148.00	\$ 5.50	\$ 28,484.50	\$ 12.00	\$ 62,148.00	\$ 33,663.50	218%	
107	6" curb around landscape islands, poured monolithically with sidewalk	220	LF	\$ 42.00	\$ 9,240.00	\$ 28.00	\$ 6,160.00	\$ 42.00	\$ 9,240.00	\$ 3,080.00	150%	
108	Concrete Curb & Gutter (6" curb & 18" Gutter)	786	LF	\$ 43.00	\$ 33,798.00	\$ 44.00	\$ 34,584.00	\$ 43.00	\$ 33,798.00	\$ (786.00)	98%	
109	Concrete pedestrian ramps with cast iron landing mat	4	EA	\$ 750.00	\$ 3,000.00	\$ 350.00	\$ 1,400.00	\$ 500.00	\$ 2,000.00	\$ 600.00	143%	Concrete costs are included in square foot cost above and line reduced by \$1k
600 Storm Drain												
601	Nyoplast Basin	1	EA	\$ 5,000.00	\$ 5,000.00	2500	\$ 2,500.00	\$ 4,000.00	\$ 4,000.00	\$ 1,500.00	160%	Reduced by \$1k
602	Reset existing Inlet, Type 1	1	EA	\$ 4,300.00	\$ 4,300.00		\$ 2,267.00	\$ 4,300.00	\$ 4,300.00	\$ 2,033.00	190%	
603	Storm Inlet Type 2	2	EA	\$ 9,500.00	\$ 19,000.00		\$ 8,298.00	\$ 8,500.00	\$ 17,000.00	\$ 8,702.00	205%	Reduced by \$2k
604	Tie in new manhole to existing	2	EA	\$ 6,500.00	\$ 13,000.00		\$ 4,534.00	\$ 4,500.00	\$ 9,000.00	\$ 4,466.00	199%	Bid included manholes, which is not required reducing bid \$4k
605	Pipe: 12" ADS	28	LF	\$ 167.00	\$ 4,676.00	89	\$ 2,492.00	\$ 167.00	\$ 4,676.00	\$ 2,184.00	188%	
606	Pipe: 18" PVC SDR-26	75	LF	\$ 194.00	\$ 14,550.00	89	\$ 6,675.00	\$ 194.00	\$ 14,550.00	\$ 7,875.00	218%	
900 TRAFFIC SIGNALS, SIGNAGE, & STRIPING												
901	REMOVAL OF LUMINAIRE	2	EACH	\$ 660.00	\$ 1,320.00	\$ 100.00	\$ 200.00	\$ 243.33	\$ 486.67	\$ 286.67	243%	Martinez Western working with subcontractor reduced \$5k
902	REMOVAL OF PULLBOX	8	EACH	\$660.00	\$ 5,280.00	\$200.00	\$ 1,600.00	\$ 555.83	\$ 4,446.67	\$ 2,846.67	278%	
903	REMOVAL OF TRAFFIC SIGNAL HEAD	12	EACH	\$660.00	\$ 7,920.00	\$150.00	\$ 1,800.00	\$ 590.56	\$ 7,086.67	\$ 5,286.67	394%	
904	REMOVE TRAFFIC SIGNAL POLE	4	EACH	\$1,452.00	\$ 5,808.00	\$600.00	\$ 2,400.00	\$ 1,243.67	\$ 4,974.67	\$ 2,574.67	207%	
905	REMOVE TRAFFIC SIGNAL MAST ARM	4	EACH	\$792.00	\$ 3,168.00	\$300.00	\$ 1,200.00	\$ 583.67	\$ 2,334.67	\$ 1,134.67	195%	
906	REMOVAL OF VIDEO DETECTION SYSTEM (CAMERA)	4	EACH	\$528.00	\$ 2,112.00	\$200.00	\$ 800.00	\$ 319.67	\$ 1,278.67	\$ 478.67	160%	
907	RESET SIGN PANEL	26	EACH	\$ 100.00	\$ 2,600.00	\$ 300.00	\$ 7,800.00	\$ 100.00	\$ 2,600.00	\$ (5,200.00)	33%	
908	3 INCH ELECTRICAL CONDUIT (PLASTIC) (TRAFFIC)	1065	LF	\$53.00	\$ 56,445.00	\$40.00	\$ 42,600.00	\$ 27.50	\$ 29,287.50	\$ (13,312.50)	69%	Unit Price cost + 10%
909	2 INCH ELECTRICAL CONDUIT (PLASTIC) (TRAFFIC and LUMINAIRE)	320	LF	\$40.00	\$ 12,800.00	\$30.00	\$ 9,600.00	\$ 16.50	\$ 5,280.00	\$ (4,320.00)	55%	Unit Price cost + 10%
910	PULL BOX (TYPE 4)	2	EACH	\$3,960.00	\$ 7,920.00	\$2,100.00	\$ 4,200.00	\$ 2,420.00	\$ 4,840.00	\$ 640.00	115%	Unit Price cost + 10%
911	PULL BOX (TYPE 5)	2	EACH	\$5,300.00	\$ 10,600.00	\$2,800.00	\$ 5,600.00	\$ 3,410.00	\$ 6,820.00	\$ 1,220.00	122%	Unit Price cost + 10%
912	WIRING (TRAFFIC)	1	L S	\$20,250.00	\$ 20,250.00	\$20,000.00	\$ 20,000.00	\$ 20,250.00	\$ 20,250.00	\$ 250.00	101%	
913	WIRING (LIGHTING)	1	L S	\$8,500.00	\$ 8,500.00	\$4,000.00	\$ 4,000.00	\$ 8,500.00	\$ 8,500.00	\$ 4,500.00	213%	
914	LUMINAIRE (LED)	2	EACH	\$1,254.00	\$ 2,508.00	\$700.00	\$ 1,400.00	\$ 1,254.00	\$ 2,508.00	\$ 1,108.00	179%	
915	SIGN PANEL (CLASS I)	76	SF	\$ 25.00	\$ 1,900.00	\$ 20.00	\$ 1,520.00	\$ 25.00	\$ 1,900.00	\$ 380.00	125%	
916	SIGN PANEL (CLASS II)	180	SF	\$ 40.00	\$ 7,200.00	\$ 30.00	\$ 5,400.00	\$ 40.00	\$ 7,200.00	\$ 1,800.00	133%	
917	STEEL SIGN SUPPORT (2-INCH ROUND)(POST AND SOCKET)	2	EACH	\$ 200.00	\$ 400.00	\$ 300.00	\$ 600.00	\$ 200.00	\$ 400.00	\$ (200.00)	67%	
918	PEDESTRIAN FACE SIGNAL (16) (COUNTDOWN)	8	EACH	\$990.00	\$ 7,920.00	\$1,600.00	\$ 12,800.00	\$ 990.00	\$ 7,920.00	\$ (4,880.00)	62%	
919	TRAFFIC SIGNAL FACE (12-12-12)	8	EACH	\$1,650.00	\$ 13,200.00	\$1,400.00	\$ 11,200.00	\$ 1,650.00	\$ 13,200.00	\$ 2,000.00	118%	
920	TRAFFIC SIGNAL FACE (12-12-12-12-12)	4	EACH	\$1,985.00	\$ 7,940.00	\$2,000.00	\$ 8,000.00	\$ 1,985.00	\$ 7,940.00	\$ (60.00)	99%	
921	PEDESTRIAN PUSH BUTTON	8	EACH	\$1,982.00	\$ 15,856.00	\$600.00	\$ 4,800.00	\$ 1,982.00	\$ 15,856.00	\$ 11,056.00	330%	
922	INTERSECTION DETECTION SYSTEM (Remount on new Masts)	4	EACH	\$3,960.00	\$ 15,840.00	\$1,000.00	\$ 4,000.00	\$ 3,960.00	\$ 15,840.00	\$ 11,840.00	396%	
923	TRAFFIC SIGNAL LIGHT POLE STEEL (2-40 FOOT MAST ARM)	2	EACH	\$73,500.00	\$ 147,000.00	\$44,000.00	\$ 88,000.00	\$ 57,750.00	\$ 115,500.00	\$ 27,500.00	131%	Unit Price cost + 10%
924	TRAFFIC SIGNAL PEDESTAL POLE STEEL	2	EACH	\$9,636.00	\$ 19,272.00	\$4,600.00	\$ 9,200.00	\$ 8,030.00	\$ 16,060.00	\$ 6,860.00	175%	Unit Price cost + 10%
925	PAVEMENT MARKING	16	GAL	\$ 195.00	\$ 3,120.00	\$ 250.00	\$ 4,000.00	\$ 195.00	\$ 3,120.00	\$ (880.00)	78%	
1000 LIGHTING & ELECTRICAL												
1001	GFCI REC: Planter Outlets	4	EA	\$ 721.00	\$ 2,884.00	\$ 278.00	\$ 1,112.00	\$ 721.00	\$ 2,884.00	\$ 1,772.00	259%	
1002	Globe Style Acorn Light: 12' Street Light	4	EA	\$ 6,754.00	\$ 27,016.00	\$ 4,200.00	\$ 16,800.00	\$ 6,754.00	\$ 27,016.00	\$ 10,216.00	161%	
1003	Trenching, Conduit and Wiring to Globe Lights	320	LF	\$ 25.00	\$ 8,000.00	\$ 21.00	\$ 6,720.00	\$ 25.00	\$ 8,000.00	\$ 1,280.00	119%	
1004	Trenching, Conduit for future service	60	LF	\$ 25.00	\$ 1,500.00	\$ 21.00	\$ 1,260.00	\$ 25.00	\$ 1,500.00	\$ 240.00	119%	

1100 IRRIGATION & LANDSCAPING												
1101	shade tree	4	EA	\$ 2,900.00	\$ 11,600.00	\$ 400.00	\$ 1,600.00	\$ 2,900.00	\$ 11,600.00	\$ 10,000.00	725%	Subcontractor cost reduce \$5k
1102	shrub bed, planted, fabric & mulch	60	SF	\$ 96.00	\$ 5,760.00	\$ 80.00	\$ 4,800.00	\$ 96.00	\$ 5,760.00	\$ 960.00	120%	
1103	irrigation tap, backflow protection, locking enclosure	1	EA	\$ 14,400.00	\$ 14,400.00	\$ 2,000.00	\$ 2,000.00	\$ 14,400.00	\$ 14,400.00	\$ 12,400.00	720%	
1104	4" irrigation sleeving	120	LF	\$ 50.00	\$ 6,000.00	\$ 25.00	\$ 3,000.00	\$ 50.00	\$ 6,000.00	\$ 3,000.00	200%	
1105	control valve	1	EA	\$ 900.00	\$ 900.00	\$ 500.00	\$ 500.00	\$ 900.00	\$ 900.00	\$ 400.00	180%	
1106	drip piping	500	LF	\$ 12.00	\$ 6,000.00	\$ 1.00	\$ 500.00	\$ 12.00	\$ 6,000.00	\$ 5,500.00	1200%	
1107	drip distribution/emitters	60	SF	\$ 10.00	\$ 600.00	\$ 1.00	\$ 60.00	\$ 10.00	\$ 600.00	\$ 540.00	1000%	
1108	Sprinkler Controller, Includes wiring and electrical	1	EA	\$ 12,000.00	\$ 12,000.00	\$ 6,500.00	\$ 6,500.00	\$ 12,000.00	\$ 12,000.00	\$ 5,500.00	185%	
1200 MISC												
1201	Mobilization, Staging, Supervisor, & Project Management	1	LS	\$ 113,000.00	\$ 113,000.00	\$ 15,000.00	\$ 15,000.00	\$ 113,000.00	\$ 113,000.00	\$ 98,000.00	753%	Traffic Signal sub reduced \$10k, traffic control \$20k, \$5k for traffic sub reduced using Martinez Western Equipment
1202	Stormwater protection & maintenance: Straw Wattles around inlets & vehicle tracking pads	1	LS	\$ 3,500.00	\$ 3,500.00	\$ 2,000.00	\$ 2,000.00	\$ 1,000.00	\$ 1,000.00	\$ (1,000.00)	50%	only 3 waddles needed for inlet protection
1203	Traffic Control During Construction & Traffic Control Plan preparation	1	LS	\$ 45,800.00	\$ 45,800.00	\$ 5,000.00	\$ 5,000.00	\$ 15,000.00	\$ 15,000.00	\$ 10,000.00	300%	City and Martinez will work together on traffic control and subcontractors will only be used for flagging
1204	Surveys: Construction Staking & Asbuilts	1	LS	\$ 17,500.00	\$ 17,500.00	\$ 10,000.00	\$ 10,000.00	\$ 17,500.00	\$ 17,500.00	\$ 7,500.00	175%	
1205	Bonding (Performance & Payment)	1	LS	\$ 20,000.00	\$ 20,000.00	\$ 4,800.00	\$ 4,800.00	\$ 20,000.00	\$ 20,000.00	\$ 15,200.00	417%	percentage and wont change
1206	Contingency	1	LS	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ -	100%	
					\$ 1,024,157.51			\$ 542,069.18	\$ 891,608.01	\$ 349,538.83	164%	



**CITY OF RIFLE
PURCHASE REQUEST**

1.	Vendor Name	NEW: W-9 attached ☐

2.	Vendor Address

3.	For the Purchase of (description)

4.	Amount Requested	Amount Budgeted	Finance Director Verified Funds Avail.

5.	Dept. Name	General Ledger Acct #

6.	Type of Purchase
Capital Construction	
Capital Construction – Change Order	
Capital Equipment	
Plant Equipment	
Materials, supplies, non-profession/technical services (includes computer/software maint.)	
Professional Services	
Utilities (includes equipment installation and ongoing contracts)	
Land, easements, ROW	

7.	Purchasing Process Required (Rifle Municipal Code sections for guidance)		
Cooperative Purchasing:		Sec 4-3-90	
Open Market:		Sec. 4-3-40(c)	
Comparative Pricing:		Sec. 4-3-40(d)	
Request for Proposal:		Sec. 4-3-40(e)	(attach bid tab)
Competitive Sealed Bid:		Sec.4-3-40(f)	(attach bid tab & advertisement)
Sole Source:		Sec. 4-3-40(a)	(attach memo)

8.	Authorization Required		
City Manager			
City Council			

9.	Signatures		
Position		Signature	Date
Department Director			
City Manager			
City Council Approval (meeting date)			
10.	Purchase Order # assigned by Finance		

TABLE 1 - IS A PURCHASE ORDER NECESSARY

<u>Amount of Purchase</u>	<u>Is Purchase Order Needed</u>	<u>Method of Source Selection</u>
\$0.01 - \$10,000	No – Dept Head Approval	No special sourcing
\$10,000.01 - \$25,000	Yes – City Manager Approval	Yes – see table 2 below
\$25,000.01 or Greater	Yes – Council Approval	Yes – see table 2 below

TABLE 2 - METHODS OF SOURCE SELECTION

<u>Methods of source selection</u>	<u>Contract limits</u>
Competitive sealed bidding	Greater than \$50,000.00
Competitive sealed proposals	Greater than \$10,000.00 and less than \$50,000.00.
**Greater than \$50,000 allowed for Construction Manager/General Contractor proposals, or similar type proposal.	
Small purchases	Less than \$10,000.00 - DEPARTMENT HEAD DISCRETION

TABLE 3 - LOCAL VENDOR PREFERENCE

Contract Amount	Primary Preference In City Limits	Secondary Preference In County Out of City
Less than \$1,000	10% discount	5% discount
\$1,001 to \$5,000	8% discount	4% discount
\$5,001 to \$25,000	6% discount	3% discount
\$25,001 to \$100,000	5% discount	2% discount
\$100,000 to \$200,000	4% discount	2.5% discount
\$200,001 to \$500,000	3% discount	1.5% discount
\$500,000 or greater	2% discount	1% discount



Agenda Item #6.g.

Agenda Item Name:

Consider Resolution No. 17, Series 2023 - Resolution to allow the manager to sign and approve expenditures required for the CDOT Grant for the Gateway Improvement Project

Presenter:

Tommy Klein, City Manager

Item Description:

Consider Resolution No. 17, Series 2023 - Resolution to allow the manager to sign grant documents and approve expenditures required for the CDOT Grant for the Gateway Improvement Project at HWY 6 and Whiteriver.

Recommended Action:

Move to approve Resolution No. 17 Series 2023 to permit the city manager to sign grant documents and allocate funds for the HWY 6 and Whiteriver intersection improvement project.

Fiscal Impact:

The City will expend matching grant funds from ARPA monies.

Operational Impact:

Staff time associated with construction and managing the grant will be part of the project.

Prior Board Motions:

Council has previously approved design and the production of construction documents for this project.

Background Information:

CDOT awarded the City \$1,800,000 to complete the intersection project at HWY 6 and Whiteriver (Gateway Improvement Project). This resolution will allow the manager to sign grant paperwork and expend funds as needed to complete the project.

Executive Summary:

CDOT awarded the City \$1,800,000 to complete the intersection project at HWY 6 and Whiteriver (Gateway Improvement Project). This resolution will allow the manager to sign grant paperwork and expend funds as needed to complete the project.

Notification Requirements:

None

Prepared By:

Tommy Klein, City Manager

Attachments:

1. Resolution No. 17-CDOT Grant-Gateway Improvements Project

CITY OF RIFLE, COLORADO
RESOLUTION NO. 17
SERIES 2023

A RESOLUTION OF THE CITY OF RIFLE, COLORADO APPROVING THE
CONTRACT WITH THE COLORADO DEPARTMENT OF
TRANSPORTATION FOR THE RIFLE GATEWAY TRAFFIC AND
PEDESTRIAN IMPROVEMENTS PROJECT: RMS M126-006 (25365).

WHEREAS, the City of Rifle received a grant from the Colorado Department of Transportation for the Rifle Gateway Traffic and Pedestrian Improvements Project (the “Project”) which will pay for 80% of the Project (the “Grant”) with a 20% match from the City; and

WHEREAS, the City Council desires to approve the Contract between the City and the Colorado Department of Transportation for the Project which is a condition of the Grant.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RIFLE THAT:

1. The above recitals are hereby incorporated as findings by the City of Rifle.
2. The City Council hereby approves the Contract with the Colorado Department of Transportation for Project RMS M126-006 (25365) attached hereto and incorporated herein by this reference (the “Contract”) and authorizes the City Manager, Tommy Klein, to execute the Contract on behalf of the City.
3. The total cost of the Project is \$2,250,000 with the State of Colorado funding \$1,800,000 (80% of the Project), and the City of Rifle funding \$450,000 (20% of the Project).
4. The City Council of the City of Rifle authorizes the expenditure of funds necessary to meet the terms and obligations of the Contract and to complete the work under the Project.

THIS RESOLUTION was read, passed, and adopted by the Rifle City Council at a special meeting held this 7th day of June 2023.

ATTEST:

CITY OF RIFLE, COLORADO

By _____
City Clerk

By _____
Mayor



Agenda Item #7.a.

Agenda Item Name:

Report to City Manager

Presenter:

Tommy Klein, City Manager

Item Description:

Staff report on notable tasks completed within the individual departments.

Recommended Action:

No action necessary

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

Work Report to City Manager
06/2/2023

Notification Requirements:

N/A

Prepared By:

Alexis Ramirez, Deputy City Clerk

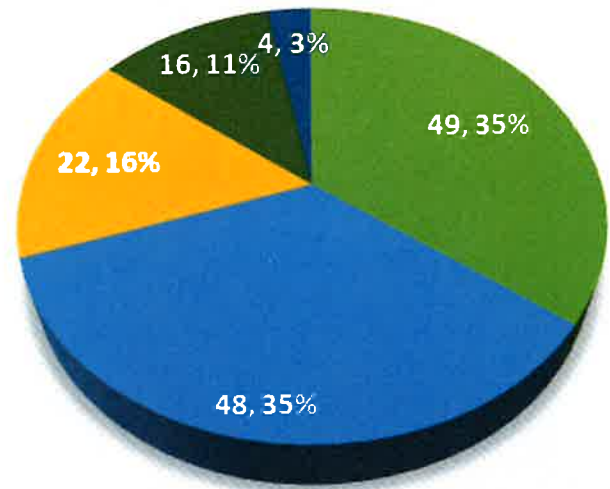
Attachments:

1. Animal Shelter 1st Quarter
2. Report to City Manager 06.02.2023



Journey Home Animal Care Center 2023 1ST QUARTER STATISTICS

TOTALS OF ALL ANIMALS INTAKE 1ST QUARTER



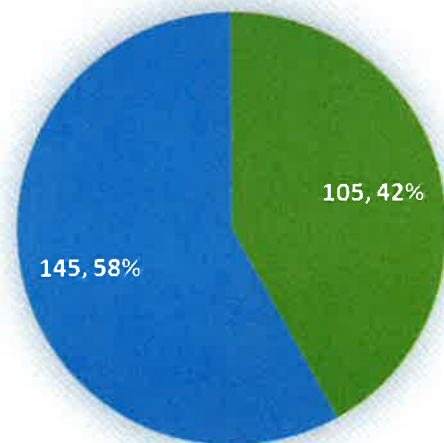
JAN | FEB | MARCH

AT A GLANCE

- 48 taken in from owner surrenders from Rifle
- 22 Returned to owner
- 16 brought in by Rifle PD strays/pickup
- 49 strays were brought in by community members
- 4 animals became property of JHACC
- 1 animal was on a quarantine hold
- 1 animal required external medical care
- 3 animals required moderate behavior training
- 1 animal required severe behavior training

- 49 animals were brought in by good Samaritans
- 48 animals were surrendered by Rifle Community members
- 22 animals were redeemed
- 16 animals were brought in by Rifle PD
- 4 animals became property of JHACC after stray hold

Community Totals



- Spayed/Neutered 145 Community Owned Animals
- Vaccinated 105 Community owned Animals

WORK REPORT TO CITY MANAGER

06.02.2023

PIO

- Continuing updates on website and social media on local issues and citizen concerns.
- Press releases on Memorial Day closures and Rifle Mountain Park closures due to flooding.
- Attended Garfield County PIO Group meeting which was hosted by our very own Rifle PD!
- Working on press release on the proposed tax initiative.

COURT

- Handled 53 adult cases and 01 juvenile case on May 17 court day.
- Held 09 telephone hearings with inmates in custody.
- Submitted application for additional DOLA grant funding for court appointed attorneys.
- Attended CML Legislative update webinar. Fortunately, the bills we were most concerned about didn't pass.
- Met with OADC Municipal Court Innovations Coordinator for our annual interview/evaluation.
- We are hoping to have our new texting module finally running this week. This would send text message reminders to defendants regarding their court dates. Hopefully, we can get the problems fixed.

PUBLIC WORKS

Projects

- Developing Phased plan for Veteran's Memorial – 30% complete
- CAD rendering of City of Rifle Specifications Manual drawings – 15% complete
- Collection of GPS data for GIS mapping
- Planning and investigation of software solutions for Asset Management
- Planning for Demolition of Grand Mesa Water Treatment Plant

Fleet

- Normal fleet maintenance operations.
- Completed Big Iron Auction Sale – all but (2) vehicles have been received. Successful sale netting: \$109,496.66
- Extensive equipment maintenance: Sweeper, Auction vehicles – complete
- Meeting with Enterprise Fleet Mgmt in budget planning for 2024 Budget planning
- Repair maintenance of pins & bushings on John Deere mini-excavator

Operations & Maintenance

- Pothole repair and street maintenance
- Casting HC ramps at 18th & Railroad Ave.
- Safety Training: Lock-out/Tag-out, Hazardous Chemical Handling, & Confined Space Training

Two weeks Look-ahead

- Street maintenance and large patching

ENGINEERING

Project Status Summary

Project	Status Update	Scope	Bid	Construction Time	Cost Estimate
River bridge Overlay	SGM is putting a design proposal together	Bridge Joints and Overlay	TBD	TBD	TBD
Airport Water Tank	All piping is in and the foundation is being placed on 6/2/23	New .5MG Water Tank and Rehabilitation of Existing Water Tank	Closed	2023	\$3.8M
Gateway Intersection	Plans are complete and submitted for final review. Bidding is anticipated by mid June	Improve Traffic and Pedestrian Safety at the Intersection of Centennial and Whiteriver	May '23	Summer and Fall '23	\$3.5M
Park and Ride	Draft agreements are complete and the project is going to the June Planning Commission Meeting	New Park and Ride with extension of streets and utilities	Late Summer '23	Fall '23 to Spring '24	\$3.5M
Tripp Drive	Survey and Geotechnical Complete	Rebuild Road and Stabilize Bank	Spring '26	2026	\$350k
Morrow Drive	Survey and Geotechnical Complete	Rebuild Road and Stabilize Bank	Spring '25	2025	\$1M
Whiteriver Ave from 9th Street to 16th Street	Survey and Geotechnical Complete	Rebuild Road, Stabilize Bank, Replace Waterline	Spring '25	2025	\$1.1M
Ute Avenue and 5th Street	Street Layout is complete and on schedule	Replace and Rehabilitate Sewer line, New Waterline, Rebuild Streets and add Sidewalk	Spring '24	2024	\$1.2M
Paradise Island	City has met with landowners and has a plan for easements	TBD	TBD	TBD	TBD
Penwell Transmission Line	Utilities are X-raying existing line	Water Transmission Line from plants to tanks	TBD	TBD	\$8M
River bridge Waterline	Going to council for award	Repair Waterline and add Restraints	Posted	Spring '23	\$65k
Railroad Avenue 5th Street to 9th Street	Utility layout, survey, and geotechnical complete, beginning on grant applications	Rehab Sewer line, Replace Waterline, Rebuild Street and Sidewalk	Spring '24	Summer '24	\$2.5M
Railroad Avenue and 5th Street Intersection	Award going to council	New Signal, Sidewalks and Landscaping	Posted	Aug-October	\$600k

2023 Street Improvements	Bid Posting 5/3/23	Prefontaine, 16th St, 7th St, Wapiti and Airport Road	May -23	Summer '23	
2023 Crack Sealing	Award April 19, 2023	16th St, 7th St, Airport Road, and Parks Parking Lots	Awarded	June	\$75k
2023 HA5	Expected to begin in July	Deerfield Subdivision and Highlands East	Closed	July	\$200k
Park Avenue Extension	No further progress, land purchase will become a discussion for 2024 budget	Bridge and Connection to Centennial Parkways	TBD	TBD	\$2M
Intersection of Park Avenue and Third Street	Plans at 60% completed in house, need to have them reviewed and add utilities	Sidewalk, Waterline, Street Rebuild	TBD	TBD	\$750k
Stormwater SEP	Public notice complete, RFP ongoing	Study and Improvements of Stormwater	TBD	TBD	TBD
Alley Maintenance	Will put together a bid in Spring	Grading and Mag Chloride	Spring '23	Summer '23	\$50k
Park Hill Retaining Wall	Meeting with land owner took place, no cost sharing is expected	Retaining wall fixing ROW and private issue	May '23	Summer '23	\$250k

Financials

For the Street Improvement Fund:

- Professional Services for stormwater compliance currently includes mapping software and consultation, inspection software and Public Works Manual Updates
 - This consists of an estimated \$36,650.00 which is \$33,350.00 under budget
- Minor Projects includes Crack Seal, HA5, Chip Seal, Alley Maintenance, and Street Repairs
 - With additional streets added this is estimated to be \$1,755,528.08 over budget which is intended to be supplemented with general funds
- Traffic Signals includes replacement of the 5th Street Signal is over budget by approximately \$200k if the URA is used as a supplement
- Major Projects Include Designs of Streets
 - All of this work was awarded in 2022, contracts include construction management which will take place in later years so Major Projects are projected to be \$280,000 below budget
- Capital Projects are the Whiteriver and Centennial intersection and Park and Ride.
 - The Intersection is anticipated to be below the budgeted amount
 - The Park and Ride is likely not going to have an executed IGA between CDOT and the City soon enough to begin in 2023 meaning its costs will be incurred in 2024

Only because of projects rolling over into 2024 and latter years, the Street Fund is anticipated to be \$2,736,294.40 under the budgeted amount pending the bid for the gateway intersection.

Administration

- **ROW permits and process**-The annual ROW meeting was held and well attended, the online permitting system is planned to be live in approximately August '23
- **GIS** -Stormwater maps have been updated
- **Stormwater**-The City of Rifle has reached the population of 10,000 which is a trigger to be regulated as a Municipal Separate Storm System (MS4) by the EPA. There is money in the 2023 budget for professional services in regards to compliance. It is not expected that the regulation will go into effect in 2023 but Engineering would like to update the water quality portions of the Public Works Manual ahead of the mandates
- **PWM and Eng. Standards**-Changes to the Public Works Manual have began as Supplemental Conditions. This will continue until the Manual is fully updated which is expected in 2024
- **2024 budget**-projects have been identified and are getting cost estimates

POLICE

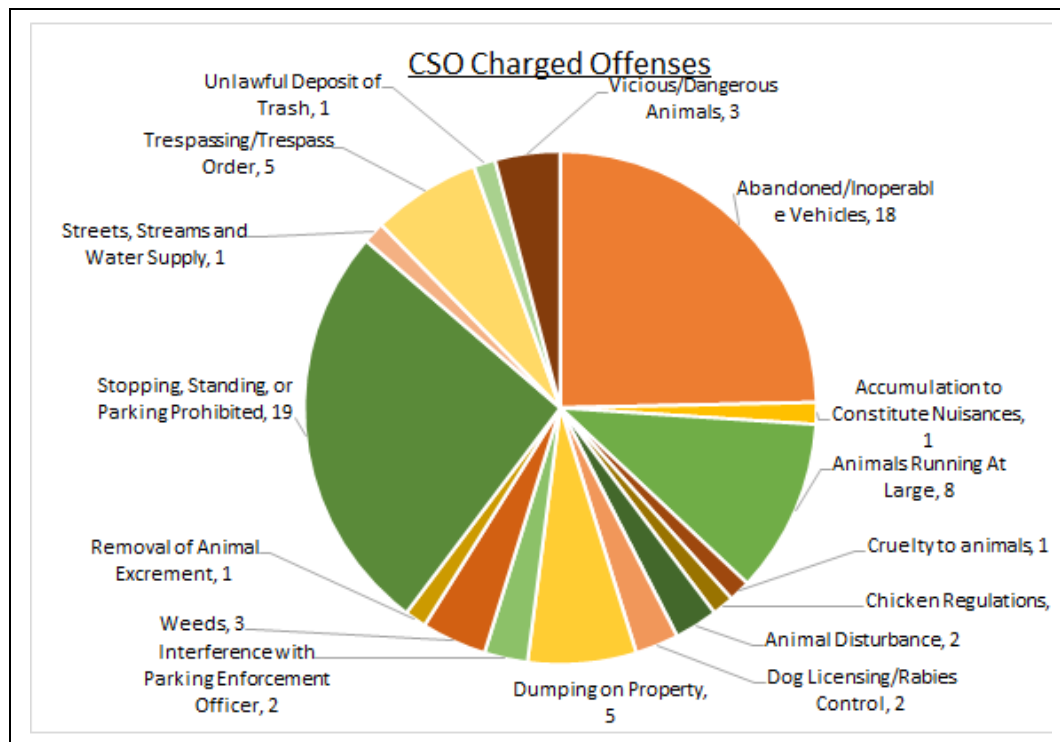
- RPD issued a total of 201 citations in May (Patrol 142/CSO 59). Of those citations, 69 were traffic citations.
- RPD responded to 1298 calls for service in May, yielding 54 cases requiring follow-up and additional investigation.
- RPD made 41 arrests in May.

Code Compliance

Code Compliance continues to work hard to provide great services to the City of Rifle. These are code compliance statistics for May.

CSO Charged Offenses (Citations/Parking tickets)

Offense Description	Count
Abandonment of Vehicles Prohibited - (1st Offense within 12 months)	5
Accumulation to Constitute Nuisances	1
Animals Running At Large (failed to physically restrain)	8
Care and Treatment (Cruelty to animals)	1
Chicken Regulations (Type permitted)	1
Disturbance (allow animal to disturb)	2
Dog Licensing (Failed to attach license)	1
Dumping on Property	5
Inoperable Vehicles Prohibited (leave on any public property...1st violation w/in 12 months)	13
Interference with Parking Enforcement Officer or Procedures (MTC1204(8))	2
Parking in excess of 72 hrs (vehicle, unattached trailer, recreational vehicle)	2
Parking within 15 ft of fire hydrant	1
Prohibitions - (weeds in excess of 8 inches in height)	3
Rabies Control (Proof of vaccination required)	1
Removal of Animal Excrement; damage to property (fail to promptly remove; properly dispose of)	1
Stopping, Standing, or Parking Prohibited (Prohibited by sign any street, alley, parking lot, any place in city)	15
Stopping, Standing, or Parking Prohibited (stop-stand-park @ specified location)	1
Streets, Streams and Water Supply	1
Trespassing (premises designed to exclude or fenced)	3
Unlawful Deposit of Trash-Blown by the Wind	1
Vicious Animals & Potentially Dangerous Animals Prohibited (unlawful possession - potentially dangerous)	3
VOID	1
Trespass Order	2
Grand Total	74



Noteworthy events in May for the Rifle Police Department.

- RPD hosted a flag ceremony on May 15th to honor National Police Week.
- Police Cadets Leland Loux and Ariel Herrera graduated from POST Academies and have begun their field training with Rifle PD.
- The Rifle Police Department Bike Rodeo was held on May 20 and was a huge success.
- RPD assisted with the Rifle High School Graduation and Senior Parade on May 19/20th.



SPEAR (Special Problem Enforcement And Response) Update for May

Info coming soon!



ADMINISTRATION

- Rifle Mountain Park will remain closed for up to 3 more weeks. The County will conduct an assessment of the roadway before we open the park to the public.
- Work on the City Hall project will begin Monday, June 5. The HVAC unit has been delivered.
- The city manager is meeting with staff for our quarterly Team Meetings.
- Mayor Green and Councilors Gresley and Strode attended a meeting with CML staff on June 1. Representatives from Silt, Glenwood, Palisade and Aspen were present.
- The sewer repair project brought before Council in April is still in progress. Supplies have been ordered. Additional issues were discovered when our crews used video equipment to assess the line. A portion of the line to our manhole is clay tile and it is partially obstructed by roots. We did not anticipate seeing clay tile at this location based on information provided by one of the parties. The parties have been notified of the status.