COLORADO WATER CONSERVATION BOARD
WATER PROJECT LOAN FEASIBILITY STUDY

ROOT AND RATLIFF DITCH COMPANY

October 1, 2021

Prepared by

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PREPARED BY

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FEASIBILITY STUDY APPROVAL
Pursuant to Colorado Revised Statutes 37-60-121 &122, and in accordance with policies adopted by the Board, the CWCB staff has determined this Feasibility Study meets all applicable requirements for approval.

11/1/2021
Date

Signed

REVIEWED BY

JORDAN DIMICK, PE

SGM Project # 2018-391.001, Ph 99

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1.0 Background

1.1 Purpose

The proposed action is to replace approximately 5.4 miles of the Root and Ratliff Ditch with a buried pipe. The Root and Ratliff Ditch is currently an unlined, open irrigation ditch system. The piping of the ditch will include the re-alignment of certain reaches of the ditch to simplify construction and decrease the project costs.

The purpose of the proposed action is to reduce salinity concentrations in the Colorado River Basin. The Colorado River system is naturally very saline. While natural sources account for 47% of the salinity in the Colorado River, irrigation practices account for 37%. Irrigation can increase the salinity in a system by mobilizing salts found in the soils of an unlined ditch or flooded field. Water loss due to evaporation can also contribute to an increase in salinity by concentrating any salts in the remaining water. Increases in water salinity can result in reduced agricultural yields as well as the corrosion and plugging of pipes in houses and industry. It is anticipated that the proposed action would reduce salinity in the Colorado River Basin by an estimated 2,347 tons of salt per year. The project will also increase the efficiency of the existing delivery system by preventing water loss through both evaporation and deep percolation.

The project is being primarily funded through a financial assistance agreement from the U.S. Bureau of Reclamation (Reclamation) under the Colorado River Basin Salinity Control Program (SCP). The SCP was authorized under Title II of the Colorado River Basin Salinity Control Act (Public Law 93-320, as amended by Public Laws 98-569, 104-20, 104-127, and 106-459). Funding assistance for construction costs have also been committed by the USDA Natural Resources Conservation Service (NRCS) Regional Conservation Partnership Program and the State of Colorado Non-Point Source Program.

As more fully described in this Loan Feasibility Study, the Root and Ratliff Ditch Company is seeking approval for a Colorado Water Conservation Board (CWCB) Water Project Loan for $300,000.00 to cover additional project costs that have been realized in the engineering and permitting phases of the project, as well as additional construction project cost that will be realized later in 2021 and into 2022.

1.2 Study Area Description

The Root and Ratliff Ditch (originally decreed as the Ratliff and Root Ditch) is located in Montezuma County, Colorado, east and south of the Town of Mancos. From the Mancos River diversion site north of U.S. Highway 160, the ditch flows under the highway and to the southwest. The project area is located entirely on private lands, with the exception of several public rights-of-way for road crossings. The proposed pipeline alignment roughly follows the existing ditch, although the pipeline will leave the existing ditch alignment in several sections in order to create a straighter alignment and improve construction and operational efficiency. Approximately 2.4 miles of the new pipeline will be located outside of the existing ditch easement. The existing ditch crosses 42 separate parcels. The new pipeline will cross 37 parcels and will be located in dedicated easements negotiated with landowners.

In accordance with the SCP, three habitat replacement sites have been proposed to mitigate riparian and wetland habitat loss resulting from the removal of an open irrigation ditch. The habitat replacement sites are located west of the Root and Ratliff Ditch and south of G Road. The sites

are on private lands owned by three different landowners and are in close proximity to each other. The Hoessle property is located on the northern end of Mormon Lake. The Willenbuecher and Strother properties share a common boundary line with each other and are located west of the Hoessle property.

The majority of the area in the immediate vicinity of the ditch and habitat replacement sites has been disturbed by agricultural activities and rural residential development. The average elevation in the project area is about 7,100 feet above mean sea level. Land cover in the vicinity of the project area consists primarily of irrigated agricultural lands with pinon-juniper on hills and ridges. Habitat along the Mancos River, where the ditch diversion structure is located, is riparian woodlands. The three habitat replacement sites each contain some wetland or riparian habitat that is surrounded by fenced pasture. Menefee Mountain can be seen to the south and east, Weber Mountain and Mesa Verde are located south and west of the project area, and the La Plata Mountains are to the northeast. Figure 1 is a map of the project area vicinity.

1.2.1 Socio-economic Characteristics

The Root and Ratliff Ditch is located in Montezuma County. As of 2018, the population in Montezuma County was 26,155. Between 2010 and 2018, Montezuma County grew 0.3% annually with most of the growth occurring in Mancos, Colorado (0.8%). In 2019, Montezuma County unemployment rates (4.2%) were higher than both the state (2.8%) and national (3.9%). The service sector employs about 38% of workers in the county. Many of the service jobs in Montezuma County support accommodation and food services and health and social assistance. Agriculture accounts for 8% of the jobs in the county. (Data from Region 9 Economic Development District of SW Colorado Economic Snapshot 2020.)

Only 27% of the county is privately owned. The Ute Mountain Ute Reservation covers 34% of the county and 38% are federal lands managed by the Bureau of Land Management, U.S. Forest Service, or National Park Service. The remaining 1% are owned by the State of Colorado (State). (Data from Region 9 Economic Development District of SW Colorado Comprehensive Economic Development Strategy 2021 Update.)

Farms cover 11% of the land in Montezuma County. The majority of the farmland is pasture for grazing (77%) with 17% being used for growing crops. The main crops produced in the county are hay for forage (47,886 acres) and wheat for grain (18,115 acres). (Data from 2017 Census.)

1.3 Previous Studies

- An “Evaluation of Habitat Impacts Associated with Piping of the Root and Ratliff Ditch” was written by SGM in July 2019 and approved by Reclamation. This report determined that 44.5 habitat units would be lost from filling in the open Root and Ratliff Ditch.
- Surveys for the presence of yellow-billed cuckoo (YBCU) were conducted within 0.5 mile of the Mancos River from U.S. Highway 160 north to the diversion point for the ditch and along a 0.5 mile stretch above the diversion point. Surveys were conducted in accordance with USFWS protocols by SGM staff. Approximately 52 acres were included in the survey. A total of four surveys were performed during the summer of 2019. There were no observed YBCU adults or nests found during the surveys.
- The project area was surveyed by SGM staff for southwestern willow flycatcher (SWFL) in 2019 in accordance with protocols established by the USFWS. A total of five surveys were performed during June and July. The project area contains approximately 25 acres of

riparian areas considered suitable habitat. There were no observed SWFL adults or nests found during the surveys.

- Surveys for the presence of New Mexico meadow jumping mice (NMMJM) were performed by Jennifer Zahratka with Biological Resources LLC. The survey was authorized under Recovery Permit Number TE40886B-2. Approximately 4,000 linear feet of the existing ditch alignment was surveyed. Surveys included live trapping for 3 consecutive nights beginning July 15, 2019. with a total of approximately 600 trap nights. No NMMJM were captured during the survey.
- A Biological Assessment was prepared by SGM in March 2020 to address the effect of the proposed project on wildlife and plant species that are listed as endangered or threatened under the Endangered Species Act (ESA) or proposed for listing under the ESA and designated critical habitat.
- Reclamation consulted with the USFWS regarding the effects on threatened or endangered species and critical habitat from the proposed action (USFWS TAILS: 06E24100-2020-F-0211). USFWS concurred that the proposed action may affect, and is likely to adversely affect, the endangered Colorado River Basin fishes: Colorado pikeminnow and razorback sucker. The proposed action's biological opinion states that the project is not likely to jeopardize the continued existence of the Colorado pikeminnow or razorback sucker, and is not likely to destroy or adversely modify designated critical habitat. The USFWS concurred that the proposed action may affect, but is not likely to adversely affect the New Mexico meadow jumping mouse, southwestern willow flycatcher, and yellow-billed cuckoo. The proposed action will have no effect to any other threatened or endangered species or their critical habitat.
- An environmental assessment (EA) was prepared by SGM, in coordination with Reclamation, in October 2020. The EA was prepared in compliance with the National Environmental Policy Act of 1969, as amended, (NEPA) to authorizing the use of Federal funds to implement the Root and Ratliff Ditch Company's Pipeline Project. A Finding of No Significant Impact (FONSI) was issued by Reclamation in September 2020.
- A Class III cultural resources inventory was completed by SWCA Environmental Consultants and finalized in July 2020. Reclamation consulted with the Colorado State Historic Preservation Office (SHPO). The proposed action was determined to have an adverse effect to historic irrigation structures. The Root and Ratliff Ditch Company, Reclamation, and SHPO entered into a Memorandum of Agreement (MOA) to mitigate the impacts to the affected structures. As a result of the MOA, a Level II documentation report was prepared for the Root and Ratliff Ditch by Woods Canyon Archaeological Consultants, Inc. in October 2020.
- A jurisdictional determination for the irrigation ditch was requested from the U.S. Army Corps of Engineers (USACE) in 2019. A letter was issued in March 2019 indicating the ditch is not considered a Water of the U.S.
- An aquatic resources delineation report was prepared by SGM to identify and characterize wetlands and other aquatic resources within the three habitat replacement sites. A total of 8.62 acres of wetlands were identified within the project area.
- A pre-construction notification was prepared for the USACE under Nationwide Permit No. 27 for the proposed habitat replacement sites. A compliance certification will need to be submitted to the USACE once the work at the habitat replacement sites is complete.

2.0 Project Sponsor

The Applicant is the Root and Ratliff Ditch Company, a non-profit corporation formed in May 1947 to operate and maintain the Root and Ratliff Ditch. The Root and Ratliff is operated as a mutual ditch company under Colorado Water Law. There are 2,337 shares in the Root and Ratliff Ditch Company. The ditch delivers irrigation water to approximately 1,290 acres, based on individual landowners' water rights priorities of its shares. On-farm irrigation is accomplished using laterals, gated pipe, or sprinkler systems. The main crops grown are hay and pasture grass. The ditch also delivers an average of 2.44 cfs of stock water to shareholders during the non-irrigation season.

The Root and Ratliff Ditch was constructed between 1874 and 1875 and was one of the earliest irrigation ditches in the area. The ditch was named after two early homesteaders with patented properties along the ditch, James Ratliff and Almarian L. Root. The Ratliff and Root Ditch was expanded by 1893 through several extensions, including the Webber No. 2 Ditch Extension, the Seabury Extension, and the Olds Extension. Features along the ditch include the ditch intake gate at the Mancos River, numerous main ditch and lateral ditch headgates, and Parshall flumes.

The Root and Ratliff Ditch Company was formed and is governed under Colorado Revised State Statute Title 7 - Corporations and Corporation Associations, Article 42 - Ditch and Reservoir Companies. The Ditch Company's Articles of Incorporation are included as Attachment A, and its Bylaws are included as Attachment B. The Root and Ratliff Ditch Company's sole revenue source is through its annual shareholder assessment, which is currently set at $2.00 per share.

3.0 Water Rights

The Root and Ratliff Ditch was first appropriated in 1875 and then adjudicated in 1893 with Number 2 water rights priority. The ditch company owns a total of 37.8 cfs of decreed water rights. The Root and Ratliff Ditch also conveys water to the Webber and Smith ditches, which have 4.5 and 2.3 cfs of decreed water rights, respectively. In addition, several water users along the Root and Ratliff Ditch have contract water stored in Jackson Gulch Reservoir, upstream of the Root and Ratliff Ditch diversion point on the Mancos River. The water for this supplemental supply is carried through the Root and Ratliff Ditch and delivered to its owners. There is a cumulative total of 44.8 cfs of water rights conveyed by the Root and Ratliff Ditch.

3.1 Water Availability

The Root and Ratliff Ditch diverts water from the Mancos River 1.4 miles upstream from the town of Mancos and runs northwest, west, southwest, and finally south to agricultural fields on the floodplains and benches on the eastern slope of Mancos and Weber Canyons. Irrigation return flows eventually reach the Mancos River through tributaries (Weber Creek) generally south of the project area.

The Mancos River is over appropriated in terms of water rights and the river in proximity to the project area often has little to no flow in it during times of peak irrigation demand. Attachment C is the Colorado Division of Water Resources (DWR) Structure Summary for the ditch, which shows the water rights and historical diversions for the Root and Ratliff Ditch.

3.2 Water Supply Demands

The irrigation season typically runs for approximately 153 days from May through September, during which the average diversion from the Mancos River is 12.8 cfs. The ditch also delivers an

average of 2.44 cfs of stock water to shareholders during the non-irrigation season. During the period of record from 1950 through 2019, the average annual total diversions to the ditch were 4,144 acre-feet. The minimum annual diversions during this period were 2,182 acre-feet, while the maximum annual diversions were 5,895 acre-feet.

Future water demands are not expected to experience much change. The amount of water that can be diverted is limited by water availability, water rights, and the size of the pipeline delivering water. The new pipeline has been designed to carry approximately 27 cfs from the diversion point on the Mancos River. The reduced water losses to evaporation and infiltration along with the installation of new electronic flow meters and control valves at turnout structures are expected to increase the efficiency of the irrigation system. These improvements should help to reduce the amount of water demand by shareholders.

4.0 Project Description – Analysis of Alternatives and Selected Alternative

4.1 Analysis of Alternatives

4.1.1 No Action Alternative

Under the No Action Alternative, the Root and Ratliff Ditch Company would not pipe the Root and Ratliff Ditch. Irrigation practices and seepage from the unlined ditch would continue to contribute to salt loading in the Colorado River Basin. Riparian and wetland habitats associated with the unlined ditch would likely remain in place and continue to provide habitat to local wildlife.

Ultimately, the Ditch Board and its shareholders did not select the No Action Alternative due to a number of considerations. The primary reason was that many landowners and irrigators desired to convert their irrigation system from flood irrigation to more efficient pressurized sideroll or sprinkler irrigation systems. This is currently not achievable, as the ditch is open and flows by gravity for its entire length. Secondarily, the existing ditch requires a lot of maintenance and manual operations by the ditch rider, which would be simplified for a piped system. Finally, the Ditch Board wanted to realize the regional and l ecological benefits of maximizing the efficiency of its ditch and reduction of salt to the Colorado River Basin.

4.1.2 Lined Ditch Alternative

Under the Lined Ditch Alternative, the Root and Ratliff Ditch Company could have participated in the SCP, but would have been able to achieve less of project salt load reduction. The lined ditch alternative could have used the existing ditch alignment, which would have needed to be reshaped and grading to allow a prefabricated product to be installed. Alternatively, the ditch could have been lined with shotcrete or a non-permeable liner.

Ultimately, the Ditch Board did not select the Lined Ditch Alternative, as the SCP requires projects have a lifespan of 50 years, and lined ditch system typically require more maintenance due to cracking of the lining from freeze/thaw cycles, heaving soils, and/or impacts from livestock. The construction costs of a lined ditch are quite significant, and the potential maintenance and replacement requirements were not desirable for the Ditch Board.

4.2 Selected Alternative

The selected alternative is to replace approximately 5.4 miles of open, unlined irrigation ditch with approximately 4.7 miles of buried irrigation pipe. Three habitat replacement sites will be

constructed to mitigate riparian and wetland habitat loss resulting from the removal of an open irrigation ditch. The Root and Ratliff Ditch project area is shown in Figure 2.

4.2.1 Headgate Replacement

The existing headgate will be replaced with a screen structure and intake box to accommodate the pipe. A totalizer meter will be installed that records continuous flows to enable measurement of diversions. The existing headgate for the ditch is located in a forebay that detains water below the diversion structure on the south bank of the of the Mancos River. The diversion structure is an in-stream rock check with an adjacent screw gate and headwall structure that can be adjusted to divert the required flow for the time of year and ditch operations.

After the headgate replacement, water will flow from the diversion structure, through the forebay, and over the fish screen. The screen will sit between the forebay and an overflow channel that flows back to the Mancos River approximately 230 feet downstream of the main diversion. The fish screen will consist of a 15-foot long and 5-foot wide coanda-effect, wedge-wire screen that is sloped downhill at approx. 30 degrees with screen slot openings approximately 0.1875 inch wide with 7-degree tilt. The screen will be attached to a concrete box, complete with aprons and wingwalls to fit the geometry of the channel, to help guide flow through the structure. Clean water that passes through the screen will feed the Root and Ratliff Ditch. Any excess water, debris, or aquatic organisms greater in size than 0.1875 inch that enter the forebay will continue over and past the fish screen into an overflow channel. When the ditch is in operation, there will always be a small amount of water in the overflow channel to ensure the ditch is fully pressurized and that fish have passage back to the Mancos River. Flows through the diversion and forebay would typically be between 2 and 30 cfs depending on the season, water needs, and availability.

To construct the new fish screen, the headgate on the Mancos River will simply be closed and any residual water (groundwater, seepage, etc.) will be directed to the overflow channel or pumped out if needed. No work on the main channel diversion or headgate on the Mancos River, or grading of the diversion channel will be required. The return flow channel from the screen structure to the river will be flattened and lowered to provide adequate operation of the self-cleaning screen structure.

4.2.2 Pipeline Installation

The pipeline component of the proposed action was designed and engineered by SGM. The entire length of the Root and Ratliff Ditch will be piped, from the headgate below the diversion structure on the Mancos River to a concrete splitter box that represents the end of the ditch as owned and operated by the Root and Ratliff Ditch Company. A total of 29 outlets will release water to farm turnouts or laterals along the length of the pipeline, including three at the splitter box that lead to the privately-owned Graf and Cox Pipeline and Doerfer Ditch. The turnout structures will be replaced with new structures equipped with flow meters and valves.

The new irrigation pipeline will begin with a 27-inch nominal diameter in the initial reach below the intake. The nominal diameter will be reduced as the amount of flow required decreases. The pipeline will reduce down to a 18-inch nominal diameter at the end of the pipeline, south of Road G. The maximum rating of the pipe will be 125 pounds per square inch (psi). The majority of the pipeline will be plastic irrigation pipe (PIP). A short run of pipe under U.S. Highway 160 through an existing irrigation culvert will be high-density polyethylene (HDPE) pipe to allow slip lining of the existing culvert and minimizing traffic impacts to 160. The irrigation pipeline will be gravity-pressurized with no pumps, compressor stations, or water storage facilities are included in the project.

At the state and county road crossings, the pipeline will cross through existing culverts, where feasible. Otherwise, an open trench will be required to construct the pipeline. The portion of the pipeline that will cross under the Colorado Department of Transportation (CDOT) right-of-way along U.S. Highway 160 east of the Mancos River will be slip lined through the existing irrigation culvert in lieu of open cutting.

4.2.3 Ditch Decommissioning

Decommissioning of the existing ditch will be accomplished by filling the ditch with clean, local soil material, compacting the material, and grading the surface to match surrounding contours and restore drainage patterns. Car tires and household waste that exist in some reaches of the ditch will be recycled or disposed of in a suitable land fill. A bulldozer will be used to grub vegetation and fill and bed the existing ditch. The material needed for construction fill will be generated within the construction footprint as much as possible. However, it is anticipated that additional fill will be required from a commercial source. Fill material will be transported in tandem dump trucks.

4.2.4 Revegetation

All areas disturbed during construction of the proposed action will be reclaimed subject to any conditions from private landowners. Disturbed surfaces will be contoured to match the surrounding area and restore drainage patterns. Drought-tolerant and weed free seed mixes appropriate for the surrounding native vegetation will be used as approved by private landowners.

The contractor will employ drill or broadcast seed methods to ensure proper seed placement. The seed will be uniformly raked, chained, dragged, or cultipacked to incorporate seed to a sufficient seeding depth, if possible. Reseeded sites will be mulched to facilitate germination and growth. Best Management Practices (BMPs) will be used to control erosion, minimize harm to wildlife, and minimize the spread of noxious weeds during and following construction. Noxious weeds will be controlled in disturbed areas according to easement stipulations and Montezuma County standards.

4.2.5 Habitat Replacement Sites

The three proposed habitat replacement sites total approximately 15 acres. The sites already include some open water and wetland habitat. The value of these areas for wildlife is presently limited by several factors, including the overall lack of trees and shrubs, the presence of weeds, cattle grazing, and fencing. In order to enlarge and improve the quality of wildlife habitat on the three parcels, several enhancement activities are proposed as listed below:

- Existing wetland habitat will be expanded by 0.37 acre on the Hoessle habitat replacement site.
- A new 0.20-acre pond will be built along an existing ditch on the Willenbuecher property.
- Emergent wetland vegetation will be planted in the shallow areas of the existing ponds and new pond on the Willenbuecher and Strother properties. The addition of vegetation that is interspersed with open water will promote use of the habitat by waterfowl.
- Mixed tree and shrub plantings on all three properties will increase the habitat diversity and functionality of the sites for wildlife. Both riparian and upland species will be planted.

- The upland area to the north of the wetland on the Hoessle property contains appreciable noxious weeds. These weeds will be treated with an approved herbicide and the area will be revegetated.
- Areas of noxious weeds on the Willenbuecher and Strother properties will be treated using biological agents or herbicides.
- A series of nest boxes will be installed at the sites to encourage use by birds.
- The connectivity of the Willenbuecher property with adjacent areas of value to wildlife will be increased by reducing fencing and modifying fencing to be more wildlife friendly.
- The outlet structure for the existing pond on the Willenbuecher property can be controlled from above the pond but needs to be reconnected to the ditch downstream. Approximately 16 linear feet of pipe will be installed to allow the structure to take water from the bottom of the pond rather than the top.
- The reliability of the water supply for the sites will be increased through dedication of water rights. Ten shares of Jackson Reservoir water (delivering approximately 10 acre-feet per year) will be purchased by the applicant for the mitigation sites.
- The sites will be protected from future disturbance through the use of deed restrictions that prevent any development or activities that could negatively impact the wildlife habitat, such as construction of roads, structures, or filling any portion of the site.
-

The habitat replacement project is required to function for 50 years following construction. The Root and Ratliff Ditch Company will be responsible for maintenance and monitoring to ensure success.

4.3 Project Cost Estimate

The design and permitting portion of this project began in 2018. Unanticipated changes occurred, which resulted in additional project costs. These changes included significant archeological field expenses and redesign costs associated with identified cultural resources, necessary field surveys for the New Mexico Meadows Jumping Mouse, and design modification to address landowner requests and increasing material prices (primarily pipe). Additionally, SGM design a habitat mitigation project during the initial portion of the project for a potential landowner, who ultimately decided not to enter into an agreement and deed restriction with the Ditch Board. Therefore, SGM had to work with the Ditch Board and three landowners to design new habitat mitigation projects to offset the habitat loss associated with piping the ditch

During the winter of 2020 and 2021 hurricane activities impacted the ability of plastic resin manufacturers to operate in the Gulf Coast area. Manufacturing shutdowns, along with COVID-19 supply chain impact, resulted in the construction bids being approximately $1,000,000 more than originally estimated in the Ditch Company's 2017 SCP application. Therefore, SGM worked with landowners and potential contractors to value engineer the project. The primary value engineering aspects included:

- Reduced the amount of pipe cover from 5 feet to 3 feet, with insulated outlets.
- Revised the bedding material requirement from Class 6 material for the entire mainline of the pipe to screened native material in open fields and Class 6 materials in road right-of-ways.
- Revised the air-vac relief valves from municipal grade to irrigation grade.

- Changed the pipeline procurement to have the Ditch Company purchase pipeline materials directly from suppliers.

Once rebid, the value engineered design resulted in a cost savings of almost $855,000. Therefore, the Ditch Company elected to move forward with construction of the pipeline, which began in August 2021. As of October 1, 2021 the following work has been completed by the selected contractor:

- Approximately 10,000 linear feet of mainline pipe has been installed with the associated tees, bends with concrete thrust blocks.
- Installed seven air-vac relief valves.
- Gravel roads have been repaired in the construction areas.
- Reshaped and filled in approximately 18,000 linear feet of existing ditch.
- Installed 1,000 linear feet of replacement fence.

As such, the total project cost is now estimated to be $3,126,718.57 as shown in Table 1.

Table 1 Root and Ratliff Pipeline Project – Total Cost Estimate

Item No.	Description	Project Costs (Incurred and Estimated)	
1	Engineering and Permitting Costs	$	521,488.70
2	Habitat Replacement Water Supply	$	25,000.00
3	Legal Costs	$	12,000.00
4	Ditch Company Expenses	$	25,000.00
	Design Level Expenses	***$***	***583,488.70***
5	Schedule 1 - Pipeline Construction	$	1,577,933.65
5.1	Schedule 1 - Change Order No. 1	$	28,369.00
5.2	Schedule 1 - Change Order No. 2	$	3,300.00
6	Schedule 2 - Pipeline Materials	$	1,352,315.00
7	Schedule 3 - Habitat Replacment Project	$	164,800.92
	Subtotal Construction Costs	***$***	***3,126,718.57***
8	Construction Contingency	$	133,382.98
9	Construction Observation Costs	$	56,430.75
	Total	**$**	**3,900,021.00**
	FOA Budget	**$**	**3,600,021.00**
	Difference	**$**	**(300,000.00)**

4.4 Implementation Schedule

The pipeline is currently being installed and is expected to be complete by May 1, 2022. Earthwork at the habitat replacement sites will be done in the Fall and Winter of 2021 as weather allows. Plant installation and revegetation activities will be done at the habitat replacement sites in the Spring of 2022.

4.5 Impacts and Institutional Feasibility

The majority of the actions required for project implementation have been completed as described under Section 1.3, Previous Studies. The additional necessary actions and responsible individual are listed below:

- The construction contractor will obtain a CDOT Utility Permit for work within the US 160 Highway right-of-way.
- The construction contractor will obtain a utility permit from the Montezuma County Public Works Department for work within the rights-of-way on Montezuma County Roads 43, 41, G, and H.
- Utility clearances will be obtained from local utilities in the area by the construction contractor prior to construction activities.
- A Stormwater Management Plan will be prepared and submitted to the Colorado Department of Public Health & Environment (CDPHE) by the construction contractor prior to construction disturbance.

5.0 Financial Feasibility Analysis

5.1 Loan Amount

The Root and Ratliff Ditch's Agreement with Reclamation provides a maximum grant amount of $3,600,021.00. Based on the costs expended to date along with contracted construction costs and a construction contingency amount of 4.3%, the current total project cost is estimated to be $3,900,021.00. As such the Ditch Board is seeking approval of a CWCB Water Project Loan in the amount of $300,000.00, which is shown as the difference (bottom row) of Table 1. The Root and Ratliff Ditch understands the 30-year CWCB interest rate for an agricultural user to be 1.10%. This would result in an annual payment amount to the CWCB for approximately $11,795. The Root and Ratliff Ditch has approved a resolution to secure a loan for $300,000 from the CWCB as shown in Attachment D.

5.2 Financing Sources

The Root and Ratliff Ditch Company is not seeking additional financing sources other than a CWCB loan and the greater part of the project is funded through a secured federal grant. Their only current source of financial income is in the form of assessments designated in Article VI. Assessments in their current by-laws. The current rate structure is established at $50 for the first 10 shares and all remainder shares are $2.00 per share. Over one third of shareholders do not own more than 10 shares. All assessments of the company's shares shall be provided by the Articles of Incorporation of the company and for the purposes therein mentioned. A loan through CWCB fits within this purpose and has been approved by the ditch board as a financing source according to their bylaws.

5.3 Revenue and Expenditure Projections

The Root and Ratliff Ditch Company currently has a $6,000 annual assessment revenue from the existing shareholders. The Ditch has also expended an average of $2,000 in expenses annually for tax returns, administration and ditch repair fees, mostly due to in-kind contributions from shareholders and board members. The Root and Ratliff Ditch will be increasing their annual shareholder assessments and creating a rate structure based on water right priority and number of shares per shareholder. At this point in time the Ditch Board anticipates charging $50 share for the first 10 shares and then $8.00 per share for the remaining shares. The projected revenue from this rate increase is an estimated $27,000 per year and has the full support of the shareholders that will see the greatest increase. The Ditch will then acquire a Certificate of Deposit for one year's loan payment and hold

that in reserves for any future unforeseen budget shortfall. The remainder of the shareholder assessment increases will provide the avenue for loan repayment and building additional reserves for increased maintenance cost on a piped ditch and updated structures.

5.4 Loan Repayment Resources

As stated above, the Root and Ratliff Ditch Company is prepared to take the necessary steps to increase their shareholder assessments by 350% to fully repay the requested loan. The Ditch currently has 38 shareholders contributing to the assessment revenue total. This increase will allow the Ditch to pay the annual loan payment with less than 50% of the total assessments. They also have a long successful history for shareholders' payment and by sharing the debt ratio within the membership through a new rate structure, the Root and Ratliff Ditch Company is confident they have the needed resources to meet the loan repayment.

5.5 Financial Impacts

The Root and Ratliff Ditch Company does not currently have any debt. While incurring debt would not hinder the Ditch's ownership, interest payments on debt will certainly reduce their net income and cash flow. Establishing new debt will cause the completion of the overall project, therefore raising the net asset value of the completed infrastructure. The Ditch recognizes that generally, too much debt would be detrimental to our company and shareholders because it inhibits our ability to create reserves for future expenditures. Since the majority of this project is being completed with grant funding, the Root and Ratliff Ditch is confident that the loan amount requested fits well within their ability to repay and not overextend their shareholders capacity to pay the increased assessments.

5.6 TABOR (Taxpayer's Bill of Rights) Issues

The Root and Ratliff Ditch Company is a nonprofit incorporated ditch company and not subject to TABOR .

5.7 Collateral

As security for the CWCB loan, the Root and Ratliff Ditch Company pledges current and future assessment income and the project itself as collateral.

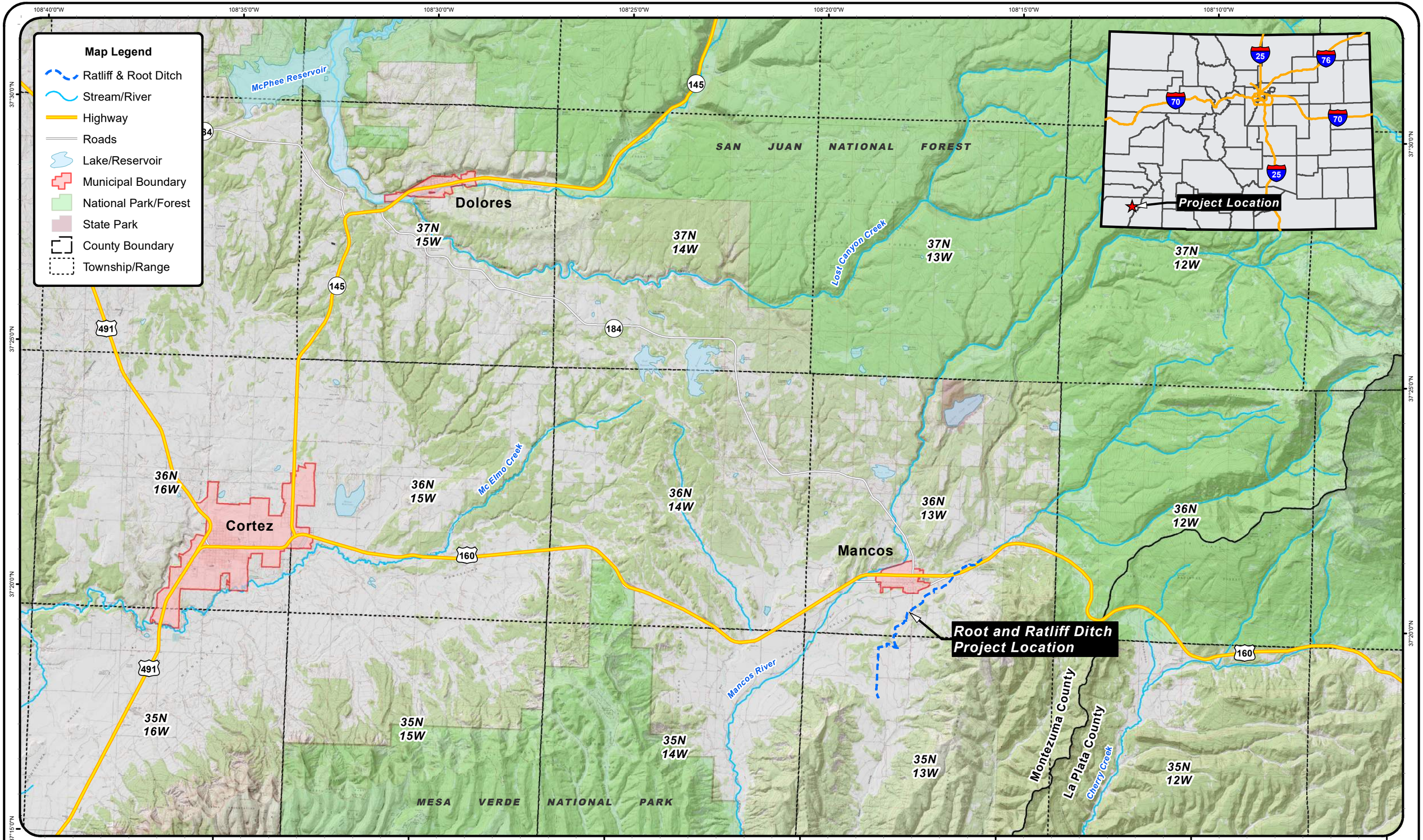
5.8 Sponsor Creditworthiness

The Root and Ratliff Ditch Company is in good standing with the Colorado Secretary of State, as shown by Attachment E. The Root and Ratliff Ditch Company's most recent audit reports of its financial statements are shown in Attachment F.

6.0 Conclusions and Recommendations

Based on the irrigation efficiency improvements, significant reduction in the salt loading of the Colorado River Basin, local ecological benefits, and the ability of the Root and Ratliff Ditch to increase its annual assessment fees and collect them, we recommend that CWCB approve the requested Water Project Loan application to assist the Root and Ratliff Ditch Company in securing funds to complete its SCP irrigation pipeline project.

Figures



SGM
555 RiverGate Ln, Suite B4-82
Durango, CO 81301
970.385.2340
www.sgm-inc.com

Figure 1.
Ratliff and Root Ditch Vicinity Map

Date: 11/19/2018	Job No. 2018-391.001	Map by: RZM	Checked by: DBM	Scale: 1:126,720

Data Sources: USGS, CDOT, Montezuma County GIS, ESRI

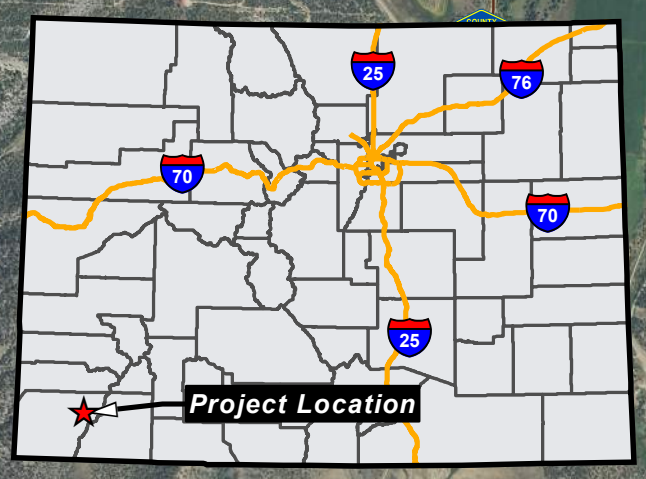
File: P:\Project Files\2018-391.001 Ratliff & Root Ditch\H-Dwgs\GIS\MXDs\Fig1-VicinityMap.mxd

The information displayed above is intended for general planning purposes. Refer to legal documentation/data sources for descriptions/locations.

0 2 4 Miles

1 inch = 2 miles

N



108°19'0"W 108°18'30"W 108°18'0"W 108°17'30"W 108°17'0"W 108°16'30"W 108°16'0"W 108°15'30"W

37°22'0"N 37°21'30"N 37°21'0"N 37°20'30"N 37°20'0"N 37°19'30"N 37°19'0"N 37°18'30"N 37°18'0"N

Ratliff & Root Point of Diversion

36N 13W

160

Mancos

Webber Ditch

COUNTY 41 ROAD

Staging Areas

COUNTY H ROAD

COUNTY H ROAD

COUNTY H ROAD

COUNTY 41 ROAD

Staging will ocur inside 50 FT easment along this area of alignment

Strother Site

COUNTY G ROAD

35N 13W

Staging Areas For Habitat Replacement Sites

Hoessle Site

Willenbuecher Site

Contractor is responsible for obtaining excess borrow needed to complete project outside of material generated from pipe trench excavation and ditch

Map Legend

- Point of Diversion
- Ratliff & Root Ditch
- Proposed Pipeline Alignment
- Staging Areas
- Other Ditch/Lateral
- Other Road
- Highway
- Municipal Boundary
- Township/Range

Habitat Replacement Site

- Willenbuecher Site
- Strother Site
- Hoessle Site

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555 RiverGate Ln, Suite B4-82
Durango, CO 81301
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Figure 2
Ratliff & Root Ditch
Project Area Map

Date:12/27/2019 | Job No. 2018-391.001 | Map by: ANW | Checked by: BK | Scale: 1:21,000

Data Sources: DWR, CDOT, Montezuma County GIS, ESRI, NAIP 2017 Imagery

File: P:\Project Files\2018-391.001 Ratliff & Root Ditch\H-Dwgs\GIS\MXDs\BA\Fig2-ProjectAreaMap.mxd

The information displayed above is intended for general planning purposes. Refer to legal documentation/data sources for descriptions/locations.

0 1,750 3,500 Feet

1 inch = 1,750 feet

N

Attachment A

94 SEP 27 P12:50

AMENDED ARTICLES OF INCORPORATION

OF THE

ROOT AND RATLIFF DITCH COMPANY

* * * * * * * * * * *

KNOW ALL MEN BY THESE PRESENTS, That We, the undersigned, citizens of the United States and of the State of Colorado, and Directors of The Root and Ratliff Ditch Company, under the authority vested by vote of the shareholders of this corporation, do hereby associate ourselves for the purpose of forming a body corporate, not for profit, and amend the Articles of Incorporation of this corporation under the laws of the State of Colorado and do hereby certify and declare as follows:

1. The Corporate name of said corporation is

THE ROOT AND RATLIFF DITCH COMPANY.

2. The objects and purposes for which said corporation is formed are:

a. To acquire the interests of the persons becoming shareholders in this corporation in that certain ditch known as the "Root and Ratliff Ditch", taking water from the Rio Mancos in Montezuma County, Colorado, not, however, including the water rights enjoyed through said ditch, and to acquire all other interests in said ditch as may be deemed necessary or desirable, for the conveyance of water for irrigation and domestic use for the benefit of the shareholders in this corporation, and solely for use upon their lands, and according to their respective rights and priorities of right to the use of the waters of said river; such shareholders to consist only of persons or corporations or associations having water rights in said river enjoyed through said ditch, and each share to represent one-sixtieth of one cubic foot per second of time of such water rights; and the sale or transfer in any manner of any such water rights, in whole or in transferee of the shares in the corporation owned by the owner of such water right; and to admit as shareholders in said corporation, upon the same basis as herein provided for owners of such water rights as are above mentioned, such persons, corporations or associations as may have or acquire water rights which can be enjoyed through said ditch, the right of such admission and the terms upon which the same may be granted to be allowed and fixed only by vote of two-thirds of the shares of said corporation at a meeting of the shareholders thereof regularly called and held.

b. To operate said ditch and convey thereby to its shareholders such water as they may respectively be entitled to take from said stream through said ditch for said purposes; to enlarge, repair, extend and maintain the same; to control all headgates, weirs, outlets, dividing boxes and other appliances for the division of the water carried by and through said ditch, and prescribe the form and manner of construction thereof; and to divide the water carried in said ditch among its shareholders according to their respective lawful rights and priorities; and to convey water from the Jackson Gulch Reservoir as may be under contract to shareholders of the corporation under rates, rules and regulations made by the Board of Directors.

c. To acquire and hold such property, real and personal, as may be necessary or convenient in effecting the purposes of its organization.

The headgate of the Weber No. 2 Ditch, being a part and incorporated with the Root and Ratliff Ditch Company, is situate on the south bank of the Root and Ratliff Ditch at a point south 59° 45' E 1551 feet from the quarter section corner between Sections 28 and 33, Township 36 N. Range 13 W., N.M.P.M. The line of the ditch begins at the point above named as the headgate and runs thence S 1° 15' W 292.38 feet, thence S 54° 45' W 1056 feet, thence S 57° W 175.56 feet, thence South 58° 38' W 207.9 feet, thence S 44° 45' W 205.26 feet, to line between NE 1/4 and NW 1/4 of Section 33, Township 36 N., Range 13 West, thence S 53° W 477.18 feet, thence S 48° 30' W 264 feet, thence S 8° W., (165 feet to line between NW 1/4 and SW 1/4 Section 33) 535.26 feet, thence S 31° 30' E 255.42 feet, thence S 4° E 128.04 feet, thence S 73° 15' W 403.92 feet, thence S 12° 30' W 206.58 feet, thence S 56° W 347.82 feet, thence S 64° W 235.62 feet, thence S 61° 30' W 273.24 feet, thence S 62° W 297.66 feet, thence S 38° 30' W 132 feet, thence S 6° 30' E 153.12 feet, thence S 2° E 248.82 feet, thence S 30° 30' E 330 feet, thence S 58° W 358.38 feet, thence S 11° 30' W 105.6 feet, to the township line between Section 33, Township 36 North, and Section 4, Township 35 North, Range 13 West (Distance west to corner of Section 32 and 33 Township 36 North, and Section 4 and 5, Township 35 North, 502.92 feet) thence S 11° 30' W 250.8 feet, thence S 12° E 235.62 feet, thence S 10° E 215.82 feet, thence S 24° E 227.04 feet, thence S 18° E 178.2 feet, thence S 12° 15' E 170.94 feet, thence S 66° 45' E 287.76 feet, thence N 89° E 211.86 feet, thence S 45° 30' W 157.74 feet, thence N 84 W 446.82 feet, thence N 53° W 234.3 feet, thence N 41° W 97.68 feet, thence N 77° 30' W 198 feet, thence N 81° W 173.58 feet, thence N 51° W 155.76 feet, thence N 84° W 201.96 feet, thence S 33° W 98.34 feet, thence S 5° 45' E 188.1 feet, thence S 69° W 141.9 feet, thence S 87° 30' W 259.38 ft., Thence S 78° W 653.40 feet, thence S 1° 45' W 5311.02 feet, ending in the NE 1/4 Section 8, Township 35 North, Range 13 West, N.M.P.M., and,

Together with an Extension of Weber No. 2 Ditch described as follows: Beginning at the last described point in Article 3 of the Articles of Incorporation, said point being a point from whence the Northeast corner of Section 8, Township 35 N, Range 13 W, N.M.P.M. bears North 41° 58' East a distance of 2116 feet; thence South 18° 07' East for 822 feet; thence South 39° 49' East for 189 feet to a point which lies 44 feet North of the 1/4 section line between the NE & SE 1/4 sections of said section 8. Said point is the division point between the South Extension and East Extension of the Weber No. 2 Extension, and,

Together with a South Extension beginning at said division point in the NE 1/4 of Section 8, thence South 14° 29' W for 131 feet; thence South 22° 40' East for 529 feet; thence South 66° 55' West for 371 feet; thence South 19° 56' East for 1412 feet; thence S 13° 28' East for 303 feet; thence South 46° 39' East for 532 feet; thence South 29° 02' West for 236 feet; thence South 10° 12' East for 222 feet; thence South 66° 13' West for 191 feet; thence South 13° 10' West for 350 feet; thence North 82° 00' West for 132 feet; thence North 13° 09' West for 174 feet; thence North 61° 40' West for 1106 feet; thence South 57° 28' West for 459 feet; thence South 01° 00' West for 820 feet; thence South 15° 30' West for 487 feet; thence South 22° 44' West for 250 feet; thence South 64° 55' for 289 feet to a point which is the end of said West Extension. Said point lies North 04° 45' West a distance of 570 feet from the center of Section 17, T. 35 N., R. 13 W., N.M.P.M., and,

Together with an East Extension beginning at same said point as the West Extension, said point lying in the NE 1/4 of Section 8; thence South 81° 52' East for 150 feet; thence South 46° 52' East for 481 feet; thence South 18° 39' East for 123 feet; thence South 39° 31' East for 814 feet; thence South 03° 02' East for 1420 feet; thence South 79° 19' East for 172 feet; thence South 11° 49' West for 190 feet; thence South 07° 26' East for 241 feet; thence South 20° 32' East for 323 feet; thence North 75° 00' East for 60 feet; thence South for 142 feet; thence South 67° 15' West for 152 feet; thence South 50° 44' East for 186 feet; thence South 30° 50' West for 237 feet; thence South 00° 15' West for 1165 feet; thence South 81° 48' East for 200 feet; thence North 62° 32' East for 296 feet; thence South 34° 13' East for 508 feet; thence South 04° 07' West for 149 feet; thence South 63° 36' West for 354 feet; thence South 20° 43' West for 268 feet; thence North 67° 45' East for 171 feet; thence South 18° 28' East for 560 feet; thence South 31° 30' West for 357 feet; thence South 07° 57' West for 538 feet; thence South 35° 32' East for 326 feet; thence South 39° 24' West for 577 feet; thence South 49° 00' East for 174 feet; thence South 11° 33' West for 569 feet; thence South 57° 31' West for 368 feet; thence South 23° 00' East for 271 feet to a point, said point being the end of the East Extension and bearing South 10° 15' East a distance of 1013 feet from the NE corner of Section 20, Township 35 N, Range 13 W, N.M.P.M., and,

Together with a West Extension beginning at a point on the East boundary of the West 1/2, SE 1/4 of Section 5, T. 35 N., R. 13 W., N.M.P.M. from whence the SE corner of said Section 5 lies 576° 59' East a distance of 1319 feet; thence S 2° 29' W for 284 feet; thence South 48° 00' West for 149 feet; thence S 63° 40' West for 366 feet; thence S 6° 16' West for 61 feet; thence S 70° 35' W for 350 feet; thence S 2° 09' East for 963 feet; thence S 21° 14' E for 171 feet; thence S 39° 04' W for 100 feet; thence S 5° 54' E for 119 feet; thence S 28° 14' W for 282 feet; thence S 68° 17' W for 359 feet; thence N 69° 00' W for 283 feet; thence N 82° 45' W for 349 feet; thence N 36° 46' West for 333 feet; thence N 60° 11' West for 231 feet; thence due West for 60 feet; thence N 52° 05' West for 286 feet to a point which is the SE corner of the NE 1/4 of the NW 1/4 of Section 8, T. 35 N., R. 13 W., N.M.P.M.; thence N 59° 53' W for 208 feet; thence S 72° 15' W for 457 feet; thence N 27° 13' W for 380 feet; thence N 31° 06' W for 145 feet; thence S 86° 03' W for 40 feet; thence N 70° 31' W for 286 feet to a point on the East boundary of the NW 1/4, S 8, T. 35 N., R. 13 W., N.M.P.M. from whence the NW corner of said 1/4 section lies North 909 feet; thence N 74° 34' W for 584 feet; thence South 80° 15' West for 652 feet; thence South 60° 28' W for 216 feet; thence N 78° 38' W for 332 feet; thence N 34° 41' W for 427 feet; thence N 63° 03' W for 285 feet; thence S 84° 44' W for 240 feet; thence S 50° 39' W for 218 feet; thence S 15° 37' E for 139 feet; thence S 22° 00' W for 200 feet; thence S 75° 24' W for 74 feet; thence S 18° 01' W for 100 feet; thence S 85° 17' W for 188 feet; thence S 70° 13' W for 99 feet; thence S 32° 15' W for 700 feet to a point which ends the West Extension. Said point lies S 63° 15' W a distance of 3731 feet from the NE corner of Section 7, T. 35 N., R. 13 W., N.M.P.M., and,

Together with the Bader-Eshelman Extension beginning at a point from whence the SW corner of Section 33, T. 36 N., R. 13 W., N.M.P.M. lies S 19° 07' W a distance of 1843 feet; thence N 63° 05' W a distance of 537 feet to the end of the Bader-Eshelman Extension.

4. Water conveyed through the property of said corporation shall be used for domestic and agricultural purposes.

5. The corporation shall have a powerful existence.

6. That accumulative voting shall not be allowed in the election of Directors of the corporation.

7. That the registered agent for service of process shall be LLOYD DOERFER.

8. That the affairs, business and management of said corporation and the control of its property has been and shall continue to be vested in a Board of five (5) Directors, and that the names of the persons designated and selected as such Directors for the year following the filing of these Amended Articles of Incorporation and until the next annual meeting are:

LLOYD DOERFER _____

LOUIS EPPICH _____

WALTER GOFF _____

VERNON ELLIS _____

WAYNE OWEN _____

In witness whereof, we have hereunto set our hands and seals this 10th day of March, A.D. 1976.

(Lloyd Doerfer)

(Louis Eppich)

(Walter Goff)

(Vernon Ellis)

(Wayne Owen)

STATE OF COLORADO)
)
COUNTY OF MONTEZUMA)

I, Phyllis F. Armstrong, a Notary Public in and for said County in the State aforesaid, do hereby certify, that this day personally appeared before me Lloyd Doerfer, Louis Eppich, Walter n. Goff, and Clay V. Bader, XXXXXXXXXXXXXXXXXXXXXXXXXXXXX personally known to me to be the persons whose names are subscribed to the foregoing instrument of writing, and acknowledged that they signed, sealed and delivered the said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 10th day of March, A.D. 1976.

Notary Public

My Commission Expires: January 17, 1978.

Attachment B

Attachment C

COLORADO
Division of Water Resources
Department of Natural Resources

Structure Summary Report

Structure Name: RATLIFF AND ROOT DITCH (3400554)

Structure Type: DITCH

CIU Code: Active Structure with contemporary diversion records (A)

Associated Permits:

Water Source Type: Tributary

Water Source: MANCOS RIVER [00902295] @ Stream Mile: 81.03

Physical Location

Feature Type	Dist N/S	Dist E/W	Q10	Q40	Q160	Sec	Township	Range	PM	UTMx	UTMy	Latitude	Longitude	Location Accuracy
Point of Diversion			SW	NW	NW	26	36.0 N	13.0 W	N	211263.3	4139110.8	37.353830	-108.259820	GPS

Division: 7 District: 34

County: MONTEZUMA

Designated Basin:

Management District:

Associated Structures

Structure Association	Structure Type	Start Date	End Date	Associated Structure Type	CIU Code
3400554 is alt. point to 3400505 - BEAVER DITCH	Ditch	1/1/1901		Ditch	A
3400554 is alt. point to 3400527 - FRANK DITCH	Ditch	1/1/1901		Ditch	A
3400554 is alt. point to 3400543 - LEE DITCH	Ditch	1/1/1901		Ditch	A
3400554 is alt. point to 3400576 - WEBBER DITCH	Ditch	9/23/2019		Ditch	A

Associated Permits

No available data

Water Rights - Net Amounts

Adj Date	Appro Date	Priority Admin No	Order No	Priority No	Associated Case Numbers	Net Absolute	Net Conditional	Net APEX Absolute	Net APEX Conditional	Decreed Units	Seasonal Limits	Comments
4/28/1893	5/15/1875	9266.00000	0	M-2	CA2025, CA1993	4.2500	0.0000	0.0000	0.0000	C	No	1952 TRANSFER TO WEBBER DITCH REDUCED IN DECREE SIGNED 06/17/1954, TT WEBBER DITCH ID 3400576
4/28/1893	5/15/1878	10362.00000	0	M-6	W1459, CA0990, CA0989, 96CW0022, 01CW0034	0.9500	0.0000	1.4670	0.0000	C	No	AP FOR 0.50 CFS FROM LEE DITCH ID# 543 SEE DECREE FOR CONDITIONS, TF FRANK DITCH ID 3400527, AKA WEBBER NO 2 DITCH, TF BEAVER DITCH ID 3400505, AP 0.967 CFS FROM FRANK DITCH ID 3400527, TF NO 6 DITCH ID# 552, LUCKY 7 IRRIG AND EVAP REPL 1.0 AC POND
4/28/1893	5/21/1881	11464.00000	0	M-11	CA3144, CA1993	1.3900	0.0000	0.0000	0.0000	C	No	TT WEBBER DITCH ID 3400576

Adj Date	Appro Date	Priority Admin No	Order No	Priority No	Associated Case Numbers	Net Absolute	Net Conditional	Net APEX Absolute	Net APEX Conditional	Decreed Units	Seasonal Limits	Comments
4/28/1893	5/15/1882	11823.00000	0	M-13	20CW0006, 19CW0009, 19CW0004, CA3144, CA1993, CA0990, 96CW0022	0.2300	0.0000	2.1800	0.0000	C	No	TF WEBBER DITCH ID 3400576, TT WEBBER DITCH ID 3400576, AP 0.23 CFS FROM FRANK DITCH ID 3400527, AP FOR WEBBER DITCH (3400576). GADDIS PROPERTY., AP FOR WEBBER DITCH (3400576). WHISTLER S RIDGE PROPERTY., AP FOR WEBBER DITCH (3400576).... (CONT...)
4/28/1893	5/20/1882	11828.00000	0	M-14	19CW0009	0.0000	0.0000	0.0670	0.0000	C	No	AP FOR WEBBER DITCH (3400576). WHISTLER S RIDGE PROPERTY.
4/28/1893	5/15/1883	12188.00000	0	M-17	88CW0021	0.0000	0.0000	0.5000	0.0000	C	No	AP 0.50 CFS FROM BEAVER D, RESTR TO WATER AVAIL LESS RETURN FLOWS
4/28/1893	5/22/1883	12195.00000	0	M-18	96CW0022	0.0000	0.0000	1.1000	0.0000	C	No	AP 1.1 CFS FROM FRANK DITCH ID 3400527
4/28/1893	5/23/1883	12196.00000	0	M-19	CA1993	0.6600	0.0000	0.0000	0.0000	C	No	
4/28/1893	6/1/1884	12571.00000	0	M-21	88CW0021	0.0000	0.0000	1.1700	0.0000	C	No	AP 1.17 CFS FROM BEAVER D, RESTR TO WATER AVAIL LESS RETURN FLOWS
4/28/1893	5/15/1885	12919.00000	0	M-25	81CW0001	0.4170	0.0000	0.0000	0.0000	C	No	TF HENRY BOLEN DITCH ID 3400534
4/28/1893	7/10/1885	12975.00000	0	M-26	20CW0006, 19CW0009	0.0000	0.0000	1.1670	0.0000	C	No	AP FOR WEBBER DITCH (3400576). WHISTLER S RIDGE PROPERTY., AP FOR WEBBER DITCH (3400576). JAMES POTTS APPLICATION.
4/28/1893	6/15/1886	13315.00000	0	M-30	CA1993, CA1873	2.5800	0.0000	0.0000	0.0000	C	No	TT WEBBER DITCH ID 3400576
4/28/1893	7/15/1886	13345.00000	0	M-31	CA1993	2.0800	0.0000	0.0000	0.0000	C	No	
4/28/1893	5/15/1889	14380.00000	0	M-36	92CW0074	1.0000	0.0000	0.0000	0.0000	C	No	TF LEE DITCH ID 3400543
4/28/1893	6/15/1889	14411.00000	0	M-37	CA1993, CA1873	16.4900	0.0000	0.0000	0.0000	C	No	TT WEBBER DITCH ID 3400576, ALSO KNOWN AS WEBBER NO 2 DITCH
4/28/1893	6/12/1892	15504.00000	0	M-46	CA1993, CA1873	2.5000	0.0000	0.0000	0.0000	C	No	TT WEBBER DITCH ID 3400576, AKA RESERVOIR DITCH, ORIGINALLY DECREED AS RESERVOIR DITCH
3/22/1963	12/22/1933	30671.00000	0	62-18	CA0967, 01CW0107	4.0000	0.0000	0.0000	0.0000	C	No	
3/22/1963	7/7/1950	36712.00000	0	62-50	CA0967	1.5000	0.0000	0.0000	0.0000	C	No	

Diversion Record - Totals

Water Class	Irr Year	FDU	LDU	MaxQ	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual Amount	Units	Data Status
Total (Diversions)	2020	11/1/19	10/31/20	18.23	203.90	289.00	209.66	146.38	162.67	194.78	986.12	645.37	548.02	383.59	301.81	158.46	4229.75	AF	Approved
Total (Diversions)	2019	11/1/18	10/31/19	20.63	99.18	92.23	92.23	83.31	92.23	82.51	459.38	1142.50	983.02	734.09	690.06	327.36	4878.10	AF	Approved
Total (Diversions)	2018	11/1/17	10/31/18	7.70	242.26	226.28	200.10	142.10	128.02	146.48	557.01	600.29	385.33	281.90	168.14	172.96	3250.86	AF	Approved
Total (Diversions)	2017	11/1/16	10/31/17	19.43	296.33	257.34	199.30	158.74	155.86	135.75	517.53	1296.42	906.86	744.59	522.10	327.83	5518.65	AF	Approved
Total (Diversions)	2016	11/6/15	10/31/16	18.43	130.51	209.06	209.06	195.57	163.84	111.53	702.28	1007.62	851.06	776.16	483.32	344.00	5184.02	AF	Approved
Total (Diversions)	2015	11/1/14	10/25/15	22.13	221.76	163.64	136.86	111.08	139.84	238.91	910.13	1085.57	774.66	548.14	663.28	210.45	5204.31	AF	Approved

Note:
FDU - First day used
LDU - Last day used
MaxQ - Maximum flow rate

Irrigated Lands

Year	Parcel Count	Land Use	Irrigation Method	Parcel Size (Acres)	Prorated Structure Acres	Linked Surface Water WDIDs	Linked Groundwater WDIDs
2020	73402308	GRASS_PASTURE	SPRINKLER	43.5203	43.5203	1	0
2020	73402309	GRASS_PASTURE	SPRINKLER	33.3446	33.3446	1	0

Year	Parcel Count	Land Use	Irrigation Method	Parcel Size (Acres)	Prorated Structure Acres	Linked Surface Water WDIDs	Linked Groundwater WDIDs
2020	73402311	ALFALFA	SPRINKLER	12.3293	12.3293	1	0
2020	73402312	ALFALFA	SPRINKLER	10.3263	10.3263	1	0
2020	73402313	ALFALFA	FLOOD	5.2445	5.2445	1	0
2020	73402315	GRASS_PASTURE	FLOOD	21.1949	21.1949	1	0
2020	73402324	GRASS_PASTURE	FLOOD	31.4934	31.4934	1	0
2020	73402325	GRASS_PASTURE	FLOOD	8.8574	8.8574	1	0
2020	73402373	GRASS_PASTURE	SPRINKLER	28.4490	28.4490	1	0
2020	73402458	GRASS_PASTURE	FLOOD	11.3164	11.3164	1	0
2020	73402459	GRASS_PASTURE	FLOOD	22.4356	22.4356	1	0
2020	73402460	GRASS_PASTURE	FLOOD	21.9724	10.9862	2	0
2020	73402461	GRASS_PASTURE	FLOOD	17.1014	17.1014	1	0
2020	73402465	GRASS_PASTURE	SPRINKLER	62.7734	62.7734	1	0
2020	73402466	GRASS_PASTURE	SPRINKLER	51.4045	51.4045	1	0
2020	73402467	GRASS_PASTURE	SPRINKLER	11.3588	11.3588	1	0
2020	73402468	GRASS_PASTURE	SPRINKLER	32.9221	32.9221	1	0
2020	73402469	ALFALFA	SPRINKLER	32.6368	32.6368	1	0
2020	73404577	GRASS_PASTURE	FLOOD	7.5276	7.5276	1	0
2020	73404806	ALFALFA	FLOOD	12.6497	12.6497	1	0
2020	73404996	GRASS_PASTURE	FLOOD	10.4559	10.4559	1	0
2020	73405151	GRASS_PASTURE	FLOOD	9.6194	9.6194	1	0
2020	73405152	GRASS_PASTURE	SPRINKLER	34.2647	34.2647	1	0
2020	73405153	GRASS_PASTURE	SPRINKLER	45.9694	45.9694	1	0
2020	73405154	GRASS_PASTURE	SPRINKLER	114.7078	114.7078	1	0
2020	73405191	GRASS_PASTURE	FLOOD	16.7974	16.7974	1	0
2020	73405200	GRASS_PASTURE	SPRINKLER	25.5196	25.5196	1	0
2020	73405201	GRASS_PASTURE	SPRINKLER	21.2104	21.2104	1	0
2020	73405210	GRASS_PASTURE	SPRINKLER	4.7270	4.7270	1	0
2020	73405211	GRASS_PASTURE	SPRINKLER	146.1762	146.1762	1	0
2020	73405212	GRASS_PASTURE	FLOOD	74.0934	74.0934	1	0
2020	73405213	GRASS_PASTURE	FLOOD	24.4455	24.4455	1	0
2020	73405223	GRASS_PASTURE	FLOOD	40.2680	40.2680	1	0
2020	73405224	GRASS_PASTURE	FLOOD	63.8538	31.9269	2	0
2020	73405225	GRASS_PASTURE	FLOOD	39.5658	39.5658	1	0
2020	73405229	GRASS_PASTURE	FLOOD	77.3944	77.3944	1	0
2020	73405482	GRASS_PASTURE	FLOOD	13.5371	13.5371	1	0
2020	73405483	GRASS_PASTURE	SPRINKLER	69.1183	69.1183	1	0
2015	73402646	GRASS_PASTURE	SPRINKLER	43.5203	43.5203	1	0
2015	73402648	GRASS_PASTURE	SPRINKLER	33.3446	33.3446	1	0

Year	Parcel Count	Land Use	Irrigation Method	Parcel Size (Acres)	Prorated Structure Acres	Linked Surface Water WDIDs	Linked Groundwater WDIDs
2015	73402659	ALFALFA	SPRINKLER	10.5751	10.5751	1	0
2015	73402660	ALFALFA	FLOOD	5.2445	5.2445	1	0
2015	73402667	GRASS_PASTURE	FLOOD	21.1949	21.1949	1	0
2015	73402698	GRASS_PASTURE	FLOOD	31.4934	31.4934	1	0
2015	73402704	GRASS_PASTURE	FLOOD	8.8574	8.8574	1	0
2015	73402709	GRASS_PASTURE	SPRINKLER	19.9447	19.9447	1	0
2015	73402760	GRASS_PASTURE	FLOOD	11.2289	11.2289	1	0
2015	73402782	GRASS_PASTURE	SPRINKLER	21.3705	21.3705	1	0
2015	73402891	GRASS_PASTURE	FLOOD	79.6977	79.6977	1	0
2015	73402892	GRASS_PASTURE	FLOOD	11.3164	11.3164	1	0
2015	73402894	GRASS_PASTURE	FLOOD	30.8135	30.8135	1	0
2015	73402895	GRASS_PASTURE	FLOOD	21.9617	10.9809	2	0
2015	73402896	GRASS_PASTURE	FLOOD	17.1014	17.1014	1	0
2015	73402904	GRASS_PASTURE	SPRINKLER	51.5902	51.5902	1	0
2015	73402905	GRASS_PASTURE	SPRINKLER	65.6895	65.6895	1	0
2015	73402906	GRASS_PASTURE	SPRINKLER	12.8029	12.8029	1	0
2015	73402907	GRASS_PASTURE	SPRINKLER	32.9221	32.9221	1	0
2015	73402908	GRASS_PASTURE	SPRINKLER	34.5628	34.5628	1	0
2015	73402909	GRASS_PASTURE	SPRINKLER	21.5494	21.5494	1	0
2015	73405293	GRASS_PASTURE	FLOOD	7.1392	7.1392	1	0
2015	73405591	GRASS_PASTURE	FLOOD	12.6497	12.6497	1	0
2015	73405831	GRASS_PASTURE	FLOOD	10.4559	10.4559	1	0
2015	73406050	GRASS_PASTURE	FLOOD	13.3590	13.3590	1	0
2015	73406057	GRASS_PASTURE	SPRINKLER	19.7751	19.7751	1	0
2015	73406308	GRASS_PASTURE	FLOOD	34.4504	34.4504	1	0
2015	73406309	GRASS_PASTURE	FLOOD	9.6194	9.6194	1	0
2015	73406310	GRASS_PASTURE	SPRINKLER	45.9694	45.9694	1	0
2015	73406311	GRASS_PASTURE	SPRINKLER	11.6860	11.6860	1	0
2015	73406312	GRASS_PASTURE	SPRINKLER	34.2647	34.2647	1	0
2015	73406314	GRASS_PASTURE	SPRINKLER	27.0020	27.0020	1	0
2015	73406315	GRASS_PASTURE	SPRINKLER	33.0100	33.0100	1	0
2015	73406316	GRASS_PASTURE	SPRINKLER	114.7078	114.7078	1	0
2015	73406363	GRASS_PASTURE	FLOOD	16.7974	16.7974	1	0
2015	73406364	GRASS_PASTURE	FLOOD	3.6236	3.6236	1	0
2015	73406378	GRASS_PASTURE	SPRINKLER	25.5196	25.5196	1	0
2015	73406379	GRASS_PASTURE	SPRINKLER	21.2104	21.2104	1	0
2015	73406391	ALFALFA	SPRINKLER	12.3293	12.3293	1	0
2015	73406392	GRASS_PASTURE	SPRINKLER	4.7270	4.7270	1	0

Year	Parcel Count	Land Use	Irrigation Method	Parcel Size (Acres)	Prorated Structure Acres	Linked Surface Water WDIDs	Linked Groundwater WDIDs
2015	73406393	GRASS_PASTURE	SPRINKLER	146.1762	146.1762	1	0
2015	73406394	GRASS_PASTURE	FLOOD	74.0934	74.0934	1	0
2015	73406395	GRASS_PASTURE	FLOOD	24.4455	24.4455	1	0
2015	73406405	GRASS_PASTURE	FLOOD	40.2680	40.2680	1	0
2015	73406406	GRASS_PASTURE	FLOOD	63.8538	31.9269	2	0
2015	73406408	GRASS_PASTURE	FLOOD	39.5658	39.5658	1	0
2015	73406409	GRASS_PASTURE	SPRINKLER	145.6037	145.6037	1	0
2015	73406410	GRASS_PASTURE	SPRINKLER	62.7734	62.7734	1	0
2015	73406411	GRASS_PASTURE	SPRINKLER	28.4490	28.4490	1	0
2015	73406425	GRASS_PASTURE	FLOOD	34.6625	34.6625	1	0
2010	73401981	GRASS_PASTURE	SPRINKLER	65.6895	65.6895	1	0
2010	73401982	GRASS_PASTURE	SPRINKLER	12.8029	12.8029	1	0
2010	73401983	GRASS_PASTURE	SPRINKLER	32.9221	32.9221	1	0
2010	73401984	GRASS_PASTURE	SPRINKLER	34.5628	34.5628	1	0
2010	73401985	GRASS_PASTURE	SPRINKLER	41.3246	41.3246	1	0
2010	73402730	GRASS_PASTURE	SPRINKLER	43.5203	43.5203	1	0
2010	73402732	GRASS_PASTURE	SPRINKLER	33.3446	33.3446	1	0
2010	73402772	GRASS_PASTURE	SPRINKLER	10.5751	10.5751	1	0
2010	73402773	ALFALFA	FLOOD	5.2445	5.2445	1	0
2010	73402780	GRASS_PASTURE	FLOOD	21.1949	21.1949	1	0
2010	73402811	GRASS_PASTURE	FLOOD	31.4934	31.4934	1	0
2010	73402812	GRASS_PASTURE	FLOOD	41.4790	41.4790	1	0
2010	73402815	GRASS_PASTURE	FLOOD	63.3000	31.6500	2	0
2010	73402817	GRASS_PASTURE	FLOOD	8.8574	8.8574	1	0
2010	73402838	GRASS_PASTURE	FLOOD	42.5556	42.5556	1	0
2010	73402839	GRASS_PASTURE	FLOOD	11.2289	11.2289	1	0
2010	73402868	GRASS_PASTURE	SPRINKLER	21.3705	21.3705	1	0
2010	73402971	GRASS_PASTURE	FLOOD	80.1129	80.1129	1	0
2010	73402972	GRASS_PASTURE	FLOOD	11.3164	11.3164	1	0
2010	73402974	GRASS_PASTURE	FLOOD	52.6935	52.6935	1	0
2010	73402975	GRASS_PASTURE	FLOOD	22.5498	11.2749	2	0
2010	73402976	GRASS_PASTURE	FLOOD	17.1014	17.1014	1	0
2010	73402984	GRASS_PASTURE	SPRINKLER	51.5902	51.5902	1	0
2010	73405745	GRASS_PASTURE	FLOOD	12.6497	12.6497	1	0
2010	73406109	GRASS_PASTURE	FLOOD	34.4504	34.4504	1	0
2010	73406110	GRASS_PASTURE	FLOOD	9.6194	9.6194	1	0
2010	73406111	GRASS_PASTURE	SPRINKLER	33.0280	33.0280	1	0
2010	73406112	GRASS_PASTURE	SPRINKLER	11.6860	11.6860	1	0

Year	Parcel Count	Land Use	Irrigation Method	Parcel Size (Acres)	Prorated Structure Acres	Linked Surface Water WDIDs	Linked Groundwater WDIDs
2010	73406113	GRASS_PASTURE	SPRINKLER	34.2647	34.2647	1	0
2010	73406114	GRASS_PASTURE	SPRINKLER	27.0020	27.0020	1	0
2010	73406115	GRASS_PASTURE	SPRINKLER	33.0100	33.0100	1	0
2010	73406116	GRASS_PASTURE	SPRINKLER	114.7078	114.7078	1	0
2010	73406140	GRASS_PASTURE	FLOOD	7.5276	7.5276	1	0
2010	73406168	GRASS_PASTURE	FLOOD	16.7974	16.7974	1	0
2010	73406169	GRASS_PASTURE	FLOOD	2.9713	2.9713	1	0
2010	73406181	GRASS_PASTURE	SPRINKLER	25.5196	25.5196	1	0
2010	73406182	GRASS_PASTURE	SPRINKLER	21.1860	21.1860	1	0
2010	73406193	ALFALFA	SPRINKLER	12.3293	12.3293	1	0
2010	73406194	GRASS_PASTURE	SPRINKLER	4.7270	4.7270	1	0
2010	73406195	GRASS_PASTURE	SPRINKLER	146.1762	146.1762	1	0
2010	73406196	GRASS_PASTURE	FLOOD	74.0934	74.0934	1	0
2010	73406197	GRASS_PASTURE	FLOOD	24.4455	24.4455	1	0
2010	73406204	GRASS_PASTURE	SPRINKLER	145.6037	145.6037	1	0
2010	73406205	GRASS_PASTURE	SPRINKLER	62.7734	62.7734	1	0
2010	73406206	GRASS_PASTURE	SPRINKLER	28.4490	28.4490	1	0
2010	73406216	GRASS_PASTURE	FLOOD	34.6625	34.6625	1	0
2005	73402936	ALFALFA	SPRINKLER	43.5203	43.5203	1	0
2005	73402938	GRASS_PASTURE	SPRINKLER	33.3446	33.3446	1	0
2005	73402949	ALFALFA	SPRINKLER	10.5751	10.5751	1	0
2005	73402950	ALFALFA	FLOOD	5.2445	5.2445	1	0
2005	73402957	GRASS_PASTURE	FLOOD	75.9312	75.9312	1	0
2005	73402958	GRASS_PASTURE	FLOOD	21.1949	21.1949	1	0
2005	73402991	GRASS_PASTURE	FLOOD	31.4934	31.4934	1	0
2005	73402992	GRASS_PASTURE	FLOOD	41.4790	41.4790	1	0
2005	73402995	GRASS_PASTURE	FLOOD	63.3000	31.6500	2	0
2005	73402997	GRASS_PASTURE	FLOOD	8.8574	8.8574	1	0
2005	73403018	GRASS_PASTURE	FLOOD	42.5556	42.5556	1	0
2005	73403019	GRASS_PASTURE	FLOOD	11.2289	11.2289	1	0
2005	73403040	GRASS_PASTURE	SPRINKLER	21.3706	21.3706	1	0
2005	73403233	GRASS_PASTURE	FLOOD	84.5520	84.5520	1	0
2005	73403234	GRASS_PASTURE	FLOOD	11.3164	11.3164	1	0
2005	73403236	GRASS_PASTURE	FLOOD	54.9336	54.9336	1	0
2005	73403237	GRASS_PASTURE	FLOOD	22.5498	7.5158	3	0
2005	73403238	GRASS_PASTURE	FLOOD	17.1014	17.1014	1	0
2005	73403246	GRASS_PASTURE	SPRINKLER	51.5902	51.5902	1	0
2005	73403247	GRASS_PASTURE	SPRINKLER	65.6895	65.6895	1	0

Year	Parcel Count	Land Use	Irrigation Method	Parcel Size (Acres)	Prorated Structure Acres	Linked Surface Water WDIDs	Linked Groundwater WDIDs
2005	73403248	GRASS_PASTURE	SPRINKLER	12.8029	12.8029	1	0
2005	73403249	GRASS_PASTURE	SPRINKLER	32.9221	32.9221	1	0
2005	73403250	GRASS_PASTURE	SPRINKLER	34.5628	34.5628	1	0
2005	73403251	GRASS_PASTURE	SPRINKLER	41.3246	41.3246	1	0
2005	73405791	GRASS_PASTURE	FLOOD	34.4504	34.4504	1	0
2005	73405792	GRASS_PASTURE	FLOOD	10.2259	10.2259	1	0
2005	73405793	GRASS_PASTURE	SPRINKLER	44.0143	44.0143	1	0
2005	73405794	GRASS_PASTURE	SPRINKLER	11.6860	11.6860	1	0
2005	73405795	GRASS_PASTURE	SPRINKLER	24.6882	24.6882	1	0
2005	73405797	GRASS_PASTURE	SPRINKLER	118.3366	118.3366	1	0
2005	73405841	GRASS_PASTURE	FLOOD	16.7974	16.7974	1	0
2005	73405842	GRASS_PASTURE	FLOOD	2.9713	2.9713	1	0
2005	73405855	GRASS_PASTURE	SPRINKLER	25.5196	25.5196	1	0
2005	73405856	GRASS_PASTURE	SPRINKLER	20.3589	20.3589	1	0
2005	73405867	ALFALFA	SPRINKLER	12.3293	12.3293	1	0
2005	73405868	GRASS_PASTURE	SPRINKLER	2.9362	2.9362	1	0
2005	73405869	GRASS_PASTURE	SPRINKLER	146.1762	146.1762	1	0
2005	73405870	GRASS_PASTURE	FLOOD	24.4455	24.4455	1	0
2005	73405877	GRASS_PASTURE	SPRINKLER	145.6037	145.6037	1	0
2005	73405878	GRASS_PASTURE	SPRINKLER	62.7734	62.7734	1	0
2005	73405879	GRASS_PASTURE	SPRINKLER	28.4490	28.4490	1	0
2005	73405887	GRASS_PASTURE	FLOOD	34.6625	34.6625	1	0
2000	73402337	ALFALFA	SPRINKLER	43.5203	43.5203	1	0
2000	73402338	ALFALFA	SPRINKLER	33.3446	33.3446	1	0
2000	73402346	GRASS_PASTURE	SPRINKLER	10.5751	10.5751	1	0
2000	73402348	GRASS_PASTURE	FLOOD	21.1949	21.1949	1	0
2000	73402357	GRASS_PASTURE	FLOOD	5.2445	5.2445	1	0
2000	73402358	GRASS_PASTURE	FLOOD	75.9312	75.9312	1	0
2000	73402359	GRASS_PASTURE	FLOOD	63.3000	31.6500	2	0
2000	73402365	GRASS_PASTURE	FLOOD	41.4790	41.4790	1	0
2000	73402381	GRASS_PASTURE	FLOOD	31.4934	31.4934	1	0
2000	73402389	GRASS_PASTURE	FLOOD	8.8574	8.8574	1	0
2000	73403224	GRASS_PASTURE	FLOOD	84.6243	84.6243	1	0
2000	73403225	GRASS_PASTURE	FLOOD	11.3164	11.3164	1	0
2000	73403230	GRASS_PASTURE	FLOOD	55.0418	55.0418	1	0
2000	73403234	GRASS_PASTURE	FLOOD	22.5498	11.2749	2	0
2000	73403250	GRASS_PASTURE	FLOOD	17.1014	17.1014	1	0
2000	73403252	GRASS_PASTURE	SPRINKLER	21.3705	21.3705	1	0

Year	Parcel Count	Land Use	Irrigation Method	Parcel Size (Acres)	Prorated Structure Acres	Linked Surface Water WDIDs	Linked Groundwater WDIDs
2000	73403254	GRASS_PASTURE	FLOOD	42.5556	42.5556	1	0
2000	73403255	GRASS_PASTURE	FLOOD	11.2289	11.2289	1	0
2000	73403263	GRASS_PASTURE	SPRINKLER	51.5902	51.5902	1	0
2000	73403266	GRASS_PASTURE	SPRINKLER	65.6895	65.6895	1	0
2000	73403267	GRASS_PASTURE	SPRINKLER	12.8029	12.8029	1	0
2000	73403268	GRASS_PASTURE	SPRINKLER	32.9221	32.9221	1	0
2000	73403270	GRASS_PASTURE	SPRINKLER	29.3752	29.3752	1	0
2000	73403281	GRASS_PASTURE	SPRINKLER	34.5628	34.5628	1	0
2000	73403282	GRASS_PASTURE	SPRINKLER	41.3246	41.3246	1	0
2000	73405393	GRASS_PASTURE	FLOOD	7.1392	7.1392	1	0
2000	73405928	GRASS_PASTURE	FLOOD	12.6497	12.6497	1	0
2000	73406212	GRASS_PASTURE	FLOOD	34.4504	34.4504	1	0
2000	73406213	GRASS_PASTURE	FLOOD	9.6194	9.6194	1	0
2000	73406216	GRASS_PASTURE	SPRINKLER	45.9694	45.9694	1	0
2000	73406217	GRASS_PASTURE	SPRINKLER	27.0020	27.0020	1	0
2000	73406218	GRASS_PASTURE	SPRINKLER	33.0100	33.0100	1	0
2000	73406219	GRASS_PASTURE	SPRINKLER	34.2647	34.2647	1	0
2000	73406220	GRASS_PASTURE	SPRINKLER	118.3366	118.3366	1	0
2000	73406246	GRASS_PASTURE	SPRINKLER	11.6860	11.6860	1	0
2000	73406284	GRASS_PASTURE	SPRINKLER	25.5196	25.5196	1	0
2000	73406285	GRASS_PASTURE	SPRINKLER	21.2104	21.2104	1	0
2000	73406298	GRASS_PASTURE	SPRINKLER	12.3293	12.3293	1	0
2000	73406299	GRASS_PASTURE	SPRINKLER	4.7270	4.7270	1	0
2000	73406300	GRASS_PASTURE	SPRINKLER	146.1762	146.1762	1	0
2000	73406301	GRASS_PASTURE	FLOOD	24.4455	24.4455	1	0
2000	73406308	GRASS_PASTURE	SPRINKLER	145.6037	145.6037	1	0
2000	73406309	GRASS_PASTURE	SPRINKLER	62.7734	62.7734	1	0
2000	73406310	GRASS_PASTURE	SPRINKLER	28.4490	28.4490	1	0
1993	73400258	ALFALFA	SPRINKLER	113.5143	113.5143	1	0
1993	73400527	GRASS_PASTURE	FLOOD	68.2017	68.2017	1	0
1993	73401983	GRASS_PASTURE	SPRINKLER	39.8372	39.8372	1	0
1993	73402006	GRASS_PASTURE	FLOOD	23.9684	23.9684	1	0
1993	73402018	GRASS_PASTURE	FLOOD	189.5956	189.5956	1	0
1993	73402021	GRASS_PASTURE	FLOOD	39.5836	19.7918	2	0
1993	73402094	GRASS_PASTURE	FLOOD	20.6441	20.6441	1	0
1993	73402117	GRASS_PASTURE	FLOOD	2.8239	2.8239	1	0
1993	73402180	ALFALFA	SPRINKLER	252.3616	252.3616	1	0
1993	73402186	GRASS_PASTURE	FLOOD	8.8999	8.8999	1	0

Year	Parcel Count	Land Use	Irrigation Method	Parcel Size (Acres)	Prorated Structure Acres	Linked Surface Water WDIDs	Linked Groundwater WDIDs
1993	73402203	ALFALFA	SPRINKLER	44.6573	44.6573	1	0
1993	73402225	ALFALFA	SPRINKLER	9.0783	9.0783	1	0
1993	73402237	GRASS_PASTURE	FLOOD	8.3086	8.3086	1	0
1993	73402270	ALFALFA	SPRINKLER	34.9238	34.9238	1	0
1993	73402297	SMALL_GRAINS	FLOOD	38.2020	38.2020	1	0
1993	73402315	GRASS_PASTURE	SPRINKLER	173.5936	173.5936	1	0
1993	73402376	GRASS_PASTURE	FLOOD	6.3685	6.3685	1	0
1993	73404935	GRASS_PASTURE	FLOOD	34.4504	34.4504	1	0
1993	73404936	GRASS_PASTURE	FLOOD	9.6194	9.6194	1	0
1993	73404937	GRASS_PASTURE	SPRINKLER	45.9694	45.9694	1	0
1993	73404938	ALFALFA	SPRINKLER	123.3041	123.3041	1	0
1993	73404956	GRASS_PASTURE	FLOOD	0.0295	0.0295	1	0
1993	73404957	GRASS_PASTURE	FLOOD	14.6806	14.6806	1	0
1993	73404962	GRASS_PASTURE	SPRINKLER	11.6860	11.6860	1	0
1993	73404963	GRASS_PASTURE	SPRINKLER	34.2647	34.2647	1	0
1993	73404992	GRASS_PASTURE	FLOOD	25.1698	25.1698	1	0
1993	73405004	ALFALFA	SPRINKLER	25.5196	25.5196	1	0
1993	73405018	GRASS_PASTURE	SPRINKLER	4.7270	4.7270	1	0
1993	73405019	GRASS_PASTURE	SPRINKLER	146.1762	146.1762	1	0
1993	73405020	GRASS_PASTURE	SPRINKLER	43.5948	43.5948	1	0
1993	73405022	GRASS_PASTURE	FLOOD	24.6148	24.6148	1	0
1993	73405033	GRASS_PASTURE	FLOOD	40.2680	40.2680	1	0
1993	73405034	GRASS_PASTURE	FLOOD	63.8538	31.9269	2	0
1993	73405036	GRASS_PASTURE	FLOOD	39.5658	39.5658	1	0

COLORADO
Division of Water Resources
Department of Natural Resources

Diversion Comments Report

Division: 7
Water District: 34
Structure Name: RATLIFF AND ROOT DITCH (3400554)
Source MANCOS RIVER [00902295] @ Stream Mile: 81.03

Type	Irr Year	Not Used Code Description	Comment	Status
DIVERSION	2011		(X-Q-0) IS TOTAL DIVERSION - (1-Q) IS NONIRRIGATION FLOWS WHICH INCLUDE STOCK USE	Approved
DIVERSION	2012		1-Q IS NONIRRIGATION FLOWS WHICH INCLUDE STOCK USE	Approved
DIVERSION	2013		NONIRRIGATION FLOWS INCLUDE STOCK USE - IRRIGATION WATER INCLUDE ALTERNATE POINT WATER FROM FRANK DITCH (3400527), LEE DITCH (3400543) AND THE BEAVER DITCH (3400505)	Approved
DIVERSION	2014		NON IRRIGATION FLOWS INCLUDE STOCK USE - IRRIGATION WATER INCLUDED ALTERNATE POINT WATER FROM FRANK DITCH (3400527) AND LEE DITCH (3400543) AND BEAVER DITCH (3400505)	Approved
DIVERSION	2015		DIVERSIONS TOTALS INCLUDE STOCK USE - IRRIGATION WATER INCLUDES ALTERNATE POINT WATER FROM FRANK DITCH (3400527) AND LEE DITCH (3400543) AND BEAVER DITCH (3400505)	Approved
DIVERSION	2016		DIVERSIONS TOTALS INCLUDE STOCK USE - IRRIGATION WATER INCLUDES ALTERNATE POINT WATER FROM FRANK DITCH (3400527) AND BEAVER DITCH (3400505)	Approved
DIVERSION	2017		DIVERSIONS TOTALS INCLUDE STOCK USE - IRRIGATION WATER INCLUDES ALTERNATE POINT WATER FROM FRANK DITCH (3400527) AND BEAVER DITCH (3400505)	Approved
DIVERSION	2018		DIVERSIONS TOTALS INCLUDE STOCK USE - IRRIGATION WATER INCLUDES ALTERNATE POINT WATER FROM FRANK DITCH (3400527) AND BEAVER DITCH (3400505)	Approved
DIVERSION	2019		DIVERSIONS TOTALS INCLUDE STOCK USE - IRRIGATION WATER INCLUDES ALTERNATE POINT WATER FROM FRANK DITCH (3400527) AND BEAVER DITCH (3400505)	Approved
DIVERSION	2020		DIVERSIONS TOTALS INCLUDE STOCK USE - IRRIGATION WATER INCLUDES ALTERNATE POINT WATER FROM FRANK DITCH (3400527) AND BEAVER DITCH (3400505)	Approved

COLORADO
Division of Water Resources
Department of Natural Resources

Monthly/Annual Diversion Record Report

Division: 7
Water District: 34
Structure Name: RATLIFF AND ROOT DITCH (3400554)
Source MANCOS RIVER [00902295] @ Stream Mile: 81.03

All values are in ACFT

Water Class	Irr Year	First Day Used	Last Day Used	Max Q	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual Amount	Data Status
3400554 Total (Diversions)	1950	11/1/1949	10/31/1950	22.30	0.00					115.04	740.44	812.04	479.71	368.73	304.47	211.64	3032.08	Approved
3400554 S:1 F: U:1 T: G: To:	1950	11/1/1949	10/31/1950	22.30	0.00					115.04	740.44	758.49	380.53	279.38	252.90	145.19	2671.97	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1950	11/1/1949	10/31/1950	4.00	0.00							53.55	99.18	89.36	51.57	66.45	360.10	Approved
3400554 Total (Diversions)	1951	11/1/1950	10/31/1951	21.20	0.00						458.98	929.27	588.90	386.39	286.62	208.07	2858.22	Approved
3400554 S:1 F: U:1 T: G: To:	1951	11/1/1950	10/31/1951	21.20	0.00						458.98	899.52	357.43	292.76	202.32	178.32	2389.32	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1951	11/1/1950	10/28/1951	6.25	0.00							29.75	231.47	93.62	84.30	29.75	468.90	Approved
3400554 Total (Diversions)	1952	11/1/1951	10/31/1952	30.10	0.00						544.77	1469.18	565.89	417.73	380.04	363.58	3741.18	Approved
3400554 S:1 F: U:1 T: G: To:	1952	11/1/1951	10/31/1952	30.10	0.00						544.77	1469.18	554.98	382.02	276.70	259.84	3487.49	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1952	11/1/1951	10/31/1952	3.00	0.00								10.91	35.70	103.34	103.74	253.69	Approved
3400554 Total (Diversions)	1953	11/1/1952	10/31/1953	28.60	9.92						499.54	1183.32	500.14	459.58	346.72	156.80	3156.01	Approved
3400554 S:1 F: U:1 T: G: To:	1953	5/6/1953	10/31/1953	28.60							499.54	1161.00	355.84	332.04	244.37	127.74	2720.53	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1953	11/1/1952	10/24/1953	3.80	9.92							22.31	144.30	127.54	102.35	29.06	435.48	Approved
3400554 Total (Diversions)	1954	11/1/1953	10/28/1954	23.60	0.00					225.52	1059.98	635.77	468.92	353.32	351.65	211.84	3307.01	Approved
3400554 S:1 F: U:1 T: G: To:	1954	11/1/1953	10/28/1954	23.60	0.00					225.52	1059.98	546.63	395.57	263.01	305.66	211.84	3008.22	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1954	11/1/1953	9/24/1954	2.88	0.00							89.14	73.35	90.31	46.00		298.79	Approved
3400554 Total (Diversions)	1955	11/1/1954	10/31/1955	28.00	0.00						940.97	978.76	569.80	466.62	314.78	344.73	3615.66	Approved
3400554 S:1 F: U:1 T: G: To:	1955	11/1/1954	10/31/1955	28.00	0.00						940.97	867.19	359.25	445.30	277.09	241.59	3131.39	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1955	11/1/1954	10/31/1955	5.85	0.00							111.57	210.55	21.32	37.69	103.14	484.27	Approved
3400554 Total (Diversions)	1956	11/1/1955	10/31/1956	30.10	0.00					149.56	1451.72	961.20	512.64	431.61	286.22	154.42	3947.36	Approved
3400554 S:1 F: U:1 T: G: To:	1956	11/1/1955	10/31/1956	30.10	0.00					149.56	1451.72	877.10	283.64	311.81	202.91	128.33	3405.07	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1956	11/1/1955	10/31/1956	5.20	0.00							84.10	229.00	119.80	83.31	26.08	542.29	Approved
3400554 Total (Diversions)	1957	11/1/1956	10/26/1957	31.00	0.00							1192.28	870.16	345.13	221.95	250.91	2880.44	Approved
3400554 S:1 F: U:1 T: G: To:	1957	11/1/1956	10/26/1957	31.00	0.00							1192.28	870.16	345.13	221.95	201.33	2830.85	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1957	11/1/1956	10/22/1957	2.00	0.00											49.59	49.59	Approved
3400554 Total (Diversions)	1958	11/1/1957	10/26/1958	32.00	0.00						1268.05	1147.45	601.40	509.66	343.24	138.85	4008.65	Approved
3400554 S:1 F: U:1 T: G: To:	1958	11/1/1957	10/26/1958	32.00	0.00						1268.05	1147.45	350.98	290.09	265.89	138.85	3461.31	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1958	11/1/1957	9/23/1958	6.45	0.00								250.42	219.57	77.36		547.35	Approved

Water Class	Irr Year	First Day Used	Last Day Used	Max Q	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual Amount	Data Status
3400554 Total (Diversions)	1959	11/1/1958	10/15/1959	30.00	0.00						692.04	650.09	454.66	362.68	170.68	115.04	2445.20	Approved
3400554 S:1 F: U:1 T: G: To:	1959	11/1/1958	10/15/1959	30.00	0.00						663.28	435.38	260.24	281.46	159.08	115.04	1914.47	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1959	11/1/1958	9/26/1959	6.75	0.00						28.76	214.71	194.42	81.22	11.60		530.73	Approved
3400554 Total (Diversions)	1960	4/18/1960	10/16/1960	32.00						150.35	1153.80	1326.96	466.92	708.01	405.53	170.58	4382.15	Approved
3400554 S:1 F: U:1 T: G: To:	1960	4/18/1960	10/16/1960	32.00						150.35	1153.80	1326.96	354.45	272.93	246.55	127.94	3632.98	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1960	7/5/1960	10/13/1960	8.65									112.46	435.08	158.98	42.65	749.17	Approved
3400554 Total (Diversions)	1961	5/1/1961	10/18/1961	30.00							1088.94	1107.98	596.74	529.40	258.85	106.12	3688.02	Approved
3400554 S:1 F: U:1 T: G: To:	1961	5/1/1961	10/18/1961	30.00							1088.94	1065.34	284.63	304.47	258.85	106.12	3108.34	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1961	6/20/1961	8/18/1961	7.70								42.65	312.10	224.93			579.68	Approved
3400554 Total (Diversions)	1962	4/22/1962	10/1/1962	32.80						137.85	1510.04	1606.64	585.27	727.31	388.96	0.00	4956.07	Approved
3400554 S:1 F: U:1 T: G: To:	1962	4/22/1962	10/1/1962	32.80						137.85	1510.04	1600.68	409.79	286.81	267.77	0.00	4212.95	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1962	6/26/1962	9/25/1962	9.10								5.95	175.48	440.50	121.19		743.12	Approved
3400554 Total (Diversions)	1963	4/17/1963	10/30/1963	32.80						190.02	1161.89	691.94	418.36	341.36	109.29	294.55	3207.42	Approved
3400554 S:1 F: U:1 T: G: To:	1963	4/17/1963	10/30/1963	32.80						190.02	1072.88	315.57	274.32	317.86	107.31	240.80	2518.75	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1963	5/18/1963	10/29/1963	9.07							89.02	376.37	144.04	23.50	1.98	53.75	688.67	Approved
3400554 Total (Diversions)	1964	5/8/1964	10/31/1964	31.00							824.14	945.30	565.85	403.94	425.80	140.23	3305.26	Approved
3400554 S:1 F: U:1 T: G: To:	1964	5/8/1964	10/31/1964	31.00							824.14	906.46	325.89	318.15	314.38	140.23	2829.26	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1964	6/16/1964	9/23/1964	6.07								38.84	239.96	85.79	111.41		476.00	Approved
3400554 Total (Diversions)	1965	11/1/1964	10/17/1965	26.00	0.00						460.97	1091.92	548.64	498.45	360.40	17.85	2978.23	Approved
3400554 S:1 F: U:1 T: G: To:	1965	11/1/1964	10/17/1965	26.00	0.00						460.97	1091.92	548.64	416.54	294.75	12.89	2825.69	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1965	11/1/1964	10/17/1965	3.10	0.00									81.92	65.65	4.96	152.53	Approved
3400554 Total (Diversions)	1966	11/1/1965	10/31/1966	30.00	0.00						1341.84	856.57	545.96	567.98	356.24	277.29	3945.88	Approved
3400554 S:1 F: U:1 T: G: To:	1966	11/1/1965	10/31/1966	30.00	0.00						1341.84	792.61	330.85	322.32	290.78	265.00	3343.39	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1966	11/1/1965	10/31/1966	5.10	0.00							63.97	215.11	245.66	65.46	12.30	602.49	Approved
3400554 Total (Diversions)	1967	11/1/1966	10/31/1967	31.20	0.00					228.50	1330.63	669.03	454.02	385.89	373.59	315.28	3756.95	Approved
3400554 S:1 F: U:1 T: G: To:	1967	11/1/1966	10/31/1967	31.20	0.00					228.50	1270.53	557.76	341.36	306.25	367.94	260.43	3332.78	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1967	11/1/1966	10/31/1967	5.45	0.00						60.10	111.27	112.66	79.64	5.65	54.84	424.17	Approved
3400554 Total (Diversions)	1968	11/1/1967	10/15/1968	31.70	0.00						548.64	1591.96	576.50	304.86	317.36	146.58	3485.90	Approved
3400554 S:1 F: U:1 T: G: To:	1968	11/1/1967	10/15/1968	31.70	0.00						548.64	1591.96	409.00	299.91	277.69	146.58	3273.77	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1968	11/1/1967	9/27/1968	8.60	0.00								167.51	4.96	39.67		212.14	Approved
3400554 Total (Diversions)	1969	11/1/1968	10/7/1969	27.50	0.00						986.00	1157.57	600.70	562.52	295.14	53.75	3655.69	Approved
3400554 S:1 F: U:1 T: G: To:	1969	11/1/1968	10/7/1969	27.50	0.00						986.00	1157.57	544.07	364.37	177.13	46.61	3275.75	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1969	7/8/1969	10/4/1969	5.20									56.63	198.15	118.02	7.14	379.94	Approved
3400554 Total (Diversions)	1974	11/1/1973	10/31/1974	14.30	59.51	61.49	61.49	55.54	61.49	59.51	799.35	793.20	526.42	371.71	168.20	184.47	3202.36	Approved
3400554 S:1 F: U:1 T: G: To:	1974	5/1/1974	10/31/1974	14.30							563.91	340.57	298.12	258.05	156.70	184.47	1801.81	Approved

Water Class	Irr Year	First Day Used	Last Day Used	Max Q	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual Amount	Data Status
3400554 S:1 F: U:9 T: G: To:	1974	11/1/1973	5/1/1974	1.00	59.51	61.49	61.49	55.54	61.49	59.51	0.00						359.01	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1974	5/14/1974	9/13/1974	9.60							235.44	452.63	228.30	113.65	11.50		1041.54	Approved
3400554 Total (Diversions)	1975	11/1/1974	10/31/1975	32.80	178.52	184.47	184.47	166.61	184.47	59.51	660.51	1753.22	1080.31	716.50	412.57	314.29	5895.42	Approved
3400554 S:1 F: U:1 T: G: To:	1975	5/16/1975	10/31/1975	32.80							603.98	1753.22	1055.02	369.39	306.45	282.55	4370.60	Approved
3400554 S:1 F: U:9 T: G: To:	1975	11/1/1974	5/16/1975	3.00	178.52	184.47	184.47	166.61	184.47	59.51	56.53						1014.56	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1975	7/28/1975	10/24/1975	7.00									25.29	347.11	106.12	31.74	510.26	Approved
3400554 Total (Diversions)	1976	11/1/1975	10/31/1976	29.60	59.51	63.27	83.51	86.28	65.46	57.52	1202.00	960.81	651.98	428.24	361.00	167.61	4187.17	Approved
3400554 S:1 F: U:1 T: G: To:	1976	5/1/1976	10/1/1976	29.60							1202.00	873.53	338.19	309.82	252.10	0.00	2975.65	Approved
3400554 S:1 F: U:9 T: G: To:	1976	11/1/1975	10/31/1976	3.00	59.51	63.27	83.51	86.28	65.46	57.52						167.61	583.15	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1976	6/18/1976	9/25/1976	6.00								87.27	313.79	118.41	108.89		628.37	Approved
3400554 Total (Diversions)	1977	11/12/1976	10/31/1977	6.20	56.53	92.23	92.23	61.49	61.49	170.18	385.99	400.27	257.06	222.55	229.49	152.93	2182.45	Approved
3400554 S:1 F: U:1 T: G: To:	1977	4/19/1977	10/15/1977	6.20						101.95	314.19	212.23	211.04	218.58	229.49	108.30	1395.79	Approved
3400554 S:1 F: U:9 T: G: To:	1977	11/12/1976	10/31/1977	2.00	56.53	92.23	92.23	61.49	61.49	68.23	48.99	19.84				44.63	545.66	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1977	5/23/1977	8/13/1977	4.30							22.81	168.20	46.02	3.97			241.00	Approved
3400554 Total (Diversions)	1978	11/7/1977	10/31/1978	29.10	47.60	43.24	36.89	33.32	36.89	38.08	990.16	1585.01	657.73	703.55	473.86	105.13	4751.47	Approved
3400554 S:1 F: U:1 T: G: To:	1978	4/25/1978	10/1/1978	29.10						0.00	990.16	1585.01	411.58	316.37	303.48	0.00	3606.60	Approved
3400554 S:1 F: U:9 T: G: To:	1978	11/7/1977	10/31/1978	2.00	47.60	43.24	36.89	33.32	36.89	38.08	0.00					105.13	341.16	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1978	7/5/1978	9/24/1978	8.00									246.15	387.18	170.38		803.71	Approved
3400554 Total (Diversions)	1979	11/1/1978	10/31/1979	25.30	119.01	122.98	122.98	111.08	122.98	119.01	218.19	1391.82	1369.61	960.61	148.76	95.41	4902.42	Approved
3400554 S:1 F: U:1 T: G: To:	1979	5/16/1979	10/11/1979	25.30							158.68	1391.82	1369.61	960.61	148.76	49.59	4079.07	Approved
3400554 S:1 F: U:9 T: G: To:	1979	11/1/1978	10/31/1979	2.00	119.01	122.98	122.98	111.08	122.98	119.01	59.51					45.82	823.35	Approved
3400554 Total (Diversions)	1980	11/1/1979	10/31/1980	29.10	119.01	122.98	122.98	115.04	122.98	119.01	122.98	1655.63	1121.27	874.72	382.02	122.98	5001.59	Approved
3400554 S:1 F: U:1 T: G: To:	1980	6/1/1980	10/1/1980	29.10								1655.63	1069.50	371.71	292.76	0.00	3389.60	Approved
3400554 S:1 F: U:9 T: G: To:	1980	11/1/1979	10/31/1980	2.00	119.01	122.98	122.98	115.04	122.98	119.01	122.98	0.00				122.98	967.95	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1980	7/18/1980	9/11/1980	10.00									51.77	503.02	89.26		644.04	Approved
3400554 Total (Diversions)	1981	11/1/1980	10/31/1981	25.50	89.26	92.23	92.23	83.31	92.23	271.74	771.78	831.68	473.06	549.83	520.67	161.85	4029.88	Approved
3400554 S:1 F: U:1 T: G: To:	1981	4/20/1981	10/5/1981	25.50						230.09	744.21	670.22	335.21	300.50	287.21	32.53	2599.97	Approved
3400554 S:1 F: U:9 T: G: To:	1981	11/1/1980	10/31/1981	2.00	89.26	92.23	92.23	83.31	92.23	41.65						107.11	598.03	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1981	5/15/1981	10/5/1981	6.10							27.57	161.46	137.85	249.33	233.46	22.22	831.88	Approved
3400554 Total (Diversions)	1982	11/1/1981	10/31/1982	26.00	89.26	92.23	92.23	83.31	92.23	86.28	716.04	1517.58	982.82	621.63	193.39	122.98	4689.99	Approved
3400554 S:1 F: U:1 T: G: To:	1982	5/1/1982	9/16/1982	26.00							716.04	1517.58	712.87	340.37	119.01		3405.87	Approved
3400554 S:1 F: U:9 T: G: To:	1982	11/1/1981	10/31/1982	2.50	89.26	92.23	92.23	83.31	92.23	86.28					74.38	122.98	732.90	Approved
3400554 S:2 F: U:1 T: G: To:	1982	7/9/1982	8/24/1982	7.00									269.95	281.26			551.21	Approved
3400554 Total (Diversions)	1983	11/1/1982	10/31/1983	29.10	89.26	92.23	92.23	83.31	92.23	73.39	261.23	1617.74	1251.99	743.81	656.94	236.04	5290.39	Approved
3400554 S:1 F: U:1 T: G: To:	1983	5/25/1983	10/7/1983	29.10							204.70	1617.74	1251.99	743.81	408.60	77.36	4304.20	Approved

Water Class	Irr Year	First Day Used	Last Day Used	Max Q	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual Amount	Data Status
3400554 S:1 F: U:9 T: G: To:	1983	11/1/1982	10/31/1983	2.00	89.26	92.23	92.23	83.31	92.23	73.39	56.53					99.18	678.36	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1983	9/9/1983	10/7/1983	6.50											248.33	59.51	307.84	Approved
3400554 Total (Diversions)	1984	11/1/1983	10/31/1984	30.70	89.26	92.23	92.23	86.28	92.23	73.39	530.19	1505.48	734.09	738.46	533.96	229.49	4797.29	Approved
3400554 S:1 F: U:1 T: G: To:	1984	5/23/1984	10/16/1984	30.70							486.55	1505.48	405.03	318.75	305.46	154.71	3175.98	Approved
3400554 S:1 F: U:9 T: G: To:	1984	11/1/1983	10/31/1984	2.00	89.26	92.23	92.23	86.28	92.23	73.39	43.64					63.47	632.74	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1984	7/3/1984	10/12/1984	8.50									329.06	419.71	228.50	11.31	988.58	Approved
3400554 Total (Diversions)	1985	11/1/1984	10/31/1985	20.00	59.51	61.49	61.49	55.54	61.49	59.51	442.12	1179.39	717.83	806.49	489.53	77.75	4072.13	Approved
3400554 S:1 F: U:1 T: G: To:	1985	5/3/1985	10/3/1985	20.00							438.16	1179.39	453.63	307.05	282.05	20.23	2680.50	Approved
3400554 S:1 F: U:9 T: G: To:	1985	11/1/1984	10/31/1985	1.00	59.51	61.49	61.49	55.54	61.49	59.51	3.97					57.52	420.50	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1985	7/2/1985	9/20/1985	9.70									264.20	499.45	207.47		971.12	Approved
3400554 Total (Diversions)	1986	11/1/1985	10/31/1986	22.20	59.51	61.49	61.49	55.54	61.49	59.51	475.05	1161.54	672.01	888.81	466.92	99.57	4122.90	Approved
3400554 S:1 F: U:1 T: G: To:	1986	5/12/1986	10/2/1986	22.20							456.21	1161.54	646.03	370.32	308.83	10.31	2953.23	Approved
3400554 S:1 F: U:9 T: G: To:	1986	11/1/1985	10/31/1986	1.50	59.51	61.49	61.49	55.54	61.49	59.51	18.84					89.26	467.11	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1986	7/4/1986	9/25/1986	9.80									25.98	518.49	158.08		702.56	Approved
3400554 Total (Diversions)	1987	11/1/1986	10/31/1987	22.20	89.26	92.23	92.23	83.31	92.23	101.16	589.10	1218.66	861.04	778.72	475.05	192.80	4665.79	Approved
3400554 S:1 F: U:1 T: G: To:	1987	4/27/1987	10/15/1987	22.20						23.80	589.10	1218.66	631.74	376.87	309.43	92.03	3241.63	Approved
3400554 S:1 F: U:9 T: G: To:	1987	11/1/1986	10/31/1987	1.50	89.26	92.23	92.23	83.31	92.23	77.36						33.72	560.34	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1987	7/11/1987	10/16/1987	8.80									229.29	401.86	165.62	67.04	863.81	Approved
3400554 Total (Diversions)	1988	11/1/1987	10/31/1988	25.80	59.51	61.49	61.49	57.52	61.49	59.51	1041.93	1097.67	612.11	752.14	291.97	208.47	4365.29	Approved
3400554 S:1 F: U:1 T: G: To:	1988	5/5/1988	10/25/1988	25.80							1034.79	1065.73	449.26	357.82	280.86	157.09	3345.57	Approved
3400554 S:1 F: U:9 T: G: To:	1988	11/1/1987	10/31/1988	3.70	59.51	61.49	61.49	57.52	61.49	59.51	7.14					51.37	419.51	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1988	6/21/1988	9/3/1988	7.30								31.93	162.85	394.32	11.11		600.21	Approved
3400554 Total (Diversions)	1989	11/1/1988	10/31/1989	28.10	59.51	61.49	61.49	55.54	61.49	200.93	1334.50	963.39	887.81	547.25	377.86	360.80	4972.04	Approved
3400554 S:1 F: U:1 T: G: To:	1989	4/21/1989	10/31/1989	28.10						166.61	1241.67	557.96	324.30	409.59	228.90	264.40	3193.44	Approved
3400554 S:1 F: U:9 T: G: To:	1989	11/1/1988	4/21/1989	1.00	59.51	61.49	61.49	55.54	61.49	34.31							333.82	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1989	5/16/1989	10/24/1989	11.30							92.83	405.43	563.51	137.65	148.96	96.40	1444.78	Approved
3400554 Total (Diversions)	1990	11/1/1989	10/31/1990	20.60	59.51	61.49	61.49	55.54	61.49	66.45	561.13	1021.11	675.18	602.39	464.34	188.23	3878.34	Approved
3400554 S:1 F: U:1 T: G: To:	1990	5/8/1990	10/10/1990	20.60							547.25	744.61	336.00	286.22	311.41	70.81	2296.30	Approved
3400554 S:1 F: U:9 T: G: To:	1990	11/1/1989	10/31/1990	2.60	59.51	61.49	61.49	55.54	61.49	66.45	13.88					113.46	493.30	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1990	6/5/1990	10/5/1990	10.00								276.50	339.18	316.17	152.93	3.97	1088.74	Approved
3400554 Total (Diversions)	1991	11/1/1990	10/31/1991	29.60	59.51	61.49	83.31	83.31	92.23	89.26	611.71	1282.33	713.46	708.70	246.15	132.70	4164.16	Approved
3400554 S:1 F: U:1 T: G: To:	1991	5/6/1991	10/28/1991	29.60							595.65	1249.61	404.83	325.89	191.61	127.14	2894.72	Approved
3400554 S:1 F: U:9 T: G: To:	1991	11/1/1990	10/31/1991	1.80	59.51	61.49	83.31	83.31	92.23	89.26	16.07					5.55	490.72	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1991	6/25/1991	9/10/1991	7.50								32.73	308.63	382.82	54.55		778.72	Approved
3400554 Total (Diversions)	1992	11/1/1991	10/31/1992	23.80	41.65	43.04	43.04	40.27	43.04	55.74	1124.05	669.23	874.72	844.38	459.38	135.47	4374.01	Approved

Water Class	Irr Year	First Day Used	Last Day Used	Max Q	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual Amount	Data Status
3400554 S:1 F: U:1 T: G: To:	1992	4/30/1992	10/7/1992	23.80						15.47	1124.05	669.23	600.01	402.65	404.63	80.93	3296.97	Approved
3400554 S:1 F: U:9 T: G: To:	1992	11/1/1991	10/31/1992	1.10	41.65	43.04	43.04	40.27	43.04	40.27						54.55	305.86	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1992	7/7/1992	9/18/1992	8.80									274.71	441.73	54.74		771.18	Approved
3400554 Total (Diversions)	1993	11/1/1992	10/31/1993	24.10	41.65	43.04	45.42	44.43	49.19	46.02	334.22	1388.85	978.86	842.79	551.41	88.27	4454.15	Approved
3400554 S:1 F: U:1 T: G: To:	1993	5/18/1993	10/4/1993	24.10							320.73	1388.85	826.92	439.35	551.41	32.73	3559.99	Approved
3400554 S:1 F: U:9 T: G: To:	1993	11/1/1992	10/31/1993	1.00	41.65	43.04	45.42	44.43	49.19	46.02	13.49					55.54	338.78	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1993	7/16/1993	8/31/1993	7.80									151.94	403.44			555.38	Approved
3400554 Total (Diversions)	1994	11/1/1993	10/31/1994	25.60	41.65	43.04	50.78	55.54	71.60	69.62	547.64	1120.28	764.04	878.10	388.77	81.32	4112.39	Approved
3400554 S:1 F: U:1 T: G: To:	1994	5/18/1994	10/4/1994	25.60							501.03	1108.38	350.29	332.04	303.87	32.13	2627.74	Approved
3400554 S:1 F: U:9 T: G: To:	1994	11/1/1993	10/31/1994	1.50	41.65	43.04	50.78	55.54	71.60	69.62	46.61					44.43	423.28	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1994	6/28/1994	10/4/1994	10.80								11.90	413.76	546.06	84.89	4.76	1061.37	Approved
3400554 Total (Diversions)	1995	11/1/1994	10/31/1995	27.60	47.60	49.19	49.19	44.43	52.76	45.22	334.62	1463.03	1095.49	906.66	497.86	100.76	4686.81	Approved
3400554 S:1 F: U:1 T: G: To:	1995	5/16/1995	10/4/1995	27.60							311.21	1463.03	1063.75	435.18	299.91	29.75	3602.83	Approved
3400554 S:1 F: U:9 T: G: To:	1995	11/1/1994	10/31/1995	1.00	47.60	49.19	49.19	44.43	52.76	45.22	23.41					55.54	367.34	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1995	7/28/1995	10/27/1995	10.50									31.74	471.48	197.95	15.47	716.64	Approved
3400554 Total (Diversions)	1996	11/1/1995	10/31/1996	28.30	59.51	61.49	61.49	57.52	61.49	107.11	1076.64	916.89	686.89	697.60	333.43	145.79	4265.83	Approved
3400554 S:1 F: U:1 T: G: To:	1996	4/27/1996	10/11/1996	28.30						55.54	983.02	437.48	356.04	264.40	253.69	83.31	2433.48	Approved
3400554 S:1 F: U:9 T: G: To:	1996	11/1/1995	10/31/1996	1.50	59.51	61.49	61.49	57.52	61.49	51.57						62.48	415.54	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1996	5/24/1996	9/13/1996	8.80							93.62	479.41	330.85	433.20	79.74		1416.81	Approved
3400554 Total (Diversions)	1997	11/1/1996	10/31/1997	22.20	89.26	92.23	92.23	83.31	92.23	89.26	531.38	946.72	1004.44	482.78	302.68	110.08	3916.62	Approved
3400554 S:1 F: U:1 T: G: To:	1997	5/9/1997	10/7/1997	22.20							506.39	946.72	809.47	482.78	302.68	35.70	3083.75	Approved
3400554 S:1 F: U:9 T: G: To:	1997	11/1/1996	10/31/1997	1.80	89.26	92.23	92.23	83.31	92.23	89.26	24.99					74.38	637.89	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1997	7/11/1997	7/30/1997	6.80									194.98				194.98	Approved
3400554 Total (Diversions)	1998	11/1/1997	10/31/1998	26.50	89.26	92.23	92.23	83.31	92.23	89.26	472.07	1389.24	910.23	754.33	624.80	61.49	4750.68	Approved
3400554 S:1 F: U:1 T: G: To:	1998	5/11/1998	10/1/1998	26.50							442.32	1371.00	560.34	429.23	380.83	0.00	3183.72	Approved
3400554 S:1 F: U:9 T: G: To:	1998	11/1/1997	10/31/1998	1.50	89.26	92.23	92.23	83.31	92.23	89.26	29.75					61.49	629.76	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1998	6/27/1998	9/29/1998	7.50								18.25	349.89	325.10	243.97		937.20	Approved
3400554 Total (Diversions)	1999	11/1/1998	10/31/1999	22.40	59.51	61.49	61.49	55.54	73.79	84.89	385.00	1264.88	713.66	314.19	145.19	84.89	3304.51	Approved
3400554 S:1 F: U:1 T: G: To:	1999	5/15/1999	9/16/1999	22.40							350.09	1264.88	631.94	314.19	59.51		2620.60	Approved
3400554 S:1 F: U:9 T: G: To:	1999	11/1/1998	10/31/1999	1.80	59.51	61.49	61.49	55.54	73.79	84.89	34.91				85.69	84.89	602.19	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	1999	7/6/1999	7/20/1999	3.30									81.72				81.72	Approved
3400554 Total (Diversions)	2000	11/1/1999	10/31/2000	26.80	89.26	92.23	92.23	86.28	92.23	89.26	928.28	984.81	893.57	661.10	393.13	202.52	4604.89	Approved
3400554 S:1 F: U:1 T: G: To:	2000	5/1/2000	10/20/2000	26.80							928.28	675.18	331.05	264.20	255.47	149.56	2603.74	Approved
3400554 S:1 F: U:9 T: G: To:	2000	11/1/1999	10/31/2000	1.50	89.26	92.23	92.23	86.28	92.23	89.26	0.00					35.70	577.20	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2000	6/6/2000	10/6/2000	11.50								309.62	562.52	396.90	137.65	17.26	1423.95	Approved

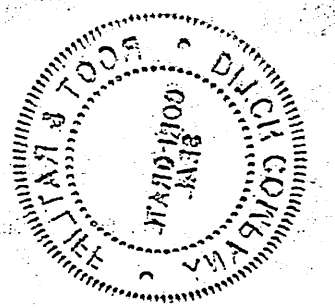
Water Class	Irr Year	First Day Used	Last Day Used	Max Q	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual Amount	Data Status
3400554 Total (Diversions)	2001	11/1/2000	10/31/2001	25.30	89.26	92.23	92.23	83.31	92.23	89.26	784.28	995.32	970.72	646.03	500.64	149.16	4584.66	Approved
3400554 S:1 F: U:1 T: G: To:	2001	5/11/2001	10/3/2001	25.30							754.52	865.00	356.24	332.04	252.30	4.96	2565.06	Approved
3400554 S:1 F: U:9 T: G: To:	2001	11/1/2000	10/31/2001	2.40	89.26	92.23	92.23	83.31	92.23	89.26	29.75					138.05	706.32	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2001	6/15/2001	10/2/2001	11.80								130.32	614.49	313.99	248.33	6.15	1313.28	Approved
3400554 Total (Diversions)	2002	11/1/2001	10/31/2002	6.40	142.81	147.57	147.57	133.29	147.57	115.64	519.68	316.76	189.82	189.42	194.18	209.66	2453.99	Approved
3400554 S:1 F: U:1 T: G: To:	2002	5/1/2002	10/31/2002	6.40							369.72	246.95	189.82	189.42	194.18	209.66	1399.76	Approved
3400554 S:1 F: U:9 T: G: To:	2002	11/1/2001	5/1/2002	2.40	142.81	147.57	147.57	133.29	147.57	115.64	0.00						834.46	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2002	5/7/2002	6/28/2002	4.30							149.95	69.82					219.77	Approved
3400554 Total (Diversions)	2003	11/29/2002	10/31/2003	30.10	7.14	110.68	110.68	99.97	98.78	184.47	1140.31	962.00	790.62	713.07	203.90	171.18	4592.79	Approved
3400554 S:1 F: U:1 T: G: To:	2003	4/23/2003	9/25/2003	30.10						140.04	1140.31	841.40	307.64	299.31	87.27		2815.97	Approved
3400554 S:1 F: U:9 T: G: To:	2003	11/29/2002	10/31/2003	4.70	7.14	110.68	110.68	99.97	98.78	44.43					41.06	171.18	683.91	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2003	6/10/2003	9/10/2003	9.30								120.60	482.98	413.76	75.57		1092.91	Approved
3400554 Total (Diversions)	2004	11/1/2003	10/31/2004	26.50	130.91	135.27	135.27	126.55	145.59	120.99	414.95	998.89	815.22	626.19	591.48	261.03	4502.35	Approved
3400554 S:1 F: U:1 T: G: To:	2004	5/5/2004	10/15/2004	26.50							406.22	911.62	368.93	311.81	374.29	163.44	2536.30	Approved
3400554 S:1 F: U:9 T: G: To:	2004	11/1/2003	10/31/2004	2.90	130.91	135.27	135.27	126.55	145.59	120.99	8.73					97.59	900.91	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2004	6/15/2004	9/21/2004	10.00								87.27	446.29	314.38	217.19		1065.14	Approved
3400554 Total (Diversions)	2005	11/1/2004	10/31/2005	28.60	166.61	172.17	172.17	155.51	178.12	138.05	697.40	1442.40	1089.14	787.85	490.32	185.26	5674.99	Approved
3400554 S:1 F: U:1 T: G: To:	2005	5/16/2005	10/7/2005	28.60							628.97	1442.40	791.61	478.42	305.46	36.89	3683.76	Approved
3400554 S:1 F: U:9 T: G: To:	2005	11/1/2004	10/31/2005	2.90	166.61	172.17	172.17	155.51	178.12	138.05	68.43					142.42	1193.47	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2005	7/12/2005	10/4/2005	10.30									297.53	309.43	184.86	5.95	797.76	Approved
3400554 Total (Diversions)	2006	11/1/2005	10/31/2006	25.10	166.61	163.84	86.08	77.36	73.79	201.72	948.71	767.85	605.46	626.19	321.82	112.66	4152.10	Approved
3400554 S:1 F: U:1 T: G: To:	2006	4/24/2006	10/10/2006	25.10						108.10	948.71	458.43	344.63	261.33	224.14	32.13	2377.46	Approved
3400554 S:1 F: U:9 T: G: To:	2006	11/1/2005	10/31/2006	2.80	166.61	163.84	86.08	77.36	73.79	93.62						80.53	741.83	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2006	6/2/2006	9/15/2006	6.80								309.43	260.83	364.86	97.69		1032.81	Approved
3400554 Total (Diversions)	2007	11/1/2006	10/31/2007	20.30	115.04	110.68	110.68	99.97	101.16	79.14	808.28	869.35	745.62	563.59	496.27	373.41	4473.19	Approved
3400554 S:1 F: U:1 T: G: To:	2007	4/30/2007	10/15/2007	20.30						10.71	808.28	847.03	370.74	380.61	392.14	227.43	3036.94	Approved
3400554 S:1 F: U:9 T: G: To:	2007	11/1/2006	10/31/2007	4.40	115.04	110.68	110.68	99.97	101.16	68.43						145.99	751.94	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2007	6/22/2007	9/25/2007	9.00								22.31	374.88	182.98	104.13		684.31	Approved
3400554 Total (Diversions)	2008	11/1/2007	10/31/2008	20.30	222.75	227.51	227.51	212.83	221.95	58.91	886.23	1107.59	713.72	663.42	639.16	359.71	5541.28	Approved
3400554 S:1 F: U:1 T: G: To:	2008	5/7/2008	10/31/2008	20.30							871.95	1107.59	562.98	379.78	292.55	298.72	3513.55	Approved
3400554 S:1 F: U:9 T: G: To:	2008	11/1/2007	10/31/2008	3.80	222.75	227.51	227.51	212.83	221.95	58.91	14.28					4.96	1190.70	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2008	7/4/2008	10/10/2008	6.75									150.75	283.64	346.62	56.03	837.04	Approved
3400554 Total (Diversions)	2009	11/1/2008	10/31/2009	20.80	173.36	114.65	110.68	99.97	79.04	124.17	818.59	655.05	634.09	779.61	348.30	179.51	4117.01	Approved
3400554 S:1 F: U:1 T: G: To:	2009	4/27/2009	10/1/2009	20.80						21.03	818.59	635.71	301.35	258.95	175.24	0.00	2210.87	Approved
3400554 S:1 F: U:9 T: G: To:	2009	11/1/2008	10/31/2009	3.50	173.36	114.65	110.68	99.97	79.04	103.14						179.51	860.34	Approved

Water Class	Irr Year	First Day Used	Last Day Used	Max Q	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual Amount	Data Status
3400554 S:2 F:3403589 U:1 T: G: To:	2009	6/16/2009	9/18/2009	9.75								19.34	332.73	520.67	173.06		1045.80	Approved
3400554 Total (Diversions)	2010	11/1/2009	10/25/2010	24.00	86.28	92.23	92.23	83.31	80.33	92.63	716.74	953.77	725.66	699.78	309.62	199.24	4131.83	Approved
3400554 S:1 F: U:1 T: G: To:	2010	11/1/2009	10/25/2010	24.00	0.00						685.50	835.25	332.43	364.07	208.47	199.24	2624.96	Approved
3400554 S:1 F: U:9 T: G: To:	2010	11/1/2009	5/10/2010	1.80	86.28	92.23	92.23	83.31	80.33	92.63	31.24						558.26	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2010	11/1/2009	9/24/2010	8.00	0.00							118.51	393.23	335.71	101.16		948.61	Approved
Total (Diversions)	2011	11/1/2010	10/31/2011	25.50	119.01	122.98	122.98	100.76	78.55	197.56	1002.66	1361.41	887.24	816.21	389.26	89.46	5288.07	Approved
3400554 S:1 F: U:1 T: G: To:	2011	4/25/2011	9/30/2011	25.50						121.39	1002.66	1361.41	537.15	286.12	174.75		3483.48	Approved
3400554 S:1 F: U:Q T: G: To:	2011	11/1/2010	10/31/2011	2.40	119.01	122.98	122.98	100.76	78.55	76.17					4.76	89.46	714.66	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2011	7/1/2011	9/30/2011	9.00									350.09	530.09	209.76		1089.93	Approved
3400554 S:X F: U:Q T:0 G: To:	2011	11/1/2010	10/31/2011	25.50	119.01	122.98	122.98	100.76	78.55	197.56	1002.66	1361.41	887.24	816.21	389.26	89.46	5288.07	Approved
Total (Diversions)	2012	11/1/2011	10/31/2012	16.80	162.65	135.87	116.03	94.22	108.89	222.75	999.09	882.04	724.37	479.91	295.54	185.66	4407.02	Approved
3400554 S:1 F: U:1 T: G: To:	2012	4/17/2012	10/31/2012	16.80						165.62	947.52	452.22	261.33	260.83	238.32	163.44	2489.27	Approved
3400554 S:1 F: U:Q T: G: To:	2012	11/1/2011	10/31/2012	4.00	162.65	135.87	116.03	94.22	108.89	57.12	0.00	0.00	0.00	0.00	0.00	22.22	697.00	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2012	4/17/2012	10/31/2012	11.20						0.00	51.57	429.82	463.05	219.08	57.22	0.00	1220.75	Approved
3400554 S:X F: U:Q T:0 G: To:	2012	11/1/2011	10/31/2012	17.83	162.65	135.87	116.03	94.22	108.89	222.75	999.09	882.04	724.37	479.91	295.54	185.66	4407.02	Approved
Total (Diversions)	2013	11/1/2012	10/31/2013	16.00	161.85	120.20	66.55	103.14	128.43	232.17	763.25	524.18	342.65	312.30	353.46	293.95	3402.14	Approved
3400554 S:1 F: U:1 T: G: To:	2013	4/23/2013	10/7/2013	16.00						142.91	763.25	401.90	263.01	312.30	353.46	74.38	2311.21	Approved
3400554 S:1 F: U:Q T: G: To:	2013	11/1/2012	10/31/2013	4.80	161.85	120.20	66.55	103.14	128.43	89.26						219.57	889.00	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2013	6/7/2013	7/16/2013	4.35								122.28	79.64				201.92	Approved
3400554 S:X F: U:Q T:0 G: To:	2013	11/1/2012	10/31/2013	16.00	161.85	120.20	66.55	103.14	128.43	232.17	763.25	524.18	342.65	312.30	353.46	293.95	3402.14	Approved
Total (Diversions)	2014	11/1/2013	10/31/2014	27.00	161.85	158.08	112.07	94.22	127.74	293.56	1104.27	951.41	537.39	676.08	346.22	292.47	4855.35	Approved
3400554 S:1 F: U:1 T: G: To:	2014	4/7/2014	9/30/2014	27.00						230.78	870.04	713.43	304.31	326.13	281.70		2726.38	Approved
3400554 S:1 F: U:Q T: G: To:	2014	11/1/2013	10/31/2014	6.80	161.85	158.08	112.07	94.22	127.74	28.56					4.76	292.47	979.75	Approved
3400554 S:1 F:3400505 U:1 T:4 G: To:	2014	4/28/2014	8/16/2014	1.67						2.98	75.95	45.40	3.01	3.31			130.65	Approved
3400554 S:1 F:3400527 U:1 T:4 G: To:	2014	4/23/2014	9/21/2014	2.30						23.31	124.46	94.91	34.75	44.55	12.02		334.00	Approved
3400554 S:1 F:3400543 U:1 T:4 G: To:	2014	4/23/2014	9/26/2014	0.50						7.93	30.15	29.75	16.30	21.30	9.38		114.82	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2014	5/17/2014	9/21/2014	13.60							3.67	67.92	179.01	280.78	38.36		569.74	Approved
3400554 S:X F: U:Q T:0 G: To:	2014	11/1/2013	10/31/2014	31.50	161.85	158.08	112.07	94.22	127.74	293.56	1105.40	951.88	537.39	676.37	346.22	292.47	4857.25	Approved
Total (Diversions)	2015	11/1/2014	10/25/2015	22.13	221.76	163.64	136.86	111.08	139.84	238.91	910.13	1085.57	774.66	548.14	663.28	210.45	5204.31	Approved
3400554 S:1 F: U:1 T: G: To:	2015	4/13/2015	10/26/2015	22.13						173.56	667.17	880.95	533.70	319.68	390.71	206.52	3172.29	Approved
3400554 S:1 F: U:Q T: G: To:	2015	11/1/2014	4/13/2015	4.00	221.76	163.64	136.86	111.08	139.84	62.48							835.65	Approved
3400554 S:1 F:3400505 U:1 T:4 G: To:	2015	5/5/2015	10/2/2015	1.67							86.86	64.44	79.26		24.12	0.56	255.24	Approved
3400554 S:1 F:3400527 U:1 T:4 G: To:	2015	4/14/2015	10/2/2015	2.30						1.09	126.35	110.42	128.61	59.11	90.35	2.38	518.31	Approved
3400554 S:1 F:3400543 U:1 T:4 G: To:	2015	4/14/2015	10/2/2015	0.50						1.79	29.75	29.75	30.74	30.74	29.75	0.99	153.52	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2015	7/31/2015	9/18/2015	4.98									2.34	138.61	128.35		269.30	Approved

Water Class	Irr Year	First Day Used	Last Day Used	Max Q	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual Amount	Data Status
3400554 S:X F: U:Q T:0 G: To:	2015	11/1/2014	10/26/2015	26.60	221.76	163.64	136.86	111.08	139.84	238.91	910.13	1085.57	774.66	548.14	663.28	210.45	5204.31	Approved
Total (Diversions)	2016	11/6/2015	10/31/2016	18.43	130.51	209.06	209.06	195.57	163.84	111.53	702.28	1007.62	851.06	776.16	483.32	344.00	5184.02	Approved
3400554 S:1 F: U:1 T: G: To:	2016	5/4/2016	10/11/2016	18.43							557.36	769.20	403.11	428.22	353.20	103.14	2614.23	Approved
3400554 S:1 F: U:Q T: G: To:	2016	11/1/2015	10/31/2016	5.68	130.51	209.06	209.06	195.57	163.84	111.53	1.96					222.61	1244.15	Approved
3400554 S:1 F:3400505 U:1 T:4 G: To:	2016	5/6/2016	9/7/2016	1.67							55.97	99.37	16.26	36.81	7.14		215.57	Approved
3400554 S:1 F:3400527 U:1 T:4 G: To:	2016	5/6/2016	10/11/2016	2.30							86.98	136.86	74.72	96.18	73.35	18.25	486.33	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2016	6/29/2016	9/23/2016	10.68								2.18	356.97	214.95	49.63		623.73	Approved
3400554 S:X F: U:Q T:0 G: To:	2016	11/1/2015	10/31/2016	22.40	130.51	209.06	209.06	195.57	163.84	111.53	702.28	1007.62	851.06	776.16	483.32	344.00	5184.02	Approved
Total (Diversions)	2017	11/1/2016	10/31/2017	19.43	296.33	257.34	199.30	158.74	155.86	135.75	517.53	1296.42	906.86	744.59	522.10	327.83	5518.65	Approved
3400554 S:1 F: U:1 T: G: To:	2017	5/9/2017	10/13/2017	19.43							342.33	1057.05	529.36	432.58	295.90	129.34	2786.56	Approved
3400554 S:1 F: U:Q T: G: To:	2017	11/1/2016	10/31/2017	4.98	296.33	257.34	199.30	158.74	155.86	135.75	54.59					173.42	1431.33	Approved
3400554 S:1 F:3400505 U:1 T:4 G: To:	2017	5/19/2017	8/14/2017	1.67							43.06	99.37	93.40	33.86			269.70	Approved
3400554 S:1 F:3400527 U:1 T:4 G: To:	2017	5/9/2017	10/13/2017	2.30							77.55	136.86	141.42	88.40	44.25	23.09	511.58	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2017	6/30/2017	10/2/2017	6.34								3.13	142.67	189.74	181.95	1.98	519.48	Approved
3400554 S:X F: U:Q T:0 G: To:	2017	11/1/2016	10/31/2017	23.40	296.33	257.34	199.30	158.74	155.86	135.75	517.53	1296.42	906.86	744.59	522.10	327.83	5518.65	Approved
Total (Diversions)	2018	11/1/2017	10/31/2018	7.70	242.26	226.28	200.10	142.10	128.02	146.48	557.01	600.29	385.33	281.90	168.14	172.96	3250.86	Approved
3400554 S:1 F: U:1 T: G: To:	2018	5/1/2018	10/3/2018	6.82							352.03	272.20	256.63	213.17	168.14	10.91	1273.07	Approved
3400554 S:1 F: U:Q T: G: To:	2018	11/1/2017	10/31/2018	4.44	242.26	226.28	200.10	142.10	128.02	146.48	0.00					162.05	1247.28	Approved
3400554 S:1 F:3400505 U:1 T:4 G: To:	2018	5/11/2018	5/13/2018	0.50							1.98						1.98	Approved
3400554 S:1 F:3400527 U:1 T:4 G: To:	2018	5/2/2018	7/24/2018	1.47							60.00	19.76	1.57				81.32	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2018	5/4/2018	8/10/2018	7.70							142.99	308.34	127.14	68.73			647.20	Approved
3400554 S:X F: U:Q T:0 G: To:	2018	11/1/2017	10/31/2018	12.60	242.26	226.28	200.10	142.10	128.02	146.48	557.01	600.27	385.33	281.90	168.14	172.96	3250.84	Approved
Total (Diversions)	2019	11/1/2018	10/31/2019	20.63	99.18	92.23	92.23	83.31	92.23	82.51	459.38	1142.50	983.02	734.09	690.06	327.36	4878.10	Approved
3400554 S:1 F: U:1 T: G: To:	2019	5/1/2019	10/11/2019	20.63							393.78	906.26	736.04	345.66	252.90	84.30	2718.94	Approved
3400554 S:1 F: U:Q T: G: To:	2019	11/1/2018	10/31/2019	6.70	99.18	92.23	92.23	83.31	92.23	82.51	0.00					193.19	734.89	Approved
3400554 S:1 F:3400505 U:1 T:4 G: To:	2019	5/31/2019	8/1/2019	1.67							3.31	99.37	101.99	0.00			204.68	Approved
3400554 S:1 F:3400527 U:1 T:4 G: To:	2019	5/1/2019	8/27/2019	2.30							62.28	136.86	141.42	52.19			392.75	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2019	7/24/2019	10/11/2019	8.55									3.57	336.24	437.16	49.87	826.84	Approved
3400554 S:X F: U:Q T:0 G: To:	2019	11/1/2018	10/31/2019	24.60	99.18	92.23	92.23	83.31	92.23	82.51	459.38	1142.50	983.02	734.09	690.06	327.36	4878.10	Approved
Total (Diversions)	2020	11/1/2019	10/31/2020	18.23	203.90	289.00	209.66	146.38	162.67	194.78	986.12	645.37	548.02	383.59	301.81	158.46	4229.75	Approved
3400554 S:1 F: U:1 T: G: To:	2020	4/29/2020	10/11/2020	18.23						26.46	765.57	425.02	297.72	279.26	280.19	53.24	2127.46	Approved
3400554 S:1 F: U:Q T: G: To:	2020	11/1/2019	10/31/2020	4.70	203.90	289.00	209.66	146.38	162.67	164.11						105.22	1280.94	Approved
3400554 S:1 F:3400505 U:1 T:4 G: To:	2020	5/5/2020	7/31/2020	1.67							87.12	34.12	9.94				131.17	Approved
3400554 S:1 F:3400527 U:1 T:4 G: To:	2020	4/29/2020	9/23/2020	2.30						4.21	130.87	78.73	20.43	15.59	21.62		271.44	Approved
3400554 S:2 F:3403589 U:1 T: G: To:	2020	5/27/2020	8/21/2020	4.54							2.56	107.51	219.93	88.74			418.74	Approved

Water Class	Irr Year	First Day Used	Last Day Used	Max Q	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual Amount	Data Status
3400554 S:X F: U:Q T:0 G: To:	2020	11/1/2019	10/31/2020	22.20	203.90	289.00	209.66	146.38	162.67	194.78	986.12	645.37	548.02	383.59	301.81	158.46	4229.75	Approved

Attachment D


DUTCH COMPANY
1602

Attachment E

OFFICE OF THE SECRETARY OF STATE
OF THE STATE OF COLORADO

CERTIFICATE OF FACT OF GOOD STANDING

I, Jena Griswold, as the Secretary of State of the State of Colorado, hereby certify that, according to the records of this office,

THE ROOT AND RATLIFF DITCH COMPANY

is a

Nonprofit Corporation

formed or registered on 05/14/1947 under the law of Colorado, has complied with all applicable requirements of this office, and is in good standing with this office. This entity has been assigned entity identification number 19871112677 .

This certificate reflects facts established or disclosed by documents delivered to this office on paper through 04/22/2021 that have been posted, and by documents delivered to this office electronically through 04/25/2021 @ 02:13:35 .

I have affixed hereto the Great Seal of the State of Colorado and duly generated, executed, and issued this official certificate at Denver, Colorado on 04/25/2021 @ 02:13:35 in accordance with applicable law. This certificate is assigned Confirmation Number 13122887 .

Jena Griswold

Secretary of State of the State of Colorado

**********End of Certificate**********

Notice: A certificate issued electronically from the Colorado Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Validate a Certificate page of the Secretary of State's Web site, http://www.sos.state.co.us/biz/CertificateSearchCriteria.do entering the certificate's confirmation number displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate. For more information, visit our Web site, http://www.sos.state.co.us/ click "Businesses, trademarks, trade names" and select "Frequently Asked Questions."

Attachment F

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Water Project Loan Program

Projects financed by the Water Project Loan Program must align with the goals identified in Colorado's Water Plan and its measurable objectives.

Application Type

☒ Prequalification *(Attach 3 years of financial statements)* ☒ Loan Approval *(Attach Loan Feasibility Study)*

Agency/Company Information

Company / Borrower Name: Root and Ratlift Ditch Company

Authorized Agent &Title: Wayne Eppich, Sec/Treasurer

Address: 8629 Road 41, Mancos, CO 81328

Phone: (970) 739.6695 | Email: epictime@yahoo.com

Organization Type: ☒ Ditch Co, ☐ District, ☐ Municipality ☐ other: _____ | Incorporated? ☒ YES ☐ NO

County: Montezuma | Number of Shares/Taps: 2,200

Water District: Mancos Water Conserv | Avg. Water Diverted/Yr 4,144 acre-feet

Number of Shareholders/Customers Served: 37 | Current Assessment per Share $ 2.00 (Ditch Co)

Federal ID Number: 84-0932966 | Average monthly water bill $ _____ (Municipality)

Contact Information

Project Representative: Wayne Eppich

Phone: (970) 739.6695 | Email: epictime@yahoo.com

Engineer: SGM

Phone: (970) 385-2340 | Email: JordanD@SGM-inc.com

Attorney: Southwest Water & Property Law

Phone: (970) 426-5480 | Email: Jkane@swpropertylaw.com

Project Information

Project Name: Root & Ratlift Salinity Control Project

Brief Description of Project: (Attach separate sheets if needed)

See attached Loan Feasibility Study

Project Start Date(s) Design: 10/1/2018 - 6/30/2021 Construction: 8/1/2021 - 5/1/2022

General Location: (Attach Map of Area)

See attached Loan Feasibility Study

Project Costs - Round to the nearest thousand

Estimated Engineering Costs: $583,488.70 | Estimated Construction Costs: $3,126,718.57

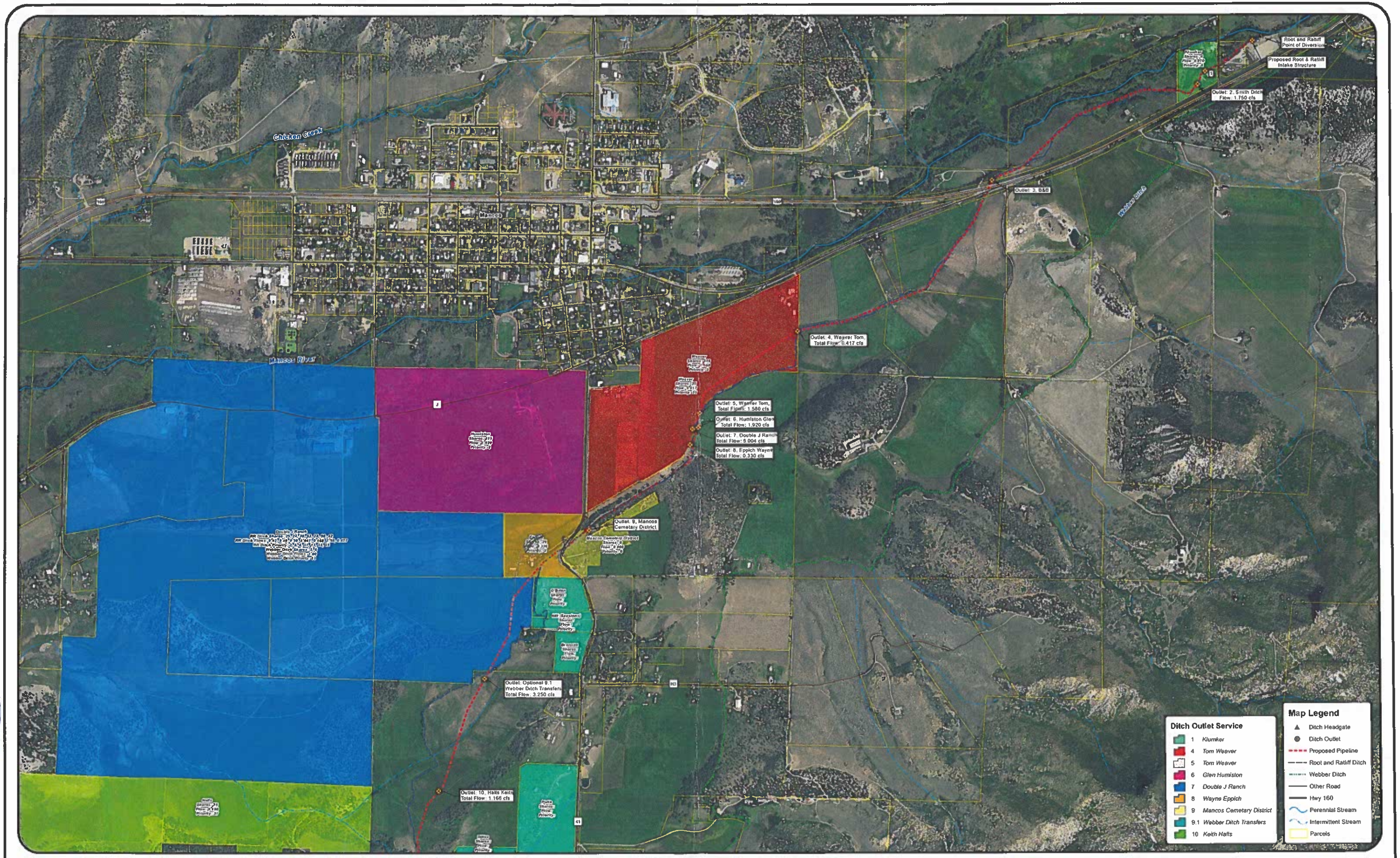
Other Costs (Describe Above): $189,813.73 | Estimated Total Project Costs: $3,900,021.00

Requested Loan Amount: $ 300,000.00 | Requested Loan Term(10, 20, or 30 years): 30 Years

Signature

Wayne E. Eppich 10-1-21
Signature / Title Date

Return to: Finance Section Attn: Matt Stearns
1313 Sherman St #718
Denver, CO 80203
Ph. 303/866.3441
e-mail: matthew.stearns@state.co.us



SGM
555 RiverGate Ln, Suite B4-82
Durango, CO 81301
970.385.2340
www.sgm-inc.com

Root and Ratliff Ditch - Service Ownership North

Date: 01/30/2019	Job No. 2018-391.001	Map by: RZM	Checked By: JR	Scale: 1:6,000

Data Sources:
NAIP 2017, San Juan Resource Conservation and Development, USGS

P:\Project Files\2018-391.001 Ratliff & Root Ditch\H-Dwgs\GIS\MXDs\Property Ownership-North.mxd

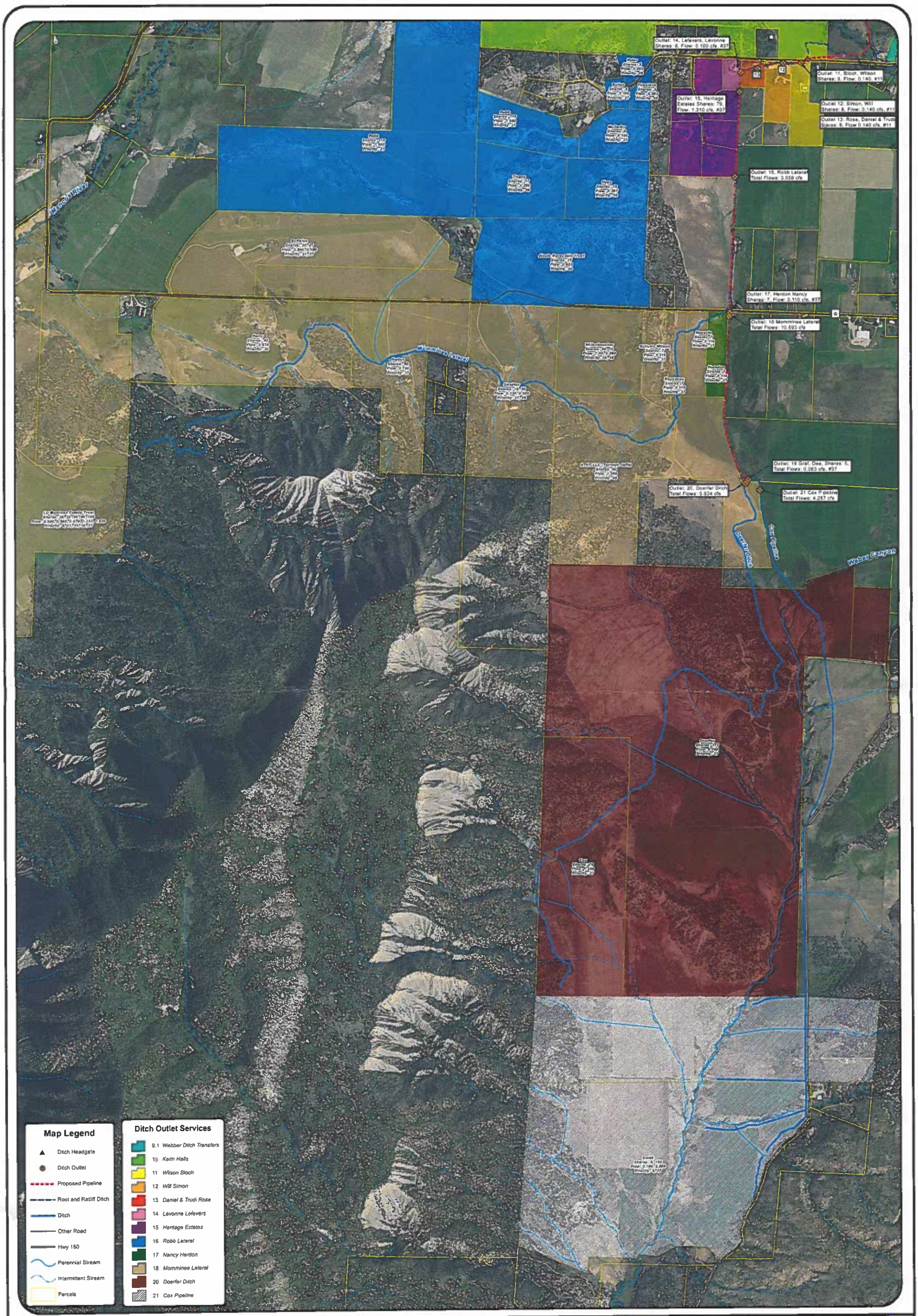
The information displayed above is intended for general planning purposes. Refer to legal documentation/data sources for descriptions/locations.

DRAFT

0 500 1,000 1,500 2,000 2,500 3,000 Feet

1 inch = 500 feet

N



SGM
555 RiverGate Ln, Suite B4-#2
Durango, CO 81301
970.385.2340
www.sgm-inc.com

Root and Ratliff Ditch - Service Ownership South

Date: 06/19/2018 | Job No. 2018-182.001 | Map by: RZM | Checked by: NJD | Scale: 7,200

Data Sources:
NAIP 2017, San Juan Resource Conservation and Development, Montezuma County GIS

File:\Project Files\2018-391 001 Ratliff & Root Ditch\H-Dwgs\GIS\MXDs\PropertyOwnership-South.mxd

The information displayed above is intended for general planning purposes. Refer to legal documentation/data sources for descriptions/locations.

0 600 1,200 1,800 2,400 Feet

DRAFT

1 inch = 600 feet

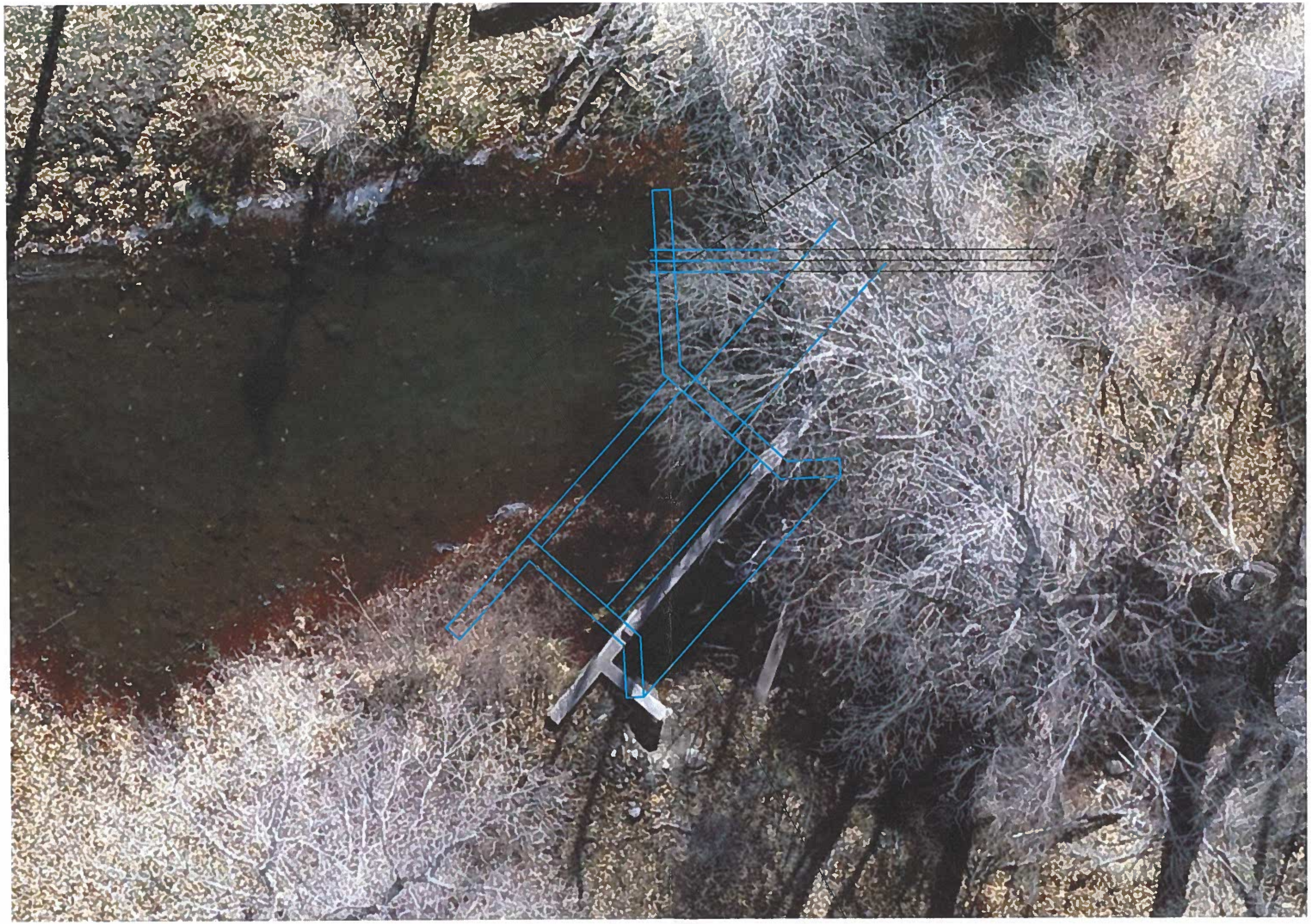
N

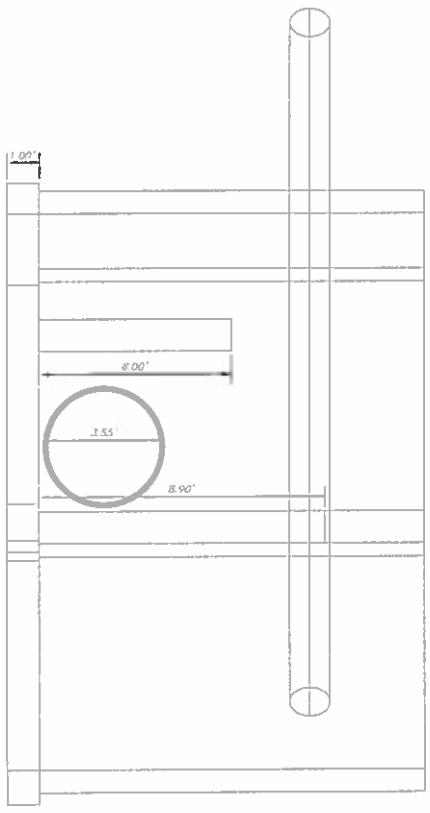
		Totals		2222	36.763	-	194.000	1.25	215	4	-	1.75	43.763		

Outlet Number	Outlet Name	Last Name or Trust Name	First Name	R&R Shares	R&R Ditch CFS	R&R Ditch Priority	Jackson Reservoir AC-FT	Additional CFS from Jackson Reservoir	Webber Shares	Webber Ditch CFS	Webber Ditch Priority	Smith Ditch CFS	Cumulative CFS	Turn Out Totals	Total After Each Turn Out
0	Ratliff and Root Headgate												43.763	43.763	43.763
1	Klumker	Klumker	Steve & Cynthia	4	0.070	6							0.070	0.070	43.693
2	Smith Ditch	Smith Ditch Company	-	0	0.000	0						1.750	1.750	1.750	41.943
3	B&B	Bed & Breakfast Box			0.000			0.500					0.500	0.500	41.443
4	Weaver Upper	Weaver	Tom	25	0.417	25							0.417	0.417	41.026
5	Weaver Lower	Weaver	Tom	110	1.580	2							1.580	1.580	39.446
6	Humiston	Humiston	Glen E.	115	1.920	2							1.920	1.920	37.526
7	Double J	Double J Ranch	Gaddis & Sharp	25	0.420	2							0.420	6.004	31.522
7	Double J	Double J Ranch	Gaddis & Sharp	24	0.400	6							0.400	-	-
7	Double J	Double J Ranch	Gaddis & Sharp	30	0.500	6							0.500	-	-
7	Double J	Double J Ranch	Gaddis & Sharp	63	1.047	11							1.047	-	-
7	Double J	Double J Ranch	Gaddis & Sharp	28	0.460	13							0.460	-	-
7	Double J	Double J Ranch	Gaddis & Sharp	90	1.500	18							1.500	-	-
7	Double J	Double J Ranch	Gaddis & Sharp	42	0.677	19							0.677	-	-
7	Double J	Double J Ranch	Gaddis & Sharp		0.000				56	1.000	13		1.000	-	-
8	Eppich	Eppich	Wayne	20	0.330	2							0.330	0.330	31.192
9	Cemetery	Mancos Cemetery District	-		0.000			0.500					0.500	0.500	30.692
9.1	Alternate	Bronson	Melinda		0.000		10.000		4	0.250	14		0.250	3.250	27.442
9.1	Alternate	Hill (Sessions)	Lee-Ann (David)		0.000		10.000	0.250	0	0.000	0		0.250	-	-
9.1	Alternate	O'Brien	Richard		0.000		13.000		15	0.250	13		0.250		
9.1	Alternate	Potts	James		0.000		30.000		4	0.500	13		0.500	-	-
9.1	Alternate	Potts	James		0.000				10		26		0.000	-	-
9.1	Alternate	Potts	James		0.000				28		26		0.000	-	-
9.1	Alternate	Stiles	Kenneth		0.000				4		14		0.000	-	-
9.1	Alternate	Stiles	Kenneth		0.000				32		26		0.000	-	-
9.1	Alternate	Stiles	Kenneth		0.000		131.000		62	2.000	13		2.000	-	-
10	Halls	Halls	Keith	70	1.166	37							1.166	1.166	26.276
11	Bloch	Bloch	Willson C.	8	0.140	11							0.140	0.140	26.136
12	Simon	Defrenchi (Simon)	Jerry (Will)	8	0.140	11							0.140	0.140	25.996
13	Rose	Rose	Daniel & Trudi	8	0.140	11							0.140	0.140	25.856
14	Lefevers	Lefevers	Lavonne	6	0.100	37							0.100	0.100	25.756
15	Heritage	Heritage Estates c/o Duffy Baumgartner	-	79	1.310	37							1.310	1.310	24.446
16	Robb Lateral	Alcala Revocable Trust	-	37	0.620	30							0.620	3.559	20.887
16	Robb Lateral	Bolles	Raymond	6	0.100	37							0.100		
16	Robb Lateral	Firestone	Steven	5	0.083	46							0.083	-	-
16	Robb Lateral	Hays	Thomas & Janie	18	0.297	46							0.297	-	-
16	Robb Lateral	McDarby	David & Linda	6	0.100	31							0.100	-	-
16	Robb Lateral	Robb	Wayne	119	1.980	31							1.980	-	-
16	Robb Lateral	Ryter	Julius	5	0.083	46							0.083	-	-
16	Robb Lateral	Tingey	Thorkild & Sara Beth	17	0.296	46							0.296	-	-
17	Herdon	Herndon	Nancy	7	0.110	37							0.110	0.110	20.777
18	Mommінee Lateral	Ancient Harvest c/o Sam Perry	-	40	0.670	30							0.670	10.593	10.184
18	Mommінee Lateral	Buffaloe	Tom	30	0.500	21							0.500	-	-
18	Mommінee Lateral	Buffaloe	Tom	27	0.450	37							0.450	-	-
18	Mommінee Lateral	Hoessle	Bradley & Hillary Ross	7	0.110	37							0.110	-	-
18	Mommінee Lateral	HTHT LLC (Terralyn Jeffs)	-	60	1.000	46							1.000	-	-
18	Mommінee Lateral	LD Mominee Family Trust	-	30	0.500	6							0.500	-	-
18	Mommінee Lateral	LD Mominee Family Trust	-	30	0.500	17							0.500	-	-
18	Mommінee Lateral	LD Mominee Family Trust	-	40	0.670	21							0.670	-	-
18	Mommінee Lateral	LD Mominee Family Trust	-	80	1.333	30							1.333	-	-
18	Mommінee Lateral	LD Mominee Family Trust	-	109	1.820	37							1.820	-	-
18	Mommінee Lateral	Patton	John	45	0.750	37							0.750	-	-
18	Mommінee Lateral	Rousseau	Barbara	7	0.110	37							0.110	-	-
18	Mommінee Lateral	Sciturro Wilson	Rena	7	0.110	37							0.110	-	-
18	Mommінee Lateral	Strother	Robin/Nancy	19	0.320	37							0.320	-	-
18	Mommінee Lateral	Strother	Robin/Nancy	30	0.500	46							0.500	-	-
18	Mommінee Lateral	Willenbeucher	Ilse	60	1.000	36							1.000		
18	Mommінee Lateral	Willenbeucher	Ilse	15	0.250	46							0.250	-	-
19	Graf	Graf	Robert c/o Dee Graff	5	0.083	37							0.083	0.083	10.101
20	Doerfer Ditch	Cox	Terry	75	1.250	37							1.250	5.834	4.267
20	Doerfer Ditch	Doerfer	Pete	275	4.584	37							4.584	-	-
21	Cox Pipeline	Cox	Lyle	100	1.667	37							1.667	4.267	0.000
21	Cox Pipeline	Smith	Luke	6	0.100	6							0.100	-	-
21	Cox Pipeline	Smith	Luke	150	2.500	37							2.500	-	-
	Can't Locate	King	Sharon	0	0.000	0							0.000	-	-
	Can't Locate	Yeomans Family	-	0	0.000	0							0.000	-	-

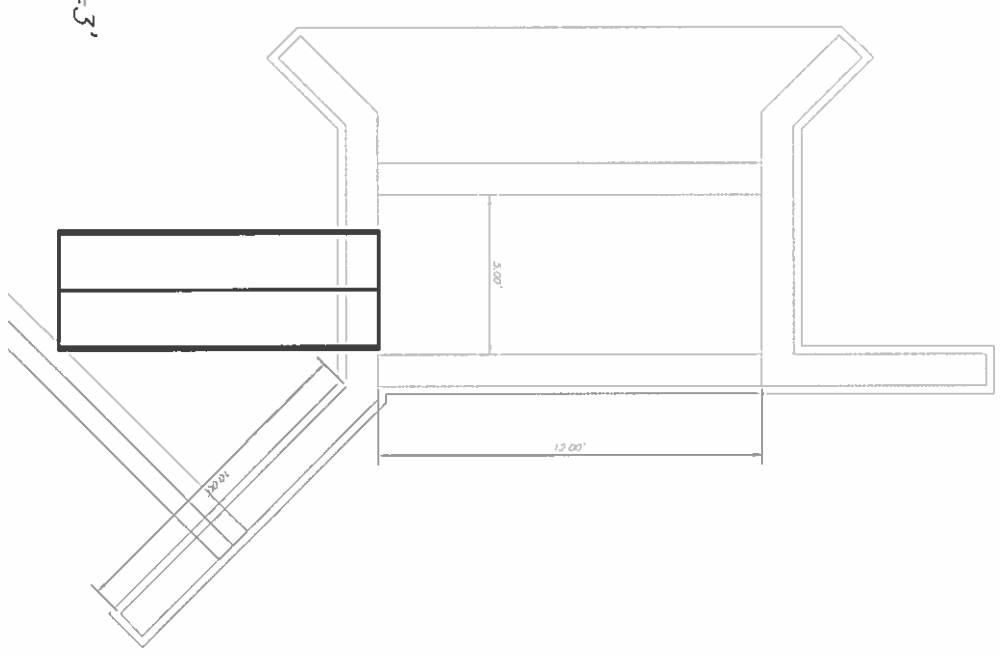
Pipe Run ID	From Node	To Node	Outlet Name	Outlet Demand	Pipe I.D. (IN)	Pipe Size (IN)	Pipe Material	Pipe Pressure Rating (PSI)	72% Pipe Pressure Rating (PSI)	Outlet Pressure (PSI)	Outlet Pressure w/ Zero Flow (PSI)	Pipe Length (FT)	Pipe Flow (CFS)	Pipe Velocity (FT/S)	Outlet Elevation (FT)	Outlet Head (FT)
RUN_01	HEADGATE	OUTLET_1	Klumker	0.07	42.65	42	C905 DR51	80	57.60	3.40	4.30	765.64	43.76	4.41	7192.73	7200.56
RUN_02	OUTLET_1	OUTLET_2	Smith Ditch	1.75	42.65	42	C905 DR51	80	57.60	4.57	6.13	277.57	43.69	4.40	7188.51	7199.06
RUN_03	OUTLET_2	OUTLET_3	B&B	0.50	42.65	42	C905 DR51	80	57.60	13.97	17.28	2,970.24	41.94	4.23	7162.77	7195.02
RUN_04	OUTLET_3	OUTLET_4	Weaver Upper	0.42	42.65	42	C905 DR51	80	57.60	36.35	41.55	3,402.38	41.44	4.18	7106.75	7190.66
RUN_05	OUTLET_4	OUTLET_5	Weaver Lower	1.58	42.65	42	C905 DR51	80	57.60	40.41	46.77	1,700.82	41.03	4.14	7094.71	7187.98
RUN_06	OUTLET_5	OUTLET_6	Humiston	1.92	42.65	42	C905 DR51	80	57.60	39.13	45.97	154.21	39.45	3.98	7096.56	7186.86
RUN_07	OUTLET_6	OUTLET_7	Double J	6.00	42.65	42	C905 DR51	80	57.60	38.18	45.44	100.61	37.53	3.78	7097.79	7185.90
RUN_08	OUTLET_7	OUTLET_8	Eppich	0.33	36.30	36	C905 DR41	100	72.00	38.21	46.07	141.11	31.52	4.39	7096.33	7184.52
RUN_09	OUTLET_8	OUTLET_9	Cemetery	0.50	36.30	36	C905 DR41	100	72.00	39.09	48.45	1,857.36	31.19	4.34	7090.82	7181.03
RUN_10	OUTLET_9	OUTLET_9.1	Alternate	3.25	36.30	36	C905 DR41	100	72.00	41.63	52.72	2,342.41	30.69	4.27	7080.97	7177.05
RUN_10.1	OUTLET_9.1	OUTLET_10	Hall's	1.17	36.30	36	C905 DR41	100	72.00	48.25	60.40	1,562.01	27.44	3.82	7063.25	7174.61
RUN_11	OUTLET_10	OUTLET_11	Bloch	0.14	36.30	36	C905 DR41	100	72.00	54.52	67.90	2,218.57	26.28	3.66	7045.94	7171.76
RUN_12	OUTLET_11	OUTLET_12	Simon	0.14	36.30	36	C905 DR41	100	72.00	56.63	70.44	183.84	26.14	3.64	7040.08	7170.77
RUN_13	OUTLET_12	OUTLET_13	Rose	0.14	29.91	30	C905 DR41	125	90.00	61.58	76.64	479.25	26.00	5.33	7025.78	7167.91
RUN_14	OUTLET_13	OUTLET_14	Lefevers	0.10	29.91	30	C905 DR41	125	90.00	66.70	82.83	320.55	25.86	5.30	7011.50	7165.44
RUN_15	OUTLET_14	OUTLET_15	Heritage	1.31	29.91	30	C905 DR41	125	90.00	66.62	83.78	287.35	25.76	5.28	7009.30	7163.06
RUN_16	OUTLET_15	OUTLET_16	Robb Lateral	3.56	29.91	30	C905 DR41	125	90.00	68.06	87.02	1,275.51	24.45	5.01	7001.81	7158.89
RUN_17	OUTLET_16	OUTLET_17	Herdon	0.11	29.29	30	C905 DR25	165	118.80	82.48	103.55	2,147.87	20.89	4.46	6963.66	7154.02
RUN_18	OUTLET_17	OUTLET_18	Momminee Lateral	10.59	29.29	30	C905 DR25	165	118.80	82.01	103.62	10.74	20.78	4.44	6963.50	7152.78
RUN_19	OUTLET_18	OUTLET_19	Graf	0.08	19.77	20	C905 DR25	165	118.80	85.76	111.46	2,642.36	10.18	4.78	6945.42	7143.34
RUN_20	OUTLET_19	OUTLET_20	Doerfer Ditch	5.83	19.77	20	C905 DR25	165	118.80	84.39	110.72	13.54	10.10	4.74	6947.13	7141.90
RUN_21	OUTLET_20	OUTLET_21	Cox Pipeline	4.27	14.00	14	C905 DR25	165	118.80	83.78	110.55	15.39	4.27	3.99	6947.52	7140.87

Pipe Diameter	Pipe Length Total	Length	Average Velocity
42"	9371.47	9372	4.67
36"	8305.3	8306	4.48
30"	4,521.27	4522	4.14
20"	2,655.90	2656	4.32
14"	15.39	16	4.41
	24,869.33	24,872.00	





SCALE 1"=3'



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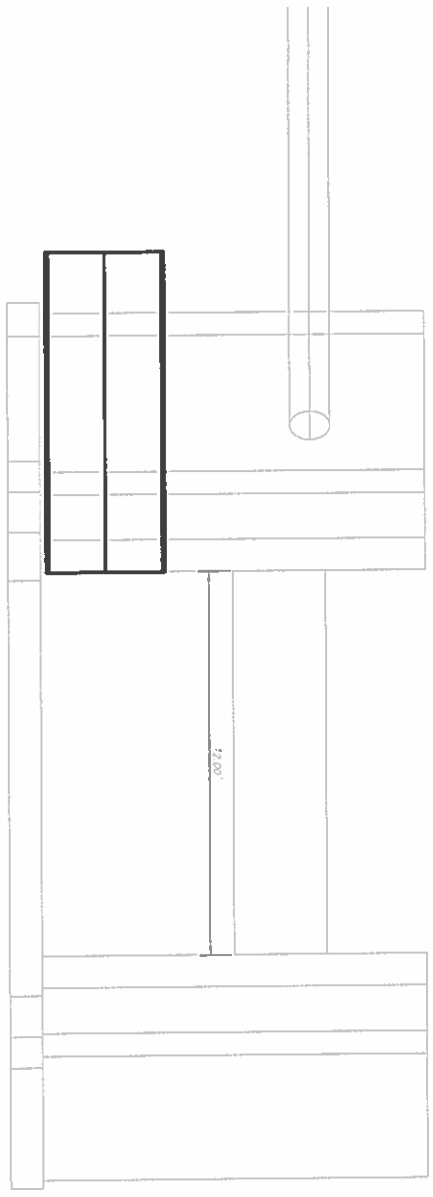

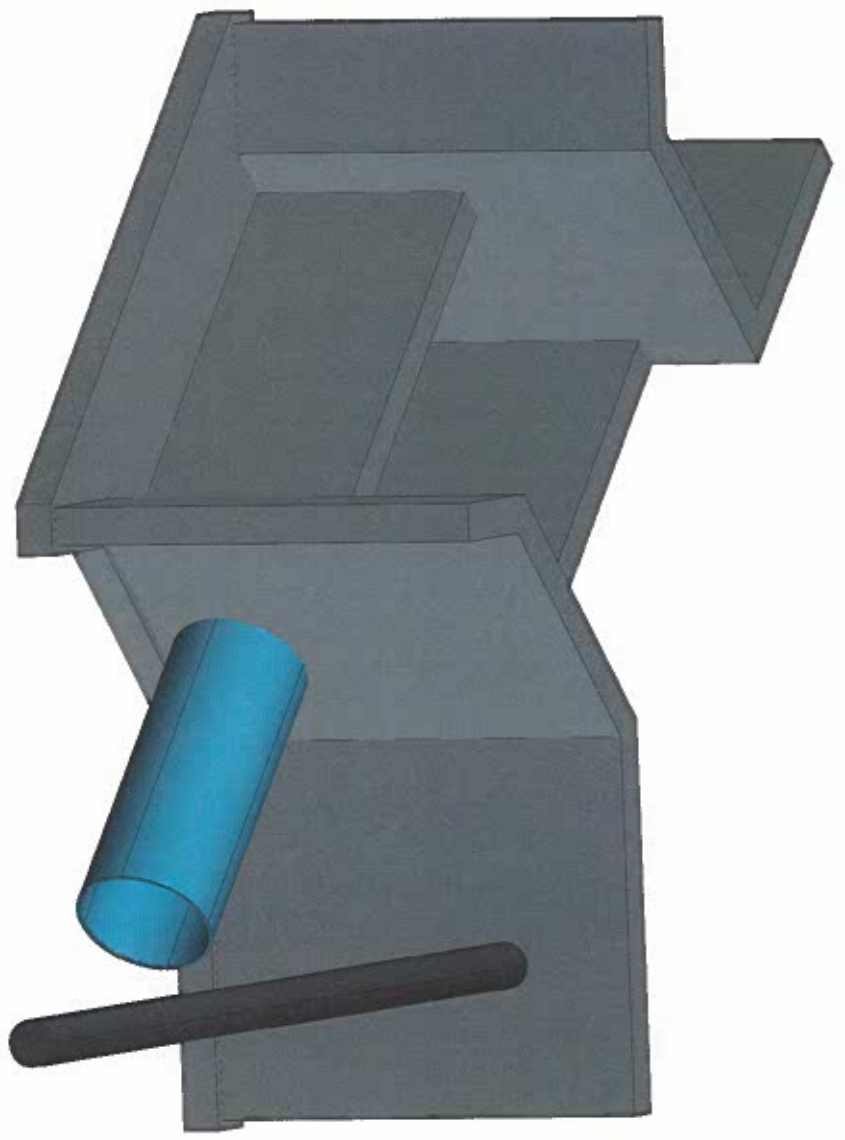

SCALE 1"=3'

#	Revision	Date	By:
1			

Project Milestone: Preliminary Not For Construction

Job No. 2018-391.001
Drawn By: SK
Date: 01.22.19
QC: JO | PE:
File: RR-Intake3D

Title: RR-Intake3D - 34x22Plan

Dwg No. 1

Of: 1

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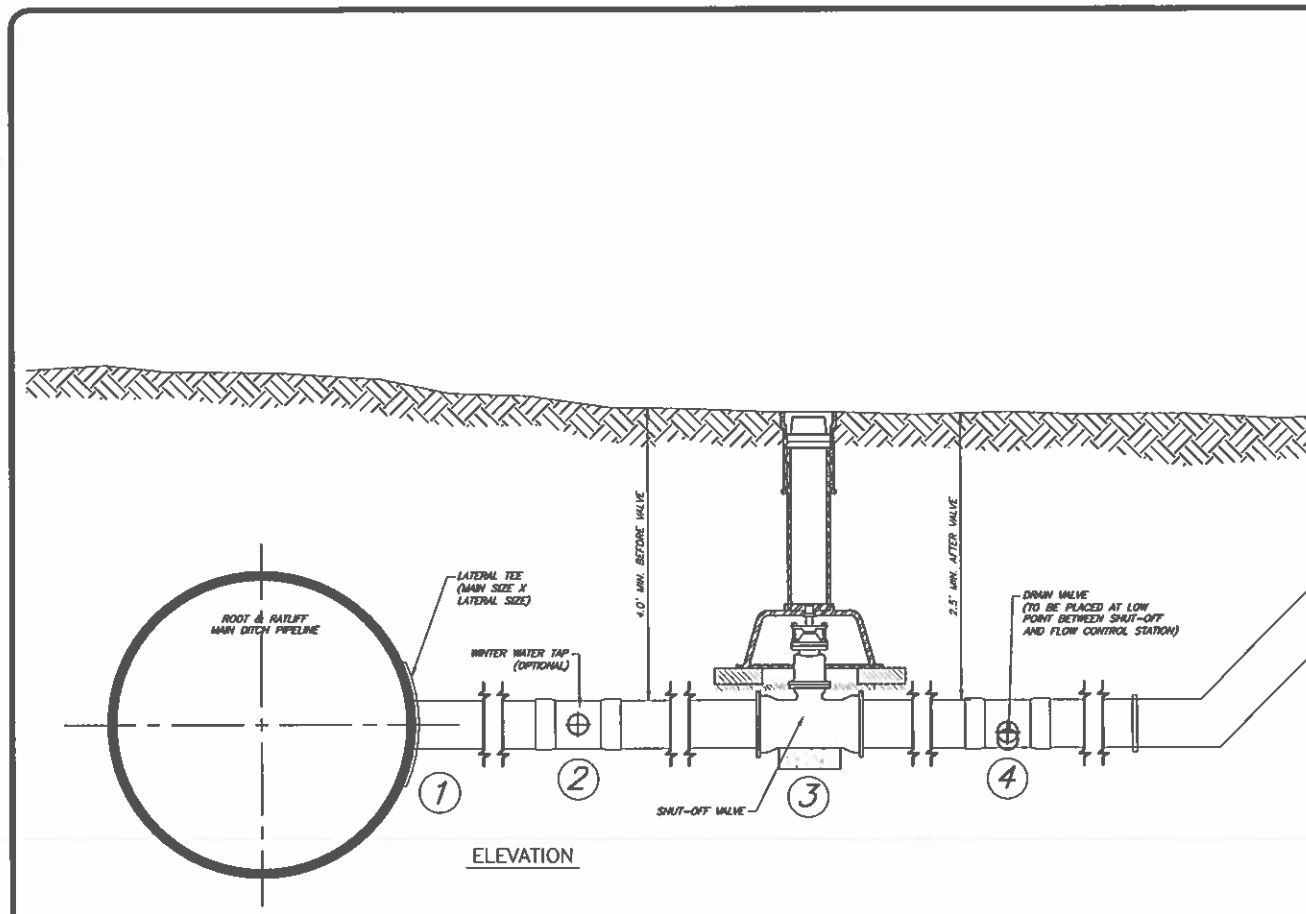
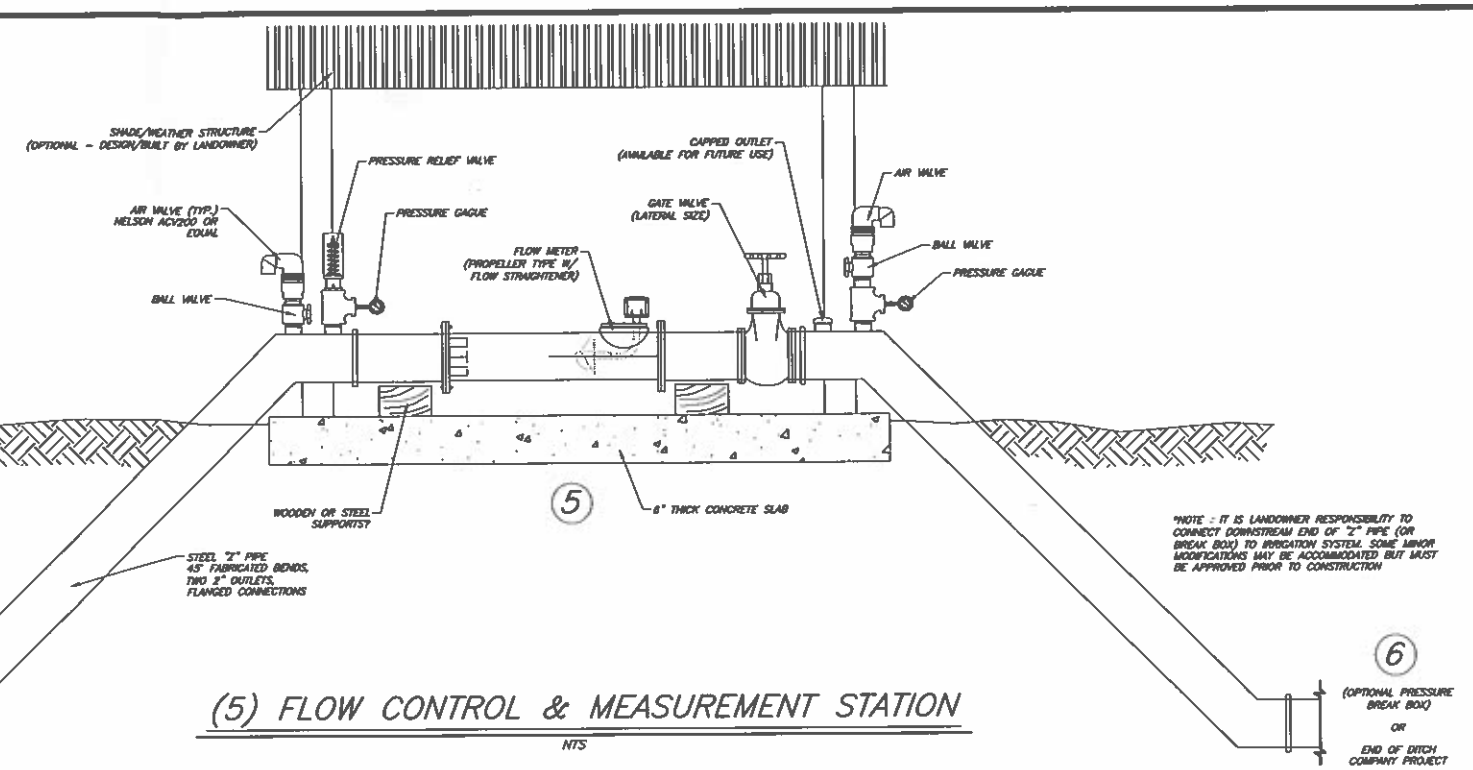


ELEVATION

LATERALS & OUTLET CONFIGURATION

NTS



(5) FLOW CONTROL & MEASUREMENT STATION

NTS

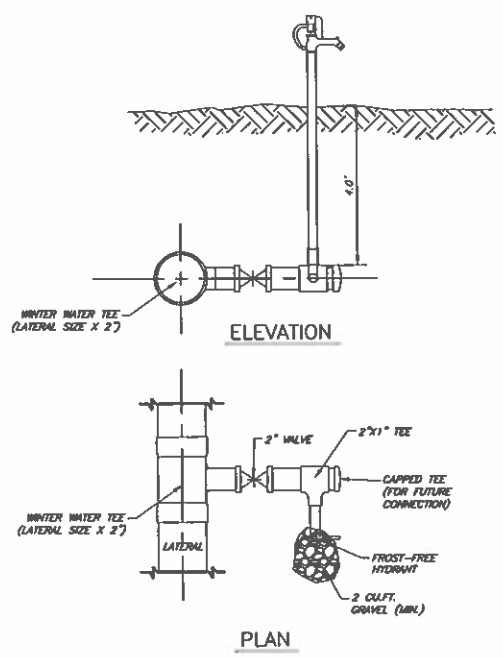
LATERAL & OUTLET NOTES

1. SPECIFIC LOCATIONS OF VARIOUS OUTLET COMPONENTS SHALL AS BE NOTED ON PLANS.
2. WINTER WATER IS NOT MEASURED AT EACH OUTLET LOCATION.
3. THE SHUT OFF VALVE IS TO BE OPERATED BY THE DITCH COMPANY, IF THE WATER USER DESIRED TO TURN DOWN OR OFF THEIR WATER THEY MAY OPERATE THE GATE VALVE ON THE FLOW CONTROL & MEASUREMENT STATION.
4. FOR INITIAL CALIBRATION OF THE SYSTEM, THE DITCH OPERATOR MAY REQUIRE THE USER'S IRRIGATION SYSTEM TO BE IN USE TO CALIBRATE THE SHUT-OFF VALVE TO DELIVER A SPECIFIED FLOW RATE. THE DITCH OPERATOR MAY HAVE TO FURTHER ADJUST THE SHUT-OFF VALVE IN USE WHILE LOOKING AT FLOW METER.
5. FOR EASE OF OPERATING, FLOW METER AND SHUT-OFF VALVE SHOULD BE PLACED AS CLOSE AS POSSIBLE.
6. TO OPTIMIZE WINTER OPERATION AND REDUCE SEDEMENTATION, THE SHUT-OFF VALVE SHALL BE PLACED AS CLOSE TO MAIN LINE AS POSSIBLE.

Outlets				
Outlet #	User	Main Line Size	Lateral Size	Tee Type
1	Klumker	42"	6"	Saddle
2	Smith Ditch	42"	6"	Saddle
3	B&B	42"	6"	Saddle
4	Weaver Upper	42"	6"	Saddle
5	Weaver Lower	42"	6"	Saddle
6	Humiston	42"	6"	Saddle
7	Double J	42"	6"	Saddle
8	Eppich	42"	6"	Saddle
9	Cemetary	42"	6"	Saddle
10	Halls	42"	6"	Saddle
11	Bloch	42"	6"	Saddle
12	Mommsinee	42"	6"	Saddle
13	Simon	42"	6"	Saddle
14	Heritage	42"	6"	Saddle
15	Cox	42"	6"	Saddle
16	Doerfer	42"	6"	Saddle
17	Graf	42"	6"	Saddle
18	Lefevers	42"	6"	Saddle
19	Robb	42"	6"	Saddle
20	Rose	42"	6"	Saddle

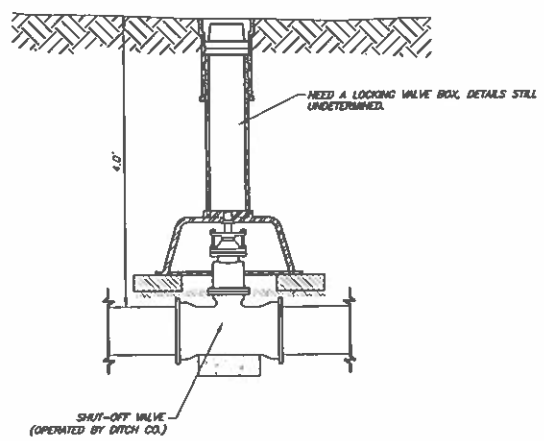
(1) TEE FROM MAIN LINE

NTS



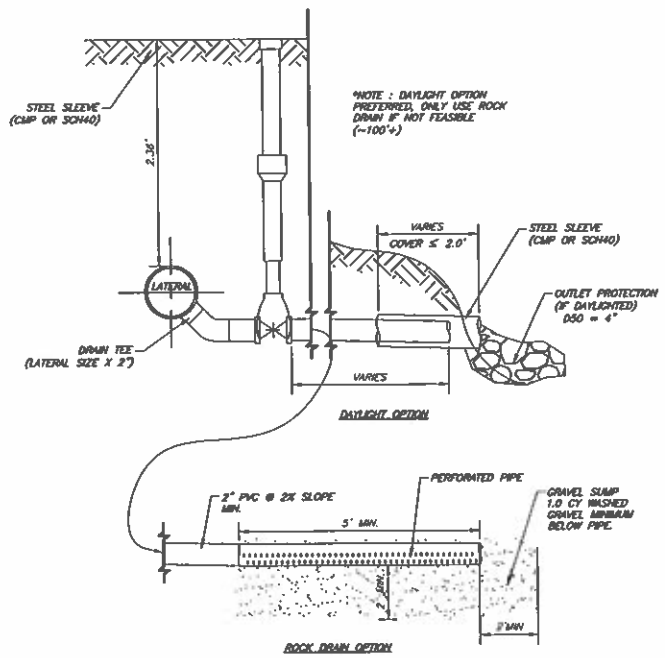
(2) WINTER WATER TAP

NTS



(3) SHUT-OFF VALVE

NTS



(4) DRAIN DETAIL

NTS

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Mancos, CO

No.	By	Date	Revision

Project Milestone: Preliminary Not For Construction

Job No. 2018-391.001
Drawn by XX
Date 01.31.2019
QC: XX PE: XX
File RR-WaterDetails

Title: Outlet Details

Dwg No. 3
Of

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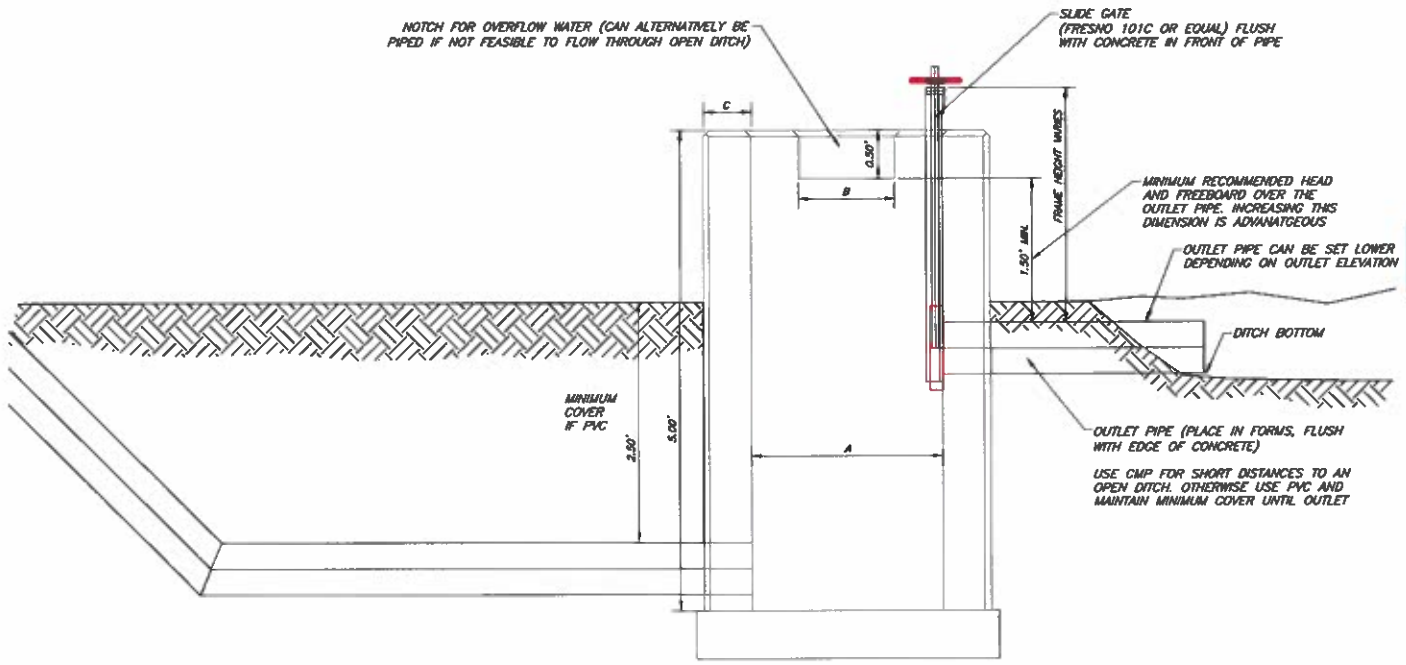
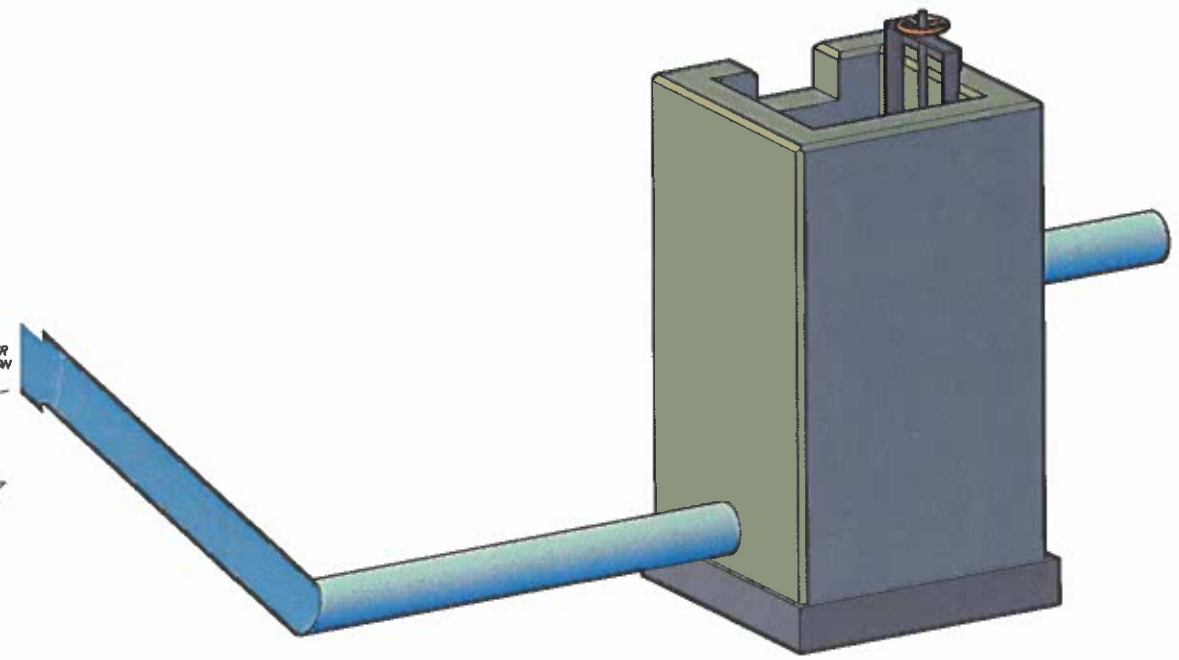


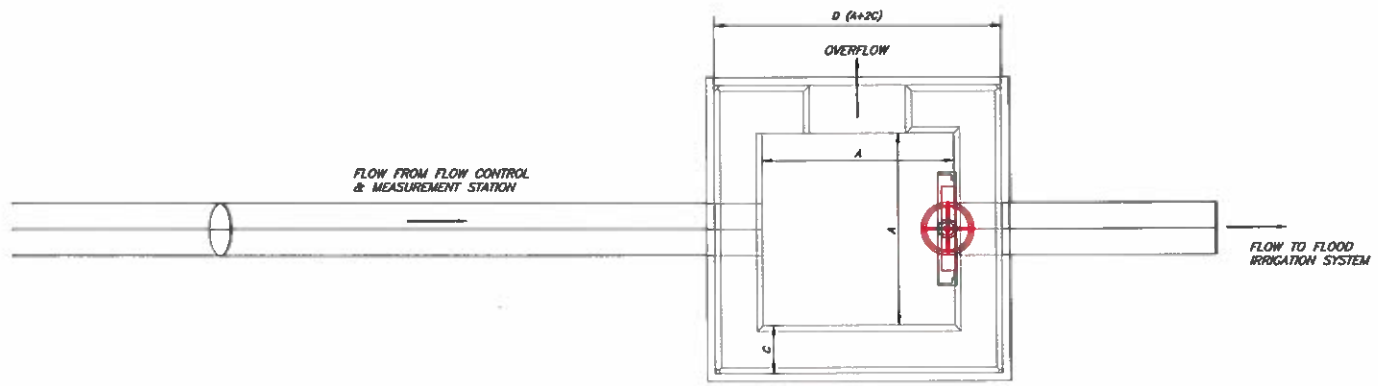
FRONT VIEW



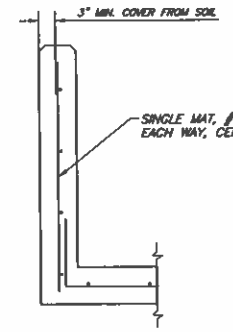
ISOMETRIC VIEW

(6) BREAK PRESSURE BOX

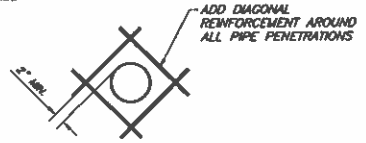
NTS



TOP VIEW



REINFORCEMENT IN WALLS (TYP.)



REINFORCEMENT AROUND PIPE (TYP.)

STRUCTURE NOTES

OPERATION

1. BREAK PRESSURE BOXES WILL ONLY BE APPLICABLE TO WATER USERS THAT CURRENTLY FLOOD IRRIGATED AND PLAN TO GOING FORWARD.

2. BREAK PRESSURE BOXES REQUIRE MANUAL OPERATION AND OVERSIGHT. IF NOT PROPERLY MANAGED VIA THE FLOW CONTROL VALVE AND THE OUTLET VALVE THERE MAY BE EXCESS OVERFLOW WATER. BOX SHOULD BE MANAGED IN A MANNER THAT THE OVERFLOW "CHANNEL" IS RARELY USED.

STRUCTURE DIMENSIONS

1. RECOMMENDED DIMENSIONS FOR THE BREAK PRESSURE BOXES ARE SHOWN TO THE RIGHT BASED UPON LATERAL DIAMETER.

2. DEPENDING ON THE EXACT SITE CONDITIONS AND NEEDS OF THE IRRIGATOR, ADDITIONAL MODIFICATIONS AND CHANGES MAY BE REQUIRED. EACH SITE WILL NEED TO BE EVALUATED AND VERIFIED WITH THE WATER USER PRIOR TO CONSTRUCTION.

3. IT IS DESIRABLE TO PLACE THE BOX AT A HIGHER POINT ON THE SITE TO ALLOW IT TO BE BURIED AND MAINTAIN POSITIVE GRADE AND FLOW TO EXISTING IRRIGATION DITCHES.

BREAK PRESSURE BOX DIMENSIONS

LATERAL SIZE (IN.)	OUTLET SIZE (IN.)	"A"	"B"	"C"	"D"	CONCRETE C.Y.
2	3	2'-0"	1'-0"	6"	3'-0"	–
3	4	2'-0"	1'-0"	6"	3'-0"	–
4	6	2'-0"	1'-0"	6"	3'-0"	–
6	8	2'-0"	1'-0"	6"	3'-0"	–
8	10	2'-0"	1'-0"	6"	3'-0"	–
10	12	3'-0"	1'-6"	6"	4'-0"	–
12	14	4'-0"	2'-0"	8"	5'-4"	–
14	18	5'-0"	3'-0"	8"	6'-4"	–

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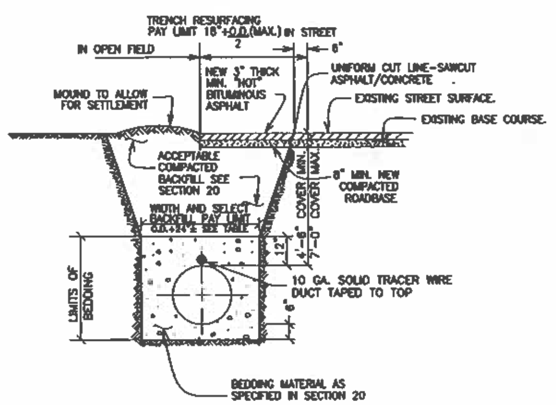
Root & Ratliff Ditch Co.
Mancos, CO

#	Revision	Date	By:
1	Project Milestone: Preliminary Not For Construction		

Job No. 2018-391.001
Drawn by: XX
Date 01.31.2019
QC: XX PE: XX
File: RR-Break Box
Title: Break Pressure Box
Dwg No. 4

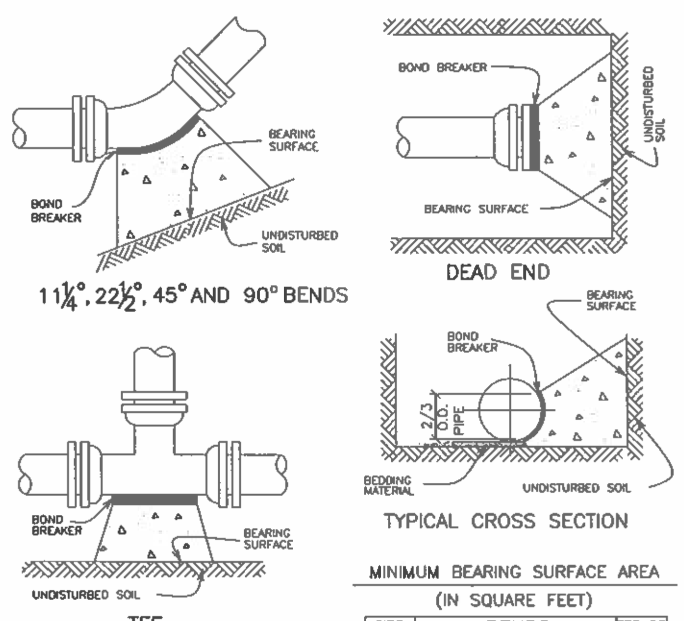


PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
12"	2'-0"	3'-0"
16"	2'-4"	3'-4"
20"	2'-8"	3'-8"
24"	4'-0"	5'-0"

NOTES:
1. PAVING SHALL COMPLY WITH SECTION 15
2. TRENCH WALLS TO BE SUPPORTED AS REQUIRED BY O.S.H.A.
3. ALL DISTURBED SURFACES SHALL BE RESTORED TO ORIGINAL CONDITIONS.
4. BACKFILL COMPACTION SHALL BE 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM 0698 OR AASHTO 799.
5. IF THE EXISTING PAVEMENT IS GREATER THAN 3", MATCH EXISTING WITH NEW PAVEMENT.
6. IF THE EXISTING ROAD BASE IS GREATER THAN 6", MATCH EXISTING WITH NEW ROAD BASE.

TRENCH SECTION (TYP.)

NTS



MINIMUM BEARING SURFACE AREA

(IN SQUARE FEET)

SIZE OF PIPE	BENDS 11¼°	22½°	45°	90°	TEE OR DEAD END
4"	1.00	1.00	1.00	1.50	1.50
6"	1.00	1.25	2.25	3.00	3.00
8"	1.00	2.00	4.00	5.25	5.25
12"	2.25	4.50	8.75	11.25	11.25
16"	3.75	7.50	14.50	27.00	19.00
20"	5.00	10.00	19.50	35.50	25.00
24"	7.00	14.00	27.75	51.00	36.00

NOTES:

1.) BEARING SURFACES SHOWN IN CHART ARE MINIMUM.

2.) BASED ON 150 PSI INTERNAL PIPE PRESSURE PLUS WATER HAMMER. 4",6",8" AND 12" WATER HAMMER = 110 P.S.I. 16",20" AND 24" WATER HAMMER = 70 P.S.I.

3.) BASED ON 3,000 psf SOIL BEARING CAPACITY.

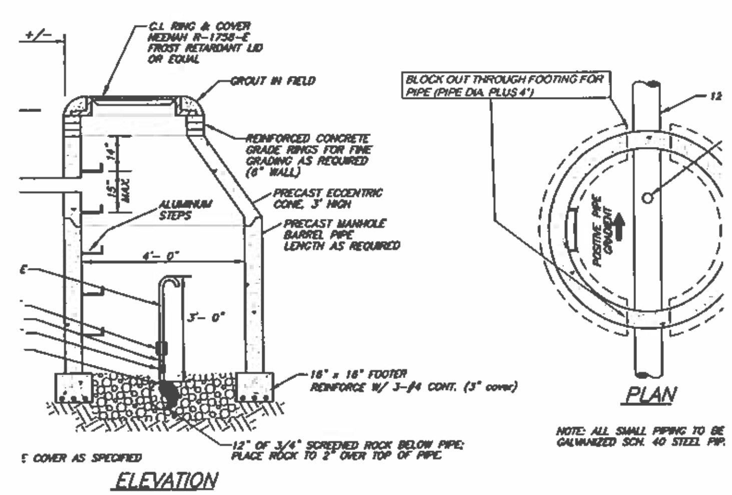
4.) ALL BENDS, TEE BRANCHES AND DEAD ENDS SHALL BE RESTRAINED AND KICK BLOCKED.

CONCRETE REACTION BLOCKS

NTS

MANHOLE CONSTRUCTION NOTES:

1. USE RUB-R-NEK PREFORMED GASKET (2 LAYERS) OR GROUT IN PLACE BETWEEN ALL BOTTOM SECTION, BARREL SECTIONS, CONCRETE GRADE RINGS, AND TOP CASTINGS.
2. BACKFIELD WITHIN 24" OF MANHOLE: CLASS 2 AGGREGATE OR NATIVE MATERIALS WITH LESS THAN 3" SIZE.
3. PRECAST RINGS OR METAL RISER RING COURSE SHALL BE UTILIZED WHERE REQUIRED WITH 2 COURSES MINIMUM AND 12 COURSES MAXIMUM (2 MINIMUM, 12" MAXIMUM HEIGHT).
4. GRADE ADJUSTMENT AS FOLLOWS: GREATER THAN, OR EQUAL TO, 1 FOOT, CONCRETE BARREL SECTIONS; LESS THAN 1 FOOT, CONCRETE OR METAL GRADE RINGS.
5. FINISH GRADE AS FOLLOWS: WITH ASPHALT OR CONCRETE PAVEMENTS FLUSH; WITH BASE COURSE SURFACE OR DIRT/TOPSOIL -3" BELOW GRADE.



MAIN LINE AIR VALVE

NTS

#	Revision	Date	By

Project Milestone: Preliminary Not For Construction

Job No.	2018-391.001
Drawn by:	XX
Date	01.31.2019
QC: XX	PE: XX
File:	RR-WaterDetails

Title: Additional Details

Dwg No. 5

Of: -

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