

MEMORANDUM

TO: Board of Trustees

THROUGH: Indra Winquest
District General Manager

FROM: Nathan Chorey, P.E.
Engineering Manager

Michael Lefrancois, P.E.
Senior Engineer

SUBJECT: Receive and possibly discuss recap of Project:
Watermain Replacement – Martis Peak Road Vicinity;
Fund: Utilities; Division: Water; Project 2299WS1704

DATE: November 10, 2020

I. BACKGROUND

At the June 23, 2020 IVGID Board of Trustees Meeting, a motion was made to:

1. Reduce the appropriation in the project by \$353,910 which will result in a new lower project budget (amending our FY2020-21 budget and Five-Year CIP) and the \$353,910 returns to Utility Fund balance with no risk that it remains "available" for other projects later this year without Board action to re-appropriate.
2. Award unit price contract to RaPiD Construction in the amount of \$456,610 for the Watermain Replacement - Martis Peak Vicinity project.
3. Authorize Chair and Secretary to execute the contract with RaPiD Construction based on a review by General Counsel and Staff.
4. Authorize Staff to approve change orders to the construction contract for additional work not anticipated at this time of up to 10% of the project bid - \$46,000.
5. Authorize Staff to enter into an Additional Services Addendum with Tri Sage Consulting totaling \$48,480 for services during construction of the project.
6. Have a project recap agenda item at the first meeting in November of 2020 of the Board of Trustees.

II. PROJECT RECAP

The 2020 Watermain Replacement – Martis Peak Road Vicinity Project was designed by IVGID Engineering staff and constructed by Rapid Construction. A notice of completion was recorded on October 21, 2020 and is attached to this memo.

The project included installing a new water main in Martis Peak Road and in Rifle Peak Road to replace older leaking steel water mains, increase the fire flow capacity, and add fire hydrants to improve coverage. The project also included slip-lining an existing 14” pipe under State Route 28 to provide redundancy for the primary water transmission main from Burnt Cedar Water Intake to Reservoir 2-1.

Specific improvements include:

Martis Peak Road: Replaced 1,130 linear feet of 6-inch steel water main with 8-inch PVC water main, thirteen (13) residential service lines, and installed three (3) fire hydrants.

Rifle Peak Ct.: Replaced 268 linear feet of 6-inch steel water main with 8-inch PVC water main, four (4) residential service lines, and the installed one (1) fire hydrant.

State Route 28 Undercrossing: Slip-lined 140 linear feet of 10-inch Fusible PVC into an existing 14-inch welded steel supply water pipeline under Nevada DOT State Route 28 near Preston Field. The new 10-inch Fusible PVC water main was fitted with a new magnetic water meter in a vault at Preston Field to improve system monitoring.

Photos from the construction project have been attached to this memo for your reference.

III. PROJECT COST COMPARISON

The estimated cost of the Watermain Replacement – Martis Peak Vicinity Project (2299WS1704) was included in the memorandum to the Board of Trustees on June 23, 2020. The table below compare the estimated cost to the actual cost occurred to date.

Task	Estimated Cost	Cost To Date
Construction contract – Unit Price	\$456,610	\$465,924.50
10% Construction reserves (Unforeseen conditions)	\$46,000	\$10,700
Construction Services consultant during construction	\$48,480	\$28,886
Testing and expenses	\$10,000	\$4,597.95
District staff and equipment time	\$35,000	\$34,244.83*
Washoe Co. Street Repair and Costs	\$40,000	\$40,000**
Total	\$636,090	\$584,353.28

* From July 1, 2020 – October 31, 2020

** Final Costs have not come in from Washoe County

Overall, the project cost will be less than the estimated cost presented to the Board of Trustees in June 23, 2020. The District will incur no further expenses for construction or construction services. Staff has worked to close out the project in November so the final cost of the “District Staff and equipment time” line item will increase slightly. Finally, we have not received the final invoice for the Street Cut Permit from Washoe County but we anticipate this will be in line with our original estimate. The funds remaining in the Watermain Replacement – Martis Peak Vicinity Project (2299WS1704) will revert to Utility Fund balance.

IV. FINANCIAL COMMENTS

At the June 23, 2020 Board of Trustee Meeting, the Trustees moved to reduce the project budget for the Watermain Replacement – Martis Peak Vicinity project by \$353,910 which resulted in a new lower project budget (amending our FY2020-21 budget and Five-Year CIP) and the \$353,910 returned to Utility Fund as “un-allocated”, and thus not available for other projects without Board action to re-appropriate.

At the December 9, 2020 Board of Trustees meeting, Staff will be bringing forward a request to accelerate a project in the FY2021/2022 Capital Improvement Budget to facilitate getting the watermain design started for Slott Peak Court. This acceleration would take advantage of the current competitive bid climate and allow the District to bid the project in spring 2021. Construction would commence in July 2021 when construction funds are available.

V. BUSINESS IMPACT

This item is not a "rule" within the meaning of Nevada Revised Statutes, Chapter 237, and does not require a Business Impact Statement.



Project Summary

Project Number:	2299WS1704
Title:	Watermain Replacement - Martis Peak Road vicinity
Project Type:	D - Capital Improvement - Existing Facilities
Division:	21 - Supply & Distribution
Budget Year:	2021
Finance Options:	
Asset Type:	DI - Distribution Infrastructure
Active:	Yes

Project Description			
<p>Project area Martis Peak Vicinity. Work includes Rifle Peak Ct and SR28 under crossing accessed from Martis Peak Rd. This project is a continuation of the multi-year program to replace the 1960's era thin-wall steel water mains and other deficient water mains. Replacement criteria are twofold: Replace those water mains with the most leaks and in streets with aging pavement. Since our water loss is now less than 6%, our main objective is to work closely with the Washoe County Road Department to replace water mains just prior to the County's repaving the street. We also work closely with the North Lake Tahoe Fire Protection District to determine areas of low fire flow, which may indicate a need for increased capacity in that area. There is approximately 6 miles of old steel watermains remaining in the system.</p> <p>Our water main replacement strategy involves meeting with Washoe County prior to each budget year and jointly agreeing on streets to be paved and water mains to be replaced. This project budgets to replace approx. 6 miles of pipeline in 15 years at \$1,500,000 per mile. Without additional escalators, that is \$9,000,000 in 15 years or \$600,000 per year. Adjustments have been made to allow for the trend of a high year then low year of work scheduled.</p>			
Project Internal Staff			
Engineering will perform Design, Engineering, Bidding, Contract Administration and Inspection tasks. Outside contractor to do the work. IVGID resources remain available for ongoing maintenance activities and emergency response.			
Project Justification			
Our overall goal is to replace deficient watermains to keep our unaccounted for water loss to under 6% and to avoid costly pavement patch penalties imposed by Washoe County. The original watermains installed in much of Incline Village in the 1960's were thin-walled steel. These pipes are now failing repeatedly and need replacement. Washoe County has high pavement penalty costs for replacing watermains in newly paved streets. Replacing watermains in newly paved streets or streets with an excellent pavement condition could increase project costs by up to 50% due to pavement cut penalties.			
Forecast			
Budget Year	Total Expense	Total Revenue	Difference
2021			
Construction Inspecting & Testing	60,000	0	60,000
Internal Planning & Design	25,000	0	25,000
Washoe Co Street repair and penalties	60,000	0	60,000
Watermain Construction Rifle Peak Ct	175,000	0	175,000
Watermain Construction Martis Peak Rd	570,000	0	570,000
Watermain Repair - 14in SR28 Undercrossing	100,000	0	100,000
Year Total	990,000	0	990,000
	990,000	0	990,000
Year Identified	Start Date	Est. Completion Date	Manager
			Project Partner

2017	Jul 1, 2020	Jun 30, 2021	Senior Engineer	
------	-------------	--------------	-----------------	--

Excerpt from the minutes of the June 23, 2020 meeting – reference document

- 3.A. Review, discuss, and possibly reduce the appropriation in this project by \$353,910 and authorize multiple contracts for the 2020 Watermain Replacement and Fire Flow Enhancement Project [budgeted at \$990,000] - 2020/2021 Capital Improvement Project: Watermain Replacement – Martis Peak Road Vicinity; Fund: Utilities; Division: Water; Project 2299WS1704. Vendor: RaPiD Construction in the amount of \$456,610 and Tri Sage Consulting in the amount of \$48,480. (Requesting Staff Members: Director of Public Works Joe Pomroy and Engineering Manager Nathan Chorey) (moved from the Consent Calendar Item G.2.)**

Engineering Manager Nathan Chorey gave an overview of the submitted materials. Chairman Callicrate said that the concern of some is that the transmission line, addressed in 2018 and abandoned in 2001, is being brought back in as a redundant feature and that it got lumped in so we need a strong overview of why this is being done now, it is a part of our five-year plan, and was it misnamed or not put in there? This gets back to the bigger question which is how we delineate projects in Public Works instead of lumping together projects. We, as a Board, have requested further drilling down so we can track them more easily and so it would help the entirety of the project. We need to make sure that each aspect of our projects are moving along and be able to track them more easily. Director of Public Works Joe Pomroy said that the transmission main that we are dealing with is the original and that it travels all the way to Lariat Circle and that it was also built in the 1960's near Ski Way. This was the original line when Boise Cascade developed the area and that they paralleled, with another watermain, all the way down to Burnt Cedar. Both remained in service until 1990. The steel watermain was subject to leaks and the 24-inch line could provide all the needs of the town. It has long been a desire to get this redundant line in place. When you get to Preston Field, and get water there, we can move it from there. A couple of years ago, there was a leak study done on that pipeline with Pure Technologies. They inserted acoustic technology and discovered a large leak under State Route 28 right at Preston Field. The line is very deep which means digging down through the State highway. Coming out of that design phase, it is then transitioned into the watermain project and there is a project every year which is identified, scoped and added into the watermain group and added to the data sheet. Chairman Callicrate said that is a good overview of what happened. Trustee Dent said that his concern with this project is the cost per square foot. On agenda packet page 277, the plan is to spend \$600,000 per year which is way higher and he understands that things could change but that this is a huge cost to the District over the next eleven years. As we look at this

Excerpt from the minutes of the June 23, 2020 meeting – reference document

problem, there is a funding problem that is associated with the assets that have been neglected and we need to figure out a way to fund them. When are we going to do the reserve/rate study so we can get ahead of it? On the project summary, we don't know who did it, don't know when it was revised so what good is it to the Board? Staff has to start putting their names to it and we do need a name on this one because we don't know what you are working on and that this is taking a huge step backwards when it comes to project summaries. We need to see who owns it and where we can look up the previous revisions because it doesn't mean anything or show how valid this information is. Mr. Dobler's information seems to be valid therefore he would appreciate efforts to get these project summaries updated and to what they should look like. He is frustrated that we keep going back to project summaries that are inaccurate. Trustee Schmitz said that she agrees with Trustee Dent. If this summary sheet says we have a fifteen-year plan, then what is the game plan and are you working closely with Washoe County? In looking at the data sheet, the budget is for \$600,000 per year and in looking at the five-year capital summary, she sees it out in 2025 so we need to know what the game plan is year after year and those are her concerns – what is the game plan and do we clearly understand it? Staff has taken a project and added another component to it and she is getting concerned as we are running low, we don't have the funds in the Utility Fund and we don't have a plan in our five-year plan. Director of Public Works Pomroy went over the data sheet and stated that the District has an annual watermain project in the next five years. Trustee Schmitz asked if it was part of this project plan. Director of Public Works Pomroy said yes and four years specifically and that year five is not identified based on leaks and rate of corrosion. This effort was started in 1980 with the replacement of forty-one miles of the watermain over forty years at a cost of twenty million dollars. The District has been very diligent in this replacement for potable water and fire flow. There are over one hundred watermains in the District and we have replaced over forty percent of the watermains over forty years. It has been a diligent effort with sixty miles remaining which are concrete pipe material. Martis Peak has been there for fifty-eight years and the District has gotten the life out of that asset. On the remaining five miles, there have been microphones put on these pipes to try and determine which are the worst sections and that constantly changes. We update the list and then figure out how we can group them. We mobilize and work on these three pipelines so as to not have traffic problems. We still have more pipes to replace and then we will move to Slott and Alder which have been very much targeted to replace as we have a much higher confidence in concrete. The twenty million dollars is in actual dollars and it is a robust program. We have been waiting for Washoe County to say they will repave Lakeshore so yes, we really

Excerpt from the minutes of the June 23, 2020 meeting – reference document

coordinate with Washoe County but they aren't doing overlays in this town. Trustee Schmitz, referencing agenda packet page 481, said that it looks like this was supposed to be complete in 2017 so how many are outstanding and what is left? Director of Public Works Pomroy said that the steel watermains all need to be replaced and that through 2017, we didn't have major replacements. We have five miles left which are the biggest pieces and they are listed with most of them having a very small amount of leaks.

Trustee Morris made a motion to:

1. Reduce the appropriation in the project by \$353,910 which will result in a new lower project budget (amending our FY2020-21 budget and Five-Year CIP) and the \$353,910 returns to Utility Fund balance with no risk that it remains "available" for other projects later this year without Board action to re-appropriate.
2. Award unit price contract to RaPiD Construction in the amount of \$456,610 for the Watermain Replacement – Martis Peak Vicinity project.
3. Authorize Chair and Secretary to execute the contract with RaPiD Construction based on a review by General Counsel and Staff.
4. Authorize Staff to approve change orders to the construction contract for additional work not anticipated at this time of up to 10% of the project bid – \$46,000.
5. Authorize Staff to enter into an Additional Services Addendum with Tri Sage Consulting totaling \$48,480 for services during construction of the project.
6. Have a project recap agenda item at the first meeting in November of 2020 of the Board of Trustees.

Trustee Wong seconded the motion. Chairman Callicrate asked for any further comments.

Trustee Morris complemented the Director of Public Works and the Engineering Manager for the background that was provided as it really helped. Trustee Dent said thank you to the Director of Public Works for the

Excerpt from the minutes of the June 23, 2020 meeting – reference document

detailed explanation and how these projects are in the five-year plan and asked that a better job be done with the project summaries.

Hearing no further comments from the Board, Chairman Callicrate called the question – the motion was passed unanimously.

Chairman Callicrate asked Staff to do a better job on the summary sheets and to do a better job of telling how everything fits in as well as the history.

DOC # 5093479

10/21/2020 09:19:30 AM
Requested By
INCLINE VILLAGE GID
Washoe County Recorder
Kalie M. Work - Recorder
Fee: \$43.00 RPTT: \$0.00
Page 1 of 1

APN: None. Washoe County & NDOT
Right-of-Way



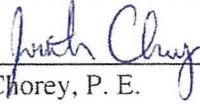
When Recorded Return to:
IVGID Public Works
Attn: Ronnie Rector
1220 Sweetwater Road
Incline Village, Nevada 89451

NOTICE OF COMPLETION

NOTICE IS HEREBY GIVEN:

That the construction work hereinafter described was completed on October 9, 2020. The name of the project was "2020 Watermain Replacement and Fire Flow Enhancement." Work consisted of replacing approx. 1400 LF existing 8" OD steel watermain with 8" DR-14 PVC or Class 350 DIP watermain in Washoe Co. ROW. Connect to 19 existing domestic service lines. Connect to existing 8" watermain in Washoe Co. ROW. Construct 4 fire hydrant assemblies. Salvage 2 fire hydrants. Abandon existing 8" OD steel watermain. And slip-lining approx... 120 LF 10" DR-14 fusible PVC into (E) 14" welded steel watermain in NDOT ROW. Inject grout into casing. Reconnect to (E) 14" steel watermain in NDOT ROW. Owner of said work is the Incline Village General Improvement District, and the Contractor for said work was RaPiD Construction, Inc., of Carson City, Nevada.

INCLINE VILLAGE G. I. D.


By: 
Nathan Chorey, P. E.
Engineering Manager

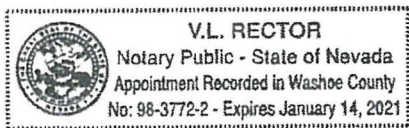
Dated: October 16, 2020

STATE OF NEVADA)
) ss
COUNTY OF WASHOE)

Nathan Chorey, P. E., being first duly sworn, says that he is the duly appointed Engineering Manager for the Incline Village General Improvement District, and that he is authorized to execute the aforesaid Notice of Completion, and that the Board of Trustees of said Incline Village General Improvement District owns the improvements described in the foregoing notice, and that he has read the same, knows the contents thereof, and that the facts stated herein are true.

Subscribed and sworn to before me this 16th day of October, 2020.


V. L. Rector, Notary Public





New fire hydrants to be installed.

2020 Watermain Replacement Project - Martis Peak Vicinity



PRE-CONSTRUCTION

2020 Watermain Replacement Project - Martis Peak Vicinity



TYPICAL PIPE IN TRENCH

2020 Watermain Replacement Project - Martis Peak Vicinity



TYPICAL SERVICE
SADDLE

08/10/2020 09:22

2020 Watermain Replacement Project - Martis Peak Vicinity

TYPICAL STORM DRAIN CULVERT



08/11/2020 14:01

2020 Watermain Replacement Project - Martis Peak Vicinity



LAKESHORE BLVD

2020 Watermain Replacement Project - Martis Peak Vicinity



TYPICAL BULL-HEAD CONNECTION

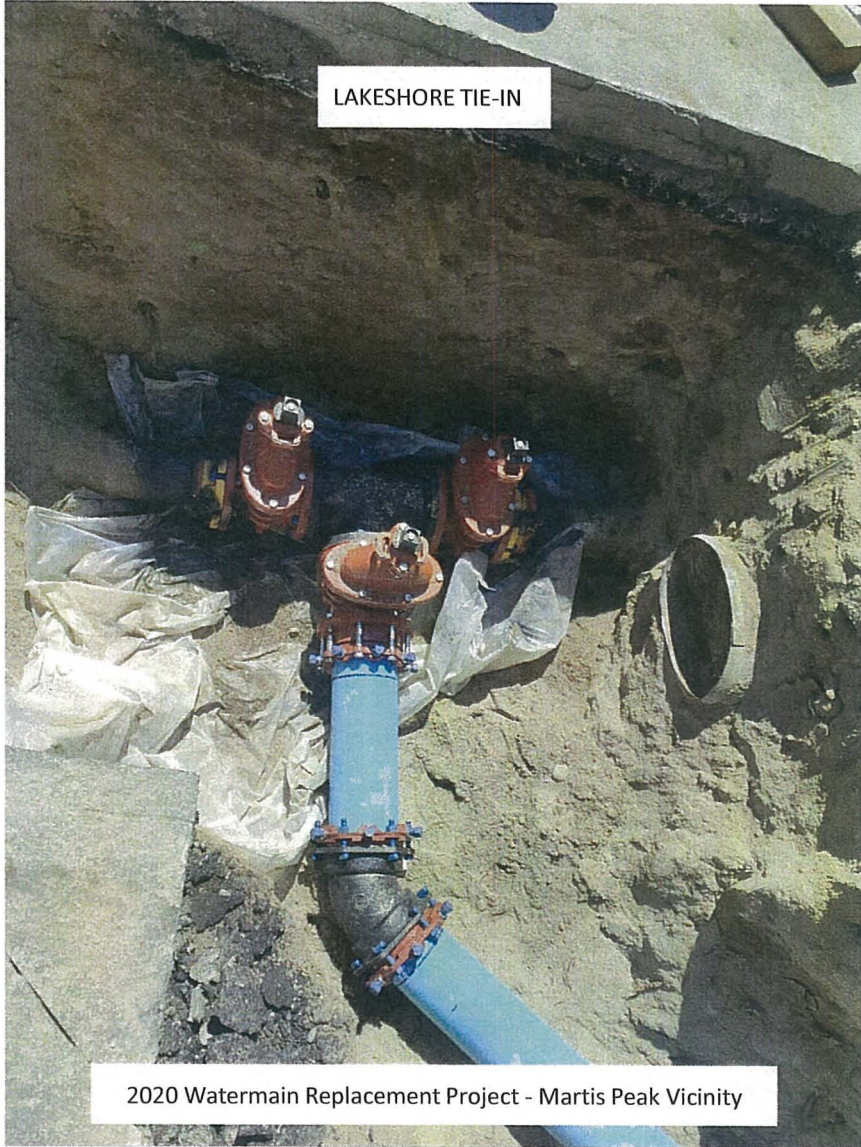
08/27/2020 16:09

2020 Watermain Replacement Project - Martis Peak Vicinity



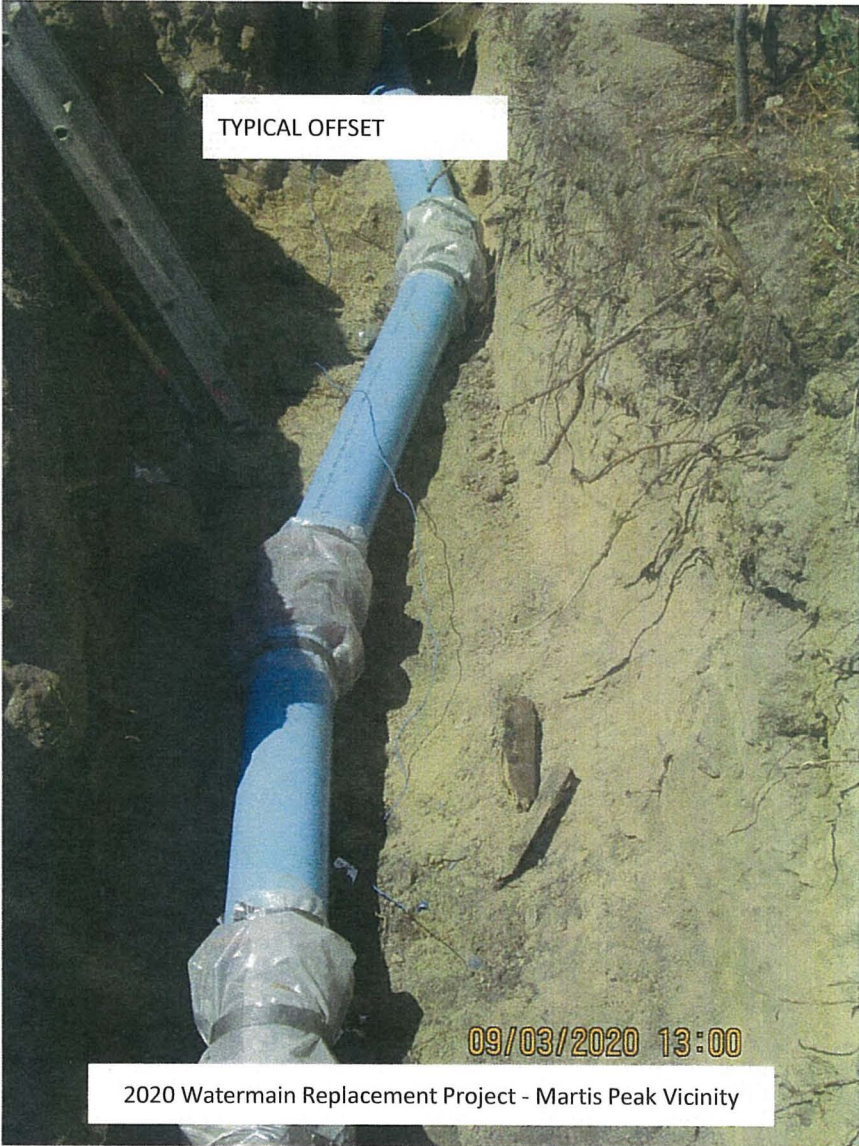
624 MARTIS PEAK DR

2020 Watermain Replacement Project - Martis Peak Vicinity

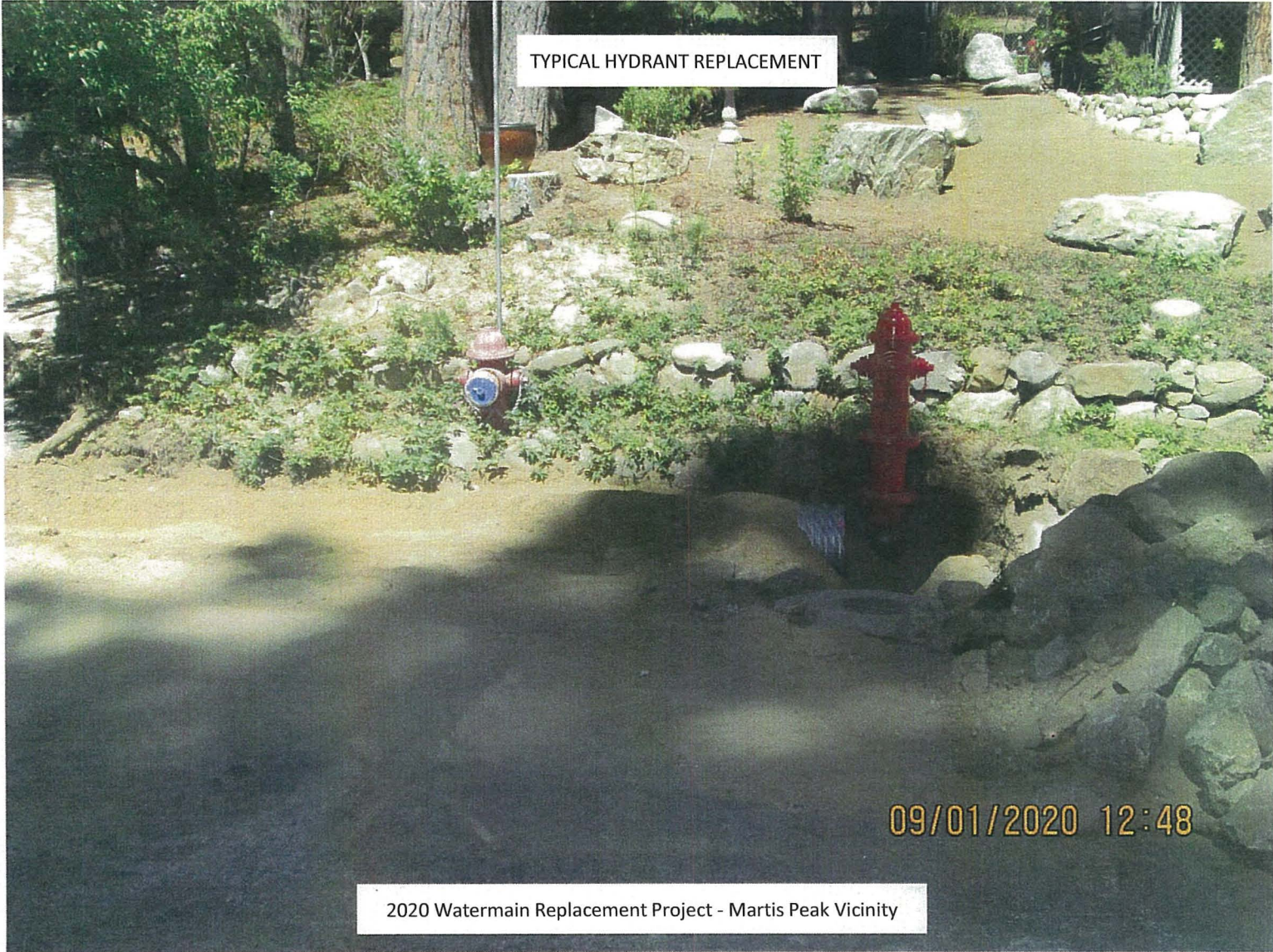


LAKESHORE TIE-IN

2020 Watermain Replacement Project - Martis Peak Vicinity



2020 Watermain Replacement Project - Martis Peak Vicinity



TYPICAL HYDRANT REPLACEMENT

09/01/2020 12:48

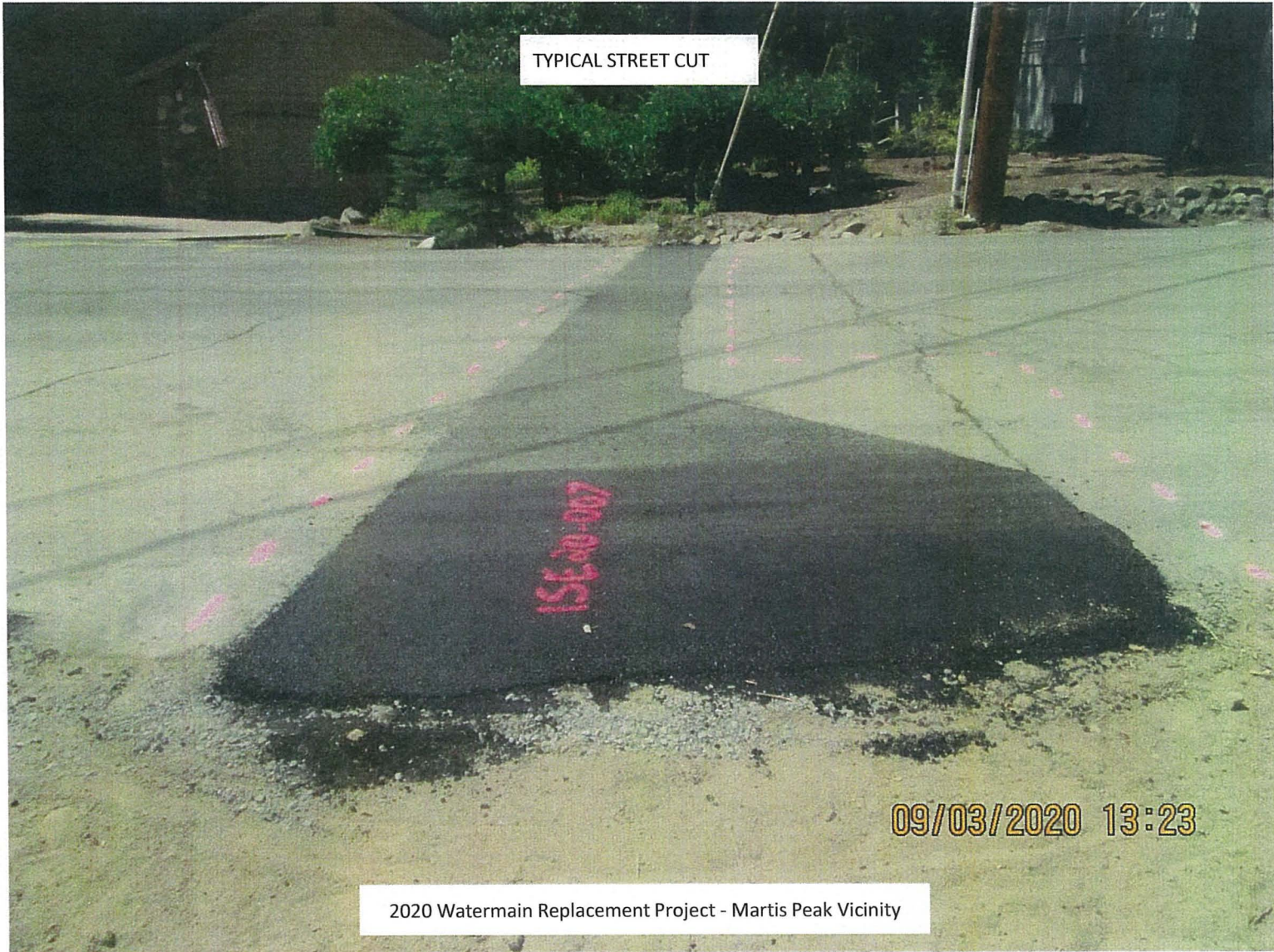
2020 Watermain Replacement Project - Martis Peak Vicinity



THRUST BLOCKS

08/26/2020 14:32

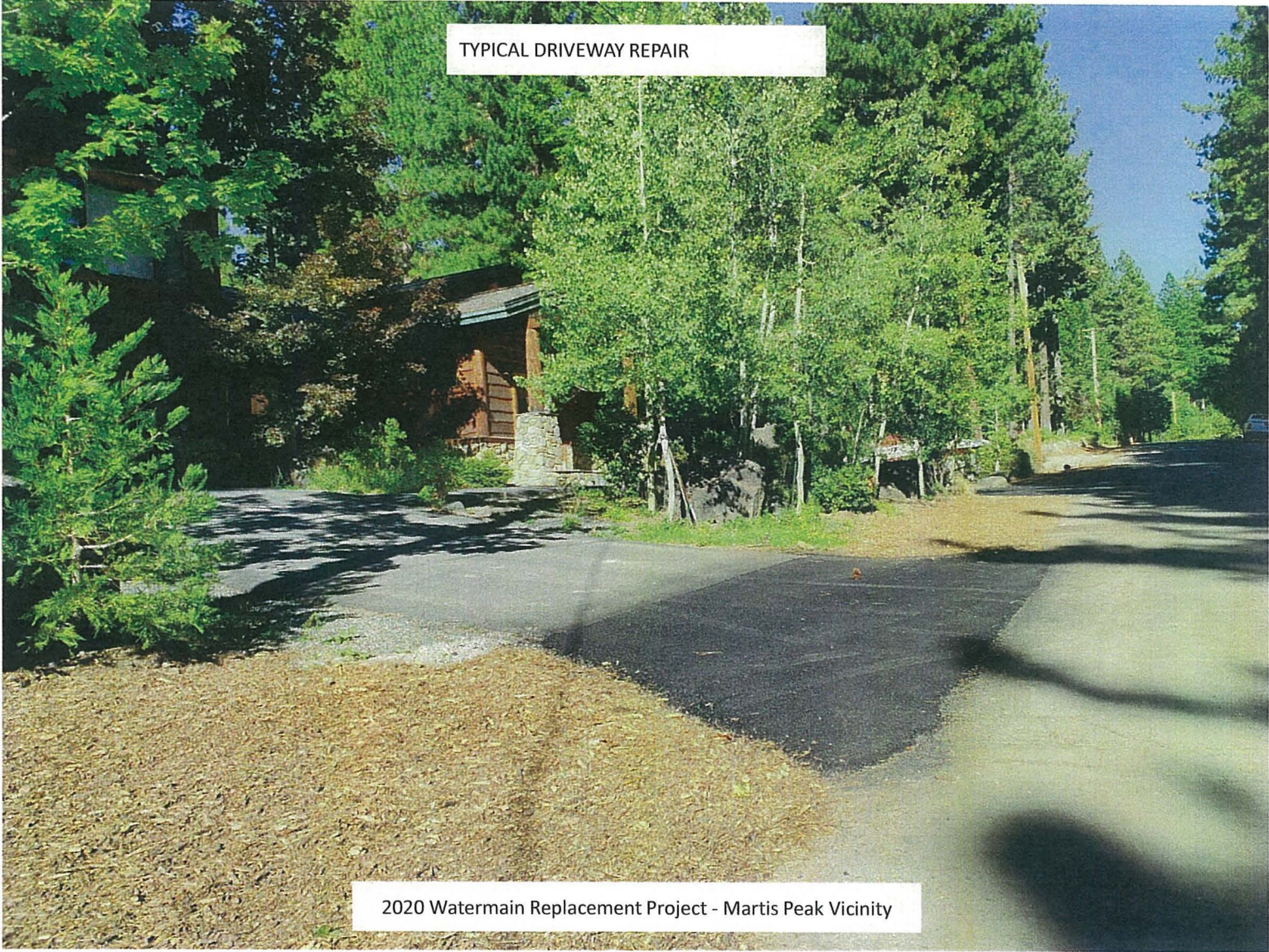
2020 Watermain Replacement Project - Martis Peak Vicinity



TYPICAL DRIVEWAY REPAIR



2020 Watermain Replacement Project - Martis Peak Vicinity



TYPICAL DRIVEWAY REPAIR

2020 Watermain Replacement Project - Martis Peak Vicinity



624 MARTIS PEAK RD.

09/11/2020 12:57

2020 Watermain Replacement Project - Martis Peak Vicinity



NEW HYDRANT

2020 Watermain Replacement Project - Martis Peak Vicinity



630 MARTIS PEAK DR.

2020 Watermain Replacement Project - Martis Peak Vicinity



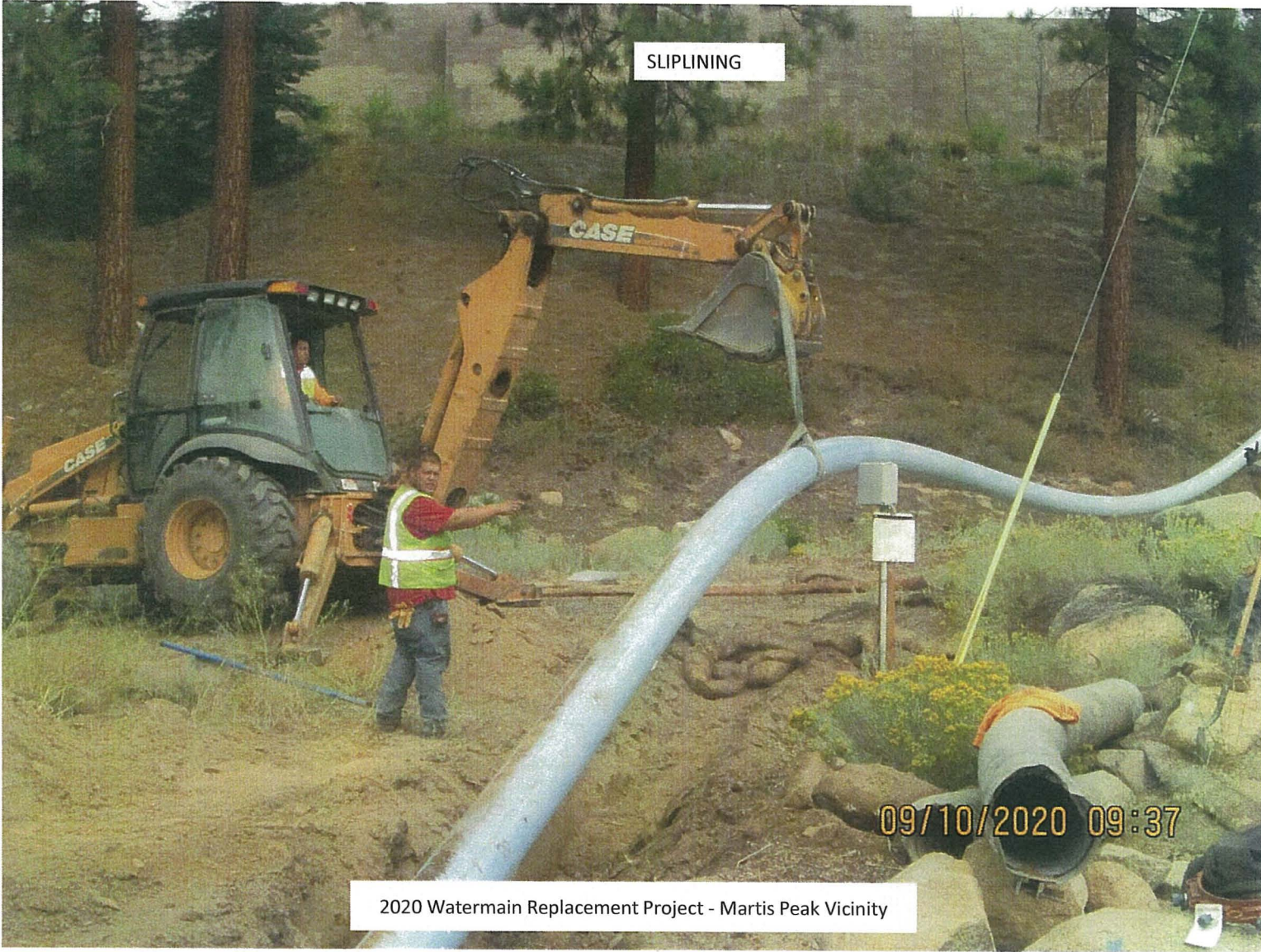
SOUTH SIDE SR-28

2020 Watermain Replacement Project - Martis Peak Vicinity

NORTH SIDE SR-28 – PRESTON FIELD

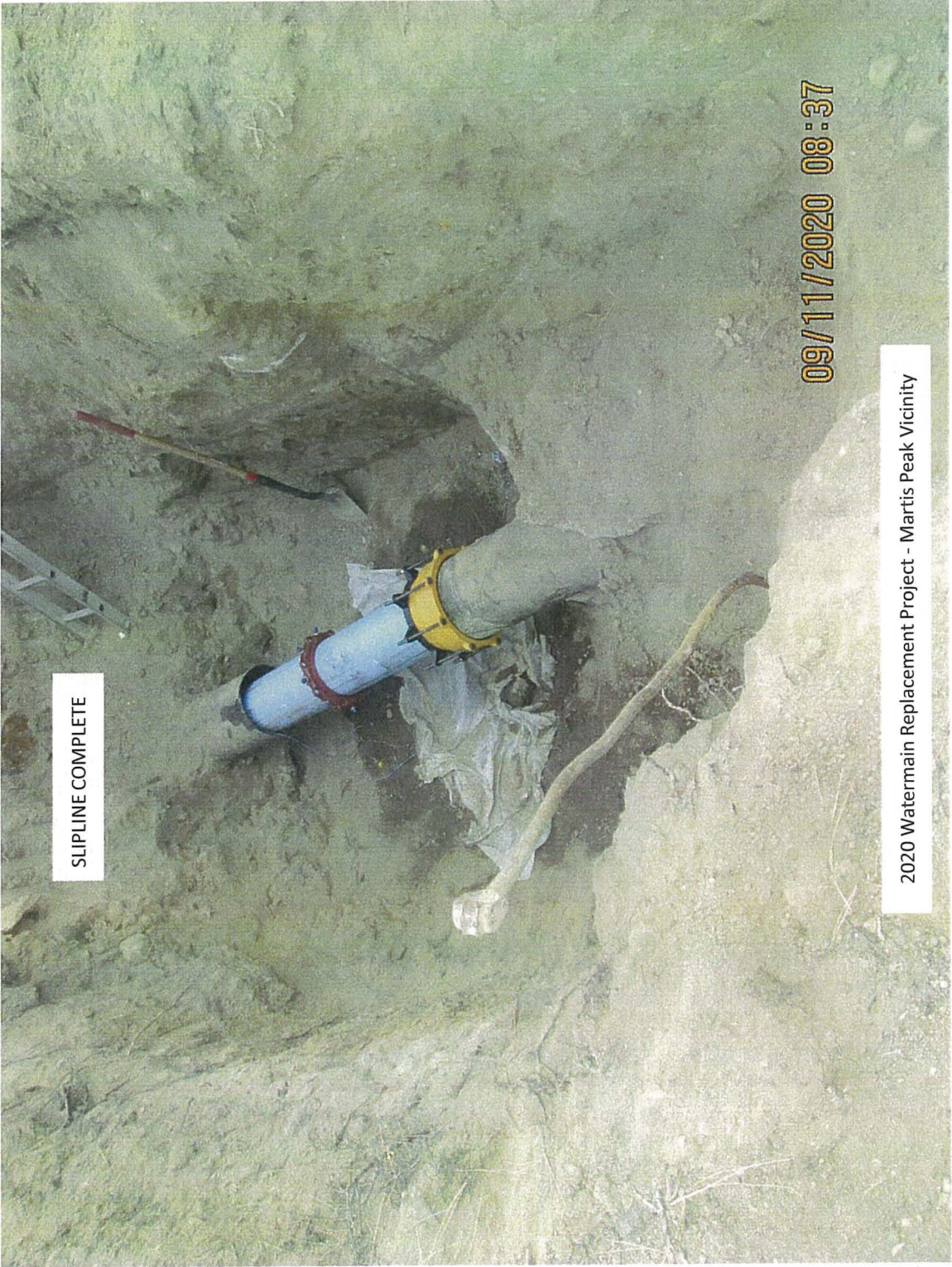


2020 Watermain Replacement Project - Martis Peak Vicinity



SLIPLINING

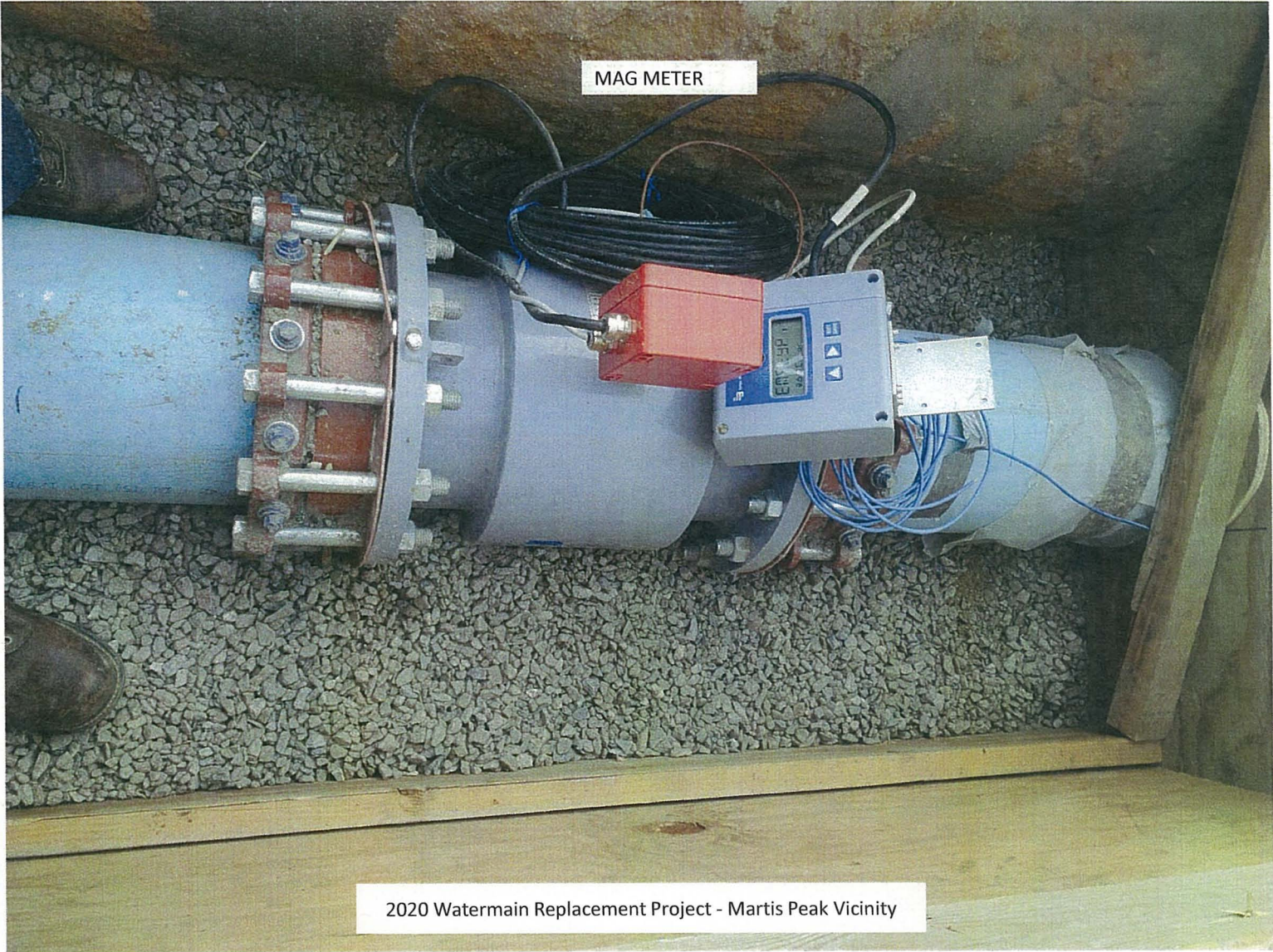
2020 Watermain Replacement Project - Martis Peak Vicinity



SLIPLINE COMPLETE

09/11/2020 08:37

2020 Watermain Replacement Project - Martis Peak Vicinity



MAG METER

2020 Watermain Replacement Project - Martis Peak Vicinity



2020 Watermain Replacement Project - Martis Peak Vicinity

SLOTT PEAK CT. – LEAK REPAIR

