



Loma Alta Landslide and North Marin Line Valve Isolation Project Update

January 12, 2024

Operations Committee

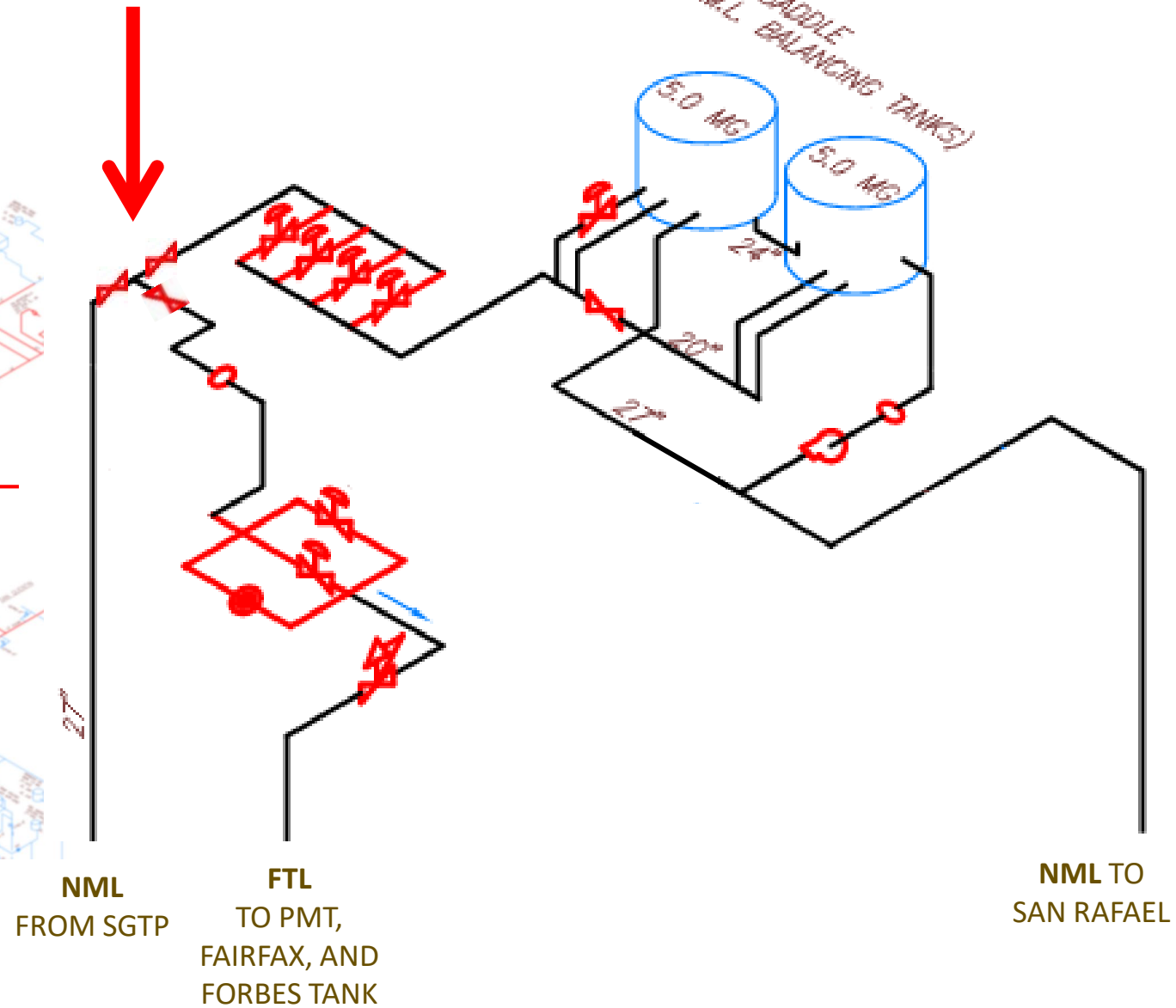
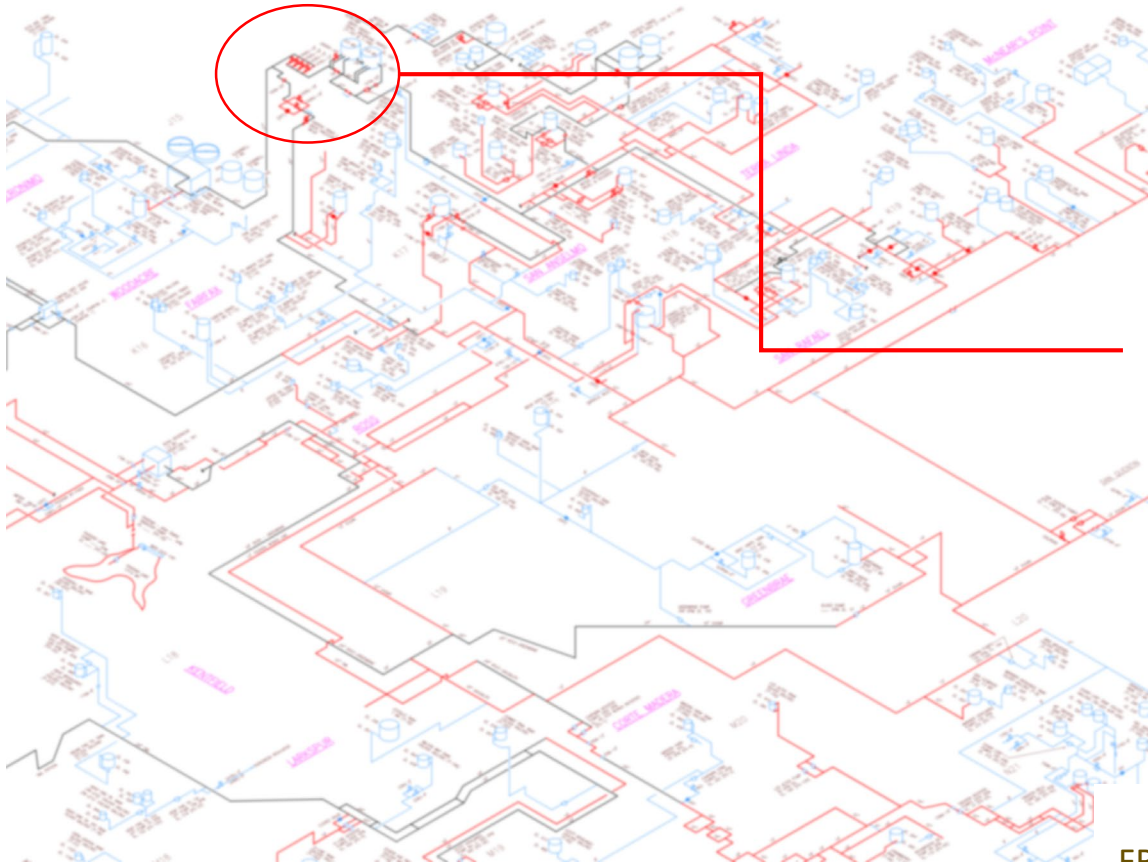


Loma Alta Landslide

- January 2023 rainfall events led to the Loma Alta Landslide at Old Railroad Grade in Unincorporated Fairfax, CA
- The Landslide occurred within an area owned by Marin County Open Space District
- Threatens the District's North Marin Line

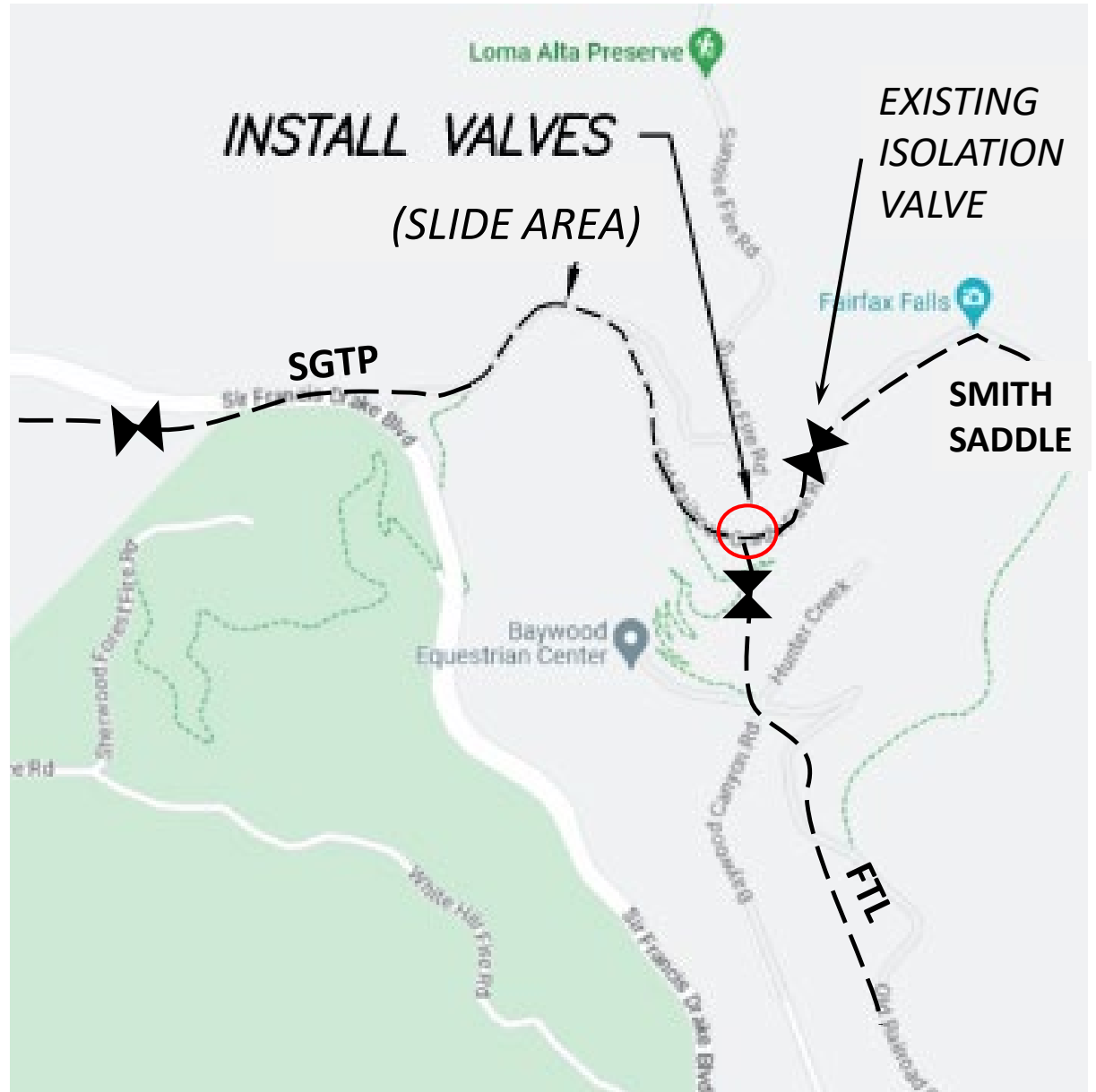


Transmission System



North Marin Line Valve Project Location

- Old Railroad Grade, east of the Loma Alta Landslide
- Between the San Geronimo Treatment Plant and Smith Saddle Tanks at the junction of the North Marin Line and Fairfax Transmission Line

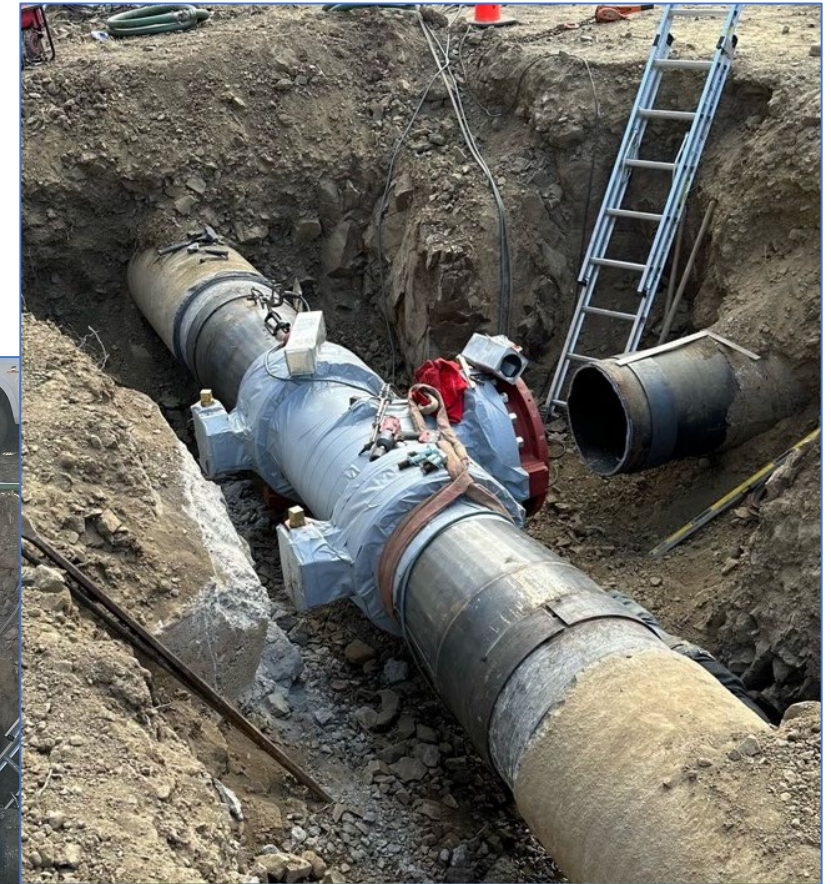


North Marin Line Valve Project Scope

- Installed a 24-inch 3-valve cluster at NML and FTL junction - enhancing our operational resiliency, allowing us to efficiently manage water flow during unexpected events, such as the Loma Alta Landslide



Before



After

North Marin Line Valve Project Budget and Schedule

▪ Schedule:

- **October 9 and 10:** On-call Contractor prepared the site
- **October 10:** Staff dewatered the system and Contractor successfully installed the 3-valve cluster in a continuous operation to quickly restore water service

▪ Project Budget to Actuals Costs:

- Budget: \$200,000
- Actual: \$114,000



3-valve cluster assembly

Next Steps

- Staff continue to monitor the slide for movement and impacts to the NML while the County pursues steps to repair the landslide
- Staff continue to perform ongoing leak surveys near the landslide to ensure that the NML does not become compromised by further earth movement
- Staff are prepared to install a temporary bypass around the landslide in the event that the NML becomes compromised