



# 2020 Sewer System Rehabilitation Project (CIP 19703)

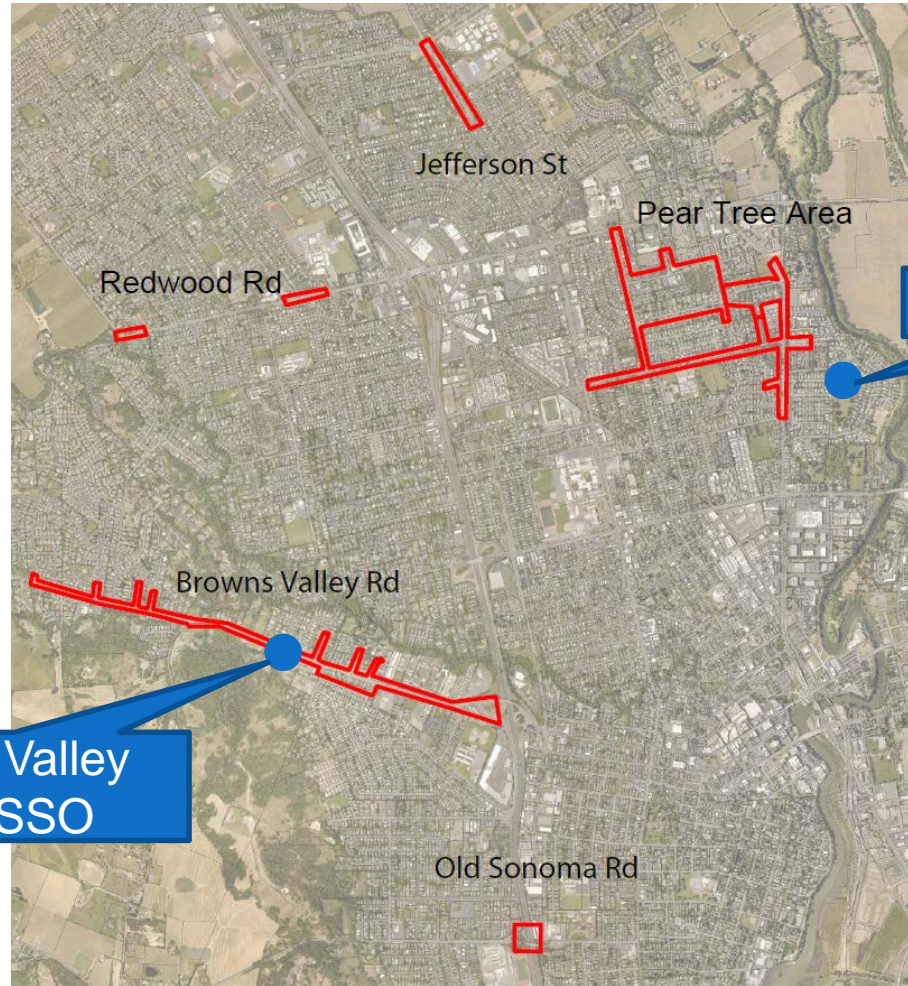


Napa Sanitation District Board of Directors Meeting  
October 2, 2019



# Background

- Collection System Master Plan (CSMP) 2007
  - Identified capacity expansion projects
  - Recommendation of an inflow & infiltration (I&I) reduction program
- 9 major rehabilitation projects completed so far
  - I&I reduction
  - Rehabilitation/replacement



# Background

## Pear Tree Area

- High peaking factor (19.3)
- Phase 1 completed in 2018
- Downstream SSO history (Lake Park)
- Upcoming paving projects (City Local Streets program)



# Background

## Redwood Rd

- High peaking factor
- Phase 1 completed in 2018
- Upcoming paving projects (City Measure T)

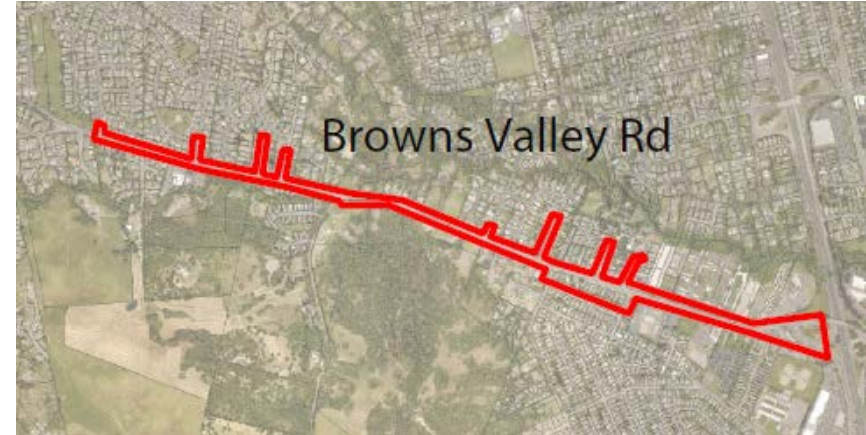




# Background

## Browns Valley Rd

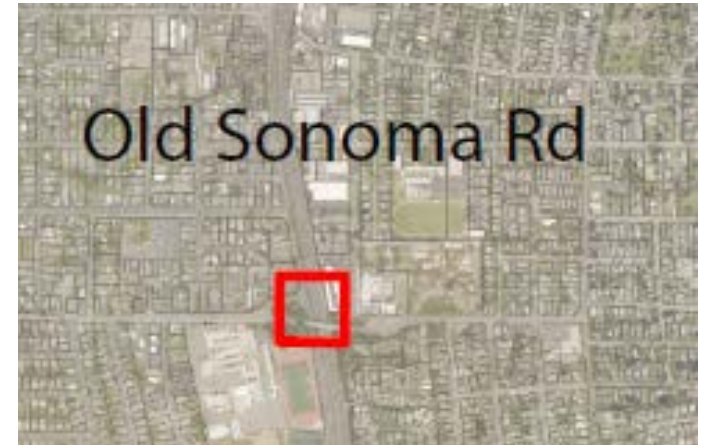
- High peaking factor
- Coordination with Browns Valley Trunk
- Upcoming paving projects (City Measure T)



# Background

## Old Sonoma Rd Highway Crossing

- 10" VCP installed in the 1950's
- High consequence of failure
- Poor condition (hole in pipe)



# Background

## Jefferson St

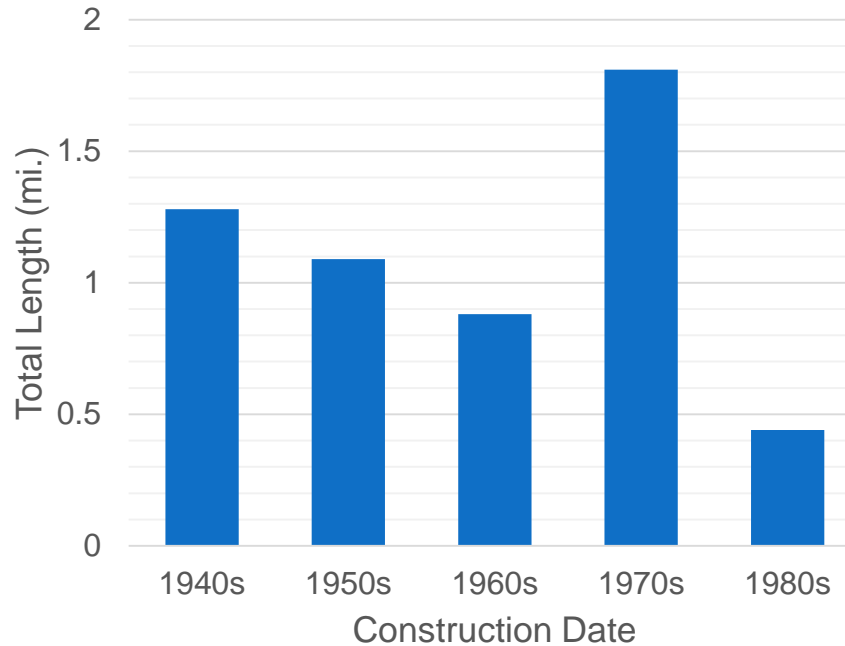
- 6" and 8" ACP in poor condition
- Upcoming paving projects (City Measure T)



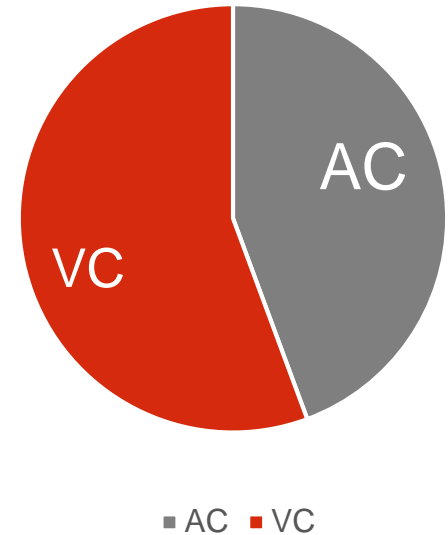


# Pipeline Age and Condition

## Within Project Areas



Pipe Material



# Pipeline Age and Condition

## Within Project Areas



VCP with cracks/fractures



ACP with surface flaking

# Rehabilitation Methods



Pipe bursting



Cured-in-place pipe (CIPP)

# Rehabilitation Methods



Manhole rehabilitation /  
replacement



Lateral connection “Top Hats”



# Project Overview

Engineer's Estimate: **\$5,800,000**

Item	Quantity
Sewer main rehabilitation	29,700 LF (5.6 miles) - <b>2.1% of system</b>
Structures	76
Laterals	340



# Anticipated Schedule

Milestone	Date
Notice Inviting Bids	Mid October, 2019
Bid Opening	Mid November 2019
Award Construction	December 4, 2019
Notice to Proceed	January 2020
Project Completion	October 2020





# Recommendation

Approve the Project, Concur with CEQA Determination, and Authorize the General Manager to Issue Notice Inviting Bids for the 2020 Sewer System Rehabilitation Project (CIP 19703)