

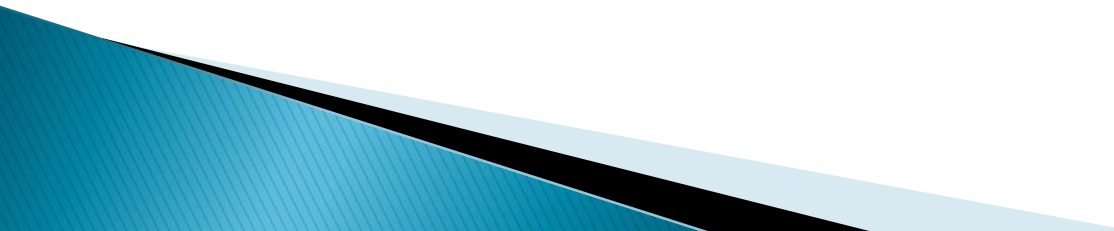
# Petaluma River Flood Management Project— Denman Reach Phase 4

Presented to:  
SCWA Zone 2A Flood Control  
Advisory Committee

Presented By:  
Jason Beatty, P.E.  
Assistant Director of Public Works

March 21, 2019

# Agenda

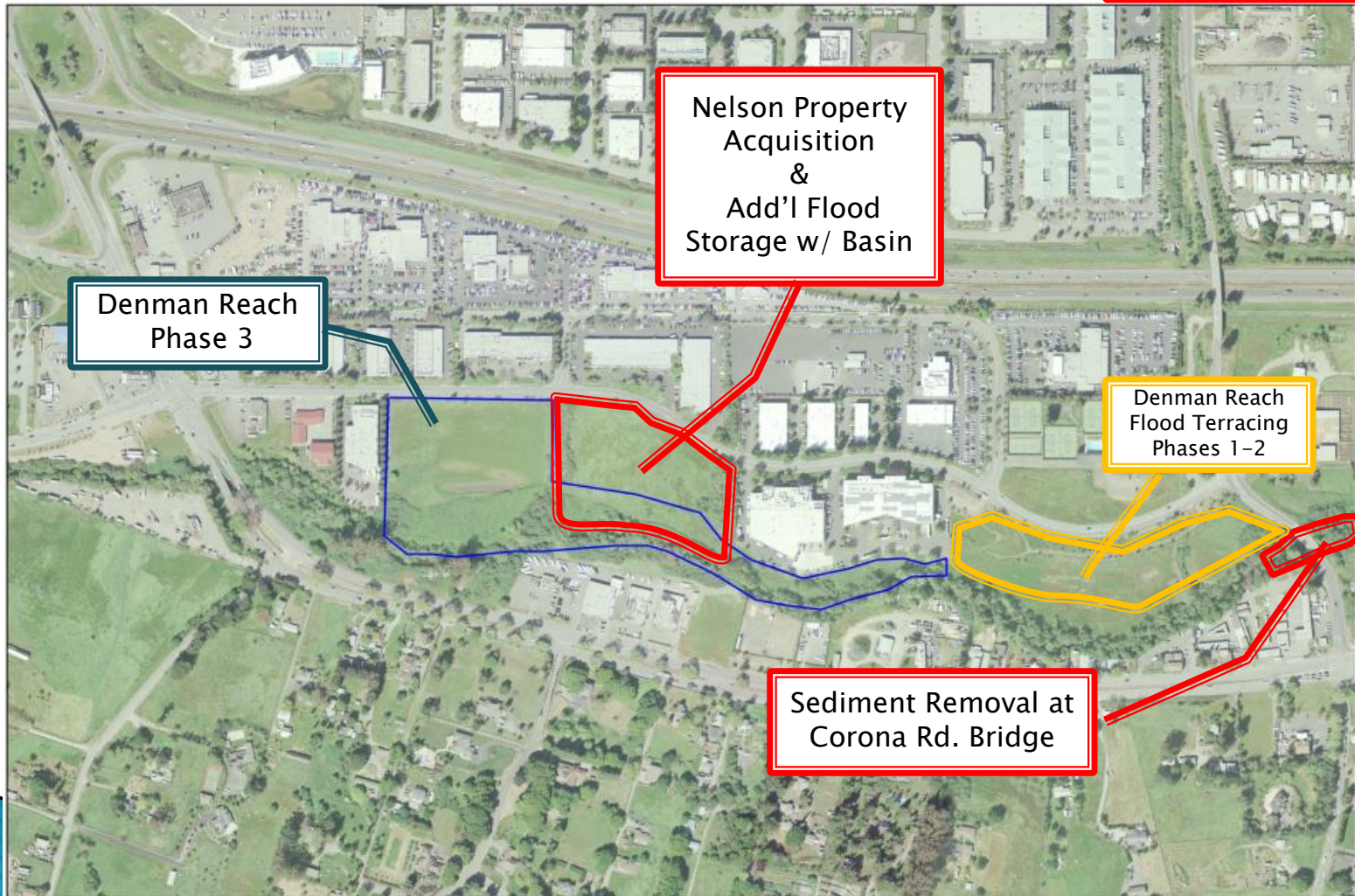
- ▶ Project Background
  - ▶ Project Goals
  - ▶ Hydraulic Analysis Results
  - ▶ Design Overview
  - ▶ Project Timeline & Status Update
- 

# Project Background

- ▶ Flood mitigation projects with public access trails
  - 1996 City of Petaluma River Access Plan
  - 2008 General Plan
- ▶ 3 vacant parcels
  - 2 purchased and terraced in Denman Phase 3
  - Lacked funds to purchase 3<sup>rd</sup>
- ▶ Fall 2016, SCWA brought opportunity for funding for project
  - \$1.9M in DWR Prop 1E Grant
  - \$881k in Zone 2A funding

# Petaluma River Flood Management Project – Denman Reach Phase 4 (in Design/Permitting)

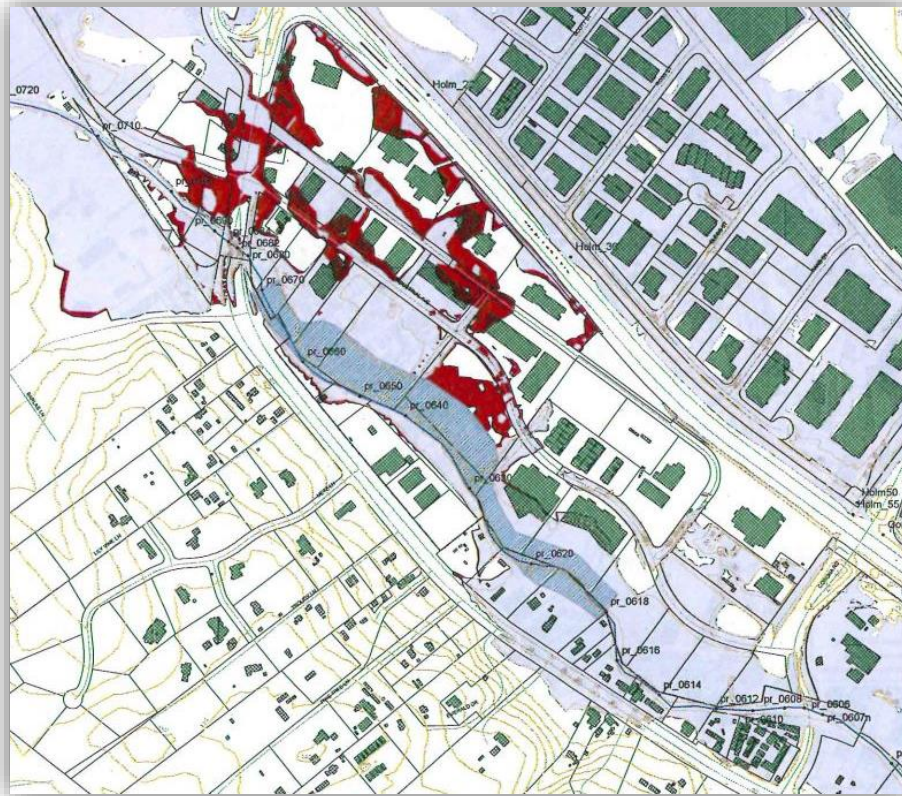
Denman Reach  
Phase 4



# Project Goals

- ▶ Funding/Grant agreement goals
  - Acquire 5.47 acre flood-prone parcel (Completed)
  - Create up to 9.3 acre-feet of flood storage
  - Remove 8,000 CY sediment build up at Corona Bridge
- ▶ Additional goals
  - Create additional wetland and riparian habitat
    - Environmental impact mitigation measures
  - Create additional public access trails
  - Additional protection for Corona Road bridge
    - Scour issues noted under east abutment

# Hydraulic Evaluation



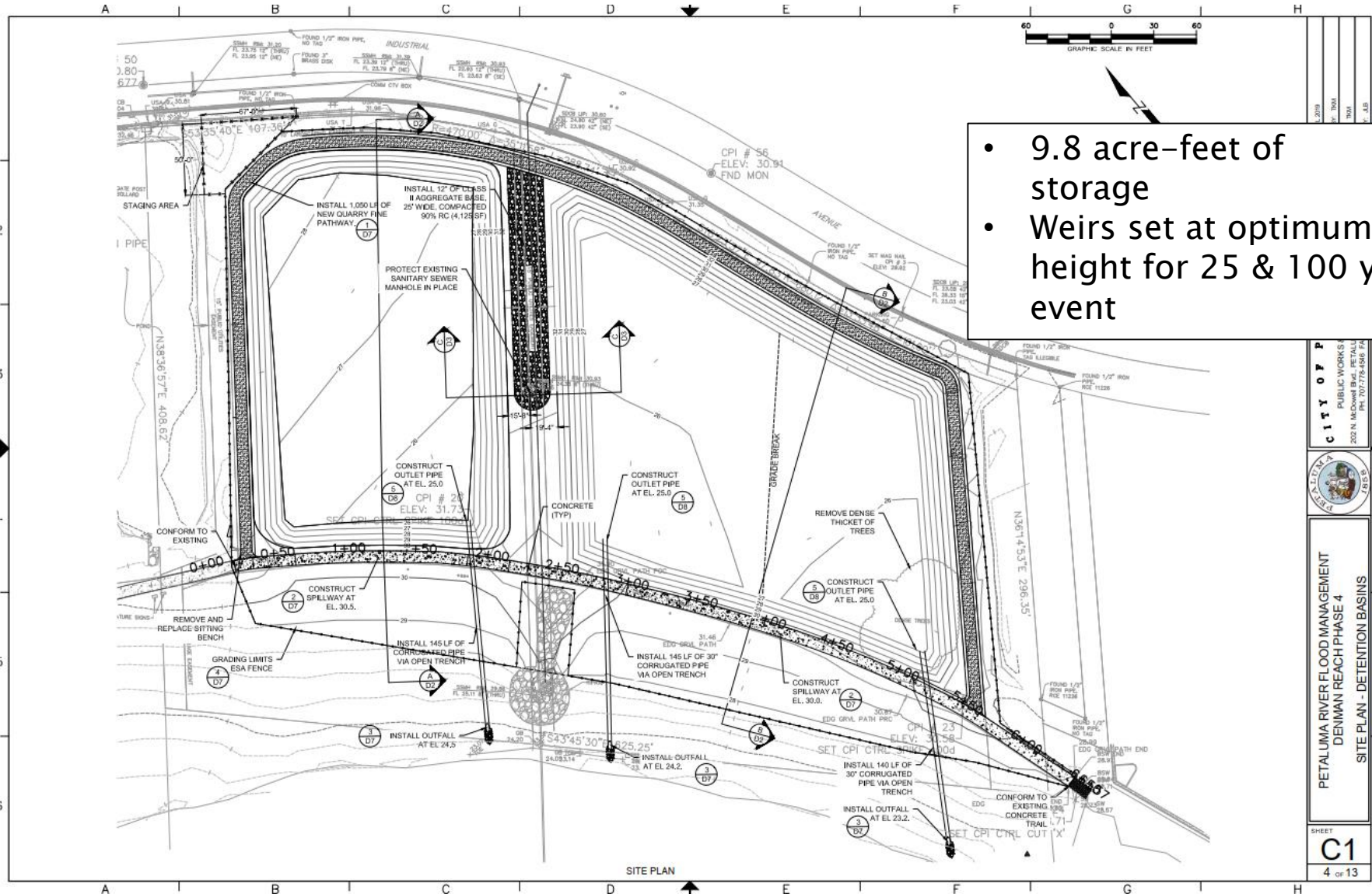
Denman Phase 3  
100 year flood plain reduction  
(Red)



Denman Phase 4  
100 year flood plain reduction  
(Green)

Note: over 1 foot reduction in 100 year  
flood elevation in Denman Reach

# Design Overview – Flood detention basins



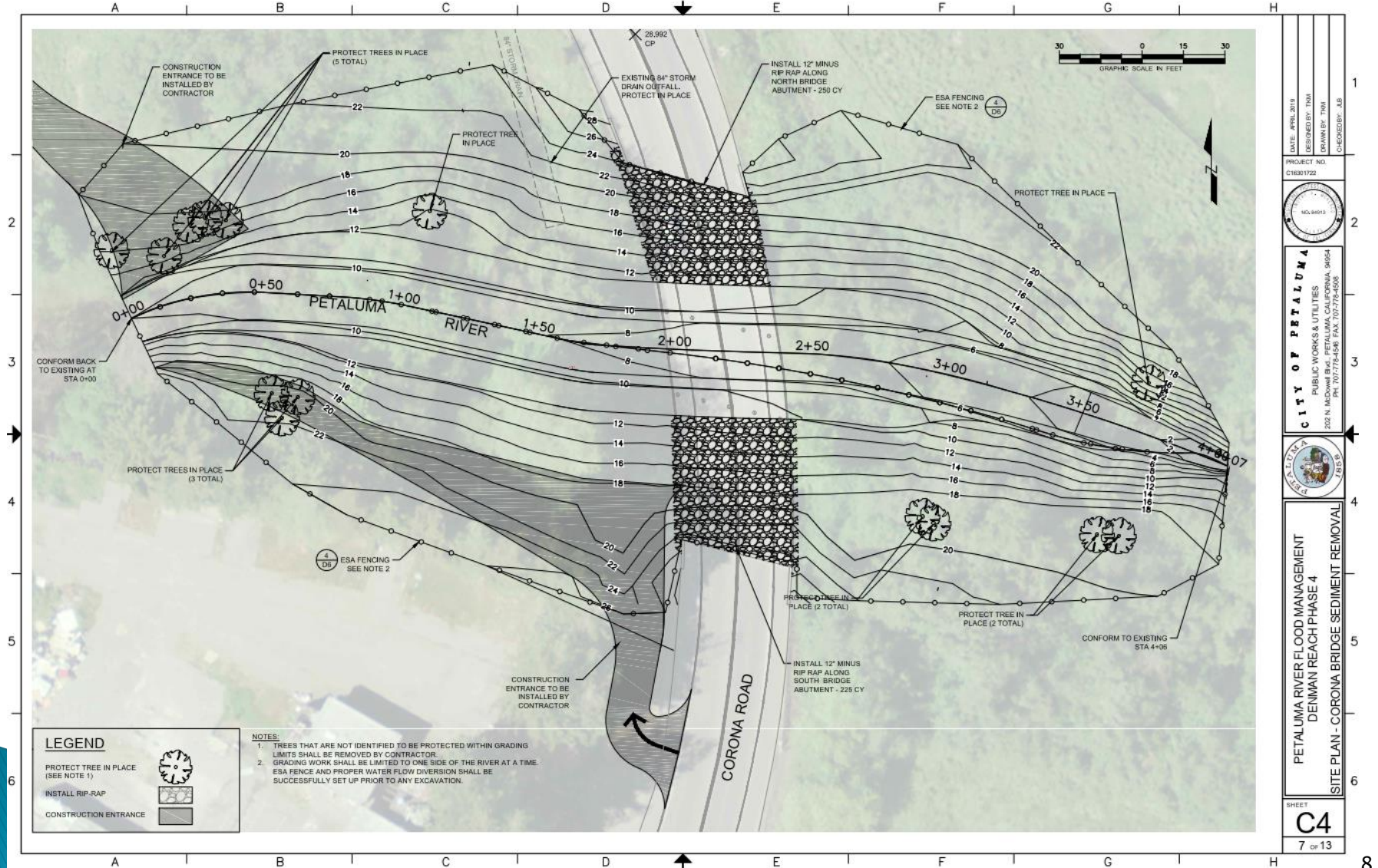
- 9.8 acre-feet of storage
- Weirs set at optimum height for 25 & 100 yr event

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PETALUMA RIVER FLOOD MANAGEMENT  
DENMAN REACH PHASE 4  
SITE PLAN - DETENTION BASINS

SHEET  
**C1**  
4 of 13

# Design Overview – Sediment removal







# Project Timeline & Status

- ▶ Finalized Funding agreement– Feb 6, 2018
- ▶ Complete hydraulic analysis of proposed mitigation measures (West) – July 26, 2018
- ▶ City acquired Nelson Property – August 14, 2018
- ▶ CEQA Final MND/Initial Study – February 7, 2019
- ▶ Permitting – In progress
  - Permit applications submitted – February 8, 2019
    - NOAA, RWQCB, ACOE, CDFW
- ▶ Design – 70% complete
  - Pre-bid notice issued Mar 14, 2019
- ▶ Bid in April
- ▶ Complete construction by end of 2019