

Notice of Exemption

2020100349

To: ☐ Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: (Public Agency) City of Folsom
50 Natoma Street, Folsom, CA 95630

☒ County Clerk
County of Sacramento

Project Title: City of Folsom Water Treatment Plant – Pretreatment System Improvements

Project Location – Specific: 194 Randall Drive, Folsom, CA 95630

Project Location – City: Folsom **Project Location – County:** Sacramento

Description of Nature, Purpose, and Beneficiaries of Project:

The City of Folsom Water Treatment Plant – Pretreatment Improvements Project includes necessary modifications to the existing pretreatment systems at the Water Treatment Plant (WTP). Modifications would provide system redundancy and allow for the system to increase the firm capacity to meet 50 mgd if any one train fails, but will not increase the design capacity of the WTP. See additional pages attached.

Name of Public Agency Approving Project: City of Folsom

Name of Person or Agency Carrying Out Project: Environmental & Water Resources Department

Exempt Status: (check one)

- ☐ Ministerial (Sec. 21080(b) (1); 15268);
- ☐ Declared Emergency (Sec. 21080 (b) (3); 15269(a));
- ☐ Emergency Project (Sec. 21080 (b) (4); 15269(b) (c));
- ☒ Categorical Exemption. (Replacement; Sec. 15301(b), 15301(d), 15302(c) and/or 15304(a))
- ☐ Statutory Exemption. (State code number)

Reasons why project is exempt: This project is replacement and/or improvement of existing infrastructure and therefore is categorically exempt from environmental review under the California Environmental Quality Act as noted in Title 14 – California Code of Regulations, Chapter 3 – Guidelines for Implementation of the California Environmental Quality Act, Article 19 – Categorical Exemptions, Sections 15301(b), 15301(d), 15302(c) and/or 15304(a).

Lead Agency

Contact Person: Nathan Stites Area Code/telephone/Extension: (916) 461-6167

If filed by applicant:

1. Attach certified document of exemption finding
2. Has a Notice of Exemption been filed by the public agency approving the project? ☐ Yes ☐ No

Signature: Marcus yasutake Date: 10/15/2020 Title: EWR Director

(Marcus Yasutake, PE)

Notice of Exemption

☒ Signed by Lead Agency

Date received for filing at OPR:

☐ Signed by Applicant

Governor's Office of Planning & Research

Oct 20 2020

STATE CLEARINGHOUSE

ADDITIONAL PAGES

PROJECT DESCRIPTION

The City of Folsom is undertaking design of necessary modifications to the existing pretreatment systems at the Water Treatment Plant (WTP), located at 194 Randall Drive in Folsom California (Figures 1 and 2). The WTP currently operates with three pretreatment trains: two Actiflo clarifiers and flocculation and one sedimentation basin (Basin No. 5) (Figures 3 and 4). Each Actiflo train is rated for 20 million gallons per day (mgd) and Basin No. 5 is rated for 15 mgd for a total capacity of 55 mgd. Currently Basin No. 5 can only handle around 7mgd, bringing the actual total pretreatment system capacity to roughly 47 mgd. The WTP has a design capacity of 50 mgd, and if any of the three pretreatment processes were to fail the water treatment plant would not be able to produce the 50 mgd design capacity.

The City proposes to convert Basin No. 5 to a plate settler basin in order to provide system redundancy; proposed upgrades would occur almost entirely within the existing Basin No. 5 and Actiflo structures, and the upgrades would increase the firm capacity to meet 50 mgd if any one train fails but will not increase the design capacity of the WTP. Further modifications would be made to Basin No. 5 to improve the hydraulics through this basin and allow a flow of 25 mgd (See Figures 5 through 10). These modifications include:

- Increasing opening sizes – the influent flume openings will be increased from 1'x3' to 2'x4', and the flocculation zone end openings will be increased from 2'x2' to 3'x3', and new sluice gates will be added.
- Raising weir wall – the existing submerged weir wall at the end of the flocculation zone will be raised to match the existing top of concrete. Openings will be added to this wall for the plate settler troughs.
- Enlarging effluent sluice gate opening – the sedimentation zone effluent flume sluice gate wall shall be removed and opening will be enlarged to improve the hydraulics through Basin 5. This will require a beam to be added across the top, and the walls on either side may need to be thickened as required to maintain structural integrity.
- Adding new sluice gate at the end of the effluent channel.

No major improvements to the basin structures are proposed and the existing basin is adequate to handle the addition of plate settlers. Proposed modifications to the Actiflo trains include replacing the lamella tubes with new tubes that are shorter in height to maintain velocities. The capacities of auxiliary equipment, including sand pumps and hydrocyclone, are adequate.

CITY OF FOLSOM WATER TREATMENT PLANT – PRETREATMENT SYSTEM IMPROVEMENTS
DEPARTMENT OF ENVIRONMENTAL AND WATER RESOURCES
 CEQA CATEGORICAL EXEMPTION

Table 1: Design Criteria

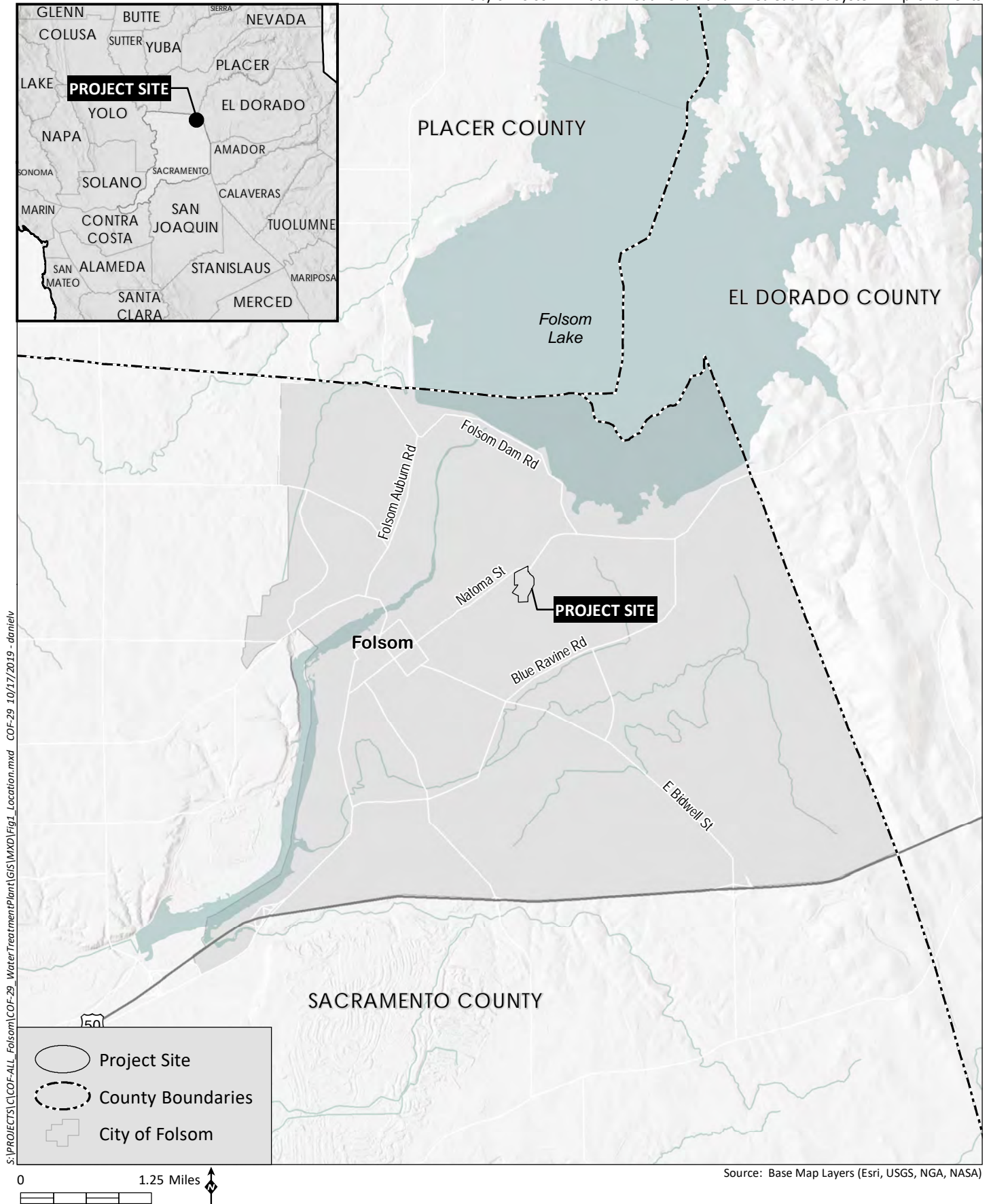
Design Criteria	
Detention time at Maximum Flow, minutes, at 25 mgd flow.	20
Number of stages, each train	3
Basin Dimensions (ft)	59 W x 58.5 L x 13.5 D
Vertical Flocculating Mixers (existing)	
Quantity	
Sedimentation	
Number of Basins per Train	1
Basin Dimensions (ft)	59 W x 150.75 L x 13.5 D
Detention time, minutes, at 25 mgd flow	51
Inclined Plate Settlers	
Manufacturer	MRI, or equal
No. of Plate Catridges per row	3
No. of Plate Settlers per cartridge	98
Plate Settler Dimensions (ft)	67 L x 59 W x 8 H
Effective Settling Area, sf	57,870
Design Loading Rate, gpm/sf	0.3
Residual Collectors	Chain & Flight (existing)
Flocculation Sluice Gates	
Manufacturer	Waterman, or equal
Number	3
Size (ft)	3 W x 3 H
Actuators	Manual

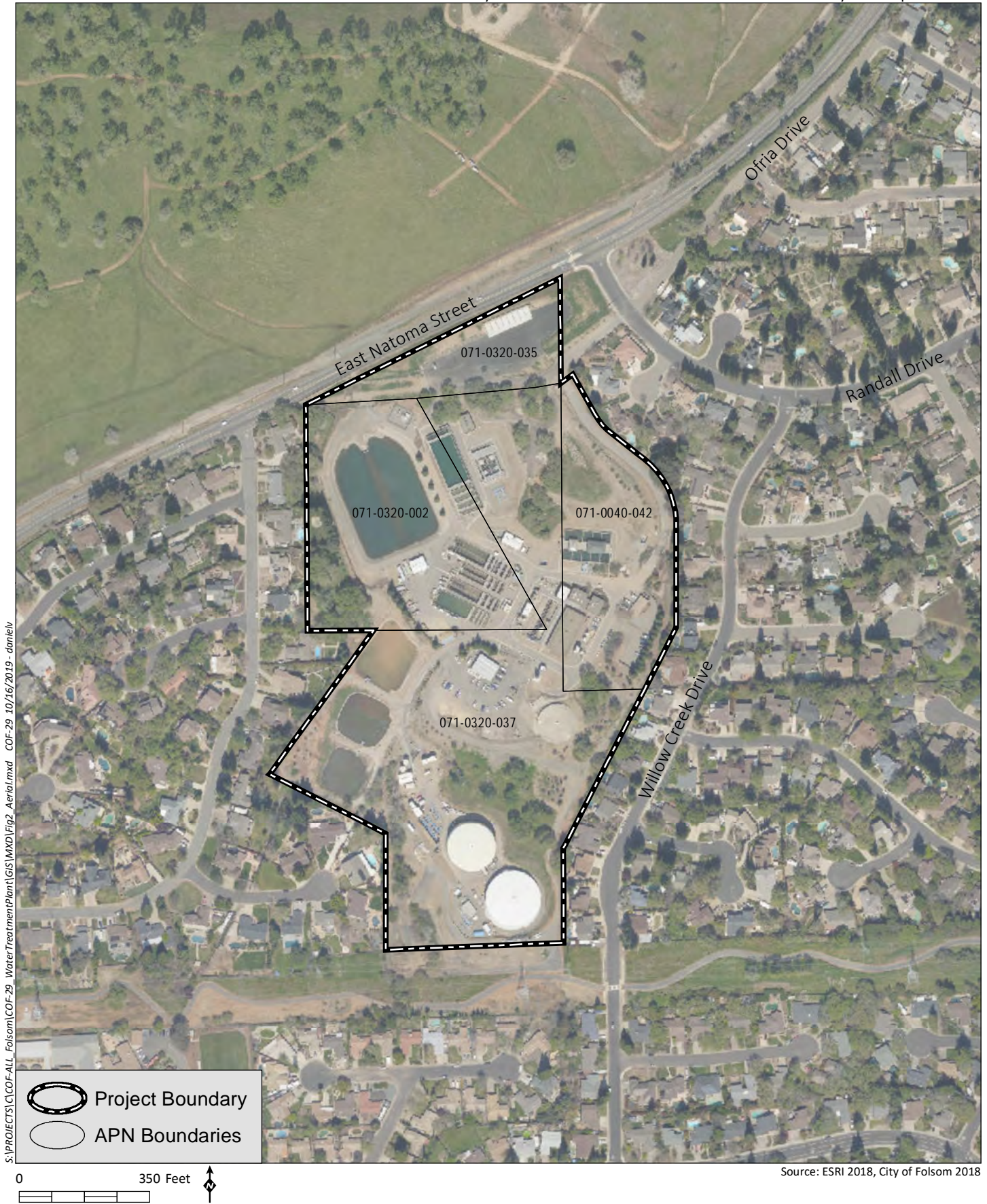
CITY OF FOLSOM WATER TREATMENT PLANT – PRETREATMENT SYSTEM IMPROVEMENTS
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Basin No. 5 Effluent Flume Sluice Gate	
Manufacturer	Waterman, or equal
Number	1
Actuator	Manual

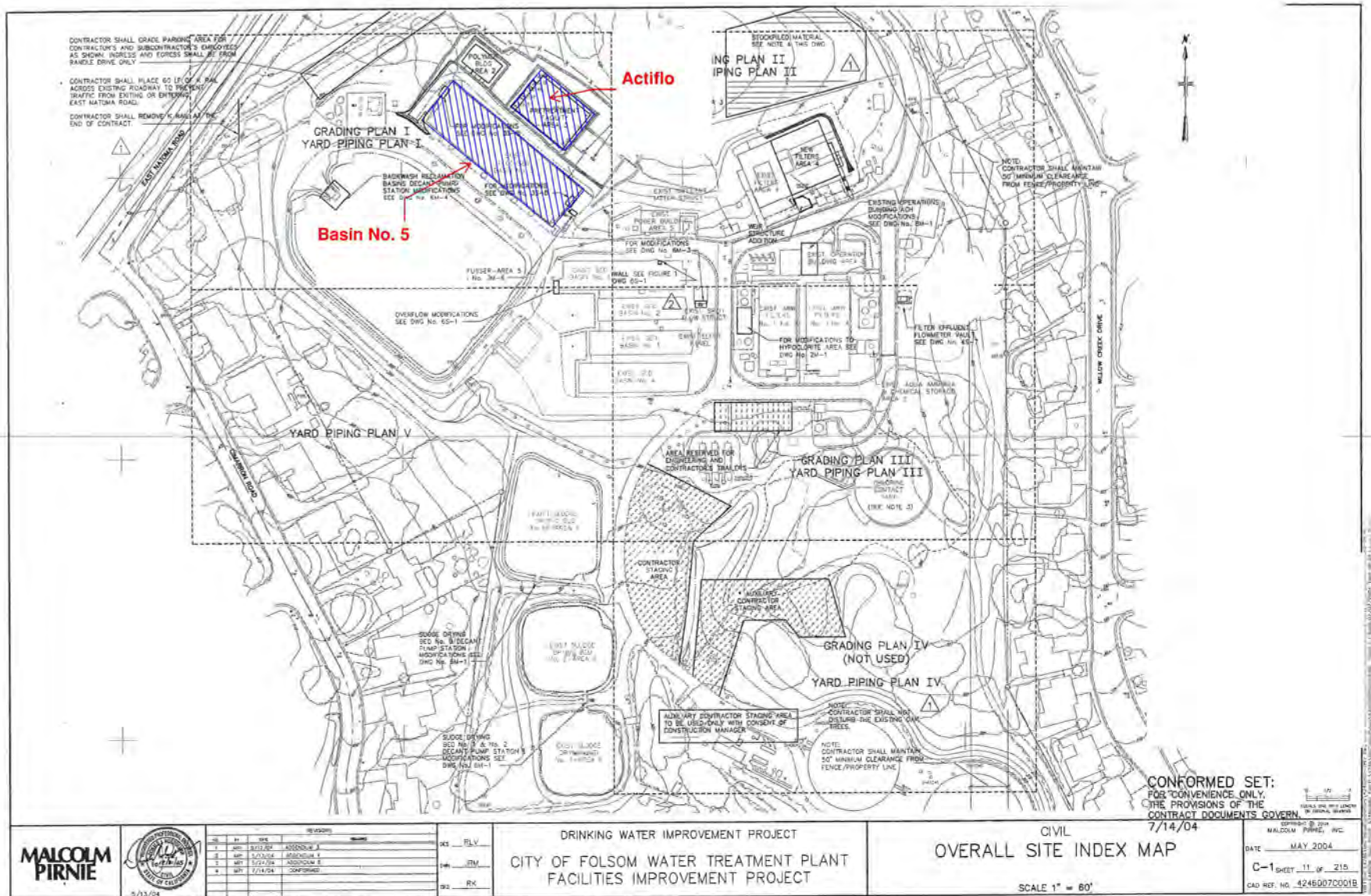
Source: Black & Veatch 2019.

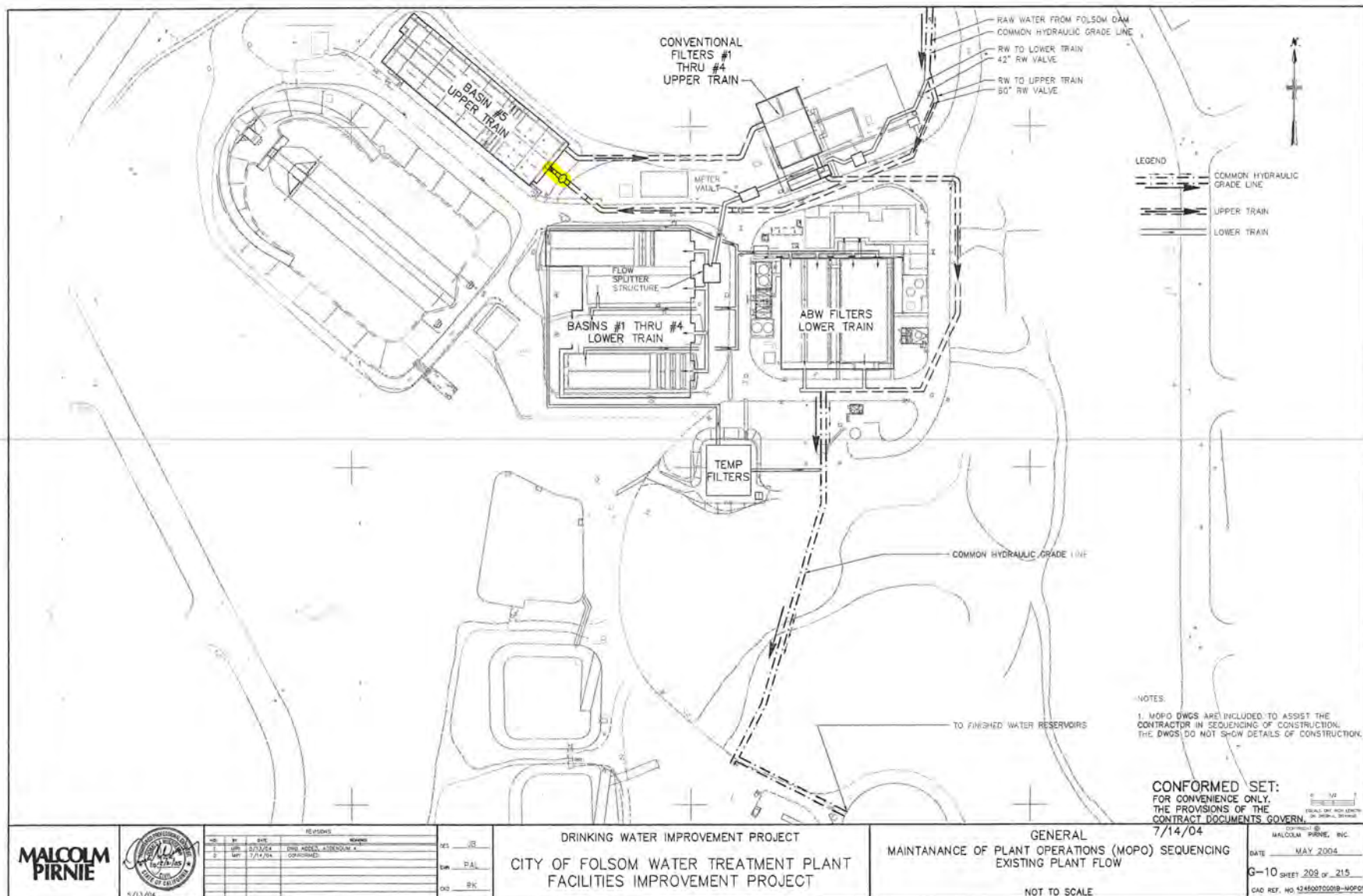
This project is a replacement and/or improvement project of an existing facility and therefore is categorically exempt from environmental review under the California Environmental Quality Act as noted in Title 14 California Code of Regulations, Chapter 3 (Guidelines for Implementation of the California Environmental Quality Act), Article 19 (Categorical Exemptions). Specifically, CEQA Guidelines Section 15301 (Existing Facilities), Section 15302 (Replacement or Reconstruction), and/or Section 15304 (Minor Alterations to Land) apply to the proposed action to be undertaken by the Lead Agency.

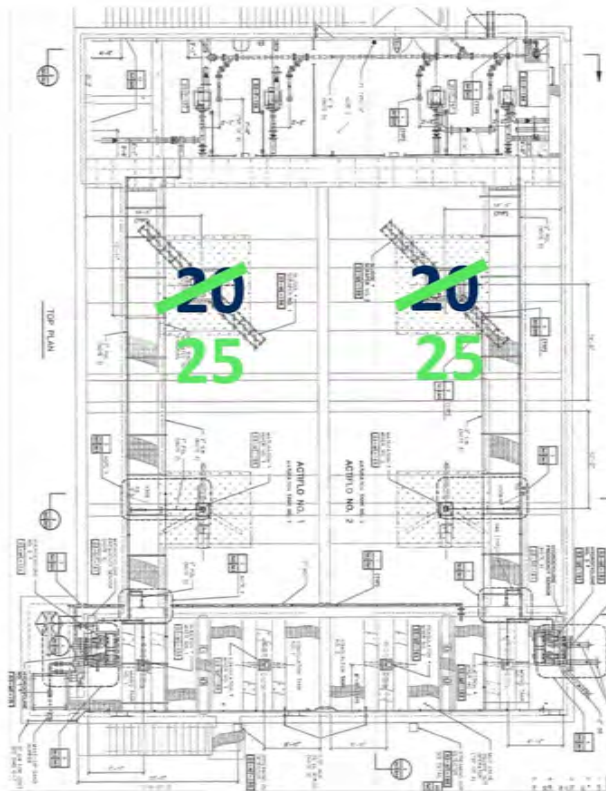




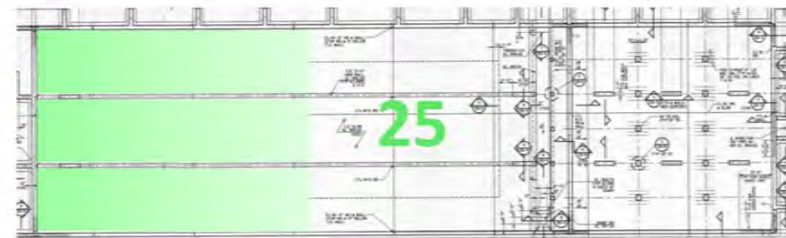
Source: ESRI 2018, City of Folsom 2018



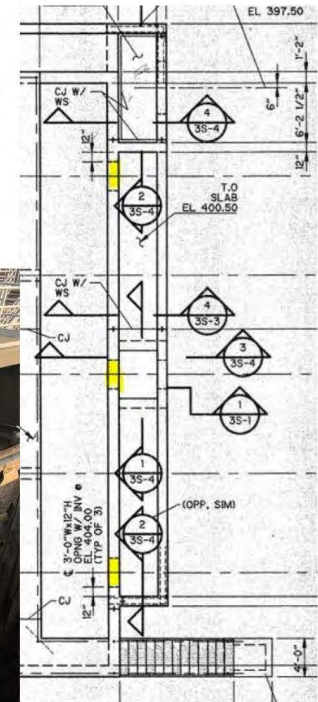
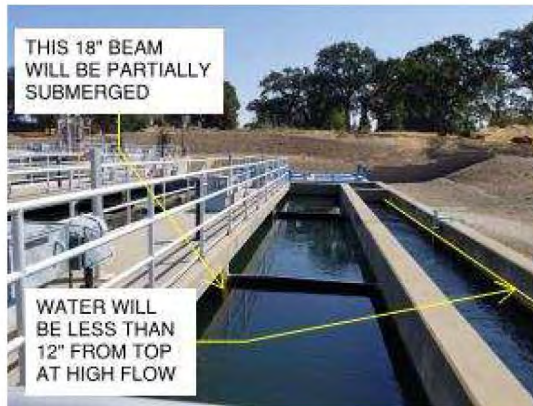
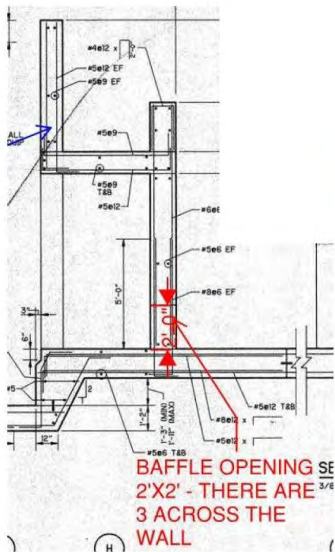




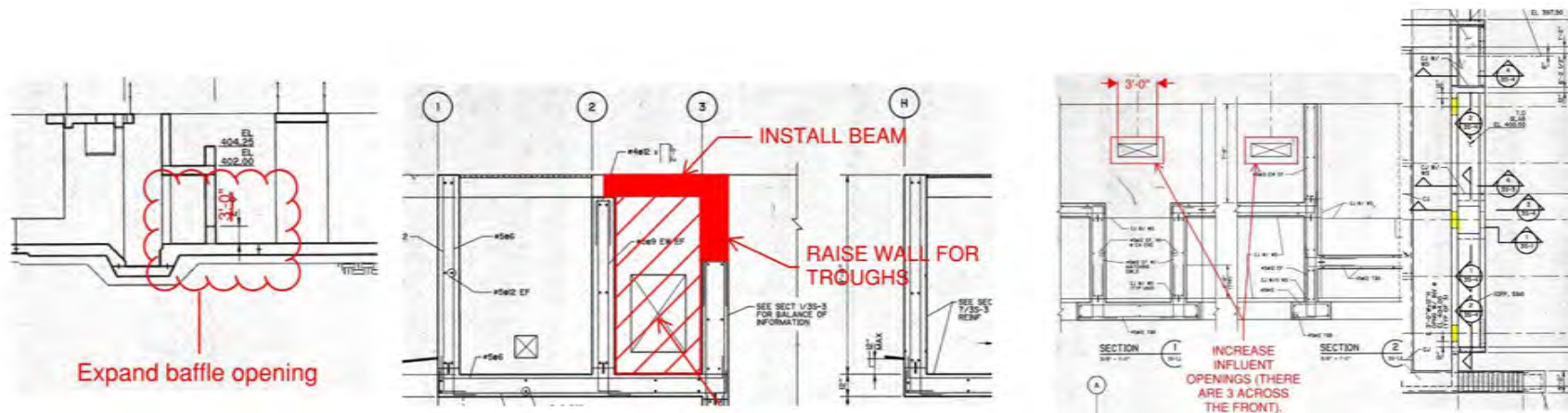
Alternative	Basin No. 5	Actiflo basin	Total Capacity	Firm Capacity
1	Add plate settler to achieve 25 mgd	Evaluate rerating to achieve 25 mgd per basin	75	50



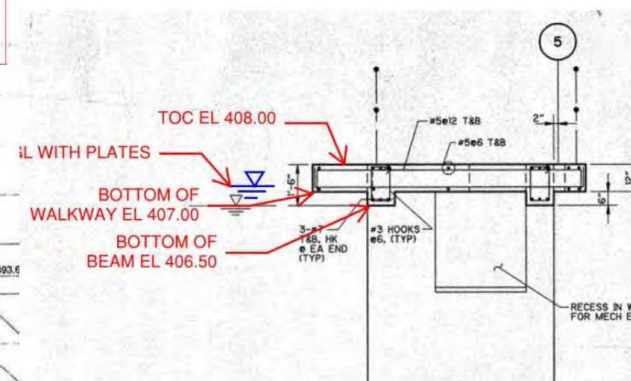
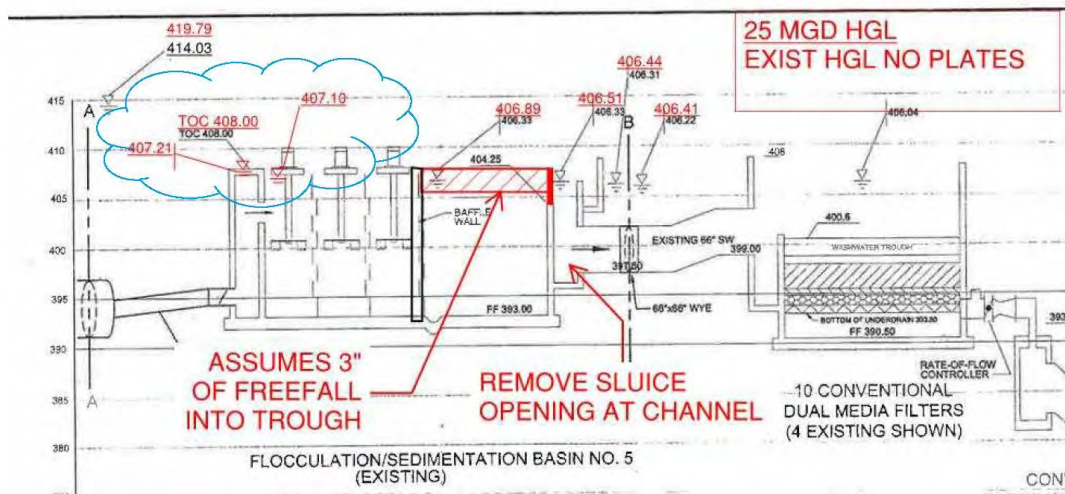
- Three 2'x2' openings at the bottom of the walls downstream of the flocculation zones with sluice gates.
- Three 1'x3' openings near the influent channel
- Baffle walls in floc zones
- Sluice gate in effluent channel



- Structural modifications to improve hydraulics
 - Influent 1'x3' openings shall be increased to 2'x4'
 - Flocculation zone 2'x2' openings shall be increased to 3'x3' and add new sluice gates
 - The submerged weir wall shall be raised to match the existing TOC and have openings for Plate Settler troughs
 - The effluent sluice gate wall shall be removed to improve hydraulics. In order to achieve this, a beam will be needed across the top and the walls on either side may need to be thickened.
 - All structural modifications will be analyzed during detailed design.



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- REMOVE SLUICE GATE TO MINIMIZE HEADLOSS



- Provide a new isolation gate at the end of the effluent channel in Basin 5.

